



INSTITUTE OF MATHEMATICS AND INFORMATICS (IMI)

BULGARIAN ACADEMY OF SCIENCES (BAS)



Highlighting Publications during 2004-2010

LIST of PAPERS FOR THE PERIOD 2004 - 2008

- 1- Selected publications with major contributions (Books, Journals, Peer Reviewed Conference Proceedings)
- 2- Lists of papers registered in SCI (Science Citation Index) or not included in SCI but having Impact Factor. In the case of Humanities, list of papers in Journals listed within the European Reference Index for the Humanities (ERIH).
The papers are grouped as follows:
 - a- International
 - b- National (other than Bulgarian)
 - c- Bulgarian.Such lists are given for each section/department/laboratory separately.
- 3- List of monographs and publications in conference proceedings (distinguish: keynote; invited; peer-reviewed). Such lists are given for each section/department/laboratory separately.

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1- Selected publications with major contributions 2004-2008

List of Selected Major Publications over the last 5 years (2004-2008)				
Title	Author, or all Co-Authors	Author or co-Authors Affiliated with the BAS Institute	Books/Journals/Proceedings	Impact Factor (if available)
Cubic hypersurfaces and integrable systems	A. Iliev, L. Manivel	A. Iliev	American J. Math. 130 (2008), 1445-1475	
A Complete Proof System for First Order Interval Temporal Logic with Projection	Dimitar P. Guelev	Dimitar P. Guelev	<i>Journal of Logic and Computation</i> , volume 14, issue 2, pp. 215-249, 2004	0.821
Polynomial Identity Rings	V. Drensky, E. Formanek	V. Drensky	Advanced Courses in Mathematics, CRM Barcelona, Birkhäuser, Basel-Boston, 2004	book
Warped Product Kaehler Manifolds and Bochner-Kaehler Metrics	Ganchev G. and V. Mihova	Ganchev G.	Journal of Geometry and Physics, 58 (2008), 7, 803-824	0.986
Polyhedral norms in non separable Banach spaces	Troyansky S, V.Fonf, A.Pallares, R.Smith	Troyansky S.	Journal of Functional Analysis, (2008), 255, 449- 470.	0.800
Hamiltonian 2-forms in Kähler geometry III: Extremal metrics and stability	Apostolov, V, D. M. J. Calderbank, C.W. Ton-	Apostolov V.	Invent. Math. 173 (2008), 547-601	1.664

	nesen- Friedman, P. Gauduchon			
Calogero-Moser spaces and adelic W-algebra	Horozov E.	Horozov E.	Ann.Inst. Fourier-Grenoble, v.55, 2005, 2069-2090	0.480
The displacement map associated to polynomial unfoldings of planar Hamiltonian vector fields	Lubomir Gavrilov, Iliya D. Iliev	Iliya D. Iliev	Amer. J. Math. Vol. 127 (2005), no. 6, 1153-1190	0.978
Complex behavior of polynomial FitzHugh-Nagumo cellular neural network model	A.Slavova, P.Zecca	A. Slavova	Nonlinear Anal., Real World Appl. 8, No. 4, 1331-1340 (2007).	1.232
2D wave scattering by a crack in a piezoelectric plane using traction BIEM	D. Gross, T.Rangelov, P. Dineva	T. Rangelov	Journ. of Str. Integrity & Durability, vol 1, N 1, 35-47, 2005.	1.200
Efficient video-stream filtering	Falchi F, Gennaro C, Savino P, Stanchev P.	P. Stanchev	IEEE MULTIMEDIA, Volume: 15, Issue: 1, 52-62, JAN-MAR, 2008	1.506
Binary self-dual codes with automorphisms of composite order	R.Dontcheva A.J. van Zanten	S. Dodunekov	<i>IEEE Trans. Inform. Theory</i> , v.50, pp.311-318, 2004	2.029
A weighted version of a result	L. Storme	I. Landjev	<i>Designs, Codes and Cryptography</i> 45,	0.681

of Hamada on minihypers and on linear codes meeting the Griesmer bound			123-138, 2007	
A New Characterization of Weighted Peetre K-Functionals	Draganov B. R. and K. G. Ivanov:	Draganov B. R., K. G. Ivanov:	Constructive Approximation, 21, 113-148, 2005	1.738
Branching processes as models of progenitors cell populations and estimation of offspring distributions.	Yakovlev, A. Yu., Stoimenova, V. K., Yanev, N. M.	Stoimenova, V. K., Yanev, N. M.	JASA (J. Amer. Stat. Ass.), 103, No. 484, 1357-1366.	1.710
Optimal Control of Heterogeneous Systems: Basic Theory	Veliov V.M.	Veliov V.M.	J. Math. Anal. Appl., 346:227-242, 2008	0.872
Competitions and Mathematics Education	Kenderov P.	Kenderov P.	Proceedings of the International Congress of Mathematicians, Madrid, Spain, 2006, p. 1583-1598. Sectional plenary lecture for the Section on Mathematics Education and Popularization of Mathematics;	Invitation of the Programme Committee of the International Congress of Mathematics

Inner and Outer Bounds for Parametric Linear Systems	Popova, E., W. Krämer,	Popova, E.	Journal of Computational and Applied Mathematics 199(2):310–316, 2007.	0.943
On the Constrained Small - Time Controllability of Linear Systems	Krastanov, M. I.	Krastanov, M. I.	Automatica, 44(9) (2008), 2370-2374	2.083 /2007

2. Lists of papers registered in SCI (Science Citation Index) or not included in SCI but having Impact Factor. In the case of Humanities, list of papers in Journals listed within the European Reference Index for the Humanities (ERIH). The papers are grouped as follows:

- a- International
- b- National (other than Bulgarian),
- c- Bulgarian

2.1. Department “Algebra”

List of papers in SCI or in ERIH for Humanities				
Title	Author, or all Co-Authors	Author or co-Authors Affiliated with the BAS Institute	Books/Journals/Proceedings	Impact Factor
a- International Journals with Impact Factor				
Polynomial Identity Rings	V. Drensky, E. Formanek,	V. Drensky	Advanced Courses in Mathematics, CRM Barcelona, Birkhäuser, Basel-Boston, 2004	book
Nonassociative exponential and logarithm	V. Drensky, L. Gerritzen	V. Drensky	J. Algebra 272 (2004), No. 1, 311-320.	0.554
Algebras satisfying the polynomial identity $[x_1, x_2][x_3, x_4, x_5] = 0$	V. Drensky, O.M. Di Vincenzo and V. Nardozza,	V. Drensky	J. Algebra and its Applications 3 (2004), No. 2, 121-142.	0.443
Combinatorics of words and	V. Drensky,	V. Drensky	Canadian Math. Bull. 47 (2004), No. 3,	0.407

semigroup algebras which are sums of locally nilpotent subalgebras	L. Hammoudi		343-353	
A combinatorial approach to the set-theoretic solutions of the Yang-Baxter equation	Tatiana Gateva-Ivanova	Tatiana Gateva-Ivanova	J. Math. Phys. 45, No. 10, 3828-3858 (2004)	1.430
Elliptic curves and rank-2 vector bundles on the prime Fano threefold of genus 7	A.Iliev, D.Markushevich	A.Iliev	Adv. Geom. 4, No. 3, 287-318 (2004)	0.282
On Lunn-Senior's mathematical model of isomerism in organic chemistry. II.	V. Iliev	V. Iliev	MATCH Commun. Math. Comput. Chem. 50, 39-56 (2004)	1.000
Hurwitz spaces of triple coverings of elliptic curves and moduli spaces of Abelian threefolds	V. Kanev	V. Kanev	Ann. Mat. Pure Appl. (4) 183, No. 3, 333-374 (2004)	In SCI
Automorphisms of free left nilpotent Leibniz algebras and fixed points	V. Drensky, A.I. Papistas	V. Drensky	Commun. In Algebra 33 (2005), 2957-2975.	0.303
Multiplicities in the trace cocharacter sequence of two 4x4 matrices	V. Drensky, G.K. Genov	V. Drensky, G.K. Genov	Mediterr. J. Math. 2 (2005), 231-241	In SCI
Automorphisms fixing a variable of $K[x; y; z]$	V. Drensky, J.-T. Yu,	V. Drensky	J. Algebra 291 (2005), 250-258	0.459
Constants of Weitzenboeck	V. Drensky,	V. Drensky	J. Algebra 292 (2005), 393-428	0.459

derivations and invariants of unipotent transformations acting on relatively free algebras	C.K. Gupta			
Severi varieties and varieties of reductions	A.Iliev, L. Manivel	A.Iliev	J. Reine Angew. Math. 585, pp. 93-139 (2005)	0.900
Geometry of the Lagrangian Grassmannian $LG(3,6)$ with applications to Brill-Noether loci	A.Iliev, K.Ranestad,	A.Iliev	Mich. Math. J. 53, No. 2, 383-417 (2005)	0.460
The Chow ring of the Cayley plane	A.Iliev, L.Manivel	A.Iliev	Compos. Math. 141, No. 1, 146-160 (2005)	0.760
Hurwitz spaces of quadruple coverings of elliptic curves and the moduli space of abelian threefolds $A_3(1,1, 4)$	V. Kanev	V. Kanev	Math. Nachr. 278, No. 1-2, 154-172 (2005)	0.47
Shafarevich's conjecture for CY manifolds I	K. Liu, A. Todorov, S.-T. Yau, K. Zuo	A. Todorov	Pure Appl. Math. Q. 1, No. 1, 28-67 (2005)	In SCI
Class field theory for strictly quasilocal fields with Henselian discrete valuations	I.D. Chipchakov	I.D. Chipchakov	Manuscripta math. 119 (2006), 383-394	0.376
Defining relations of invariants of two 3×3 matrices	V. Drensky, H. Aslaksen,	V. Drensky, L. Sadikova	J. Algebra 298 (2006), 41-57	0.568

	L. Sadikova			
Multiplicities in the mixed trace cocharacter sequence of two 3x3 matrices	V. Drensky, G.K. Genov, A. Valenti	V. Drensky, G.K. Genov	International J. Algebra and Computations 16 (2006), No. 2, 275-285	0.357
Defining relations of noncommutative trace algebra of two 3x3 matrices	V. Drensky, F. Benanti	V. Drensky	Adv. Appl. Math. 37 (2006), No. 2, 162-182	0.764
Groebner bases of ideals invariant under endomorphisms,	V. Drensky, R. La Scala	V. Drensky	J. Symbol. Comp. 41 (2006) No. 7, 835-846	0.641
The genetic reactions of ethane	V. Iliev	V. Iliev	MATCH Commun. Math. Comput. Chem. 56, No. 1, 21-95 (2006); correction ibid. 57, No. 2, 517 (2007)	2.000
Hurwitz spaces of Galois coverings of P^1 , whose Galois groups are Weyl groups	V. Kanev	V. Kanev	J. Algebra 305, No. 1, 442-456 (2006)	0.568
The analogue of the Dedekind eta function for CY manifolds I.	J. Bass, A. Todorov	A. Todorov	J. Reine Angew. Math. 599, 61-96 (2006)	0.860
Automorphic equivalence problem for free associative algebras of rank two	V. Drensky, J.-T. Yu	V. Drensky	International J. Algebra and Computations 17 (2007), No. 2, 221-234	0.357
The strong Anick conjecture is true	V. Drensky, J.-T. Yu	V. Drensky	J. European Math. Soc. 9 (2007), No. 4, 659-679	1.486
Tame automorphisms fixing a	V. Drensky,	V. Drensky	International J. Algebra and	0.357

variable of free associative algebras of rank three	J.-T. Yu		Computations 17 (2007), Nos. 5/6, 999-1011	
Set-theoretic solutions of the Yang-Baxter equation, graphs and computations	Tatiana Gateva-Ivanova, Shahn Majid	Tatiana Gateva-Ivanova	J. Symb. Comput. 42, No. 11-12, 1079-1112 (2007)	0.658
Prime Fano threefolds and integrable systems	A.Iliev, L.Manivel	A.Iliev	Math. Ann. 339, No. 4, 937-955 (2007)	0.877
The abelian fibration on the Hilbert cube of a K3 surface of genus 9	A.Iliev, K.Ranestad	A.Iliev	International Journal of Math., 18, No. 1 (2007), 1-26	0.597
Pfaffian Lines and Vector Bundles on Fano Threefolds of Genus 8	A.Iliev, L. Manivel	A.Iliev	J. Algebraic Geom. 16 (2007), 499-530	0.931
Parametrization of sing-Theta for a Fano 3-fold of genus 7 by moduli of vector	A.Iliev, D. Markushevich,	A.Iliev	Asian J. Math. 11, No. 3, 427-458 (2007)	0.426
The generic reactions of cyclopropane. I	V. Iliev	V. Iliev	MATCH Commun. Math. Comput. Chem. 57, No. 3, 525-548 (2007)	2.58
Complex counterpart of Chern-Simons-Witten theory and holomorphic linking	I. Frenkel, A. Todorov	A. Todorov	Adv. Theor. Math. Phys. 11, No. 4, 531-590 (2007)	2.98
Weil-Petersson volumes of the moduli spaces of CY manifolds	A. Todorov	A. Todorov	Commun. Anal. Geom. 15, No. 2, 381-405 (2007)	0.459

Flows on S-arithmetic homogeneous spaces and applications to metric Diophantine approximation	D. Kleinbock, G. Tomanov	G. Tomanov	Comment. Math. Helv. 82, No. 3, 519-581 (2007)	0.875
Values of decomposable forms at S-integral points and orbits of tori on homogeneous spaces	G. Tomanov	G. Tomanov	Duke Math. J. 138, No. 3, 533-562 (2007)	1.323
Divergent orbits on S-adic homogeneous spaces	G. Tomanov	G. Tomanov	Pure Appl. Math. Q. 3, No. 4, 969-985 (2007)	0.233
On the residue fields of Henselian valued stable fields	I.D. Chipchakov	I.D. Chipchakov	J. Algebra 319 (2008), No 1, 16-49	
Defining relations of minimal degree of the trace algebra of 3x3 matrices	F. Benanti	V. Drensky	J. Algebra 320 (2008), No. 2, 756-782	
Planar trees, free nonassociative algebras, invariants, and elliptic integrals	V. Drensky, R. Holtkamp	V. Drensky	Algebra Discrete Math. 2008, No. 2, 1-41 (2008)	
Matched pairs approach to set theoretic solutions of the Yang-Baxter equation	Tatiana Gateva-Ivanova, Shahn Majid,	Tatiana Gateva-Ivanova	J. Algebra 319, No. 4, 1462-1529 (2008)	
On the irreducibility of the	H. Iliev	H. Iliev	Commun. Algebra 36, No. 4, 1550-	

Hilbert scheme of curves in P^5			1564 (2008)	
A pioneer remembered biographical notes about Arthur Constant Lunn	I. Gutman, V. Iliev, M. Weissman	V. Iliev	MATCH Commun. Math. Comput. Chem. 59, No. 3, 687-708 (2008)	
b- National (non-Bulgarian) Journals with Impact Factor				
Maximal unipotent monodromy for complete intersection CY manifolds	B. Lian, A. Todorov, S.-T. Yau	A. Todorov	Am. J. Math. 127, No. 1, 1-50 (2005)	2.551
The strong Anick conjecture	V. Drensky, J.-T. Yu	V. Drensky	Proc. Nat. Acad. Sci. 103 (2006), No. 13, 4836-4840	9.643
On the irreducibility of the Hilbert scheme of space curves	H. Iliev	H. Iliev	Proc. Am. Math. Soc. 134, No. 10, 2823-2832 (2006)	0.513
A refinement of the classical Clifford inequality	H. Iliev	H. Iliev	J. Korean Math. Soc. 44, No. 3, 565-583 (2007)	0.171
A cancellation conjecture for free associative algebras	V. Drensky, J.-T. Yu,	V. Drensky	Proc. Amer. Math. Soc. 136 (2008), No. 10, 3391-3394	0.513
Cubic hypersurfaces and integrable systems	A. Iliev, L. Manivel,	A. Iliev	Amer. J. of Math. 130, No 6, pp. 1445-1475 (2008)	
c- National (Bulgarian) Journals with Impact Factor				
On the residue fields of Henselian valued stable fields	I.D. Chipchakov	I.D. Chipchakov	C.R. Acad. Bulg. Sci. 60 (2007), No 5, 471-478	0.106
Defining relations of minimal degree of the trace algebra of 3×3 matrices	V. Drensky, F. Benanti	V. Drensky	C.R. Acad. Bulg. Sci. 60 (2007), No. 2, 103-110	0.106

Addendum to K3-surfaces of genus 8 and varieties of sums of powers for cubic fourfolds	A.Iliev, K.Ranestad	A.Iliev	C. R. Acad. Bulg. Sci., 60 (2007)	0.106
Embeddings in quasilocal fields and computations in Brauer groups of arbitrary fields	I.D. Chipchakov	I.D. Chipchakov	C.R. Acad. Bulg. Sci. 61 (2008), No 10, 1229-1238	0.106

2.2. Department “Mathematical Logic”

List of papers in SCI or in ERIH for Humanities				
Title	Author, or all Co-Authors	Author or co-Authors Affiliated with the BAS Institute	Books/Journals/Proceedings	Impact Factor
a- International Journals with Impact Factor or in ERIH				
Diagonal fixed points in algebraic recursion theory	Jordan Zashev	Jordan Zashev	Archive for Mathematical Logic 44, 973-994, 2005	0.62
A Complete Proof System for First Order Interval Temporal Logic with Projection	Dimitar P. Guelev	Dimitar P. Guelev	<i>Journal of Logic and Computation</i> , volume 14, issue 2, pp. 215-249, 2004	0.821
A Syntactical Proof of the Canonical Reactivity Form for Past Linear Temporal Logic	Dimitar P. Guelev	Dimitar P. Guelev	<i>Journal of Logic and Computation</i> , volume 18, issue 4, pp. 615-623, 2008	0.821
On the Completeness and Decidability of Duration Calculus with Iteration	Dimitar P. Guelev	Dimitar P. Guelev	<i>Theoretical Computer Science</i> , volume 337, pp. 278-304, 2005	0.735
b- National (Bulgarian) Journals with Impact Factor or in ERIH				
Non-Classical Operations Hidden in Classical Logic	Vladimir Sotirov	Vladimir Sotirov	<i>Comptes Rendues de l'Academie bulgare des Sciences</i> , 61 (2008), no. 5, pp. 567-570	0.106

2.3. Department “Geometry and Topology”

List of papers in SCI or in ERIH for Humanities				
Title	Author, or all Co-Authors	Author or co-Authors Affiliated with the BAS Institute	Books/Journals/Proceedings	Impact Factor
a-International Journals with Impact Factor or in ERIH				
On closed sets with convex projections in Hilbert space	Barov S. and Jan J. Dijkstra	Barov S.	Fundamenta Mathematicae, Vol. 197, No. 1, 2007, 17-33	0.487
On closed sets with convex projections under a narrow set of directions	Barov S. and Jan J. Dijkstra	Barov S.	Trans. Amer. Math. Soc., Vol. 360, No. 12 (2008), 6525-6543	
Hermitian manifolds with flat associated connection	Ganchev G. and O. Kassabov	Ganchev G.	Kodai Math. J., 29 (2006), 2, 281-298.	In SCI
Kähler metrics generated by functions of the time-like distance in the flat Kähler-Lorentz space	Ganchev G., and V. Mihova	Ganchev G.	Journal of Geometry and Physics, 57 (2007), 2, 617-640	0,986
Kähler manifolds admitting a flat complex conformal connection	Ganchev G. and V. Mihova	Ganchev G.	Kodai Math. J., 30 (2007), 2, 237-245.	In SCI

Warped Product Kaehler Manifolds and Bochner-Kaehler Metrics	Ganchev G. and V. Mihova	Ganchev G.	Journal of Geometry and Physics, 58 (2008), 7, 803-824	
Kähler manifolds of quasi-constant holomorphic sectional curvature.	Ganchev G. and V. Mihova	Ganchev G.	Cent. Eur. J. Math., 6 (2008) 1, 43-75.	
On the theory of surfaces in the four-dimensional Euclidean space	Ganchev G. and V. Milousheva	Ganchev G. and V. Milousheva	Kodai Math. J., 31 (2008), 183-198	
On selections and classes of spaces	Choban M., E. Mihaylova, and S. Nedev	Nedev S.	Topology and its Applications, 155, (2008), 8, 797-804	
Base-cover paracompactness.	Popvassilev S.	Popvassilev S.	Proc. Amer. Math. Soc. 132 (2004), 10, 3121-3130	0.236
Base-family paracompactness	Popvassilev S.	Popvassilev S.	Houston J. Math. 32 (2006), 2, 459-469	0.354
(m,n)-equidistant sets in R^k , S^k , and P^k	Popvassilev S.	Popvassilev S.	Discrete Comput. Geom. 40 (2008), 2, 279-288.	
Selections of set-valued mappings with hereditarily collectionwise normal domain.	Shishkov I.	Shishkov I.	Topology and its Applications, 142 (2004), 1-3, 95-100.	0,364
Collectionwise normality and selections into Hilbert spaces	Shishkov I.	Shishkov I.	Topology and its Applications, 155 (2008), 8, 889-897	

b-National (non-Bulgarian) Journals with Impact Factor or in ERIH				
Isogonal conjugacy and Fermat problem	Ganchev G. and N. Nikolov	Ganchev G. and N. Nikolov	Matematicheskoe Prosveshchenie, ser. 3, 12, (2008), 185-194 (in Russian).	
On a characterization of normal and countably paracompact spaces via set-valued selections	Barov S.	Barov S.	Comment. Math. Univ. Carolin. 49, 1 (2008), 45-52	
c- National (Bulgarian) Journals with Impact Factor or in ERIH				
Analytical characterization of the minimal and bi-umbilical foliated semi-symmetric hypersurfaces in euclidean space	Ganchev G. and V. Milousheva	Ganchev G. and V. Milousheva	Compt. Rend. Acad. Bulg. Sci., 60 (2007), 6, 601-606	0,106
On the Solvability of Nonlinear Elliptic Systems Generating Minimal Foliated Semi-Symmetric Hypersurfaces	Kutev N. and V. Milousheva	Kutev N. and V. Milousheva	C. R. Acad. Bulg. Sci., 60 (2007) 12, 1259-1264.	0,106

2.4. Department “Real and Functional Analysis”

List of papers in SCI or in ERIH for Humanities				
Title	Author, or all Co-Authors	Author or co-Authors Affiliated with the BAS Institute	Books/Journals/Proceedings	Impact Factor
a-International Journals with Impact Factor or in ERIH				
Stability of solitary wave solutions of nonlinear dispersive system in critical case	Hakkaev S., K. Kirchev	K. Kirchev	Nonlinear Analysis TMA 67, 2007, 2890 - 2899	0.519
On the well-posedness and stability of peakons for a generalized Camassa-Holm equation	Hakkaev S., K. Kirchev	K. Kirchev	International Journal of Nonlinear Science, 3 (2006), 139-148	4.386
Local well-posedness and orbital stability of solitary wave solutions for the generalized Camassa-Holm equation	Hakkaev S., K. Kirchev	K. Kirchev	<i>Communications in Partial Differential Equations</i> 2005, 30, 761-781	0.721
Stability of periodic travelling shallow-water waves determined by Newton's equation	Hakkaev Sevdjan, Iliya D.Iliev and Kiril Kirchev	Iliya D.Iliev and Kiril Kirchev	J. Phys. A : Math. 41, 2008, 85203, 1-31	1.800

Regular couplings of dissipative and antidissipative unbounded operators, asymptotics of the corresponding non-dissipative processes and the scattering theory	Kirchev K.P., G.S. Borisova	Kirchev K.P	Integr .Equ. Oper. Theory, 2007, 57, 339-379	0.490
High order smoothness and asymptotic structure in Banach spaces	Troyansky S, R.Gonzalo, J.Jaramillo	Troyansky S	J.of Convex Analysis, 2007,14, 249 - 269	0,700
Kuratowski's Index of Non-compactness and renorming in Banach Spaces	Troyansky S, F.García L. OncinaJ. Orihuela	Troyansky S,	J. of Convex Analysis, 2004, 11, 477 - 494.	0,700
Polyhedral norms in non separable Banach spaces	Troyansky S, V.Fonf, A.Pallares, R.Smith	Troyansky S	Journal of Functional Analysis, (2008), 255 449- 470.	0,800
Some non linear maps and renormings in Banach spaces	Troyansky S, S.Lajara, A. Pallares	Troyansky S	SIAM Journal Optimization, 2007,18,1027 -1045.	0,800
Strictly convex renormings	Troyansky S, A.Molto, J.Orihuela, V.Zizler	Troyansky S	Journal of London Math. Soc., 2007, 5, 647 – 658.	0,700

Uniformly smooth renormings of Banach spaces with modulus of convexity of power type 2	Troyansky S, M.Ivanov	Troyansky S,	Journal of Functional Analysis, 2006, 237, 373 – 390.	0.800
Non-linear transfer technique	Troyansky S, A. Moltó, J. Orihuela, M. Valdivia	Troyansky S,	Lecture Notes in Mathematics, 1951, Springer, Berlin 2008.142 p.	book
Lifshitz tails in constant magnetic fields	F,Klopp G.D.Raikov	G.D.Raikov	Commun. Math. Phys., 2006, 267, 669-701.	1.600
b-National (non-Bulgarian) Journals with Impact Factor or in ERIH				
On the spectrum of a translationally invariant Pauli operator	Raikov G.D	Raikov G.D	Amer. Math. Soc. Transl. (2) Vol. 225, 2008, 157-167.	
c-National (Bulgarian) Journals with Impact Factor or in ERIH				
Commutative nonstationary fields and wave operators	Kirchev K.P., G.S. Borisova	Kirchev K.P	C. R. Acad. Bulg. Sci Tome 61, 5, 2008, 571 – 577	0.106
Commutative nonstationary stochastic fields and correlation functions	Kirchev K.P., G.S. Borisova	Kirchev K.P	C. R. Acad. Bulg. Sci Tome 61, 4, 2008, 425 - 430	0.106

2.5. Department “Complex Analysis”

List of papers in SCI or in ERIH for Humanities				
Title	Author, or all Co-Authors	Author or co-Authors Affiliated with the BAS Institute	Books/Journals/Proceedings	Impact Factor
a-International Journals with Impact Factor				
Kähler reduction of metrics with holonomy G_2	Apostolov, V., S. Salamon	Apostolov, V.	Comm. Math. Phys. 246 (2004), 43	2.07
Hamiltonian 2-forms in Kähler Geometry II: Global Classification	Apostolov, V., D. M. J. Calderbank, C. W. Tonnesen-Friedman, P. Gauduchon	Apostolov, V.	J. Differential Geom. 68 (2004), 277	0.744
The odd-dimensional Goldberg conjecture	Apostolov, V., T. Draghici, A. Moroianu	Apostolov, V.	Math. Nachr. 279 (2006), no. 9–10, 948–952	0.382

A remark on Kähler metrics of constant scalar curvature on ruled complex surfaces	Apostolov, V., C. Tønnesen-Friedman	Apostolov, V.	Bull. London Math. Soc. 38 (2006), no. 3, 494–500	0.556
Hamiltonian 2-forms in Kähler geometry. I. General theory	Apostolov, V., D. Calderbank, P. Gauduchon	Apostolov, V.	J. Differential Geom. 73 (2006), no. 3, 359–412	0.744
Generalized Kaehler manifolds, commuting complex structures, and split tangent bundles	Apostolov, V., M. Gualtieri	Apostolov, V.	Comm. Math. Phys. 271, (2007), 561–575	2.07
Hamiltonian 2-forms in Kähler geometry III: Extremal metrics and stability	Apostolov, V, D. M. J. Calderbank, C.W. Tønnesen-Friedman, P. Gauduchon	Apostolov, V.	Invent. Math. 173 (2008), 547	1.664
Hamiltonian 2-forms in Kaehler geometry IV: Weakly Bochner-flat Kaehler manifolds	Apostolov, V., D. M. J. Calderbank, C.W. Tønnesen-Friedman, P. Gauduchon	Apostolov, V.	Comm. Ann. Geom. 16 (2008), 91.	0.459

Bihermitian metrics on Hopf surfaces	Apostolov, V., G. Dloussky	Apostolov, V.	Math. Res. Letters 15 (2008), 827	0.702
Isotropic Kaehler Hyperbolic Twistor Spaces	D. Blair, Davidov J., Muskarov O.	Davidov J., Muskarov O.	J. Geom. Phys. 52 (2004), 74-88	1.048
Einstein Condition and Twistor Spaces of Compatible Partially Complex Structures	Davidov J.	Davidov J.	Diff. Geom. and its Appl. 22 (2005), 159-179	0.391
Eta-Einstein Condition on Twistor Spaces of Odd-Dimensional Riemannian Manifolds	Davidov J.	Davidov J.	J. Geom. 86 (2006), 42-53	In SCI
Self-dual Walker Metrics with Two-step Nilpotent Ricci Operator	Davidov J., Muskarov O.	Davidov J., Muskarov O.	J. Geom. Phys. 57, No 1 (2006), 157-165	0.797
Twistor Spaces of Generalized Complex Structures	Davidov J., Muskarov O.	Davidov J., Muskarov O.	J. Geom. Phys. 56 (2006), 1623-1636	0.797

Almost Kaehler Walker 4-manifolds	Davidov J., Muskarov O., H. Dias-Ramos, E. Garcia-Rio, Ya. Matsushita, R. Vazkes-Lorenzo	Davidov J., Muskarov O.	J. Geom. Phys. 57, No 3 (2007), 1075-1088	0.986
Twistorial Construction of Generalized Kaehler Manifolds	Davidov J., Muskarov O.	Davidov J., Muskarov O.	J. Geom. Phys. 57, No 3 (2007), 889-901	0.986
Hermitian-Walker 4-Manifolds	Davidov J., Muskarov O., H. Dias-Ramos, E. Garcia-Rio, Ya. Matsushita, R. Vazkes-Lorenzo	Davidov J., Muskarov O.	J. Geom. Phys. 58, No 3 (2008), 307-323	0.986
On automorphisms and multipliers, connected with smooth generalized integration	Dimovski I., S. Mincheva-Kaminska	Dimovski I.	Integral Transforms & Special Functions, 16, 4 (2005), 291-292	0.291

Commutants of the Euler operator and corresponding mean-periodic functions	Dimovski I., Hristov V.	Dimovski I., Hristov V.	Integral Transforms and Special Functions, 18, No 2, 2007, 117-131	0.322
Sequences with equi-distributed extreme points in uniform polynomial approximation	Kovacheva R., H.-P. Blatt, R. Grothmann	Kovacheva R.	Journal of Approximation Theory, 126 (2004), 157–140	0.453
Sign changes in rational $L(1)$ approximation	Kovacheva R.	Kovacheva R.	Ukranian Mat. J. 58(2006), no 2, 283-287	Registered in SCI
Some remarks on the Green function and the Azukawa pseudometric	Nikolov N., W. Zwonek	Nikolov N.	Monatsh. Math., 142 (2004), 341-350	0.343
The Bergman kernel of the symmetrized polydisc in higher dimensions has zeros	Nikolov N., W. Zwonek	Nikolov N.	Arch. Math., 87 (2006), No 5, 412-416	0.341
On the definition of the Kobayashi-Buseman pseudometric	Nikolov N., P. Pflug	Nikolov N.	Internat. J. Math., 17 (2006), No 1, 1145-1149	0.531
Estimates of the Caratheodory metric on the symmetrized polydisc	Nikolov N., P. Pflug, P. J. Thomas, W. Zwonek	Nikolov N.	J. Math. Anal. Appl. 342 (2008), 140-148	0.872
On the derivatives of the Lempert functions	Nikolov N., P. Pflug	Nikolov N.	Ann. Mat. Pura Appl. 187 (2008), No 3, 547-553	0.696

Discontinuity of the Lempert function and the Kobayashi-Royden metric of the spectral ball	Nikolov N., P. Pflug, P. J. Thomas, W. Zwonek	Nikolov N.	Integral Equations & Oper. Theory 61, 2008, 401-412	0.645
b-National (non-Bulgarian) Journals with Impact Factor				
Hyperbolic Twistor Spaces	D. Blair, Davidov J., Muskarov O.	Davidov J., Muskarov O.	Rocky Mountain J. Math. 35 (2005), 1437-1465	0.196
Curvature Properties of the Chern Connection of Twistor Spaces	Davidov J., G. Grancharov, Muskarov O.	Davidov J., Muskarov O.	Rocky Mountain J. Math. 37 (2007)	0.196
Local vs. global hyperconvexity, tautness or k-completeness for unbounded open sets in \mathbf{C}^n	Nikolov N., P. Pflug	Nikolov N.	Ann. Scuola Norm. Sup. Pisa Cl. Sci. (5), Vol. IV, (2005), 601-618	0.571
The multipole Lempert function is monotone under inclusion of pole sets	Nikolov N., P. Pflug.	Nikolov N.	Mich. Math. J., 54 (2006), No 1, 111-116	0.440
Simultaneous approximation and interpolation on Arakelian sets	Nikolov N., P. Pflug	Nikolov N.	Can. Math. Bull., 50 (2007), No 1, 123-125	0.336
The Lempert function of the symmetrized polydisc in higher dimensions is not a distance	Nikolov N., P. Pflug., W. Zwonek	Nikolov N.	Proc. Amer. Math. Soc. 135, 2007, No 9, 2921-2928	0.520

Invariant metrics and distances on generalized Neil parabolas	Nikolov N., P. Pflug	Nikolov N.	Mich. Math. J. 55 (2007), No 2, 255-268	0.494
An example of a bounded \mathbb{C} -convex domain which is not biholomorphic to a convex domain	Nikolov N., P. Pflug., W. Zwonek	Nikolov N.	Math. Scan. 102 (2008), 149-155	0.370
c-National (Bulgarian) Journals with Impact Factor				
Ostrowski gaps, zeros and overconvergence, II	Kovacheva R.	Kovacheva R.	C. R. Acad. Bulg. Sci., 60 (2007), No.6	0.106
Hyperbolicity of \mathbb{C} -convex domains	Nikolov N., A. Saracco	Nikolov N.	C. R. Acad. Bulg. Sci., 60, 2007, No 9, 935-938	0.106

2.6. Department “Differential Equations”

List of papers in SCI or in ERIH for Humanities				
Title	Author, or all Co-Authors	Author or co-Authors Affiliated with the BAS Institute	Books/Journals/Proceedings	Impact Factor
a-International Journals with Impact Factor or in ERIH				
Bifurcations of limit cycles from quadratic non-Hamiltonian systems with two centers and two unbounded heteroclinic loops	Iliya D. Iliev, Chengzhi Li, Jiang Yu	Iliya D. Iliev	Nonlinearity, vol. 18 (2005), no. 1, 305-330	1.008
Complete hyperelliptic integrals of the first kind and their non-oscillation	Lubomir Gavrilov, Iliya D. Iliev	Iliya D. Iliev	Trans. Amer. Math. Soc., vol. 356 (2004), no.3, 1185-1207	0.839
The displacement map associated to polynomial unfoldings of planar Hamiltonian vector fields	Lubomir Gavrilov, Iliya D. Iliev	Iliya D. Iliev	Amer. J. Math. Vol. 127 (2005), no. 6, 1153-1190	0.978

Perturbations of quadratic centers of genus one	Sebastien Gautier, Lubomir Gavrilov, Iliya D. Iliev	Iliya D. Iliev	Discr. Contin. Dynam. Syst. A [to appear] [submitted May 2007]. arXiv:math.DS/0705.1609 (11 May 2007, revised 24 Nov 2007), 29 pp.	0.830
Stability of periodic travelling shallow-water waves determined by Newton's equation	Sevdzhan Hakkaev, Iliya D. Iliev, Kiril Kirchev	Iliya D. Iliev, Kiril Kirchev	J. Phys. A, Math. Theor.41 (2008), no. 8 [chosen for IOP Select]. arXiv:nlin.SI/0707.4365 (30 July 2007), 35 pp.	1.680
Viscosity solutions to the degenerate oblique derivative problem for fully nonlinear elliptic equations	P. Popivanov, N. Kutev	P. Popivanov, N. Kutev	Math. Nachrichten, vol. 278, No. 7, 8 (2005), 886-903	0.465
On the global solvability in Gevrey classes on the n-dimensional torus	P. Popivanov, A. Albanese	P. Popivanov	J. of Math. Analysis and Appl., vol. 297, No. 2, (2004), 659-672	0.490

Global analytic and Gevrey solvability of sublaplacians under Diophantine conditions	A. Albanese, P. Popivanov	P. Popivanov	Ann. di Mat. Pura ed Appl., vol. 185 (3), (2007), 395-409	0.696
Superexponential decay and holomorphic extensions for semilinear equations with polynomial coefficients	M. Cappiello, T. Gramchev and L. Rodino	T. Gramchev	J. Funct. Anal., 237} :2 (2006), 634-654	0.806
Solvability of systems of singular partial differential equations in function spaces	T. Gramchev and E. Tolis	T. Gramchev	Integral Transforms Spec. Funct., 17 (2006), 231-237.	0.291
Normal forms of maps: Formal and algebraic aspects	T. Gramchev and P. Walcher	T. Gramchev	Acta Appl. Math., 87 (2005), 123-146.	0.366

Comparison principle for viscosity solutions of fully nonlinear, degenerate elliptic equations	B. Kawohl, N. Kutev	N. Kutev	Comm. Part. Diff. Eq., vol.32 (2007), 1209-1224.	1,041
Calogero-Moser spaces and an adelic W-algebra	Horozov E.	Horozov E.	Ann. de l'Inst. Fourier, v. 55, 2006. p. 2069-2090	0.698
Non-integrability of some Painleve VI-equations and dilogarithms	Horozov E., Ts. Stoyanova	Horozov E.	Regular & Chaotic Dynamics, v.12, Issue 6, p.620-627, 2007.	0.485
Calogero-Moser spaces and adelic W-algebra	Horozov E.	Horozov E.	Ann.Inst. Fourier-Grenoble, v.55 2005	0.480

Solvability for a class of transversally elliptic operators on the Heisenberg group	G.E. Karadzhov	G.E. Karadzhov	Math. Nachr., 279(2006), 400-414	0.465
Extrapolation theory: new results and applications	G.E. Karadzhov, M.Milman	G.E. Karadzhov	J. Approx. Theory, 133(2005), 38-99	0,471
Limits of higher order Besov spaces and sharp reiteration theorems	G.E. Karadzhov, M. Milman, J. Xiao	G.E. Karadzhov	J. Funct.Anal., 221(2005), 323-339	0,806
Carleson type theorems for certain convolution operators	G.E. Karadzhov, J. Xiao	G.E. Karadzhov	Integr. Eq. and Oper. Theory, 55(2006), 429-438	0.490

Grand Orlicz spaces and global integrability of the Jacobian	G.E. Karadzhov, C. Capone, A. Fiorenza	G.E. Karadzhov	Math. Scand., 102(2008), 131-148	0.370
Classes of Carleson type measures generated by capacities	G.E. Karadzhov, G. Dafni, J. Xiao	G.E. Karadzhov	Math. Zeitschrift., 258(2008), 827-844	0.680
Comparison principle for non - cooperative elliptic systems	Boyadzhiev G.	Boyadzhiev G.	Nonlinear Analysis: Theory, Methods & Applications, Volume 69, Issue 11, 1 December 2008, Pages 3838-3848	1.097
Global fold structure of the Miura map	Peter Topalov, T. Kappeler	Peter Topalov	IMRN, 2004, no. 39, 2039-2068	0.722

Global well-posedness of mKdV	Peter Topalov, T. Kappeler	Peter Topalov	Comm. Partial Differential Equations, 30(2005), no. 1-3, 435-449	1,040
The Miura map on the line	Peter Topalov	Peter Topalov	IMRN, 2005, no. 50, 3091-3133	0.722
b-National (non-Bulgarian) Journals with Impact Factor or in ERIH				
Gevrey hypoellipticity and solvability on the multidimensional torus of some classes of linear PDE	A. Albanese, P. Popivanov	P. Popivanov	Annali Univ. di Ferrara, Sez. VII, Sci. Matematiche, vol. 52, 65-81, (2006)	In SCI
Periodic solutions of the Burgers-Hopf equation with small parameter and its cellular neural network model	P. Popivanov, A. Slavova, P. Zecca	P. Popivanov, A. Slavova	Mediterranean J. Math. (2007), vol. 5, 1-19	0.414
Global in time spatial analyticity of solutions to fractional Burgers' equations	T. Gramchev	T. Gramchev	Mat. Contemp., 27 (2004), 75-100.	In SCI
Sur un theoreme de Cauchy-	D. Gourdin and T.	T. Gramchev	C. R. Math. Acad. Sci. Paris, 339:10	0.284

Kowalewski-Nagumo global dans des espaces de Gevrey projectifs	Gramchev		(2004), 695-698.	
c-National (Bulgarian) Journals with Impact Factor or in ERIH				
Mathematical Model for the growth of tumours with free boundary surface	R. Semerdjieva	R. Semerdjieva`	C. R. Acad. Bulg. Sci., vol. 61, No. 12, (2008), 1509-1516	0.106
On the solvability of nonlinear elliptic systems generating minimal foliated semi – symmetric hypersurfaces	Kutev N., V. Milousheva,	N.Kutev	C.R. Acad. Bulgare Sci., vol. 60, 1259 – 1264 (2007)	0.106
Existence, non-existence and regularity for the generalized Emden – Fowler equation	Chaparova J., N.Kutev	N.Kutev	C.R. Acad. Bulgere Sci., vol.61, 431 – 436 (2008).	0.106
Optimal embeddings of generalized homogeneous Sobolev spacesw, jointly with	G.E. Karadzhov ,I. Ahmed	G.E. Karadzhov	C.R. Acad. Bulgare Sci., 61(2008), 967-972	0.106

2.7. Department “Mathematical Physics”

List of papers in SCI or in ERIH for Humanities				
Title	Author, or all Co-Authors	Author or co-Authors Affiliated with the BAS Institute	Books/Journals/Proceedings	Impact Factor
a-International Journals with Impact Factor or in ERIH				
CNN model for studying dynamics and travelling wave solutions of FitzHugh-Nagumo equation	A.Slavova, P.Zecca	A.Slavova	Journ. of Comp. and Appl. Math.,151, 2003, pp. 13-24	0.567
Dynamics and stability of generalized Cellular Neural Network model	R.Cancelliere, A.Slavova	A.Slavova	Applied Mathematics and Computation 165, 2005,pp.127-136	0.426
Receptor-based Cellular Neural Networks	A.Slavova, M.Markova	A.Slavova, M.Markova	WSEAS Trans. on Mathematics 3, vol.4, July 2005, pp. 212-217	In SCI
Discrete-continuous control of bifurcations and oscillatory behaviour in a class of cellular neural networks	G.Agranovich, E.Litsyn, A.Slavova	A.Slavova	Neural, Parallel and Scientific Comput., vol. 13, No.3-4, 2005, pp. 393-410	In SCI
Dynamics and travelling waves in CNN vector-disease model	A. Slavova	A. Slavova	IEEE Trans. CAS-II, vol. 53, No 11, pp. 1304-1307, 2006	0.420

Receptor-based CNN model with hysteresis for pattern formation	A.Slavova, M.Markova	A.Slavova, M.Markova	IEEE Proc. CNNA2006, Istanbul, 2006, pp. 241-244	2.321
On periodic solutions in one dimensional cellular nonlinear networks based on Josephson junctions (JJ's)	V.Mladenov, A.Slavova	A. Slavova	IEEE Proc. CNNA2006, Istanbul, 2006, pp. 235-240	2.321
Hysteresis in CNN model of bakteria growth	A.Slavova	A. Slavova	Funct. Differ. Equ. 13, No. 1, 107-113 (2006)	In SCI
Complex behaviour of polynomial FitzHugh-Nagumo CNN model	A.Slavova, P.Zecca	A. Slavova	Nonlinear Analysis-Real World Applications 8 (4), pp.1331-1340, 2007	0.477
Periodic solutions of the Burgers-Hopf equation with small parameter and its Cellular Neural Network model	P.Popivanov, A.Slavova, P.Zecca	A. Slavova	Medit.Journal of Math. 5 (1), pp.1-19, 2008	0.414
Cellular Neural Networks Model of Risk Management	A.Slavova	A.Slavova	IEEE Proc. CNNA2008, art. No. 4588674, pp. 181-185, 2008	2.321
Complex behavior of polynomial FitzHugh-Nagumo cellular neural network model	A.Slavova, P.Zecca	A.Slavova	Nonlinear Anal., Real World Appl. 8, No. 4, 1331-1340 (2007).	1.232
Transient seismic wave propagation in a multilayered cracked geological region	P. Dineva, G. Manolis, T. Rangelov	T. Rangelov	Journal of Sound and Vibration, 273:1-2, 1-32,2004.	0.884

Wave scattering by cracks in inhomogeneous continua using BIEM	G. Manolis, P. Dienva, T.Rangelov	T. Rangelov	International Journal of Solids and Structures, 41:14, 3905-3927, 2004	1.378
BIEM for 2D steady-state problems in cracked anisotropic materials	P. Dineva, T. Rangelov, Gross, D	T. Rangelov	Engng. Anal. BE, vol. 29, N7, 689-698, 2005.	0.894
On the first eigenvalue for second order elliptic equations in divergence form	A.Fabricant, N. Kutev, T. Rangelov	A.Fabricant, T. Rangelov	Cubo. A Mathematical Journal, v.9:3, 47-64, 2007.	In SCI
2D wave scattering by a crack in a piezoelectric plane using traction BIEM	D. Gross, T.Rangelov, P. Dineva	T. Rangelov	Journ. of Str. Integrity & Durability, vol 1, N 1, 35-47, 2005.	1.200
Elastodynamic fundamental solutions for certain families of 2d inhomogeneous anisotropic domains: basic derivations	T. Rangelov, G. Manolis, P.Dineva	T. Rangelov	European Journal of Machanics A/Solids 24 820-836, 2005.	0.897
Non-homogeneous elastic waves in solid: notes on the vector decomposition technique	G. Manolis, T. Rangelov	T. Rangelov	Soil Dyn. Earthq. Engn, v.26, 952-959, 2006.	0.76
Sub-surface crack in an inhomogeneous half-plane: wave scattering fenomena by BIEM	P.Dineva, G. Manolis, T. Rangelov	T. Rangelov	Engn. Anal BE, v. 30, 350-362, 2006.	0.883

Elastic wave propagation in a class of cracked, functionally graded materials by BIEM	P.Dineva, T. Rangelov, G. Manolis	T. Rangelov	Comput. Mech., 39, 293-308, 2007.	1.060
Free-field wave solutions in a half-plane exhibiting a special type of continuous inhomogeneity	G.D. Manolis, T.V. Rangelov, P.S. Dineva	T. Rangelov	Wave Motion, 44, 304-321, 2007	0.869
BIEM solution of piezoelectric cracked finite solids under time-harmonic loading	D. Gross, P. Dineva, T.Rangelov	T. Rangelov	Engng. Anal. BE, 31, 152-162, 2007.	0.936
Effect of material inhomogeneity on the dynamic behaviour of cracked piezoelectric solids: a BIEM approach	T. Rangelov, P.Dineva, D. Gross	T. Rangelov	Z. Angew. Math. Mech., v.88:2, 86-99, 2008	
Site effect due to wave path inhomogeneity by BEM	P. Dineva, G. Manolis, T. Rangelov	T. Rangelov	Engng. Anal. BE, 32, 1025-1036, 2008	
Continuous-time additive Hopfield-type neural networks with impulses	Haydar Akça, Rajai Alassar, V. Covachev, Zlatinka Covacheva, Eada Al-Zahrani	Valéry Covachev	Journal of Mathematical Analysis and Applications, 290 (2004), Issue 2, 436-451	0.490

Some complex matrix and determinant functional equations	I.B. Risteski, V.C. Covachev	Valéry Covachev	Acta Mathematica Universitatis Comenianae, Volume LXXV (2006), No. 2, 173-184	In SCI
Discrete counterparts of continuous-time additive Hopfield-type neural networks with impulses, Dynamic Systems and Applications	Haydar Akça, Rajai Alassar, Valéry Covachev, Zlatinka Covacheva	Valéry Covachev	Dynamic Systems and Applications, 13 (2004), No. 1, 77-92	0.256
b-National (non-Bulgarian) Journals with Impact Factor or in ERIH				
c-National (Bulgarian) Journals with Impact Factor or in ERIH				
Dynamic behaviour of a cracked inhomogeneous piezoelectric solid. Part I: in-plane case	T. Rangelov, P.Dineva	T. Rangelov	C. R. Acad. Sci. Bulg, 60:2, 141-148, 2007	0.106
Dynamic behaviour of a cracked inhomogeneous piezoelectric solid. Part II: anti-plane case	T. Rangelov, P.Dineva	T. Rangelov	C. R. Acad. Sci. Bulg, 60:3, 231-238, 2007.	0.106

2.8. Department “Education in Mathematics and Informatics”

List of papers in SCI or in ERIH for Humanities				
Title	Author, or all Co-Authors	Author or co-Authors Affiliated with the BAS Institute	Books/Journals/Proceedings	Impact Factor
a-International Journals with Impact Factor or in ERIH				
Materializing Model-like hypotheses in language, poetry and humor by means of a computer micro-world	Sendova, E.	Sendova, E.	<i>International Journal ÉTUDES COGNITIVES</i> . Vol. 8. SOW, Warsaw, 2008. ISSN 1641-9758, pp. 273-285.	In ERIH
b-National (non-Bulgarian) Journals with Impact Factor or in ERIH				
c-National (Bulgarian) Journals with Impact Factor or in ERIH				

2.9. Department “Information Systems”

List of papers in SCI or in ERIH for Humanities				
Title	Author, or all Co-Authors	Author or co-Authors Affiliated with the BAS Institute	Books/Journals/Proceedings	Impact Factor
a-International Journals with Impact Factor or in ERIH				
Corpus Callosum Anatomy in Right-Handed Homosexual and Heterosexual Men	Witelson S., Kigar D., Scamvougeras A., Kideckel D., Buck B, Stanchev P., Bronskill M, Black S.	Stanchev P.	Archives of Sexual Behaviour, 2008, 37:857-863	2.393 (2007)
Efficient video-stream filtering	Falchi F, Gennaro C, Savino P, Stanchev P	Stanchev P.	IEEE MULTIMEDIA Volume: 15 Issue: 1, 52-62 JAN-MAR 2008	1.506
Failure of Convergence of the Newton-Weierstrass Iterative Method for Simultaneous Rootfinding of Generalized Polynomials	Kyurkchiev N., A. Iliev	Iliev A.	Computers & Mathematics with Applications, 2004, 47, № 2-3, 441-446	0.720

Some Methods for Simultaneous Extraction of a Part of All Multiple Roots of Algebraic Polynomials	Iliev A., N. Kyurkchiev	Iliev A.	Computing, vol. 75, no. 1 (2005), 85-97	0.880
On a Generalization of Euler-Chebyshev's Method for Simultaneous Extraction of Only a Part of All Roots of Algebraic Polynomials	Iliev A., N. Kyurkchiev, Q. Fang	Iliev A.	Japan Journal of Industrial and Applied Mathematics, vol. 23, no. 1 (2006), 63-73	0.302
A Propositional Approach to Textual Case Indexing.	Wiratunga, N., Lothian, R., Chakraborti, S., I. Koychev	Koychev I.	Jorge, A., Torgo, L., Brazdil, P., Camacho, R., Gama J. (Eds.): Knowledge Discovery in Databases: PKDD 2005, LNCS 3721 Springer, p. 380-391	0.4(2005)
Feature Selection and Generalisation for Retrieval of Textual Cases	Wiratunga, N., Koychev, I., Massie, S.	Koychev I.	Proceeding of the 7-th European Conference on Case-Based Reasoning. Lecture Notes in Artificial Intelligence, Springer, Berlin, Heidelberg, New York (2004). (<i>Best paper award</i>).	0.4(2005)
Within-document Retrieval: A User-Centred Evaluation of Relevance Profiling	Harper, D.J., Koychev, I., Sun, Y. and Pirie I.	Koychev I.	Journal of Information Retrieval, 7, 265-290, 2004, Kluwer Academic Publishers.	0.77(2007)
b-National (non-Bulgarian) Journals with Impact Factor or in ERIH				

c-National (Bulgarian) Journals with Impact Factor or in ERIH				

2.10. Department “Artificial Intelligence”

List of papers in SCI or in ERIH for Humanities				
Title	Author, or all Co-Authors	Author or co-Authors Affiliated with the BAS Institute	Books/Journals/Proceedings	Impact Factor
a-International Journals with Impact Factor or in ERIH				
Optimal discovery of repetitions in 2D	Apostolico A., V.E. Brimkov	V.E. Brimkov	Discrete Applied Mathematics, Elsevier, 151 (2005) 5-20	0.625
Digitization scheme that assures faithful reconstruction of plane figures	Brimkov V.E.	Brimkov V.E.	Pattern Recognition, Elsevier, 2008 (in print)	2.019
Formulas for the number of (n-2)-gaps of binary objects in arbitrary dimension	Brimkov V.E.	Brimkov V.E.	Discrete Applied Mathematics, Elsevier, 2008 (in print)	0.625
Advances in combinatorial image analysis	Brimkov V.E., R.P. Barneva	Brimkov V.E.	Pattern Recognition, Elsevier, 2008 (in print)	2.019
On the polyhedral	Brimkov V.E.,	Brimkov V.E.	Theoretical Computer Science, Elsevier	0.735

complexity of the integer points in a hyperball	R.P. Barneva		(2008) 24-30	
Border and surface tracing – theoretical foundations	Brimkov V.E., R. Klette	Brimkov V.E.	IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI), IEEE, 30(4) (2008) 577-590	5.582
Algorithmic and explicit determination of the Lovasz number for certain circulant graphs	Brimkov V.E.	Brimkov V.E.	Discrete Applied Mathematics, Elsevier, 155 (2007) 1812-1825	2.019
Digital planarity – a review	Brimkov V.E., D. Coeurjolly, R. Klette	Brimkov V.E.	Discrete Applied Mathematics, Elsevier, 155 (2007) 468-495	2.019
Digital hyperplane recognition in arbitrary fixed dimension within an algeb. computation model, Image and Vision Computing	Brimkov V.E., S.S. Dantchev	Brimkov V.E.	Image and Vision Computing, Elsevier, 25 (2007) 1631-1643	1.027
Plane digitization and related combinatorial problems	Brimkov V.E., R.P. Barneva	Brimkov V.E.	Discrete Applied Mathematics, Elsevier, 147 (2005) 169-186	2.019
Analytical honeycomb geometry for raster and volume graphics	Brimkov V.E., R.P. Barneva	Brimkov V.E.	The Computer Journal, Oxford University Press, 48 (2) (2005) 180-199	0.880
Connectivity of discrete planes	Brimkov V.E., R.P. Barneva	Brimkov V.E.	Theoretical Computer Science, Elsevier, 319(1-3) (2004) 203-227	0.735
Supervised pattern recognition by parallel feature partitioning	V.Valev	V.Valev	Pattern Recognition, Vol. 37, No. 3, 2004, pp. 463-467	2.019

Construction of all non-reducible descriptors	V.Valev, A.Asaithambi	V.Valev	Pattern Recognition, Vol. 37, No. 9, 2004, pp. 1817- 1823	2.019
Generalized non-reducible descriptors	V.Valev, B.Sankur	V.Valev	Pattern Recognition, Vol. 37, No. 9, 2004	2.019
b-National (non-Bulgarian) Journals with Impact Factor or in ERIH				
c-National (Bulgarian) Journals with Impact Factor or in ERIH				

2.11. Department “Mathematical Linguistics”

List of papers in SCI or in ERIH for Humanities				
Title	Author, or all Co-Authors	Author or co-Authors Affiliated with the BAS Institute	Books/Journals/Proceedings	Impact Factor
a-International Journals with Impact Factor or in ERIH				
There is no correlation between the size of a community speaking a language and the size of the phonological inventory of that language.	Pericliev V.	Pericliev V.	<i>Linguistic Typology</i> 2004, 8: 376–383.	A
Implicational phonological universals	Pericliev, V.	Pericliev V.	<i>Folia Linguistica</i> 2008, 42.1: 195-225	B
A Multidimensional Trust Model in B-to-C E-Commerce: A Conceptual Framework and Content Analysis of Academia/Practitioner Perspective	Kim, D., Song, Y., Rao, H., Braynov. S.	Braynov, S.	<i>Decision Support Systems</i> , 2004	1.458
Bulgarian Digital Resources as a Base for Automatic	Dimitrova, L.	Dimitrova, L.	<i>International Journal ÉTUDES COGNITIVES</i> , 2008, 8: 255-271.	In ERIH

Disambiguation			ISSN 1641-9758	
Some Problems in Multilingual Digital Dictionaries	Dimitrova, L., V. Koseska – Toszewa	Dimitrova, L.	<i>International Journal ÉTUDES COGNITIVES</i> , 2008, 8: 237-254. ISSN 1641-9758	In ERIH
b-National (non-Bulgarian) Journals with Impact Factor or in ERIH				
c-National (Bulgarian) Journals with Impact Factor or in ERIH				

2.12. Department “Mathematical Foundation of Informatics”

List of papers in SCI or in ERIH for Humanities				
Title	Author, or all Co-Authors	Author or co- Authors Affiliated with the BAS Institute	Books/Journals/Proceedings	Impact Factor
a- International Journals with Impact Factor or in ERIH				
On Increasing the Number of Users in (t, n) Threshold Secret Sharing Schemes	H. Morita	T. Alexandrova	<i>IEICE Trans. on Fundamentals</i> , vol. E91-A, no. 8, pp. 2138-2150, 2008	0.287
Binary and Ternary Quasi-Perfect Codes with Small Dimensions	Fack V.	Baicheva T., Bouyukliev I., Dodunekov S.	<i>IEEE Trans. on Inform. Theory</i> 54, 4335-4339, (2008)	2.315
A survey on proper codes	Dodunekova R., Nikolova E., Dodunekov	Dodunekov S.	<i>Discrete Applied Mathematics</i> , v.156, No.9, 2008, pp.1499-1509	0.625

	S.			
Determination of the best CRC codes with up to 10-bit redundancy	T. Baicheva	T. Baicheva	<i>IEEE Trans on Communications</i> , vol. 56, no. 8, pp. 1214-1220, 2008	1.302
Using Error-correcting Dependencies for Collaborative Filtering	T. Georgieva	G. Bogdanova	<i>Data and Knowledge Engineering</i> , Elsevier, vol. 66, N 3, pp.402-413, 2008	1.144
On the covering radii of binary Reed-Muller codes in the set of resilient Boolean functions	A.Braeken, S. Nikova and B. Preneel	Y. Borissov	<i>IEEE Trans. on Information Theory</i> , IT-51, no. 3, pp. 1182-1189, (2005)	2.183
Classification of cubic (n-4)-resilient Boolean functions	A.Braeken, S. Nikova and B. Preneel	Y. Borissov	<i>IEEE Trans. on Information Theory</i> , IT-52, no. 4, pp. 1670-1676, (2006)	1.938
Bounds on key appearance equivocation for substitution ciphers	M.H. Lee	Y.L. Borissov	<i>IEEE Trans. on Information Theory</i> , IT-53, no. 6, pp. 2294 – 2296, (2007)	2.315
Fast decoding of the p-ary Reed-Muller code based on Jacket transform"	M.H. Lee	Y.L. Borissov	<i>IEICE Transactions Fundamentals</i> , vol. E91-A, no 3, pp. 901-904, (2008)	0.287
New bounds for $n_4(k,d)$ and classification of some optimal codes over GF(4)	Grassl M	Bouyukliev I., Varbanov Z.	<i>Discrete Mathematics</i> 281, 43-66, (2004)	0.374
Classification of Self-Orthogonal Codes over F_3 and F_4	Östergård P.	Bouyukliev I.	<i>SIAM Journal on Discrete Mathematics</i> 19, 363-370 , (2005)	0.885
Some results for linear	Varbanov Z.	Bouyukliev I.	<i>IEEE Trans. on Information Theory</i>	2.183

binary codes with minimum distance 5 and 6			51, 4387-4391, (2005)	
On the binary projective codes with dimensions 6		Bouyukliev I.	<i>Discrete Applied Mathematics</i> 154, 1693-1708, (2006)	0.577
Projective two-weight codes with small parameters and their corresponding graphs	Fack V., Willems W. and Winne J.	Bouyukliev I.	<i>Designs, Codes and Cryptography</i> 41, 59-78, (2006)	0.6371
A Method for Efficient Computing the Number of Codewords of Fixed Weights in Linear Codes	Bakoev V.	Bouyukliev I.	<i>Discrete Applied Mathematics</i> 156, 2986-3004, (2008)	0.625
Binary self-dual codes with automorphisms of composite order	R.Dontcheva, A.J. van Zanten	S. Dodunekov	<i>IEEE Trans. Inform. Theory</i> , v.50, pp.311-318, 2004	2.029
A family of ternary quasi-perfect BCH codes		S. Dodunekov, D. Danev	<i>Designs, Codes and Cryptography</i> , no. 1-3, Dec. 2008	0.681
Derivation on Bit Error Probability of Coded QAM using Integer Codes	H. Morita	H. Kostadinov, N. L. Manev	<i>IEICE Trans. Fundamentals</i> , vol. E87-A, no. 12, 3397-3403, Dec. 2004	0.318
On the minimum size of some minihypers and related linear codes	T. Maruta, A. Rousseva	I. Landjev,	<i>Designs, Codes and Cryptography</i> 34, 5-15, 2005	0.661
On maximal arcs in projective Hjelmslev planes over chain rings of even characteristic	Th. Honold	I. Landjev	<i>Finite Fields and Their Applications</i> 11, 292-304, 2005	0.338
A weighted version of a	L. Storme	I. Landjev	<i>Designs, Codes and Cryptography</i> 45,	0.681

result of Hamada on minihypers and on linear codes meeting the Griesmer bound			123-138, 2007	
Jacket Transform Eigenvalue Decomposition"	M. H. .Lee, Xiao-Dong Zhang	N. L. Manev	<i>Applied Mathematics and Computation</i> , Vol. 198/2, pp.858-864, May 2008, Elsevier	0.821
Enumeration of the doubles of the projective plane of order 4	V. Fack, J. Winne, R. Zlatarski	S. Topalova	<i>Discrete Mathematics</i> , 306, 2141-2151, 2006	0.347
Steiner Triple Systems of Order 19 and 21 with Subsystems of Order 7	Kaski P., Ostergard P., Zlatarski R.	Topalova S.	<i>Discrete Mathematics</i> , 308, 2732-2741, 2008	0.377
b- National (non-Bulgarian) Journals with Impact Factor or in ERIH				
c- National (Bulgarian) Journals with Impact Factor or in ERIH				

2.13. Department “Telecommunications”

List of papers in SCI or in ERIH for Humanities				
Title	Author, or all Co-Authors	Author or co-Authors Affiliated with the BAS Institute	Books/Journals/Proceedings	Impact Factor
a-International Journals with Impact Factor or in ERIH				
New Stochastic Algorithm for Optimization of Both Side-lobes and Grating lobes in Large Antenna Arrays for MPT	Shinohara N., Shishkov B., H. Matsumoto , K. Hashimoto , A.K.M. Baki	Shishkov B.	IEICE Transactions on Communications, Vol.E91-B, No.1, pp., Jan. 2008.	0.252
Mathematical Modeling and Optimization of the Sidelobe Level of Large Antenna Array toward SPS/MPT Applications	Shishkov B., Shinohara N., Matsumoto H., Nanokaichi K., and Hibino T.	Shishkov B.	IEEE, Transaction on Antennas and Propagation, 2004	1.154

Footprint peak time analysis and Functional Ambulation Profile reflect the potential for hemiparetic gait recovery	Titianova E., Mateev P., Peruta S., Sivenius J., Tarkka I	Mateev P.	Brain Injury, 19(8), 2005, pp. 623-631	1.471
Footprint Analysis of Gait using a Pressure Sensor System Journal of Electromyography & Kinesiology	Titianova E., Mateev P., Tarkka I.	Mateev P.	Brain Injury, 14 (2004), pp. 275-281	1.250
b-National (non-Bulgarian) Journals with Impact Factor or in ERIH				
c-National (Bulgarian) Journals with Impact Factor or in ERIH				
Spatial and Temporal Processing of Cyclostationary Signals in Array Antennas Based on Cyclic Higher-Order Statistics	Shishkov, B., A. Bekiarski, H. Kabakchiev	Shishkov B.	Comptes Rendus de l'Academie bulgare des Sciences, Tome, 61, No 2, 2008	0.106

2.14. Department “Humanities Informatics”

List of papers in SCI or in ERIH for Humanities (Section/Department/Laboratory- “ <i>Humanities Informatics</i> ”)				
a-International Journals with Impact Factor or in ERIH				
Title	Author, or all Co-Authors	Author or co-authors affiliated with the BAS Institute	Books/Journals/Proceedings	Impact Factor
a-International Journals with Impact Factor or in ERIH				
Footprint Analysis of Gait using a Pressure Sensor System	Titianova E., Mateev P., Tarkka I.	P. Mateev	Journal of Electromyography & Kinesiology, 14 (2004) pp. 275-281	1.333
Footprint peak time analysis and Functional Ambulation Profile reflect the potential for hemiparetic gait recovery.	Titianova E., Mateev P., Peruta S., Sivenius J., Tarkka I.	P. Mateev	Brain Injury, 19(8), 2005, 623-631.	1.250
Digital Libraries and Digitised Maps: An Early Overview of the DIGMAP Project.	Borbinha J., Pedrosa G., Gil J., Martins B., Freire N., Dobrev M., Wyttenbach A.	M. Dobrev	Springer LNCS vol. 4822/2007, pp. 383-386, ISBN 978-3-540-77093-0 (2007)	0.402

b-National (non-Bulgarian) Journals with Impact Factor or in ERIH			
c-National (Bulgarian) Journals with Impact Factor or in ERIH			

2.15. Department “Mathematical modelling”

List of papers in SCI or in ERIH for Humanities				
Title	Author, or all Co-Authors	Author or co-Authors Affiliated with the BAS Institute	Books/Journals/Proceedings	Impact Factor
a-International Journals with Impact Factor or in ERIH				
On existence of almost greedy bases in Banach spaces	Kutzarova D., S.J. Dilworth, and N. J. Kalton	Kutzarova D.	Studia Math., №4, 482-488, 2004	0.568
Interpolation by bivariate polynomials based on Radon projections	Boyanov B. and I. K. Georgieva	I. K. Georgieva	Studia Math., 162 (2), 141-160, 2004	0.568
Study of the Ionization Rate in the SOL	Popova,L., D. Tskhakaya, S. Kuhn, T. Nickolov, S. Hristov, G. Kamberov, H. Marichkova, Z. Tomova, D. Vasileva, V. Hristov	Popova,L., V. Hristov	Contribution to Plasma Physics, vol. 44, № 1-3, 252-255, 2004	0.701

Nonlinear approximation from differentiable piecewise polynomials	Petrushev P. with O. Davydov	Petrushev P.	SIAM J. Math. Anal., 35, 708-758, 2004	1.119
Some methods for simultaneous extraction of a part of all multiple roots of algebraic polynomials	Iliev A. and N. Kyurkchiev	N. Kyurkchiev	Computing 75, 85-97, 2005.	0.880
On Convergence of Minmod-Type Schemes	Konyagin Sergei, Boyan Popov and O. Trifonov	O. Trifonov	SIAM Journal of Numerical Analysis, 45, 5, 1978-1997, 2005	1.470
Impact of particle collisions of ELMs	Kamberov G. and L. Popova	L. Popova	Contributions of Plasma Physics, v. 45, No 2, 111-117, 2005	1.000
High order geometric smoothness for conservation laws	Campos-Pinto M., A. Cohen, P.Petrushev	P.Petrushev	J. of Hyperbolic Differ. Eq., 2, 363-394, 2005	0.492
Localized polynomial frames on the interval with Jacobi weights	Petrushev P., Yuan Xu	Petrushev P.	J. Fourier Anal. Appl., 5, 557-575, 2005	1.125
A New Characterization of Weighted Peetre K-Functionals	Draganov B. R. and K. G. Ivanov	Draganov B. R. and K. G. Ivanov:	Constructive Approximation, 21, 113-148, 2005	1.738
On a generalization of the Euler-Chebyshev method for simultaneous extraction of only a part of all roots of polynomials,	Iliev, A., N. Kyurkchiev, Q. Fang	N. Kyurkchiev	Japan J. of Industrial and Applied Mathematics, vol. 23, № 1, 63-73, 2006	0.302

On asymptotically symmetric Banach spaces	Marius Junge, Denka Kutzarova and E. Odell	Denka Kutzarova	Studia Math. 173, 203-231, 2006	0.568
The weak Chebyshev X-greedy algorithm in the unweighted Bergman space	Dilvorth S. J., D. Kutzarova and Karen Shuman	D. Kutzarova	J. Math. Anal. Appl. 318, №2, 692-706, 2006	0.872
Order of convergence of second order schemes based on the minmod limiter	Popov B. and O. Trifonov	O. Trifonov	Math. Comp., 75, №256, 1735-1753, 2006	1.230
One-sided stability and convergence of the Nessyahu-Tadmor scheme	Popov B. and O. Trifonov	O. Trifonov	Numer. Math., 104, № 4, 539-559, 2006	1.376
On the construction of frames for Triebel-Lizorkin and Besov spaces	Kyriazis G., P. Petrushev	P. Petrushev.	Proceedings of Amer. Math. Soc., 134, 1759-1770, 2006	0.520
“Push the Error” algorithm for nonlinear n-term approximation	Dahmen W., P. Petrushev	P. Petrushev.	Constr. Approx., 23, 261-304, 2006	1.738
Localized Tight Frames on Spheres	Narcowich F. J., P. Petrushev and J. D. Ward	P. Petrushev	SIAM J. Math. Anal., 38, 574-594, 2006	1.119
Decomposition of Besov and Triebel-Lizorkin spaces on the sphere	Narcowich J., P. Petrushev J., D. Ward	P. Petrushev	J. Funct. Anal. 238, 530-564, 2006	0.893

A characterization of Weighted Approximations by the Post-Widder and the Gamma Operators	Draganov B., K. G. Ivanov	Draganov B., K. G. Ivanov	Journal of Approximation Theory, 146, 1, 3-27, 2007	0.697
On strongly asymptotic L_p spaces and minimality	Dilworth S. J., V. Ferenczi, D. Kutzarova, E. Odell	D. Kutzarova	J. London Math. Soc. 75, 409-419, 2007	1.221
Multilevel Preconditioning for Partition of Unity Methods – Some Analytic Concepts	Dahmen W., S. Dekel, P. Petrushev	P. Petrushev.	Numerische Mathematik, 107, 503-532, 2007	1.376
Localized polynomial frames on the ball	Petrushev P., Yuan Xu	Petrushev P.	Constr. Approx., 27, 121-148, 2008	1.738
Jacobi decomposition of weighted Triebel-Lizorkin and Besov spaces	Kiryazis G., P. Petrushev, Yuan Xu	P. Petrushev	Studia Math. 186, 161-202, 2008	0.568
Decomposition of weighted Triebel-Lizorkin and Besov spaces on the ball	Kiryazis G., P. Petrushev, Yuan Xu	P. Petrushev	Proceedings of London Math. Soc., 97, 477-513, 2008	1.121
Decomposition of spaces of distributions induced by Hermit expansions	Petrushev P., Yuan Xu	Petrushev P.	J. Fourier Anal. and Appl. 14, 372-414, 2008	1.125

Weak convergence of greedy algorithms in Banach spaces	Dilvorth S. J., D. Kutzarova, K. Shuman, V. Temlyakov, P. Wojtaszczyk	D. Kutzarova	J. Fourier Anal. Appl., 14, 609-628, 2008	1.125
Minimality properties of Tsirelson type spaces	Kutzarova D. (with D. H. Leung,A. Manoussakis and W.-K. Tang)	Kutzarova D.	Studia Math. 187, 233—263, 2008	0.568
Yet another generalization of the Ramanujan-Nagell equation	Trifonov O.(with M. Bennett and M. Filaseta)	Trifonov O.	Acta Arith. , 134 no.3, 211—217, 2008.	0.410
Smoothing of Radon projections type of data by bivariate polynomials	Georgieva I., R. Uluchev	Georgieva I.	Journal of Computational and Applied Mathematics, 215, 167-181, 2008	0.943
Surface reconstruction and Lagrange basis polynomials	Georgieva I., R. Uluchev	Georgieva I.	Lecture Notes in Computer Sciences, Springer-Verlag, 4818, 670-678, 2008	0.766
Failure of convergence of the Newton-Weierstrass iterative method for simultaneous rootfinding of generalized polynomials	N. Kyurkchiev, A. Iliev,	N. Kyurkchiev	Computers and Math. with Applic., Vol. 47, No.2-3, 441-446, 2004	0.720

b-National (non-Bulgarian) Journals with Impact Factor or in ERIH				
c-National (Bulgarian) Journals with Impact Factor or in ERIH				
Optimal Interpolation of Strictly Convex Local Data in R^3 by Convex Smooth Functions	G.Iliev	G.Iliev	C. R. Acad. Bulg. Sci., Vol. 61, No7, 2008	0.106

2.16. Department “Probability and Statistics”

List of papers in SCI or in ERIH for Humanities				
Title	Author, or all Co-Authors	Author or co-Authors Affiliated with the BAS Institute	Books/Journals/Proceedings	Impact Factor
a-International Journals with Impact Factor or in ERIH				
Age and residual lifetime distributions for branching processes.	Yakovlev, A. Yu., Yanev N. M.	Yanev N. M.	Statistics and Probability Letters 77, 2007, 503-513.	0.328
Branching stochastic processes with immigration in analysis of renewing cell populations.	Yakovlev, A. Yu., Yanev N. M.	Yanev N. M.	Mathematical Biosciences 203, 2006, 37-63.	1.885
Stationary distributions for branching processes with multi-type random control functions.	Del Puerto, I.M., Yanev N. M.	Yanev N. M.	J. Appl. Stat. Sci., 2008, v. 16, No.1.	In SCI
Superpositions of renewal processes with heavy-tailed interarrival times.	Mitov, K. V., Yanev N. M.	Yanev N. M.	Statistics & Probability Letters, 2006, v. 76, no.6, 555-561.	0.328
Analysis of a Recurrence Related to Critical Nonhomogeneous Branching Processes.	Drmotva, M., Louchard, G., Yanev N. M.	Yanev N. M.	Stochastic Analysis and Applications, 2006, v. 24, no. 1, 37-59.	0.386

A critical branching process with stationary-limiting distribution.	Yanev, G. P., Yanev, N. M.	Yanev, G. P., Yanev, N. M.	Stochastic Anal. Appl., 22:3(2004):721-738.	0.386
Renewal, regenerative, and branching processes with stable distributions.	Yanev, N. M., Mitov, K. V., and Yanev, G. P.	Yanev N. M., Yanev, G. P.	J. Math. Sci. (N. Y.), 122:4(2004):3438-3448.	In SCI
Branching processes as models of progenitors cell populations and estimation of offspring distributions.	Yakovlev, A, Yu. Stoimenova, V. K., Yanev, N. M.	Stoimenova, V. K., Yanev, N. M.	JASA (J. Amer. Stat. Ass.), 103, No. 484, 1357-1366.	1.710
New Stochastic Algorithm for Optimization of Both Side-lobes and Grating lobes in Large Antenna Arrays for MPT	Shinohara, N., B. Shishkov, H. Matsumoto, K. Hashimoto, A.K.M. Baki	B. Shishkov	IEICE Transactions on Communications, Vol.E91-B, No.1,pp. 286-296, Jan. 2008	0.487
Random Time-Changed Extremal Processes	Pancheva E., E. Kolkovska and P. Jordanova.	Pancheva E.	Probability Theory and Applications, vol. 51, no. 4 (2006) pp. 752-772.	In SCI
A Functional Extremal Criterion.	Pancheva E., P.Jordanova.	Pancheva E.	Journal of Mathematical Sciences, Plenum Publishing Corporation, New York, vol. 121, no. 5, pp. 2636-2644, 2004.	In SCI

The limiting distribution of the trace of a random plane partition	Kamenov, E. and Mutafchiev, L.	Mutafchiev, L.	Acta Math. Hungarica 117(2007), 293-314.	0.366
On the maximal multiplicity of parts in a random integer partition	Mutafchiev, L.	Mutafchiev, L.	The Ramanujan J. 9(2005), 305-316.	0.358
Survival probabilities for N-ary subtrees on a Galton-Watson family tree.	Mutafchiev, L.	Mutafchiev, L.	Statist. Probab. Letters 78(2008), 2165-2170	0.328
The size of the largest part of random plane partitions of large integers.	Mutafchiev, L.	Mutafchiev, L.	Integers: Electronic Journal of Combinatorial Number Theory 6(2006), No. A13	In SCI
Number of complete N-ary subtrees on Galton-Watson family trees	Mutafchiev, L., Yanev, G.	Mutafchiev, L., Yanev, G.	Methodology and Computing in Applied Probability 8:2 (2006):223-233	0.463
Characterizations of probability distributions via bivariate regression of record values	Yanev, G.P., M. Ahsanullah, and M.I. Beg	Yanev, G.P.	Metrika, 68:1(2008):51-64.	0.510
Changes in coral reef communities among the Florida Keys, 1996-2003	P. Somerfield, W. Jaap, K. Clarke, M. Callahan, K. Hackett, J. Porter, M.	G. Yanev	Coral Reefs, 27:4(2008):951-965	2.227

	Lybolt, C. Tsokos, and G. Yanev			
Distribution of the amount of genetic material from a chromosomal segment surviving to the following generation	Stefanov, V.T.	Stefanov, V.T.	Journal of Applied Probability, 41, (2004) pp. 345-354.	0.500
Evaluation of identity-by-descent probabilities for half-sibs on continuous genome	Ball, F., Stefanov, V.T.	Stefanov, V.T.	Mathematical Biosciences, 196, (2005) pp. 215-225.	1.130
Exact Distributions for Reward Functions on Semi-Markov and Markov Additive Processes	Stefanov, V.T.	Stefanov, V.T	Journal of Applied Probability, 43, (2006) pp. 1053-1065	0.500
Waiting times for clumps of patterns and for structured motifs in random sequences	Stefanov, V.T., Robin, S., Schbath, S.	Stefanov, V.T.	Discrete Applied Mathematics, 155, (2007) pp. 868-880.	0.58
Waiting time distributions for pattern occurrence in a constrained sequence	Stefanov, V.T., Szpankowski W.	Stefanov, V.T.	Discrete Mathematics and Theoretical Computer Science, 9, 1, (2007) pp. 305-320.	0.90
Simultaneous occurrences of runs in independent Markov chains,	Robin, S. and Stefanov, V. T.	Stefanov, V. T.	Methodology and Computing in Applied Probability DOI 10.1007/s11009-008-9093-3 (available online July 2008)	0.463

Solar wind polytropic index estimates based on single spacecraft plasma and interplanetary magnetic field measurements	Kartalev, M., M. Dryer, K. Grigorov, E.Stoimenov a	E. Stoimenova	Journal of Geophysical Research - Space Physics (2006), vol. 111, No.A10, A10107.	2.953
The contribution of the gibberellin-insensitive semi-dwarfing (Rht) genes to genetic variation in wheat seedling growth in response to osmotic stress	Landjeva S., V. Korzun, E. Stoimenova, B. Truberg, G.Ganeva pA. Boerner	E. Stoimenova	Journal of Agricultural Science (2008), vol. 146, 1–12.	1.093
Two-sample rank tests based on exceeding observations	E. Stoimenova	E. Stoimenova	Applications of Mathematics (2007), vol. 52, No. 4, 345-352.	In SCI
Transcranial magnetic stimulaton and absolute silent period in adolescents with migraine and idiopathic generalized epilepsy	Tomov, V., E. Stoimenova and L. Belopitova	E. Stoimenova	The Journal of Headache and Pain (2004), vol. 5, No.1, 70-71.	In SCI
Estradiol and tryptophan depletion interact to modulate cognition in menopausal women.	Amin Z, Gueorguieva R, Cappiello A, Czarkowski KA, Stiklus S, Anderson GM,	Gueorguieva R	Neuropsychopharmacology 31(11): (2006) 2489-2497.	4.94

	Epperson CN.			
Preliminary evidence for medication effects on functional abnormalities in the amygdale and anterior cingulate in bipolar disorder.	Blumberg H.P., Donegan NH, Sanislow CA, Collins S, Lacadie C, Skudlarski P, Gueorguieva R, Fulbright RK, McGlashan TH, Wexler BE, Gore JC, Krystal JH.	Gueorguieva R	Psychopharmacology 183(3): (2005) 308-313.	3.15
Extracellular metabolites in the cortex and hippocampus of epileptic patients.	Cavus I, Kasoff W, Cassaday M, Jacob R, Gueorguieva R, Sherwin R, Krystal J, Spenser D, Abi-Saab W.	Gueorguieva R	Annals of Neurology 57(2): (2005) 226-235.	8.1

<p>Absence of behavioral sensitization in healthy human subjects following repeated exposure to ketamine.</p>	<p>Cho H.S., D'Souza D.C., Gueorguieva R, Perry E.B., Madonick S, KArper L.P., Abi- Dargham A, Belger A, Abi-Saab W, Cassello K, Lipschitz D, Bennet A, Seibyl J.P., Krystal J.H.</p>	<p>Gueorguieva R</p>	<p>Psychopharmacology 179 :(2005) 136-143.</p>	<p>3.15</p>
<p>Riluzole pharmacotherapy for treatment-resistant OCD: an open label trial.</p>	<p>Oric V, Taskiran S, Wasylink S, Mathalon DH, Valentine G, Saksa J, Wu Y, Gueorguieva R, Sanacora</p>	<p>Gueorguieva R</p>	<p>Biological Psychiatry 58:(2005) 424-428.</p>	<p>6.16</p>

	G, Malison R.T., Krystal J.H.			
Delta-9-Tetrahydrocannabinol effects in schizophrenia: implications for cognition, psychosis and addiction.	D'Souza D.C., Abi- Saab, WM, Madonick S, Forselius- Bielen K, Doersch A, Braley G, Gueorguieva R, Cooper T.B., Krystal J.H.	Gueorguieva R	Biological Psychiatry 27(6):(2005) 594-608.	6.16
Enhanced sensitivity to the euphoric effects of alcohol in schizophrenia	D'Souza D.C., Gil R, Madonick S, Forselius- Bielen K, Braley G, Donahue L, Tellioglu T, Zimolo Z, Gueorguieva R, Krystal J.H.	Gueorguieva R	Neuropsychopharmacology 31(12): (2006) 2767-2775.	4.94

<p>The psychotomimetic effects of intravenous Delta-9-Tetrahydrocannabinol in healthy individuals: implications for psychosis.</p>	<p>D'Souza D.C., Perry E, MacDougall L, Ammerman Y, Cooper T, Wu Y.T., Braley G, Gueorguieva R, Krystal J.H.</p>	<p>Gueorguieva R</p>	<p>Neuropsychopharmacology 29, (2004) 1558-1572.</p>	<p>4.94</p>
<p>Preliminary evidence of reduced occipital GABA concentrations in puerperal women: a 1H-MRS Study.</p>	<p>Epperson CN, Gueorguieva R, Czarkowski KA, Stiklus S, Sellers E, Krystal JH, Rothman D, Mason GF.</p>	<p>Gueorguieva R</p>	<p>Psychopharmacology 186(3): (2006) 425-433.</p>	<p>3.15</p>
<p>Sex, Nicotine and GABA: The impact of smoking on cortical gamma-aminobutyric acid levels as measured with 1H-MRS.</p>	<p>Epperson CN, O'Malley S, Czarkowski K,</p>	<p>Gueorguieva R</p>	<p>Biological Psychiatry 57:(2005) 44-48.</p>	<p>6.16</p>

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Opioid receptor gene (OPRM1, OPRK1, and OPRD1) variants and response to naltrexone treatment for alcohol dependence: Results from the VA Cooperative Study.	Gelernter J, Gueorguieva R, Kranzler H, Zhang H, Cramer J, Rosenheck R, Krystal JH.	Gueorguieva R	Alcoholism: Clinical and Experimental Research 31(4): (2007) 555-563.	3.18
Impaired GABA neuronal response to benzodiazepine administration in panic disorder.	Goddard AW, Mason GF, Rothman DL, Gueorguieva R, Behar KL, Krystal JH	Gueorguieva R	American Journal of Psychiatry 161: (2004) 2186-2193.	7.61
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Comments about joint modeling of cluster size and binary and continuous subunit-specific outcomes.	Gueorguieva R.	Gueorguieva R	Biometrics 61(3):(2005) 862-867.	1.21
Move Over ANOVA: Progress in analyzing repeated measures data and its reflection in papers published in the Archives of General Psychiatry.	Gueorguieva RV, Krystal J	Gueorguieva R	Archives of General Psychiatry 61: (2004) 310-317.	11.2
Joint analysis of repeatedly observed continuous and ordinal measures of disease severity.	Gueorguieva RV, Sanacora G.	Gueorguieva R	Statistics in Medicine 25; (2006) 1307-1322.	1.39
CSF sub-compartments in patients with first episode schizophrenia and healthy control subjects: an investigation in relation to plasma Na and osmolality.	Gunduz-Bruce H, Narr KL, Gueorguieva R, Toga AW, Cseszko PR, Ashtari M, Robinson DG, Kane JM, Bilder RM	Gueorguieva R	Psychiatry Research - Neuroimaging 155: (2007) 57-66.	2.3

<p>Cortisol levels in relation to hippocampal sub-regions in subjects with first episode schizophrenia.</p>	<p>Gunduz-Bruce H, Szeszko P, Gueorguieva R, Ashtari M, Robinson DG, Kane JM, Bilder RM</p>	<p>Gueorguieva R</p>	<p>Schizophrenia Research 94: (2007) 281-287.</p>	<p>4.24</p>
<p>Temporoparietal transcranial magnetic stimulation for auditory hallucinations: safety, efficacy and moderators in a fifty patients sample.</p>	<p>Hoffman RE, Gueorguieva R, Hawkins KA, Varanko M, Boutros N, Wu Y, Carroll K, Krystal JH</p>	<p>Gueorguieva R</p>	<p>Biological Psychiatry 58: (2005) 97-104.</p>	<p>6.16</p>
<p>Risk factors for cocaine-induced paranoia in cocaine-dependent sibling pairs.</p>	<p>Kalayasiri R, Kranzler HR, Weiss R, Brady K, Gueorguieva R, Panhuysen C, Yand BZ, Farrer L, Gelernter J, Malison RT.</p>	<p>Gueorguieva R</p>	<p>Drug and Alcohol Dependence 84(1): (2006) 77-84.</p>	<p>2.91</p>

<p>Self-reported paranoia during “binge” cocaine self-administration in humans.</p>	<p>Kalayasiri R, Sughondhabirrom A, Gueorguieva R, Coric V, Lynch W, Morgan P, Cubells J, Malison RT.</p>	<p>Gueorguieva R</p>	<p>Pharmacology, Biochemistry and Behavior 83: (2006) 249-256.</p>	<p>2.36</p>
<p>DBH C-1021T influences self-reported paranoia during cocaine self-administration.</p>	<p>Kalayasiri R, Sughondhabirrom A, Gueorguieva R, Coric V, Lynch W, Lappalainen J, Glernter J, Cubells JF, Malison RT.</p>	<p>Gueorguieva R</p>	<p>Biological Psychiatry 61: (2007) 1310-1313.</p>	<p>6.16</p>
<p>The NMDA receptor antagonist, memantine, reduces cue-induced alcohol craving despite producing ethanol-like subjective effects in recovering alcohol dependent patients.</p>	<p>Krypitsky E, Neznanova O, Masalov D, Burakov A, Didenko T, Romanova T, Tsoy M, Beshpalov A,</p>	<p>Gueorguieva R</p>	<p>American Journal of Psychiatry 164(3): (2007) 519-523.</p>	<p>7.61</p>

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ketamine, on working memory by pretreatment with the group II metabotropic glutamate receptor (mGluR) agonist, LY354740, in healthy human subjects.	Liu N, Gueorguieva R, McDougall L, Hunsberger T, Belger A, Levine L, Breier A.			
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Potentiation of low dose ketamine effects by naltrexone: potential implications for the pharmacotherapy of alcoholism.	Krystal JH, Madonick S, Perry E, Gueorguieva R, Brush L, Wray Y, Belger A, D'Souza DC.	Gueorguieva R	Neuropsychopharmacology 31: (2006) 1793-1800.	4.94

<p>Comparative and interactive human psychopharmacologic effects of ketamine and amphetamine: implication for glutamatergic and dopaminergic model psychoses and cognitive function.</p>	<p>Krystal JH, Perry E, Gueorguieva R, Belger A, Madonick S, Casselo K, MacDougall L, Abi-Saab W, D'Souza DC.</p>	<p>Gueorguieva R</p>	<p>Archives of General Psychiatry 62: (2005) 985-995.</p>	<p>11.2</p>
<p>Baseline and modulated acoustic startle responses in adolescent girls with posttraumatic stress disorder.</p>	<p>Lipschitz D.S., Mayes L.M., Rasmusson A.M., Anyan W, Billingslea E, Gueorguieva R, Southwick S.M.</p>	<p>Gueorguieva R</p>	<p>Journal of American Academy of Child and Adolescent Psychiatry (JAACAP) 44(8): (2005) 807-814.</p>	<p>3.53</p>
<p>A paradigm to investigate the regulation of cocaine self-administration in human cocaine users: a fully randomized trial.</p>	<p>Lynch W.J., Sughondhabirrom, Pittman B, Gueorguieva R, Joshua D, Morgan P,</p>	<p>Gueorguieva R</p>	<p>Psychopharmacology 185: (2006) 306-314.</p>	<p>3.15</p>

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Amino acid neurotransmitter abnormalities associated with major depression: differential metabolic changes in	Sanacora G, Gueorguieva R, Epperson CN, Wu YT,	Gueorguieva R	Archives of General Psychiatry 61, (2004) 705-713.	11.2

subtypes of major depression.	Appel M, Rothman DL, Krystal JH, Mason G			
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A paradigm to investigate the regulation of cocaine self- induced administration in humans using patient- controlled analgesia techniques.	Sughondhabi rom A, Jain D, Gueorguieva R, Coric V, Berman R, Lynch WL,	Gueorguieva R	Psychopharmacology 180: (2005) 436- 446.	3.15

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Control group bias in randomized atypical antipsychotic trials for schizophrenia.	Woods S.W., Gueorguieva R, Baker C.B., Makuch R.W.	Gueorguieva R	Archives of General Psychiatry 62: (2005) 975-983.	11.2
Limit Theorems for Subcritical Age-dependent Branching Processes with Two Types of Immigration.	Alsmeyer G., M. Slavtchova-Bojkova	M. Slavtchova-Bojkova	Stochastic Models, 21(1), 133-147, 2005	0.603
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A Finite-Time Ruin Probability Formula For Continuous Claim Severities.	Ignatov, Z.G., and Kaishev, V.K.	Kaishev, V.K.	Journal of Applied Probability, v. 41, 2, (2004) 570-578.	0.500
An explicit formula for the infinite horizon probability of (non-) ruin for integer valued claims.	Ignatov, Z.G., and Kaishev, V.K.	Kaishev, V.K.	Journal of Applied Probability, v. 43, 2, (2006) 535-551.	0.500
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Modeling the joint distribution of competing risks survival times using copula functions.	Kaishev, V.K., Dimitrova, D.S., and Haberman, S.	Kaishev, V.K.	Insurance: Mathematics and Economics, v. 41, (2007) 339-361.	0.575

Multinomial model for random sums.	Kolev N., D. Paiva.	Kolev N.	Insurance: Mathematics & Economics 37, (2005), 494-504.	0.575
Random sums of exchangeable variables and actuarial applications.	Kolev N., D. Paiva.	Kolev N.	Insurance: Mathematics & Economics 42, (2008), 147-153.	0.575
Joint probability generating function for a vector of arbitrary indicator variables.	Kolev N., J. Lopez-Mimbela and E. Kolkovska.	Kolev N.	Journal of Computational and Applied Mathematics 186, (2006), 89-98.	0.943
Copulas: a review and recent developments.	Kolev N., U. Anjos and B. Mendes.	Kolev N.	Stochastic Models 22, (2006), 617-660, (Invited paper).	0.603
Some measures for asymmetry of distributions	Boshnakov, G.N.	Boshnakov, G.N.	Statistics and Probability Letters, vol. 77(11), pp. 1111-1116, 2007.	0.328
Singular value decomposition of multi-companion matrices.	Boshnakov, G.N.	Boshnakov, G.N.	Linear Algebra and Its Applications, Vol. 424 (Issues 2-3) 2007, Pages 393-404.	0.702
On the asymptotic properties of multivariate sample autocovariances.	Boshnakov, G.N.	Boshnakov, G.N.	Journal of Multivariate Analysis, 92 (1), 42-52, 2005.	0.773
b-National (non-Bulgarian) Journals with Impact Factor or in ERIH				
Empirical density estimation for interval censored data	E. Stoimenova	E. Stoimenova	Austrian Journal of Statistics (2008), vol. 37, 119–128.	

c-National (Bulgarian) Journals with Impact Factor or in ERIH				
Exceedance-type statistic under Lehmann alternatives	E.Stoimenov a	E. Stoimenova	Compt. Rend. Acad. Bulg. Sci. (2008), vol.61 (12), 1517-1524.	0.106

2.17. Department “Operational Research”

List of papers in SCI or in ERIH for Humanities				
Title	Author, or all Co-Authors	Author or co-Authors Affiliated with the BAS Institute	Books/Journals/Proceedings	Impact Factor
a-International Journals with Impact Factor or in ERIH				
On real-analytic recurrence relations for cardinal exponential B-splines	Aldaz J.M., O. Kounchev, H. Render,	O. Kounchev	J. Approx. Theory 145 (2007), no. 2, 253–265	0.697
Dynamic Programming for LR-PCR Segmentation of Bacterium Genoms	Andonov R., N. Yanev, D. Lavenier, P. Veber	N. Yanev	Concurrency and Computation: Practice and Experience, 2005, Vol. 17, 1657-1668, Wiley & Sons	0.535
On the inner and outer norms of sublinear mappings	Aragón Artacho F. J., A. Dontchev	A.L. Dontchev	Set-Valued Analysis 15 (2007), 61-65	0.675 (2007)
Regularity and integration of set-valued maps represented by generalized Steiner points	Baier R., E. Farkhi	E. Farkhi	Set-Valued Analysis, 15, (2007), 185-207	0.675 (2007)
Cardinal interpolation with periodic polysplines on strips	Bejancu A., O.I. Kounchev, H. Render	O.I. Kounchev	Calcolo 44 (2007), no. 4, 203–217	0.467 (2007)

Properties of Typical Bounded and Closed Convex Sets in Hilbert Spaces	de Blasi F., N. Zhivkov	N. Zhivkov	Abstract and Applied Analysis 2005:4 (2005), 423-436	0.163 (2007)
A one perturbation variational principle and applications	Borwein J. et al.	J.P. Revalski	Set-Valued Anal., 12(2004), 49--60	0.553 (2004)
Metric regularity of semi-infinite constraint systems	Canovas M., A.L..Dontchev, M. Lopez, J. Parra	A. L. Dontchev	Math. Programming 104 (2005), Ser. B, 329-346	1.497
Cycles of violence: a dynamic control analysis	Caulkins J., G. Feichtinger, G. Tragler, V.M. Veliov	V.M. Veliov	European J. Oper. Res.. 181(1): 350- 361, 2007	1.096 (2007)
Extensions of Clarke's proximal characterization for reachable mappings of differential inclusions	Dontchev A.L., T. Donchev	Dontchev A.L., T. Donchev	J. Math. Anal. Appl. 348 (2008), no. 1, 454-460	
Aubin criterion for metric regularity	Dontchev A.L., M. Quincampoix , N. Zlateva	Dontchev A.L.	J. Convex Analysis 13 (2006), 281- 297	0.567 (2006)
Parametrically robust optimality in nonlinear programming	Dontchev A.L., R. T. Rockafellar	Dontchev A.L.	Appl. Comput. Math. 5 (2006), 59-65.	0.821

Perturbations and metric regularity	Dontchev A.L., A. S. Lewis	Dontchev A.L.	Set-Valued Analysis 13 (2005), 417-438.	0.675 (2007)
A local selection theorem for metrically regular mappings	Dontchev A.L.	Dontchev A.L.	J. Convex Analysis 11 (2004), 81-94	0.425
Regularity and conditioning of solution mappings in variational analysis	Dontchev A.L., R. T. Rockafellar	Dontchev A.L.	Set-Valued Analysis 12 (2004), 79-109.	0.675 (2007)
Discrete Approximations and Fixed Set Iterations in Banach Spaces	Donchev T., E. Farkhi, S. Reich	Donchev T., E. Farkhi	SIAM J. Optimization, 18, (2007), 895-906.	1.554 (2007)
Approximations of Set-Valued Functions by Metric Linear Operators	Dyn N., E. Farkhi, A. Mokhov	E. Farkhi	Constructive Approximation, 25, (2007), 193-209.	1.738 (2007)
On a Distributed Control Problem Arising in Dynamic Optimization of a Fixed-Size Population	Feichtinger G., V.M. Veliov	V.M. Veliov	SIAM J. Optim., 18(3):980-1003, 2007	1.554
Financially constrained capital investments: the effects of disembodied and embodied technological progress	Feichtinger G., R.F. Hartl, P.M. Kort, V.M. Veliov	V.M. Veliov	Journal of Mathematical Economics, 44:459-483, 2008	0.351

Anticipation effects of technological progress on capital accumulation: a vintage capital approach	Feichtinger G., R.F. Hartl, P.M. Kort, V.M. Veliov	V.M. Veliov	J. Econom. Theory, 126:143-164, 2006	1.353
Capital accumulation under technological progress and learning: a vintage capital approach	Feichtinger G., R.F. Hartl, P.M. Kort, V.M. Veliov	V.M. Veliov	European J. Oper. Res., 172(1):293-310, 2006.	0.918
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Maximum principle for age and duration structured systems: a tool for optimal prevention and treatment of HIV	Feichtinger G., Ts. Tsachev, V. Veliov	Ts. Tsachev, V. Veliov	Mathematical Population Studies, 11 (2004), No 1, 3-28	1.395 (2007)
Age-structured optimal control in population economics	Feichtinger G., A. Prskawetz, V.M. Veliov	V.M. Veliov	Theoretical Population Biology, 65:373-387, 2004	1.950
Extended sums and extended compositions of monotone operators	Garcia Y. et al.	J.P. Revalski	J. Convex Anal., 13(2006), 721-738	0.567

Optimal Harvesting Time in a Size-Heterogeneous Population	Gasca-Leyva E., J.M. Hernandez, V.M. Veliov	V.M. Veliov	Ecological Modelling, 210(1-2):161-168, 2008	
On linear inequality systems with smooth coefficients	Goberna M., L. Hernandez, M.I. Todorov	M.I. Todorov	JOTA, Volumen 124, Number 2, February 2005, pp. 363 – 386	0.688 (2007)
On the stability of closed-convex-valued mappings and the associated boundaries	Goberna M.A., M.A. Lopez, M.I. Todorov	M.I. Todorov	JMAA, Vol. 306, Issue 2, (2005), pp. 502-512.	0.872
Sensitivity analysis in linear semi-infinite programming: perturbing cost and right-hand-side coefficients	Goberna M.A., Gomez S., Guerra F., M.I. Todorov	M.I. Todorov	European Journal of Operational Research, 181 (2007), pp. 1069-1085.	1.096 (2007)
Separating the solution sets of analytical and polynomial systems	Goberna M.A., Hernandez L., M.I. Todorov	M.I. Todorov	TOP, (2005), Vol. 13, No. 2, pp. 321-329	0.770
On the stability of the convex-valued mappings and their relative boundary and extreme points set mappings	Goberna M.A., M.I. Todorov, V. Vera de Serio	M.I. Todorov	SIAM J. on Optimization, Vol. 17, No. 1, pp. 147-158, 2006	1.554 (2007)

Generic primal-dual solvability in continuous linear semi-infinite programming	Goberna M.A., M.I. Todorov	M.I. Todorov	Optimization, Volume 57, Issue 2, 2008, Pages 239-248.	In SCI
Tabu search approaches for solving the two-group classification problem	Hanafi S., N. Yanev	N. Yanev	Annals of operations research, 2008.	
On polyharmonic interpolation	Haußmann W., O. Kounchev	O. Kounchev	J. Math. Anal. Appl. 331 (2007), no. 2, 840–849.	0.872
Almost every convex quadratic programming problem is well-posed	Ioffe A. et al.	J.P. Revalski	Math. Oper. Res., 29, No. 2,(2004), 369--382.	1.044
Norm continuity of weakly continuous mappings into Banach spaces	Kenderov P., I. Korteov, W. Moors	Kenderov P., I. Korteov	Topology and its Applications, Vol. 153, 14, (2006), 2745-2759	IF= 0.480 5 year IF= 0.428
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On the Existence of Solutions to Differential Inclusions with Nonconvex Right-Hand Side	Krastanov M.I., N.K. Ribarska, Ts. Y. Tsachev	M.I. Krastanov, N.K. Ribarska, Ts. Y. Tsachev	SIAM Journal on Optimization, 18 (2007), No 3, 733-751	1,554 (2007)
Pade approximation for a multivariate Markov transform	Kounchev O.; H. Render	Kounchev O.	J. Comput. Appl. Math. 219 (2008), no. 2, 416–430.	

Convergence of polyharmonic splines on semi-regular grids $a.ZZ_n$ for a to infinity	Kounchev O.; H. Render	Kounchev O.	Numer. Algorithms 44 (2007), no. 3, 255–272.	0.527 (2007)
Cardinal interpolation with polysplines on annuli	Kounchev O.; H. Render	Kounchev O.	J. Approx. Theory 137 (2005), no. 1, 89–107. ISSN: 0021-9045	0.697
The approximation order of polysplines	Kounchev O.; H. Render	Kounchev O.	Proc. Amer. Math. Soc. 132 (2004), no. 2, 455–461.	0.508 (2005)
Fragmentability of sequences of set-valued mappings with application to variational principles	Lassonde M. and J.P. Revalski	J.P. Revalski	Proc. Amer. Math. Soc., 133(2005), 2637--264	0.508
Multifractality of decomposed EEG during imaginary and real visual-motor tracking	Popivanov D., V. Stomonyakov, Z. Minchev, S. Jivkova, P. Dojnov, S. Jivkov, E. Christova, and S. Kosev	Z. Minchev	Biological Cybernetics, DOI: 10.1007/s00422-005-0037-5, Springer-Verlag, 2005.	1.398
Age specific dynamic labor demand and human capital investment	Prskawetz A., V.M. Veliov	V.M. Veliov	Journal of Economic Dynamics and Control, 31:3741-3777, 2007.	0.703

Optimal control of uncertain systems with in complete information for the disturbances	Quincampoix M., V.M. Veliov	V.M. Veliov	SIAM J.Contr. Optim., 43(4):1373-1399, 2005.	0.764
On the effect of population heterogeneity on dynamics of epidemic diseases	Veliov V.M.	Veliov V.M.	Journal of Mathematical Biology, 51:123-143, 2005.	1.489 (2007)
Optimal Control of Heterogeneous Systems: Basic Theory	Veliov V.M.	Veliov V.M.	J. Math. Anal. Appl., 346:227-242, 2008	0.872
Lagrangian approaches to a class of matching problems,	Yanev N., P. Veber, R. Andonov and S. Balev	Yanev N	Computers & mathematics with applications, v 55, 5, 2008, pp 1054-1067	0.720
d- National (non-Bulgarian) Journals with Impact Factor or in ERIH				
A dual differentiation space without an equivalent locally uniformly rotund norm.	Kenderov P., W. Moors,	Kenderov P.	Journal of the Australian Mathematical Society, 77, (2004) 357-364.	IF=0.418 , 5 Year IF=0.528
e- National (Bulgarian) Journals with Impact Factor or in ERIH				
Stochastic dominance for sequences and implied utility in dynamic optimization	Dentcheva D., A Ruszczynski	Dentcheva D.	Comptes Rendus de l'Academie Bulgare des Sciences, 57 (2008) 1, 15-22.	0.106 (2007)

2.18. Department “Computational mathematics”

List of papers in SCI or in ERIH for Humanities (Section/Department/Laboratory- “Computational mathematics”)				
Title	Author, or all Co- Authors	Author or co- Authors Affiliated with the BAS Institute	Books/Journals/Proceedings	Impact Factor
a-International Journals with Impact Factor or in SCI-expanded				
Postprocessing and Higher Order Convergence of Mixed Finite Element Approximations of Biharmonic Eigenvalue Problems	Andreev A.B., R.D. Lazarov, and M.R. Racheva	R. Lazarov	<i>J. Comput. Appl. Math.</i> 182 (2005), 333-349	0.569 (2005)
Postprocessing and Improved Accuracy of the Lowest- Order Mixed Finite Element Approximation for Biharmonic Eigenproblems	Andreev, R. Lazarov, M. Racheva	R. Lazarov	<i>Lecture Notes in Computer Science</i> 3743 (2006), 613-620	0.402 (2005)
Crystallization kinetics and network rigidity	Avramov I., Ch.Russel, N. Kolkovska, I. Georgiev	N. Kolkovska, I. Georgiev	<i>J. Phys.: Condens. Matter</i> 20 (2008), 335203 (4pp)	2.038 (2006)

The Continuous Analog of Newton Method for Nonlinear Data Approximation	Bankov N.G. and M.S. Kaschiev	M. Kaschiev	<i>Lectures Notes in Computer Science</i> 3401 (2005), 168-173	0.402 (2005)
Boundary integral method for deformable interfaces in the presence of insoluble surfactants	Bazhlekov I., Patrick D. Anderson and Han E.H. Meijer	I. Bazhlekov	<i>Lecture Notes in Computer Sciences</i> 2907 (2004), 355-362	0.513 (2004)
Non-singular boundary integral method for deformable drops in viscous flows	Bazhlekov, I.B., Anderson P.D., Meijer H.E.H.	I. Bazhlekov	<i>Physics of Fluids</i> , 16 (2004), 1064-1081	1.761 (2004)
Numerical investigation of the effect of insoluble surfactants on drop deformation and breakup in simple shear flow	Bazhlekov, I.B., Anderson, P.D., Meijer, H.E.H.	I. Bazhlekov	<i>Journal of Colloid and Interface Science</i> 298 (2006), 369-394	2.233 (2006)
Two-level preconditioning of Crouzeix-Raviart anisotropic FEM systems	Bencheva G., I. Georgiev, S. Margenov	I. Georgiev	<i>Lecture Notes in Computer Science</i> 2907 (2004), 76-84	0.513 (2004)
Explicit and averaging a posteriori error estimates for adaptive finite volume methods	Carstensen C., R.D. Lazarov, and S. Tomov	R. Lazarov	<i>SIAM J. Numer. Anal.</i> 42 (2005), 2496-2521	1.392 (2005)

Error estimates for finite volume element method for elliptic PDE's in nonconvex polygonal domains	Chatzipantelidis P. and R.D. Lazarov	R. Lazarov	<i>SIAM J. Numer. Anal.</i> 42 (2005), 1932 – 1958	1.392 (2005)
Error estimates for the finite volume element method for parabolic equations in convex polygonal domains	Chatzipantelidis P., R.D. Lazarov, V. Thomee	R. Lazarov	<i>Numer. Methods for Partial Diff. Equations</i> 20 (2004), 650 - 674	0.631 (2004)
Parabolic finite element equations in convex polygonal domains	Chatzipantelidis P., R.D. Lazarov, V. Thomee, L. Wahlbin	R. Lazarov	<i>BIT Numerical Mathematics</i> 43 (2006), S113-S143	0.841 (2006)
A finite volume element method for nonlinear elliptic problems	Chatzipantelidis P., V. Ginting, R.D. Lazarov	R. Lazarov	<i>Numer. Linear Algebra Appl.</i> 12 (2005), 515-546	0.791 (2005)
Benchmark calculations for three particles on a line within the Kantorovich method	Chuluunbaatar O., A.A. Gusev, M.S. Kaschiev, V.A. Kaschieva, A. Amaya-Tapia, S.Y. Larsen, S.I. Vinitsky	M. Kaschiev	<i>J. Phys. B</i> 39 (2006), 243-269	2.024 (2006)

<p>Explicit Magnus expansion for solving the time-dependent Schrodinger equation</p>	<p>Chuluunbaatar O., V.L. Debrov, A. Galtbayar, A. Gusev, M.S. Kaschiev, S.I. Vinitzky, T.Zhanlav</p>	<p>M. Kaschiev</p>	<p><i>J. Phys. A</i> 41 (2008) 295203 (25pp)</p>	<p>1.577 (2006)</p>
<p>A symbolic-numerical algorithm for solving the eigenvalue problem for a hydrogen atom in the magnetic field: cylindrical coordinates</p>	<p>Chuluunbaatar O., A. Gusev, V. Gerdt, M. Kaschiev, V. Rostovtsev, V. Samoylov, T. Tupikova and S. Vinitzky</p>	<p>M. Kaschiev</p>	<p><i>Lecture Notes in Computer Science</i> 4770 (2007), 118-133</p>	<p>0.402 (2005)</p>
<p>KANTBP: A program for computing energy levels, reaction matrix and radial wave functions in the coupled-channel hyperspherical adiabatic approach</p>	<p>Chuluunbaatar O., A.A. Gusev, A.G. Abrashkevich, A. Amaya-Tapia, M.S. Kaschiev, S.Y. Larsen</p>	<p>M. Kaschiev</p>	<p><i>Comput. Phys. Commun.</i> 177 (2007), 649-675</p>	<p>1.595 (2006)</p>

	and S.I. Vinitsky			
Calculation of a hydrogen atom photoionization in a strong magnetic field by using the angular oblate spheroidal functions	Chuluunbaatar, O., A.A. Gusev, V.L. Derbov, M.S. Kaschiev, V.V. Serov, L.A. Melnikov and S.I. Vinitsky	M. Kaschiev	<i>J. Phys. A</i> 40 (2007), 11485-11524	1.577 (2006)
Adiabatic representation for a hydrogen atom photoionization in a uniform magnetic field	Chuluunbaatar, O., Gusev, A.A., Derbov, V.L., Kaschiev, M.S. , Mardoyan, L.G., Serov, V.V., Tupikova, T.V., Vinitsky, S.I.	M. Kaschiev	<i>Physics of Atomic Nuclei</i> 71 (2008), 844-852	0.616 (2006)

<p>POTHMF: A program for computing potential curves and matrix elements of the coupled adiabatic radial equations for a hydrogen-like atom in a homogeneous magnetic field,</p>	<p>Chuluunbaatar, O., Gusev, A.A., Gerdt, V.P., Rostovtsev, V.A., Vinitzky, S.I., Abrashkevich, A.G., Kaschiev, M.S., Serov, V.V.</p>	<p>M. Kaschiev</p>	<p><i>Computer Physics Communication</i> 78 (2008), 301-330</p>	<p>1.595 (2006)</p>
<p>Parallel Monte Carlo Sampling Scheme for Sphere and Hemisphere</p>	<p>Dimov, I. T., A. A. Penzov, S. S. Stoilova</p>	<p>S. Stoilova</p>	<p><i>Lecture Notes in Computer Science</i> 4310 (2007), 48-155</p>	<p>0.402 (2005)</p>
<p>Parallel Monte Carlo Approach for Integration of the Rendering Equation</p>	<p>Dimov, I. T., A. A. Penzov, S. S. Stoilova</p>	<p>S. Stoilova</p>	<p><i>Lecture Notes in Computer Science</i> 4310 (2007) 140-147</p>	<p>0.402 (2005)</p>
<p>High precision method for calculating the energy values of the hydrogen atom in a strong magnetic field</p>	<p>Dimova M., M. Kaschiev</p>	<p>M. Dimova, M. Kaschiev</p>	<p><i>Lecture Notes in Computer Science</i> 3401 (2005), 24-33</p>	<p>0.402 (2005)</p>

Kantorovich method for high accuracy calculations of a hydrogen atom in a strong magnetic field: low-lying excited states	Dimova M.G., M.S. Kaschiev and S.I. Vinitsky	M. Dimova, M. Kaschiev	<i>J. Phys. B</i> 38 (2005), 2337-2352	1,913 (2005)
Two-level preconditioning of discontinuous Galerkin approximations of second order elliptic equations	Dobrev V.A., R.D. Lazarov, P.S. Vassilevski, and L.T. Zikatanov	R. Lazarov	<i>Numer. Linear Algebra Appl.</i> 13 (2006), 753-770	0.860 (2006)
Comparison of a new magnetosphere - magnetosheath model with Interball-1 magnetosheath plasma measurements	Dobreva Polya, Monio Kartalev, Nikolay Shevyrev, Georgy Zastenker	P. Dobreva	<i>Planetary and Space Science</i> 53 (2005), 117-125	In SCI Exp.
On the modular approach of a 3D model of the system magnetosheath-magnetosphere	Dobreva, P.S., Kartalev, M.D., Koitchev, D., Keremidarska, V.I., Kaschiev, M.	M. Kaschiev	<i>Advances in Space Research</i> 41 (2008), 1279-1285	In SCI Exp.

Dynamic data driven simulations in stochastic environments	Duoglas C., Y. Efendiev, R. Ewing, V. Ginting, and R. Lazarov	R. Lazarov	<i>Computing</i> 77 (2006), 321-332	0.881 (2006)
Dynamic contaminant identification in water	Douglas, C.C., Clay Harris, J., Iskandarani, M., Johnson, C.R., Lodder, R.J., Parker, S.G., Cole, M.J., Ewing, R., Efendiev, Y., Lazarov, R., Qin, G.	R. Lazarov	<i>Lecture Notes in Computer Science</i> 3993 (2006), 393-400	0.402 (2005)
Multiscale Interpolation, Backward in Time Error Analysis for Data-Driven Contaminant Simulation	Douglas, Craig C., Yalchin Efendiev, Richard E. Ewing, Victor Ginting, Raytcho D. Lazarov,	R. Lazarov	<i>Lecture Notes in Computer Science</i> 3515 (2005), 640-647	0.402 (2005)

	Martin J. Cole, Greg Jones, and Chris R. Johnson			
Using a virtual telemetry methodology for dynamic data driven application simulations, Dynamic Data Driven Applications Systems	Douglas C.C., C. Shannon, Y. Efendiev, R. Ewing, V. Ginting, R. Lazarov, M. R. Cole, G. Jones, C. R. Johnson, and J. Simpson	R. Lazarov	<i>Lecture Notes in Computer Science</i> 3038 (2004), 701-708	0.513 (2004)
On convergence of certain finite volume difference discretizations for 1-D poroelasticity interface problems	Ewing, R.E., O.P. Iliev, R.D. Lazarov, and A. Naumovich	O. Iliev, R. Lazarov	<i>Numer. Methods for Partial Differential Equations</i> 23 (2007), 652-671	0.667 (2006)
Multilevel preconditioning of rotated bilinear non-conforming FEM problems	Georgiev I., J. Kraus, S. Margenov	I. Georgiev	<i>Computers and Mathematics with Applications</i> 55 (2008), 2280-2294	0.611 (2006)

Multilevel algorithms for Rannacher-Turek finite element approximation of 3D elliptic problems	Georgiev I., J. Kraus, S. Margenov	I. Georgiev	<i>Computing</i> 82 (2008), 217-239	0.881 (2006)
Multilevel preconditioning of rotated trilinear non-conforming finite element problems	Georgiev I., J. Kraus, S. Margenov	I. Georgiev	<i>Lecture Notes in Computer Science</i> 4818 (2008), 86-95	0.402 (2005)
Multilevel preconditioning of 2D Rannacher-Turek FE problems; Additive and multiplicative methods	Georgiev, I., J. Kraus, S. Margenov	I. Georgiev	<i>Lecture Notes in Computer Sciences</i> 4310 (2007), 56-64	0.402 (2005)
Upscale modeling for multiphase flow	Ginting V., R. Ewing, Y. Efendiev, and R. Lazarov	R. Lazarov	<i>J. Comput. Appl. Math.</i> 24 (2004), 213-233	0.486 (2004)
A symbolic-numerical algorithm for solving the eigenvalue problem for a hydrogen atom in magnetic field	Gusev A., V. Gerdt, M. Kaschiev, V. Rostovtsev, V. Samoylov, T. Tupikova and S. Vinitsky	M. Kaschiev	<i>Lecture Notes in Computer Science</i> 4194 (2006), 205-218	0.402 (2005)

On symbolic-numerical representation of evolution operator for finite-dimensional quantum systems	Gusev, A., V.Gerdt, M.Kaschiev, V.Rostovtsev , V.Samoylov, T.Tupikova, Y.Uwano, S.Vinitsky	M. Kaschiev	<i>Physics of Particles and Nuclei letters</i> 4 (2007), 146-149	0.393 (2006)
Uniformly convergent multigrid methods for convection--diffusion problems without any constraint on coarse grids	Hwanho K., X. Jinchao, L. Zikatanov	L. Zikatanov	<i>Adv. Comput. Math.</i> 20 (2004), 385-399	0.763 (2004)
On a local refinement solver for coupled flow in plain and porous media	Iliev, O., D. Vasileva	O. Iliev, D. Vasileva	<i>Lecture Notes in Comp. Sci.</i> 4310 (2007) 590-598	0.402 (2005)
On iterative solvers for non-Newtonian flow equations	Iliev, O., Linn, J., Moog, M., Niedziela, D., Starikovicius , V.	O. Iliev	<i>International Journal of Numerical Methods for Heat and Fluid Flow</i> 16 (2006), 602-616	0.478 (2006)
On upscaling certain flows in deformable porous media	Iliev, Oleg, Mikelic, Andro,	O. Iliev	<i>Multiscale Modeling and Simulation</i> 7 (2008), 93-123	1.723 (2006)

	Popov, Peter			
Modeling and simulation of pollutants transport in rivers	Kachiashvili, K., D. Gordeziani, R. Lazarov, D. Melikdzhanian	R. Lazarov	<i>Applied Mathematical Modelling</i> 31 (2007), 1371-1396	0.583 (2006)
An economic method for evaluation of volume integrals	Kolkovska N.	N. Kolkovska	<i>Lecture Notes in Computer Science</i> 3401 (2005), 360-367	0.402 (2005)
Numerical solution of an elliptic problem with a non-classical boundary condition	Kolkovska, N.	N. Kolkovska	<i>Lecture Notes in Computer Science</i> 4310 (2007), 623-627	0.402 (2005)
Stabilized discontinuous finite element approximations for Stokes equations	Lazarov, R.D., X. Ye	R. Lazarov	<i>J. Comput. Appl. Math.</i> 198 (2007), 236-252	0.759 (2006)
CBS constants for graph-Laplacians and application to multilevel methods for discontinuous Galerkin systems	Lazarov, R.D., and S.D. Margenov	R. Lazarov	<i>Journal of Complexity</i> 23 (2007), 498-515	1.422 (2006)
On the balancing principle for some problems of numerical analysis	Lazarov, R.D., S. Lu, and S.V. Pereverzev	R. Lazarov	<i>Numerische Mathematik</i> 106 (2007), 659-689	1.116 (2006)

Some new error estimates of a semidiscrete finite volume element method for parabolic integro-differential equation with nonsmooth initial data	Sinha R., R.E. Ewing, and R.D. Lazarov	R. Lazarov	<i>SIAM J. Numer. Anal.</i> 43 (2006), 2320-2344	1.335 (2006)
Phase-field method for 2D dendritic growth	Slavov, Vladimir, Dimova, Stefka, Iliev, Oleg	O. Iliev	<i>Lecture Notes in Computer Science</i> 2907 (2004), 404-411	0.513 (2004)
Application of Price functions and Haar type functions to the numerical integration	Stoilova S.	S. Stoilova	<i>Lecture Notes in Computer Science</i> 3401(2005), 502-509	0.402 (2005)
An adaptive multigrid strategy for convection-diffusion problems	Vasileva D., A. Kuut, P.W. Hemker	D. Vasileva	<i>Lecture Notes in Computer Science</i> 3743 (2006), 138-145	0.402 (2005)
b-National (non-Bulgarian) Journals with Impact Factor or in SCI expanded				
A symbolic-numerical algorithm for the computation of matrix elements in the parametric eigenvalue problem	Vinitsky, S.I, V.P. Gerdt, A.A. Gusev, M.S. Kaschiev, V.A. Rostovtsev, V.N. Samoilov, T.V.	M. Kaschiev	<i>Programming and Computer Software</i> , v. 33, pp. 105-116 (2007); Программирование v. 33, pp. 63-76 (2007)	In SCI Exp.

	Tupikova and O. Chuluunbaat ar			
c-National (Bulgarian) Journals with Impact Factor or in SCI expanded				

2.19. Department “Biomathematics”

List of papers in SCI or in ERIH for Humanities (Department “Biomathematics”)				
Title	Author, or all Co-Authors	Author or co-Authors Affiliated with the BAS Institute	Books/Journals/Proceedings	Impact Factor
a-International Journals with Impact Factor or in ERIH				
On the controllability of switching linear systems	Krastanov M., V. M. Veliov	Krastanov M., V. M. Veliov	Automatica, 41(4) (2005), 663-668	1,693
On the Strong Invariance Property for Non-Lipschitz Dynamics	Krastanov, M. I, M. Malisoff, P. Wolenski	Krastanov, M. I.	Communications in Pure and Applied Analysis 5 No. 1 (2006), 107-124	0.857
Differential Inclusions with Nonconvex Right-Hand Side	Krastanov M.I., N.K. Ribarska, Ts. Y. Tsachev	Krastanov M.I., N.K. Ribarska, Ts. Y. Tsachev	SIAM Journal on Optimization, 18 (2007), No 3, 733-751	1.554
On the Constrained Small - Time Controllability of Linear Systems	Krastanov, M. I.	Krastanov, M. I.	Automatica, 44(9) (2008), 2370-2374,	2.083 /2007
Visualizing Parametric Solution Sets	Popova, E., W. Krämer,	Popova, E.	BIT Numerical Mathematics 48(1):95-115, 2008.	0.695/2007

Inner and Outer Bounds for Parametric Linear Systems	Popova, E., W. Krämer,	Popova, E.	Journal of Computational and Applied Mathematics 199(2):310–316, 2007.	0.943
Parametric Interval Linear Solver	Popova, E.	Popova, E.	Numerical Algorithms 37(1-4):345–356, 2004.	0.264
Sharp Bounds for Strains and Stresses in Uncertain Mechanical Models	Popova, E., Datcheva, M., Iankov, R., Schanz, T.	Popova, E.	Springer Lecture Notes in Computer Science 2907, 2004, pp. 262–269.	0.513
On Quasilinear Spaces of Convex Bodies and Intervals	Markov, S.	Markov, S.	Journal of Computational and Applied Mathematics 162 (1), 93-112, 2004.	0.486
On Quasivector Spaces of Convex Bodies and Zonotopes	Markov, S.	Markov, S.	Numerical Algorithms 37(1-4), 263-274, 2004.	0.264
Stochastic Arithmetic: S-spaces and Some Applications	Markov, S., R. Alt, J.-L. Lamotte	Markov, S.	Numerical Algorithms 37 (1-4), 275-284, 2004.	0.264
Stochastic Arithmetic: Addition and Multiplication by Scalars	Markov, S., R. Alt	Markov, S.	Applied Numerical Mathematics 50, 475-488, 2004.	0.639
On the Approximation of Centered Zonotopes in the Plane	Markov, S., D. Claudio	Markov, S.	LSSC2003, Lecture Notes in Computer Sciences 2907, Springer, 246–253, 2004.	0.513

On the Normed Linear Space of Hausdorff Continuous Functions	Anguelov, R., S. Markov, Bl. Sendov	Markov, S.	Lecture Notes in Computer Science 3743, Springer, 2005, 281–288.	0,402
Testing stochastic arithmetic and CESTAC method via polynomial computation	Alt, R., J.-L. Lamotte, S. Markov	Markov, S.	Foundations of Fuzzy Logic and Soft Computing (IFSA 2007), LNAI 4529, Springer, 2007, 13–22.	0.302
Stabilizing Feedback of a Nonlinear Biological Wastewater Treatment Plants Model	Dimitrova N.S. M.I.Krastanov:	Dimitrova N.S. M.I.Krastanov	Lecture Notes in Computer Science 2907, 222-230, 2004.	0.513
Stability analysis of a nonlinear model of wastewater treatment processes	Dimitrova, N. P. Zlateva.	Dimitrova, N.	Lecture Notes in Computer Science, 3401, Springer, 606–612, 2005.	0.402
Higher order approximations of affine nonlinear systems	Kirov, N.I.; M.I. Krastanov	Kirov, N.I.; M.I. Krastanov	Springer Lecture Notes in Computer Science 2907 (2004), 230-238.	0.513
Volterra series and numerical approximations of ODEs	Kirov, N.I.; M.I. Krastanov	Kirov, N.I.; M.I. Krastanov	Springer Lecture Notes in Computer Science 3401 (2005), 337-344.	0.402
b-National (non-Bulgarian) Journals with Impact Factor or in ERIH				
c-National (Bulgarian) Journals with Impact Factor or in ERIH				

3. List of monographs and publications in conference proceedings (distinguish: keynote; invited; peer reviewed)

3.1. Department “Algebra”

Monographs and publications in conference proceedings (distinguish: keynote; invited; peer reviewed) (“Department of Algebra”)			
Title	Author, or all Co-Authors as appear on the publication	Author or co-Authors from the Institute	Books/ Proceedings/ distinguish: keynote; invited; peer reviewed
Coordinates in ideals of polynomial algebras	V. Drensky	V. Drensky	peer reviewed Proceedings of the Special Session on Afine Algebraic Geometry, Contemp. Math. 369 (2005), 85-95
Varieties of reduction for gl_n	A.Iliev, L. Manivel	A.Iliev	peer reviewed Proceedings of the international conference “Varieties with unexpected properties”, Siena, Italy, June 8--13, 2004. Berlin: Walter de Gruyter. 287-316 (2005).
A Short Survey of Lunn-Senior's Model of Isomerism in Organic Chemistry	V. Iliev	V. Iliev	peer reviewed Lecture Series on Computer and Computational Sciences, Brill Academic Publishers, vol. 4B (2005), 1586 - 1588
On Some Isomers of the	V. Iliev	V. Iliev	peer reviewed

Linear Alkanes			Proceedings of the International Conference on Computational Methods in Science and Engineering 2007 (ICCMSE 2007): Vol. 2, Parts A and B, ISBN 978-0-7354-0478-6, December 2007, 528-532.
Polarization type of isogeneous Prym-Tyurin varieties	V. Kanev, H. Lange,	V. Kanev	peer reviewed Curves and abelian varieties. International conference, Athens, GA, USA, March 30--April 2, 2007. Providence, RI: American Mathematical Society (AMS). 2008 Contemporary Mathematics 465, 147-174
Isomerism as Intrinsic Symmetry of Molecules	V. Iliev	V. Iliev	peer reviewed Mathematical Chemistry Monographs, No 5, University of Kragujevac and Faculty of Science Kragujevac, 2008, 250 p. ISBN: 978-86-81829-86-8.

3.2. Department “Mathematical Logic”

Monographs and publications in conference proceedings (distinguish: keynote; invited; peer reviewed) (Section “ <i>Mathematical Logic</i> ”)			
Title	Author, or all Co-Authors as appear on the publication	Author or co-Authors from the Institute	Books/ Proceedings/ distinguish: keynote; invited; peer reviewed
Joint Bulgarian-American Military Facilities: Public Attitudes and Strategic, Political, Economic and Environmental Aspects	Lyubomir Ivanov et al	Lyubomir Ivanov	Book NI Plus Publishers, 2006. 68 pp. (joint with co-authors; in Bulgarian)
<i>Bulgarian Policies on the Republic of Macedonia: Recommendations on the development of good neighbourly relations following Bulgaria’s accession to the EU and in the context of NATO and EU enlargement in the Western Balkans</i>	Lyubomir Ivanov	Lyubomir Ivanov	Book Manfred Wörner Foundation, 2008. 80 pp. (Trilingual publication in Bulgarian, Macedonian and English) ISBN 978-954-92032-2-6

The role of immigration for the demographic and national development of Bulgaria in the 21 st Century	Lyubomir Ivanov	Lyubomir Ivanov	peer reviewed <i>Towards New Immigration Policies for Bulgaria</i> . Sofia: Manfred Wörner Foundation, 2006. 54 pp. (in Bulgarian, English summary) ISBN 9789549203219
Leibniz's Programme in Action	Vladimir Sotirov	Vladimir Sotirov	peer reviewed Proceedings of <i>6th Panhellenic Logic Symposium</i> , 2007
Leibniz's "Calculemus!" at Work	Vladimir Sotirov	Vladimir Sotirov	peer reviewed Proceedings of <i>8th Intern. Leibniz Congress</i> , 2006
Reasoning about QoS contracts in the Probabilistic Duration Calculus	Dimitar P. Guelev and Dang Van Hung	Dimitar P. Guelev	peer reviewed Proceedings of the ETAPS workshop <i>Formal Foundations of Embedded Software and Component-Based Software Architectures (FESCA)</i> , 2008. To appear in ENTCS.
Model-checking the Preservation of Temporal Properties upon Feature Integration.	Dimitar P. Guelev, Mark D. Ryan and Pierre-Yves Schobbens	Dimitar P. Guelev	peer reviewed Proceedings of the CONCUR workshop <i>Automated Verification of Critical Systems (AVoCS'04)</i> , ENTCS volume 128, issue 6, pp. 311-324, 2005

Synthesising Features by Games	Dimitar P. Guelev, Mark D. Ryan and Pierre-Yves Schobbens	Dimitar P. Guelev	peer reviewed Proceedings of the <i>5th workshop Automated Verification of Critical Systems (AVoCS'05)</i> , ENTCS volume145, pp. 79-93, 2006
Sharpening the Incompleteness of the Duration Calculus	Dimitar P. Guelev	Dimitar P. Guelev	peer reviewed Proceedings of the <i>AMAST Workshop on Real-time Systems</i> , ENTCS, volume 139, pp. 91-104, 2005
Model-checking strategic ability and knowledge of the past of communicating coalitions	Dimitar P. Guelev and Catalin Dima	Dimitar P. Guelev	peer reviewed <i>Declarative Agent Languages and Technologies (DALT)</i> , 2008, LNAI 5397
Model-checking Access Control Policies	Dimitar P. Guelev, Mark D. Ryan and Pierre-Yves Schobbens	Dimitar P. Guelev	peer reviewed Proceedings of the <i>7th Information Security Conference (ISC'04)</i> , LNCS 3225, 2004, pp. 219-230
Evaluating Access Control Policies through Model-checking	Nan Zhang, Mark Ryan and Dimitar P. Guelev	Dimitar P. Guelev	peer reviewed <i>8th Information Security Conference (ISC'05)</i> , LNCS 3650, LNCS 3650, 2005, pp. 446-460

Synthesising Verified Access Control Systems in XACML	Nan Zhang, Mark Ryan and Dimitar P. Guelev	Dimitar P. Guelev	peer reviewed Proceedings of the <i>2nd ACM Workshop on Formal Methods in Security Engineering (FMSE 2004)</i> , ACM, 2004, pp. 56-65
AI in Arbitrary World	Dimiter D. Dobrev	Dimiter D. Dobrev	peer reviewed <i>Proceedings of the 5th Panhellenic Logic Symposium</i> , July 2005 University of Athens, Athens, Greece, pp.62-67
Second Attempt to Build a Model of the Tic-Tac-Toe Game	Dimiter D. Dobrev	Dimiter D. Dobrev	peer reviewed Proceedings of KDS 08, published in IBS ISC, Book 2, p.146
Testing AI in one Artificial World	Dimiter D. Dobrev	Dimiter D. Dobrev	peer reviewed <i>Proceedings of XI International Conference "Knowledge-Dialogue-Solution"</i> , Vol.2, pp.461-464
Two fundamental problems connected with AI	Dimiter D. Dobrev	Dimiter D. Dobrev	peer reviewed Proceedings of KDS 07, volume 2, p.667

3.3. Department “Geometry and Topology”

Monographs and publications in conference proceedings (distinguish: keynote; invited; peer reviewed) (Section/Department/Laboratory- “Geometry and Topology”)			
Title	Author, or all Co-Authors as appear on the publication	Author or co-Authors from the Institute	Books/ Proceedings/ distinguish: keynote; invited; peer reviewed
Covers of topological spaces and compact-covering maps	Barov S.	Barov S.	Topology Proceedings, Vol. 30, No. 1, 2006, 1-10. (peer reviewed)
A characterization of developable two-dimensional surfaces in Euclidean space	Milousheva V.	Milousheva V.	Mathematics and Education in Mathematics, Proceedings of Thirty Fifth Spring Conference of the Union of Bulgarian Mathematicians (2006), 186-190. (peer reviewed)
On the Geometric Structure of Hypersurfaces of Conullity Two in Euclidean Space	Ganchev G. and V. Milousheva	Ganchev G. and V. Milousheva	Proc. 8 th Int. Conf. Geometry, Integrability and Quantization, Varna, 2006, Eds. I. Mladenov and G. Naber, (2007), 169-183. (peer reviewed)

3.4. Department “Real and Functional Analysis”

Monographs and publications in conference proceedings (distinguish: keynote; invited; peer reviewed) (Section/Department/Laboratory- “Real and Functional Analysis”)			
Title	Author, or all Co-Authors as appear on the publication	Author or co-Authors from the Institute	Books/ Proceedings/ distinguish: keynote; invited; peer reviewed
Spectral shift function for magnetic Schrödinger operators	G.D.Raikov	G.D.Raikov	Mathematical Physics of Quantum Mechanics, Lecture Notes in Physics, 2006, 690, 451-465.

3.5. Department “Complex Analysis”

Monographs and publications in conference proceedings (distinguish: keynote; invited; peer reviewed)			
<i>Section/Department/Laboratory “Complex Analysis”</i>			
Title	Author, or all Co-Authors as appear on the publication	Author or co-Authors from the Institute	Books/ Proceedings/ distinguish: keynote; invited; peer reviewed
Real analyticity of the almost Kaehler manifolds	Apostolova L.	Apostolova L.	peer reviewed <i>Contemporary Aspects of Complex Analysis, Differential Geometry and Mathematical Physics</i> , Proceedings of the 7 th International Workshop on Complex Structures and Vector Fields, 2004, World Scientific, 2005, 25-30.
Real analyticity of the hyperkahler almost Kaehler manifolds	Apostolova L.	Apostolova L.	peer reviewed <i>Topics in Contemporary Differential Geometry, Complex Analysis and Mathematical Physics</i> , Proceedings of the 8 th International Workshop on Complex Structures and Vector Fields, 2006, , World Scientific, New Jersey, London, Singapore, 2007, 15-22.

Multi-index Mittag-Leffler functions, generalized fractional calculus and Laplace type transform	Kiryakova V.	Kiryakova V.	<i>invited</i> <i>Proc. 2nd IFAC Workshop Fractional Differentiation and its Applications (FDA'06)</i> , Porto, July 19-21, 2006, Portugal; 181-186.
The fractional calculus' functions: Mittag-Leffler functions, some applications in control theory, generalizations and open problems	Kiryakova V.	Kiryakova V.	<i>invited</i> <i>Proc. IX Triennial Internat. SAUM Conf. on Systems, Automatic Control and Measurements</i> , Nis – Serbia, Nov. 2007, 88-93.
Poles and alternation points in rational Chebyshev approximation	Kovacheva R., H.-P. Blatt, R. Grothmann	Kovacheva R.	peer reviewed Constructive Methods of Functional Theory, Special Volume dedicated to Prof. Gaier, 3 (2004), 165 – 177
Uniform convergence of best Chebyshev rational approximants to a real-valued function on [-1,1]	Kovacheva R.	Kovacheva R.	peer reviewed Banach Center Publications, 2004
Bicomplex Variables: Analytic and Geometric Aspects	S. Dimiev, Lazov R., S. Slavova	Lazov R.	peer reviewed Topics in Contemporary Differential Geometry, Complex Analysis and Mathematical Physics, Proc. of the 8 th International Workshop on Complex Structures and Vector Fields, World Scientific, 2007, 50–56

3.6. Department “Differential Equations”

Monographs and publications in conference proceedings (distinguish: keynote; invited; peer reviewed) (Section/Department/Laboratory- “Differential Equations”)			
Title	Author, or all Co-Authors as appear on the publication	Author or co-Authors from the Institute	Books/ Proceedings/ distinguish: keynote; invited; peer reviewed
Local solvability for partial differential equations with multiple characteristics	A. Oliaro, P. Popivanov, L. Rodino	P. Popivanov	peer reviewed Proceedings Intern. Conference on Abstract and Appl. An., August 2002, Hanoi, World Scientific, Singapore, 2004, 143-157.
A link between local solvability and partial analyticity of several classes of degenerate parabolic operators	P. Popivanov	P. Popivanov	peer reviewed Birkhäuser volume, Hyperbolic problems and regularity questions, Conference on PDE - Ferrara 2006.
Gevrey local solvability for degenerate parabolic operators of higher order	A. Oliaro, P. Popivanov	P. Popivanov	peer reviewed Catania vol. “Modern trends in Pseudodifferential operators”, Birkhäuser volume, 172, (2007), 135-151.

<p>On the hypoellipticity of some classes of overdetermined systems of differential and pseudodifferential operators</p>	<p>P. Popivanov</p>	<p>P. Popivanov</p>	<p>peer reviewed Topics in Contemporary Diff . Geometry, Complex Analysis and Math. Physics, Proceedings of the 8-th International Workshop on Complex structures and vector fields, World Sci., Singapore, 278 – 289 (2007).</p>
<p>Geometrical methods for solving of fully nonlinear partial differential equations</p>	<p>P. Popivanov</p>	<p>P. Popivanov</p>	<p>peer reviewed Mathematics and its applications series, vol. 2, Union of Bulgarian Mathematicians, 2006, pp. 158</p>

3.7. Department “Mathematical Physics”

Monographs and publications in conference proceedings (distinguish: keynote; invited; peer reviewed) (Section/Department/Laboratory- “Mathematical Physics”)			
Title	Author, or all Co-Authors as appear on the publication	Author or co-Authors from the Institute	Books/ Proceedings/ distinguish: keynote; invited; peer reviewed
Cellular Neural Networks: Theory and Applications	A.Slavova, V.Mladenov	A.Slavova	Book Nova Science Publishers, 2004
Reaction-diffusion Cellular Neural Network models	A.Slavova	A.Slavova	Proc. 9 th WSEAS International Conference on Neural Networks (NN’08), TU-Sofia, 2008 –
Transient seismic wave motion in a cracked multi-layered geological region	P. Dineva, G. Manolis, T. Rangelov	T. Rangelov	keynote lecturer In: C.A. Brebbia (Edd.), BEM XXVI, International Conference, Bologna, Italy, April 19-21, WIT Press, Southampton, 455-464, 2004.
BIEM for cracked piezoelectric solids under dynamic load	D. Gross, P. Dineva, T. Rangelov	T. Rangelov	peer reviewed In: Z.H.Yao, M.W.Yuan, W.X.Zhong (Edds), WCCM VI in conjunction with APCOM’04, September 5-10, Tsinghua University Press & Springer Verlag, Beijing, China, 2004.

Seismic Wave Scattering by Inhomogeneous Geological Deposits with Cracks	G.D. Manolis, P.S. Dineva, T.V. Rangelov	T. Rangelov	peer reviewed In: C.A.Brebbia, D.E.Beskos, G.D.Manolis, C.C.Spyrakos (Edds.) Proceedins of the 5th International Conference on Earthquake Resistant Engineering Structures (ERES'05), Skiathos Island, Greece, May 30-June 1, 3-12, 2005.
Elastodynamic Fundamental Solutions for 2D Inhomogeneous Anisotropic Domains	G.D. Manolis, T.V. Rangelov, P.S. Dineva	T. Rangelov	peer reviewed In: G. Georgiou, P. Papanastasiou (Edds.) Proceedings of the 5th GRACM Congress on Computational Mechanics, Limassol, Cyprus, June 29-July 1, 471-478, 2005
Wave Diffraction in Inhomogeneous Continua with Cracks by BIEM	G.D.Manolis, P.S. Dineva, T.V. Rangelov	T. Rangelov	peer reviewed In: Yan Fang (ED.) Proc. of Int. Conference on Optoelectronics and Spectroscopy of Nano-Structured Thin Films and Materials (ICOSFM 2004), Beijing, China, August 2-5, 2004, also published in Special Issue of the Chinese Journal of Light Scattering, 17: 3, 289-291, October.
BIEM for cracked piezoelectric solids under dynamic load	P. Dineva, D. Gross, Ts. Rangelov	T. Rangelov	peer reviewed In: Y. Ivanov, E. Manoach and R. Kazandjiev (Edds.) Proceedings of the 10th Jubilee National Congress on Theoretical and Applied Mechanics, Varna, Bulgaria, September 13-16, 1, 157-161, Marin Drinov Academic Publishing House, 2005.

<p>Elastic Wave Motion in a Cracked, Multi-layered Geological Region under Transient Conditions</p>	<p>P. Dineva, Ts. Rangelov, G. Manolis</p>	<p>T. Rangelov</p>	<p>peer reviewed In: E.E. Gdoutos (Ed.) Volume on Fracture of Nano and Engineering Materials and Structures, 391-392 and paper No. 822 in the CD Proceedings of the 16th European Conference on Fracture (ECF16), Alexandroupolis, Greece, 3-7 July 2006, Springer, Dordrecht, 2006</p>
<p>Elastic Wave Scattering Phenomena in Inhomogeneous Media due to a Buried Crack</p>	<p>G.D. Manolis, P. Dineva, T. Rangelov</p>	<p>T. Rangelov</p>	<p>peer reviewed In: C.C. Baniotopoulos (Ed.) Proceedings of the 2nd International Conference on Nonsmooth/Nonconvex Mechanics with Applications in Engineering (NNMAE-2006), Edited by C.C. Baniotopoulos, Thessaloniki, Greece, July 7-8, 347-345, 2006, Ziti Editions, Thessaloniki, 2006.</p>
<p>Wave Motion through Cracked, Functionally Graded Materials by BEM</p>	<p>G.D. Manolis, T. Rangelov, P. Dineva</p>	<p>T. Rangelov</p>	<p>peer reviewed In: C.A Brebbia and J.T. Katsikadelis (Eds.) Proceedings of the 28th World Conference on Boundary Elements and other Mesh Reduction Methods (BEM-MRM 28), Skiathos Island, Greece, May 10-12, 307-316, 2006, WIT Press, Southampton, 2006.</p>

<p>Discrete-Time Impulsive Hopfield Neural Networks with Finite Distributed Delays</p>	<p>Haydar Akça, Rajai Alassar, Valéry Covachev, H. Ali Yurtsever</p>	<p>Valéry Covachev</p>	<p>peer reviewed International Symposium on Neural Networks and Soft Computing in Structural Engineering (Cracow, Poland, 2005), Computer Assisted Mechanics and Engineering Sciences, 14 (2007), No. 2, 145-158</p>
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3.8. Department “ Education in Mathematics and Informatics”

Monographs and publications in conference proceedings (distinguish: keynote; invited; peer reviewed) (Section/Department/Laboratory- “ Education in Mathematics and Informatics ”)			
Title	Author, or all Co-Authors as appear on the publication	Author or co-Authors from the Institute	Books/ Proceedings/ distinguish: keynote; invited; peer reviewed
<i>For high achievements in mathematics. The Bulgarian experience (Theory and practice)</i>	Sava Grozdev	Sava Grozdev	monograph Sofia, Association for the development of education, 2007. ISBN 978-954-92139-1-1;
Didactical options of problems with a scale (in Bulgarian)	Grozdev, S.T. Chehlarova	Grozdev, S. T. Chehlarova	peer reviewed In the Proceedings: Приемственост и перспективи в развитието на педагогическата теория и практика. ФНПП, София, ВЕДА СЛОВЕНА – ЖГ, 2007. с. 248 – 259
Didactical software: “Number inequalities with natural numbers in 4. grade” (in Bulgarian)	Grozdev, S.T. Chehlarova	Гроздев, С., Т. Чехларова	peer reviewed In the Proceedings Приемственост и перспективи в развитието на педагогическата теория и практика. ФНПП, София, ВЕДА СЛОВЕНА – ЖГ, 2007. с. 301-307

Didactical software: “Number inequalities with natural numbers in 5. grade” (in Bulgarian)	Grozdev, S.T. Chehlarova	Grozdev, S., T. Chehlarova	peer reviewed In the Proceedings: ПУ “П. Хилендарски”. т.44, кн.2, Методика на обучението, 2007. с. 83 – 92
Didactics and IT in Education (in Bulgarian)	Grozdev, S.T. Chehlarova	Grozdev, S.T. Chehlarova	peer reviewed In the Proceedings: „Руската наука, образование и култура в съвременния свят”. 30.09 – 01.10. 2008, Стара Загора, 2008, 27–35, ISBN 978-954-691-065-3
<i>European Kangaroo. Didactical approaches</i> (in Bulgarian)	Grozdev, S.T. Chehlarova	Grozdev, S. T. Chehlarova	Book UBM, С., 2008
On the adding operation in problem solving (in Bulgarian)	Grozdev, S. T. Chehlarova	Grozdev, S. T. Chehlarova	peer reviewed In the Proceedings: Пролетна математическа конференция на СМБ, Варна, 2007. с. 331–340
Warm-up problems for a class of operations on objects (in Bulgarian)	Grozdev, S. T. Chehlarova	Grozdev, S. T. Chehlarova	peer reviewed In the Proceedings: 37 Пролетна конференция на СМБ, Боровец, 2-6 април, С., 2008. с. 320 – 328
The shifting operation in problem solving (in Bulgarian)	Grozdev, S. T. Chehlarova	Grozdev, S. T. Chehlarova	peer reviewed In the Proceedings: Европейски измерения на образованието, част 2, Ст. Загора, 2007. с. 212 – 218

<p>Words are silver, mouse-clicks are gold? (or how to optimize the level of language formalization of young students in a Logo-based cubics world)</p>	<p>Sendova, E., T. Chehlarova, P. Boytchev</p>	<p>Sendova, E., T. Chehlarova</p>	<p>peer reviewed <i>Informatics in education</i>, Vilnius, vol. 6, №2, 2007, pp. 411– 428,</p>
<p><i>Stereometry Activities with Dalest.</i></p>	<p>Christou, C., Sendova, E., Matos, J.F., Jones, K., Zachariades, T., Pitta- Pantazi, D., Mousoulides, N., Pittalis, M., Boytchev, P., Mesquita, M., Chehlarova, T., Lozanov, C.</p>	<p>Sendova, E., Chehlarova, T.</p>	<p>monograph University of Cyprus, Nicosia, 2007;</p>
<p>Handling the Diversity of Learners' Interests by Putting Informatics Content in Various Contexts</p>	<p>Sendova, E.</p>	<p>Sendova, E.</p>	<p>peer reviewed In: Roland T. Mittermeir (Ed.) <i>Informatics Education – The Bridge between Using and Understanding Computers</i>, ISSEP 2006, LNCS 4226, Springer-Verlag Berlin Heidelberg 2006, pp. 71-82, Proceedings</p>

Like a (School of) Fish in Water (or ICT-Enhanced Skills in Action)	Sendova, E., Stefanova, E., Nikolova, N., Kovatcheva, E.	Sendova, E.	peer reviewed <i>Lecture Notes in Computer Science</i> , Springer Berlin / Heidelberg, Volume 5090/2008, ISBN 0302-9743 (Print) 1611- 3349 Proceedings
Virtual Reality vs Real Virtuality in Mathematics Teaching and Learning	P. Boytchev, T. Chehlarova, E. Sendova	T. Chehlarova, E. Sendova	peer reviewed Mathematics and ICT: a 'golden triangle', Boston, 2007 Proceedings
Enhancing spatial imagination of young students by activities in 3d elica applications	Boytchev, P., T. Chehlarova, E. Sendova	T. Chehlarova, E. Sendova	peer reviewed Proc. of the 36th Spring Conference of the Union of Bulgarian Mathematicians, 2007, Varna, Bulgaria, pp. 109 – 119 Proceedings
Enhancing the art of problem posing in a dynamic 3D computer environment.	T. Chehlarova, Sendova, E.	T. Chehlarova, Sendova, E.	peer reviewed Proceedings of IV congress of the mathematicians of Republic of Macedonia, Struga, 19–22.10.2008. Proceedings
Resulting effect of consecutive activities	Borislav Lazarov	Borislav Lazarov	peer reviewed <i>10th ICME</i> , 4-11 Aug 2004, Copenhagen, (Proceedings of TSG4)
Comparing two ways of elaboration of complex numbers	Borislav Lazarov	Borislav Lazarov	peer reviewed <i>The Teaching of Mathematics</i> , vol. VII, 2 (2005), pp 103-106;
Some didactical aspects of the application of professional software in mathematics education (in Russian)	Lazarov, B. A.Vasileva.	Lazarov, B. A.Vasileva.	peer reviewed <i>The Teaching of Mathematics</i> , 2007, Vol. X, 1, pp. 37–50;

The eternal geometry: Quo vadis?	Б. Лазаров, Й. Табов.	Б. Лазаров, Й. Табов.	peer reviewed In the Proceedings: <i>Професор д-р Димитър Павлов. Въздигане на духа.</i> Парадигма, София, 2008, с.122-133;
Quotations about mathematics and their meaning in mathematics classes	Iordanka Gortcheva	Iordanka Gortcheva	peer reviewed <i>Bulgaria and Russia – directions of collaboration.</i> International Scientific Conference, Rouse, Dec.. 14-17, 2008;
Through narrative to mathematical concepts	Iordanka Gortcheva	Iordanka Gortcheva	peer reviewed <i>IV Congress of mathematicians of Republic of Macedonia</i> , Struga, Oct. 19-22, 2008;
Elin Pelin's story-problems and modern mathematics education	Iordanka Gortcheva	Iordanka Gortcheva	peer reviewed <i>The science, the education and the art in 21st century: Proceedings of the second Balkan scientific conference</i> , Blagoevgrad, Bulgaria, Sept. 26-27, 2008. "Neofit Rilski" South-West Univ. Publ. House, Blagoevgrad, 2008, Vol. 2, pp. 190-199;
Analysis of statistical data of interval type in the context of the mathematics education	Iordanka Gortcheva	Iordanka Gortcheva	peer reviewed <i>Mathematics and Education in Mathematics.</i> Proceedings of the Thirty Seventh Spring Conference of the Union of Bulgarian Mathematicians, Borovets, April 2-6, 2008. ISSN 1313-3330;

<p>Motivating Activities in Teaching Mathematics to Pre-Service Elementary School Teachers</p>	<p>Iordanka Gortcheva, Zdravko Lalchev</p>	<p>Iordanka Gortcheva</p>	<p>peer reviewed <i>Current Trends in Mathematics Education. 5th Mediterranean Conference on Mathematics Education</i>, 13-15 April 2007, Rhodes, Greece. ISBN 978-960-89713-0-1, New Technologies Publications, Athens, Greece, pp. 459-465</p>
<p>Mathematics education: a humanitarian approach in the computer era</p>	<p>Iordanka Gortcheva, Zdravko Lalchev, Jordan Tabov</p>	<p>Iordanka Gortcheva, Jordan Tabov</p>	<p>invited <i>Mathematics and Education in Mathematics</i>. Proceedings of the Thirty Fifth Spring Conference of the Union of Bulgarian Mathematicians, Borovets, April 5-8, 2006. ISBN- 10 954-8880-23-7; ISBN-13 978-954-8880-23-7. Union of Bulgarian Mathematicians, 2006. pp. 104-114</p>
<p>The fairy tale form of mathematics problems as a strategy for success (in Bulgarian)</p>	<p>Iordanka Gortcheva</p>	<p>Iordanka Gortcheva</p>	<p>peer reviewed <i>Teachers and Social Pedagogists Training in View of European Integration</i>. Proceedings of the Fourth Autumn Scientific Conference of the Faculty of Primary and Preschool Pedagogy, Kiten, 18-22 September 2006. ISBN – 10:954-8510-97-9; ISBN – 15:978-954-8510-97-4. Publi-sher “Veda Slovena – JG”, Sofia, pp. 274-279</p>

<p>The problems in the works of Elin Pelin as a motivation factor in math education (in Bulgarian)</p>	<p>Iordanka Gortcheva, Zdravko Lalchev, , Milena Palij</p>	<p>Iordanka Gortcheva</p>	<p>peer reviewed <i>Teachers and Social Pedagogists Training in View of European Integration.</i> Proceedings of the Fourth Autumn Scientific Conference of the Faculty of Primary and Preschool Pedagogy, Kiten, 18-22 September 2006. ISBN – 10:954-8510-97-9; ISBN – 15:978-954-8510-97-4. Publisher “Veda Slovena – JG”, Sofia, pp. 234-239</p>
<p>Mathematical modelling of monetary minting in mediaeval Bulgaria</p>	<p>Tabov, J., K. Vasilev, A. Velchev</p>	<p>Tabov, J., K. Vasilev, A. Velchev</p>	<p>peer reviewed Review of the National Center for Digitization, 4[2004], 99-104</p>
<p>Classification method for the concept of quadrilateral in geometry lessons at school</p>	<p>Vasilev K., Pashkouleva D., Velchev ,A.</p>	<p>Vasilev K., Pashkouleva D., Velchev, A.</p>	<p>peer reviewed International conference on Mathematical Education, 3-5 June 2005. Svishtov-Bulgaria, p.233-237</p>
<p>On a class of multivalent functions with negative coefficients</p>	<p>Pashkouleva D., Vasilev K.</p>	<p>Vasilev K.</p>	<p>peer reviewed Plovdiv university "Paisii Hilendarski" scientific works, vol.34, book 3,2004, pp. 61-67</p>

3.9. Department “Information Systems”

Monographs and publications in conference proceedings (distinguish: keynote; invited; peer reviewed) (Section “Information Systems”)			
Title	Author, or all Co-Authors as appear on the publication	Author or co-Authors from the Institute	Books/ Proceedings/ distinguish: keynote; invited; peer reviewed
Multidimensional Life Time Equivalence”	B. Dimitrov, D. Green Jr., P. Stanchev	Stanchev P.	peer reviewed International Workshop “Distributed computer and communication networks. Theory and applications”, Moscow, Russia, September 10-12, 2007, 26-33
A General Framework for Vessel Segmentation in Retinal Images	Wu, C. Agam G. Stanchev, P	Stanchev P.	peer reviewed 2007 IEEE International Symposium on Computational Intelligence in Robotics and Automation, June 20-23, 2007, Jacksonville, Florida, USA
A Hybrid Filtering Approach to Retinal Vessel Segmentation	Wu, C. Agam G., Stanchev, P	Stanchev P.	peer reviewed 2007 IEEE International Symposium On Biomedical Imaging: From Nano to Macro, April 12-15, 2007, Metro Washington DC, USA, 604-607

Converting a regular learning course into distance course	Stanchev P.	Stanchev P.	peer reviewed Education in the information society conference, Plovdiv, Bulgaria, 13-14 October 2006, 63-66
Semantic Notation and Retrieval in Art and Architecture Image Collections	P. Stanchev, D. Green Jr., B. Dimitrov	Stanchev P.	peer reviewed Third special workshop "Multimedia semantics, Pisa, June 22-24 2005, 45-53,
Converting a Regular Learning Course into Distance Course"	Stanchev P.	Stanchev P.	peer reviewed 17th Lilly Conference on College & University Teaching, West, March 18-19, 2005, Pomona, California
Age Affecting Control in Biological Systems	Dimitrov B., Green D. Jr., Stanchev P.,	Stanchev P.	peer reviewed 55th Session of the International Statistical Institute, Sydney, Australia, 2005, 337
Improving Image Similarity Search Effectiveness in a Multimedia Content Management System	Amato G., Falchi F., Gennaro C., Rabitti F., Savino P , Stanchev P.,	Stanchev P.	peer reviewed Tenth International Workshop on Multimedia Information Systems, August 25 - 27, 2004 College Park, MD, 139-146
The "Web Technology" Distance course	Stanchev P.	Stanchev P.	peer reviewed Conference on Information Technology in Education, September 18, 2004, Elizabethtown, PA, 31-37

“WWW-based distance education course “Management Support Systems”	Stanchev P., Dimitrov B	Stanchev P.	peer reviewed International Conference on Computing, Communications and Control Technologies (CCCT 2004), Austin, Texas, August 14-17, 2004, 222-226
Selection of MPEG-7 Image Features for Improving Image Similarity Search on Specific Data Sets	Stanchev P., Amato G., Falchi F., Gennaro C., Rabitti F., Savino P.,	Stanchev P.	peer reviewed 7-th IASTED International Conference on Computer Graphics and Imaging, CGIM 2004, Kauai, Hawaii, 2004, 395-400
Reliability Model for Biological Objects	Rykov V., Dimitrov B., Green D, Jr., Stanchev P	Stanchev P.	peer reviewed International conference “The Model of Durability, Aging and Degradation in Medicine, Biology, and Technique”, St. Petersburg, Russia, June 7-9, 2004, 230-240
Semantic Video and Image Retrieval - State of the Art and Challenges,	Stanchev P.	Stanchev P.	Invited ACMSE 2007, The 45th ACM Southeast Conference, Winston-Salem, North Carolina, USA, March 24, 2007, 512-513
Web Based Interactive Mathematical Modeling Tool (in Bulgarian)	Iliev A., N. Valchanov, T. Terzieva	Iliev A.	keynote Proceedings of 30th International Conference - Information and Communication Technologies and Programming, 2006, Plovdiv

Analysis of Contemporary Software Systems for Dynamic Models Presentation (in Bulgarian)	Iliev A., T. Terzieva, G. Hristozov, N. Valchanov	Iliev A.	keynote Proceedings of 30th International Conference - Information and Communication Technologies and Programming, 2006, Plovdiv
Shared Experience from Software Test System Usage when Exams of Information Modeling are Conducted (in Bulgarian)	Iliev A., N. Valchanov, T. Terzieva	Iliev A.	keynote Proceedings of Jubilee Conference Science, Education and Time as Concern, 2007, Smolyan
Some Practical Applications of Software System for Dynamic Models Presentation (in Bulgarian)	Iliev A., G. Hristozov	Iliev A.,	keynote Proceedings of Jubilee Conference Science, Education and Time as Concern, 2007, Smolyan
Functional Abilities of Content Management Systems (in Bulgarian)	Iliev A., G. Hristozov	Iliev A.,	keynote Proceedings of International Conference Computer methods in Science and Education, 2008, Varna
Approaches for Learning Classifiers of Drifting Concept.	Koychev I.	Koychev I.	peer reviewed Security Informatics and Terrorism-Patrolling the Web Proceedings of NATO Advanced Research Workshops, NATO Science for Peace and Security Series, vol. 15, 2008, ISO Press, p. 176-192

Designing a Toolset for the PRIME Virtual Business Environment	Boytchev P., Bontchev B., Nikolov R., Oliveira M.,	Koychev I.	peer reviewed Proceeding of 10th Workshop on Experimental Interactive Learning in Industrial Management; IFIP WG5.7 SIG, Trondheim, Norway, June 2006
Tracking Drifting Concepts by Time Window Optimisation Research and Development. Intelligent Systems	Koychev I., Lothian R	Koychev I.	peer reviewed Research and Development in Intelligent Systems XXII: Proceedings of the 25th SGAI International Conference on Innovative Techniques and Applications of Artificial Intelligence (AI-2005), Springer-Verlag
Business Informatics. Artificial Intelligence and Decision Making	Markov K., K. Ivanova, I. Mitov, V. Mitova	Markov K., K. Ivanova, I. Mitov	keynote Book Num.7 from Int. Book Series "Information Science & Computing", 2008, Uzhgorod, pp. 213-218 (Presented in the Second part of XIV-th Int. Conf. "Knowledge-Dialogue-Solution" – KDS, Uzhgorod, Ukraine)
Regional Development and Electronic Knowledge Market.	Ivanova K., K. Markov, I. Mitov	Ivanova K., K. Markov, I. Mitov	invited International Scientific-applied Conference "Evolution of the System of Scientific Communications of the Association of the Universities of Caspian Countries", 21-23.10.2008, Astrakhan, Russia, pp. 48-64.(in Russian)

Data Independence in the Multi-dimensional Numbered Information Spaces.	Markov K.	Markov K.	peer reviewed International Journal "Information Technologies and Knowledge", Vol.2/2008, Num.1, pp. 87-94
Advance of the Access Methods.	Markov K., K. Ivanova, I. Mitov, St. Karastanev.	Markov K., K. Ivanova, I. Mitov	peer reviewed International Journal "Information Technologies and Knowledge", Vol. 2/2008, Num.2, pp.123-135 (Presented in: Proceedings of the Fifth Int. Conf. "Information Research and Applications" – i.Tech, Varna, Bulgaria, 2007, pp.309-325),
Culture Aspects of Inforaction. International Journal	Markov K., S. Poryazov, K. Ivanova, I. Mitov, V. Markova	Markov K., K. Ivanova, I. Mitov	peer reviewed "Information Technologies and Knowledge". Vol. 2/2008, Num.4, pp. 335-342 (Presented in: Proceedings of the XIII-th Int. Conf. "Knowledge-Dialogue-Solution" – KDS, Varna, Bulgaria, 2007, pp.625-633)
Basic Structure of the General Information Theory. International Journal	Markov K., K. Ivanova, I. Mitov	Markov K., K. Ivanova, I. Mitov	keynote "Information Theories and Applications". Vol. 14/2007, Num.1, pp. 5-19 (Presented in: Proceedings of the XII-th Int. Conf. "Knowledge-Dialogue-Solution" – KDS, Varna, Bulgaria, 2006, pp.19-32)

Multimedia Retrieval. International Scientific and Technological Exhibition	Stanchev P., K. Ivanova	Stanchev P., K. Ivanova	invited Congress "Mechatronics and Robotics (M&R-2007)", 02.10-05.10.2007, Saint Petersburg, Russia, 46-49
Introduction to NISL.	Markov K., K. Ivanova, I. Mitov	Markov K., K. Ivanova, I. Mitov	peer reviewed New Trends of Mathematic and Informatics, IMI – BAS, Sofia, 2007, pp.56-57
Personal Development and Electronic Knowledge Market.	Markov K., V Markova	Markov K	invited Proceedings of VII International Scientific-applied Conference NITE-2006, Astrakhan, 2006. pp. 17-23. (in Russian)
e-Publishing, Education and Knowledge Market.	Markov K., K. Ivanova, N. Ivanova, I. Mitov	Markov K., K. Ivanova, I. Mitov	keynote Proceedings of the I-th Int. Conf. "Informatics in the Scientific Knowledge" ISK-2006. VFU, Varna, Bulgaria. 2006, pp. 15-26
The Integrity of Self-development and the Education – a Premise to Success.	Markov P., V. Markova, K. Markov	K. Markov	peer reviewed Proceedings of the International Conference "Modern (e-) Learning" – Varna, Bulgaria, 2006. pp. 43-48
Education and Personal Development in the Conditions of the Transition to the Global Information Society.	Markov K., V. Markova	Markov K.	peer reviewed Proceedings of the International Conference "Modern (e-) Learning" – Varna, Bulgaria, 2006. pp. 43-48

The Staple Commodities of the Knowledge Market.	Markov K., K. Ivanova, I. Mitov	Markov K., K. Ivanova, I. Mitov	peer reviewed International Journal "Information Theories and Applications". Vol. 13/2006, Num.1, pp. 11-18 (Presented in: Proceedings of the XI-th Int. Conf. "Knowledge-Dialogue-Solution" – KDS, Varna, Bulgaria, 2005, pp.631-638)
Basic Interactions between Members of the Knowledge Market.	Ivanova K., N. Ivanova, A. Danilov, I. Mitov, K. Markov	Ivanova K., I. Mitov, K. Markov	peer reviewed International Journal "Information Theories and Applications". Vol. 13/2006, Num.1, pp. 19-30 (Presented in: Proceedings of the XI-th Int. Conf. "Knowledge-Dialogue-Solution" – KDS, Varna, Bulgaria, 2005, pp.638-648)
Electronic Knowledge Market: Premises for Arising and Development.	Markov K., N. Ivanova, A. Danilov, K. Ivanova, I. Mitov	Markov K., K. Ivanova, I. Mitov	invited Proceedings of Int. Conf. "Modeling of the Stable Regional Development", Nalchik, Russia, 2005, pp. 35-46.(in Russian)
Multi-Domain Information Model.	Markov K.	Markov K.	peer reviewed Proceedings of the ITC&P-2004 - International Conference "Information Technologies and Communications & Programming", Varna. 2004, pp. 79-88

Coordinate-based Physical Organization for Computer Representation of the Information Spaces.	Markov K.	Markov K.	peer reviewed Proceedings of the Second International Conference "Information Research, Applications and Education" i.Tech 2004, Varna, Bulgaria, 2004, pp.163-172. (in Bulgarian)
Organization of the User Dialogue in the Complex FOI.	Ivanova K., I. Mitov, K. Markov	Ivanova K., I. Mitov, K. Markov	peer reviewed Proceedings of the Second International Conference "Information Research, Applications and Education" i.Tech 2004, Varna, Bulgaria, 2004, pp. 150-155. (in Bulgarian)
Formal Definition of the Concept "INFOS".	Markov K., K. Ivanova, I. Mitov, E. Velikova-Bandova	Markov K., K. Ivanova, I. Mitov	peer reviewed International Journal "Information Theories and Applications", Vol. 11/2004, Nm.1, pp. 16-19 (Presented in: Proceedings of the Second Int. Conf. "Information Research, Applications and Education" i.Tech, Varna, Bulgaria, 2004, pp.71-74)

3.10. Department “Artificial Intelligence”

Monographs and publications in conference proceedings (distinguish: keynote; invited; peer reviewed) (Section “Artificial Intelligence”)			
Title	Author, or all Co-Authors as appear on the publication	Author or co-Authors from the Institute	Books/ Proceedings/ distinguish: keynote; invited; peer reviewed
Point-and-click functionality and multimedia dictionary for educational purposes	Barneva, R., V.E. Brimkov, K. Kanev	V.E. Brimkov	keynote Barneva, R. and V.E. Brimkov (Editors), “Image Analysis: from Theory to Applications”, Research Publishing, 2008, 39-46
Lovász theta-function of a class of graphs representing digital lines	Brimkov V.E., R.P. Barneva, R. Klette, J. Straight	Brimkov V.E.	peer reviewed Proc. WG’04 - 30th International Conference on Graph-Theoretic Concepts in Computer Science, Bad Honnef, Germany, June 2004, 239-250
Searching Scientific Publications by Authors – Some Notes on a Web-based Implementation	Grigorov A., E. Detcheva, A. Angelov	Grigorov A., E. Detcheva,	peer reviewed Knowledge-Based Society: Perspectives and Challenges – Proc. of the Thirtieth International Conference “Information And Comm. Technologies and Programming ICT&P 2005”, Sofia, 2005 (95-100)

XML specification for electronic invoices	Grigorov A., A. Angelov, E. Detcheva	Grigorov A., E. Detcheva,	peer reviewed Mathematics and Education in Mathematics - Proc. of 36 Spring Conference of UBM, 2007 (223-229)
Using XML and Digital Signatures for Electronic Invoices	Grigorov A., A. Angelov, E. Detcheva	Grigorov A., E. Detcheva,	peer reviewed Jubilee International Conference “New Trends in Mathematics and Informatics”, July 6 - 8, 2007, Sofia, Bulgaria (25-26)
Modeling and personalization of ontology based learning	Grigorov A	Grigorov A	peer reviewed Ontologies – Philosophical and Technological Problems”, Proc. of SOLON – Sofia Lectures of Ontology, Sofia, 15-19 October, 2007 (134-147)
Building a Knowledge Repository for Life-long Competence Development	Grigorov A., A. Georgiev, M. Petrov, S. Varbanov, K. Stefanov	Grigorov A S. Varbanov	peer reviewed International Workshop: Stimulating Personal Development and Knowledge Sharing. October, 30-31, 2008, Sofia, Bulgaria (21-25)
Operational Calculus Microenvironment in a Computer Algebra System	Dimovski I., M. Spiridonova	Dimovski I., M. Spiridonova	peer reviewed New Trends in Mathematics and Informatics, Jubilee Intern. Conf. 60 years Inst. of Math. and Informatics, Bulg. Acad. of Sci, Abstracts, Sofia, 6-8 July, 2007, 23-24

<p>Extensions of the Heaviside Algorithm and the Duhamel Principle for Nonlocal Cauchy Problems</p>	<p>Dimovski I., M. Spiridonova</p>	<p>Dimovski I., M. Spiridonova</p>	<p>peer reviewed Int. Conf. Applications of Computer Algebra ACA 2008, July 2008, Austria. http://www.ricam.oeaw.ac.at/people/page/rosenkranz/aca08/AADIOS_MSpirid.pdf</p>
<p>Symbolic and Numeric Computations for the Heaviside Algorithm</p>	<p>Dimovski I., M. Spiridonova</p>	<p>Dimovski I., M. Spiridonova</p>	<p>peer reviewed Int. Conf. Applications of Computer Algebra ACA 2008, July 2008, Austria. http://www.hpc.cs.ehime-u.ac.jp/~kai/SNC2008/ACA08_SNC_MSp.pdf</p>
<p>Computation of Periodic Solutions of Differential Equations by the Operational Calculus Approach</p>	<p>Spiridonova M.</p>	<p>Spiridonova M.</p>	<p>peer reviewed Mathematics and Education in Mathematics, Proc. of the 34th Spring Conf. of the Union of Bulgarian Mathematicians, Sofia, 2005, 191-195</p>
<p>The Globe: A 3D Representation of Linguistic Knowledge and Knowledge about the World Together</p>	<p>Staykova K., S. Varbanov</p>	<p>S. Varbanov</p>	<p>peer reviewed Proc. of the Workshop "Language and Speech Infrastructure for Information Access in the Balkan Countries", Borovec, Bulgaria, 25 Sept. 2005, pp. 68-74</p>

<p>Supervised pattern recognition with heterogeneous features</p>	<p>V.Valev</p>	<p>V.Valev</p>	<p>invited 9th Iberoamerican Congress on Pattern Recognition, CIAPR 2004, Puebla, Mexico, October 26-29, 2004, Published by Lecture Notes in Computer Science (LNCS), Progress in Pattern Recognition, Image Analysis and Applications, Vol. 3287, A. Sanfeliu, J.F. Martinez Trinidad, J.A. Carrasco Ochoa (Eds.), Springer-Verlag, Berlin, Heidelberg, 2004, pp. 693-700.</p>
<p>Software Agent's Architecture for a Business Game</p>	<p>Varbanov S., Koychev I.</p>	<p>Varbanov S., Koychev I.</p>	<p>peer reviewed New Trends in Mathematics and Informatics – Jubilee International Conference 60 years Institute of Mathematics and Informatics Bulgarian Academy of Sciences, Sofia, Bulgaria, 6-8 July, 2007, pp. 27-28, ISBN 978-954-8986-26-7</p>
<p>Software Agents in a Serious Business Game - the PRIME Project Case</p>	<p>Varbanov S., S. Stoykov, B. Bontchev</p>	<p>Varbanov S.</p>	<p>peer reviewed Marco Taisch, Jacopo Cassina (eds.) Proceedings of LG'2007 – Learning with Games, 24th – 26th September 2007, Sophia Antipolis, France, ISBN 978-88-901168-0-3, pp. 301 – 306</p>

Image Analysis: From Theory to Applications	Barneva, R., V.E. Brimkov	V.E. Brimkov	keynote authors and editors Research Publishing Services, Singapore Chennai, 2008
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3.11. Department “Software Engineering”

Monographs and publications in conference proceedings (distinguish: keynote; invited; peer reviewed) (Section “Software Engineering”)			
Title	Author, or all Co-Authors as appear on the publication	Author or co-Authors from the Institute	Books/ Proceedings/ distinguish: keynote; invited; peer reviewed
eXPERT Approach Implementation in Software SME	S. Ilieva, P. Ivanov, I. Mihaylov, E. Stefanova, A.Eskenazi	A.Eskenazi	peer reviewed Proc of Euro-Spi 2003, Graz 10-12.12.2003, p.VIII.1-VIII.9.
One More View on PhD Competences in Computing	Ivanov S., N.Maneva, D.Dimov, N.Dokev	N.Maneva	peer reviewed Proc. of the Conference on E-Learning and the Knowledge Society, Berlin, 3-6 September, 2005, pp.115-124
Software Engineering Models and their Evaluation	Maneva N.	Maneva N.	peer reviewed Proc. of the MASSE’2003 Matematika Balkanika , New Series, vol.18, 2004, Fasc.1-2, pp. 149-156
Assessment Models in e-Learning Environments	Dureva D., Tuparov G.	Tuparov G.	peer reviewed Journal Communication and Cognition, 2007, vol. 40; No 1/2, pp. 95-102

Design and Evaluation of an Adaptive Incentive Mechanism for Sustained Educational Online Communities	Cheng R., J.Vassileva	J.Vassileva	peer reviewed User Modelling and User-Adapted Interaction, special issue on User Modelling Supporting Collaboration and Online Communities, 16 (2/3), 2006, 321-348
A requirements engineering framework for cross-organizational ERP systems	Daneva, M. and Wieringa, R.J.	Daneva, M	peer reviewed Requirements Engineering Journal, Springer 11(3). 2006, pp. 194-204
Integrating Reuse Measurement Practices into the ERP Requirements Engineering Process	Daneva M.	Daneva M.	peer reviewed Proc. Of the 7th Int. Conf. On Product Focused Software Process Improvement (PROFES), Amsterdam, June 12-14, 2006, LNCS, Springer
Functional Size and Reuse Evaluation in ERP Requirements Engineerin	Daneva M	Daneva M	peer reviewed Proc. of 9th Int. Conf. On Quality Engineering in Software Technology(CONQUEST 2006), Sept 27-29, 2006, Berlin
A case study of metric-based and scenario-driven black box testing for SAP projects	Daneva, M., Abran A., Ormandjie va O., Abu Talib, M.	Daneva, M	peer reviewed Proceedings of the International Workshop on Software Measurement - IWSM 2006, Postdam, Germany, Nov. 2-3 2006, Shaker-Verlag Aachen

Toward Trust and Reputation Based Web Service Selection: A Survey	Wang Y., Vassileva J.	Vassileva J.	peer reviewed Int. Transactions on Systems Science and Applications, 3 (2), special Issue on "New tendencies on Web Services and Multi-agent Systems (WS-MAS)", July 2007, 118-132
The KeepUp Recommender System	Webster A.S., Vassileva J	Vassileva J	peer reviewed Proc. ACM Recommender Systems, RecSys 2007, 173-177
Strategic Delay in Bargaining	Winoto P., McCalla G., Vassileva J.	Vassileva J.	peer reviewed Proceedings Autonomous Agents and Multi-Agent Systems Conference, AAMAS2007, ACM Press. Hawai
Approaching the ERP Project Cost Estimation Problem: an Experiment	M. Daneva	M. Daneva	peer reviewed Proc. of the First IEEE Int. Symposium on Empirical Software Engineering and Measurement (ESEM07), IEEE Computer Society Press, 2007, p. 500
Preliminary Results in a Multi-site Empirical Study on Cross-organizational ERP Size and Effort Estimation	M. Daneva	M. Daneva	peer reviewed Proc of the Int. Conf. on Software Process and Product Measurement (MENSURA), Palma, Spain, UIB Press, 2007, pp. 182-193

Non-Functional Requirements: Size Measurement and Testing with COSMIC-FFP	M. Kassab, O. Ormandjieva, M. Daneva, A. Abran	M. Daneva	peer reviewed Proc of the Int. Conf. on Software Process and Product Measurement (MENSURA), Palma, Spain, UIB Press, 2007, pp. 247-259
An Improved Design and a Case Study of a Social Visualization Encouraging Participation in Online Communities	Sun, L., Vassileva J.	Vassileva J.	peer reviewed Proceedings of the 13th International Workshop on Groupware, CRIWG'2007, Bariloche, Argentina
A Usability Study of an Access Control System for Group Blogs	Indratmo, Vassileva J.	Vassileva J.	peer reviewed Proc. International Conference on Weblogs and Social Media ICWSM'2007, March 26-28, 2007, Boulder, CO
A System Dynamics Approach to Study Virtual Communities	Mao, Y., Vassileva, J., Grassmann W.	Vassileva, J	peer reviewed Proceedings IEEE HICSS'07 mini-track on Virtual Communities. Big Island, Hawaii, Jan 2-5, 2007
Contemporary university education in software engineering (in Bulgarian)	A. Eskenazi	A. Eskenazi	peer reviewed Proc. Intern. Symposium Brezovo 16-17.6. 2007, c.5-16

E-government and the groups with low social and economic status – current state and recommendation for action (in Bulgarian)	A. Eskenazi	A. Eskenazi	peer reviewed Sofia, 2008, ISBN 978-954-9518-50-4,
Present and Future of Bulgarian Research in Software and Services	Eskenazi, S. Ilieva, A. Dimov, I. Pavlova	A. Eskenazi	peer reviewed Proc. of Intl. Conf. Automatics and Informatics'08, Sofia, 2008, p.III-1-III-6
The ECMR System – a Multi-tier Solution for Marketing Research	Marinova, N, Arabadjiyski St, Peneva J.	Peneva J.	peer reviewed Proc. of CompSysTech'2003, 19-20.06.2003, Sofia, Bulgaria, pp.III.23-1 – III.23-6
Didactical and technological issues during the development process of e-learning courses	Peneva J. et al.	Peneva J.	peer reviewed Proc.of CompSysTech'2004, 19-20.06.2004, Russe, Bulgaria, pp.III.23-1 – III.23-6
An Approach of Teaching Data Management	Juliana Peneva, George Tuparov	Juliana Peneva, George Tuparov	peer reviewed Proceedings of International Conference on Computer Systems and Technologies CompSysTech'2005, pp.IV.18-1 -18.6
A Conceptual Model of a Web-based Environment to Support Open and Distance Education	Tuparov, G., Dureva, D., Peneva J.	Tuparov, Peneva J.	peer reviewed Proc. of International Workshop “Computer Science and Education”, Borovetz-Sofia, 2005 pp. 59-68

UML Skills for Software Development in Bulgarian SME	Tuparov G., Sivanov S., Peneva J., Assenova P.	Tuparov G, Peneva J.	peer reviewed Proc. of the 2-nd International Workshop on “Computer Science and Education in Computer Science”, Borovetz-Sofia, 2006 pp. 37-47, ISBN–10: 954-535-430-5
Utilization of UML in Bulgarian SME – Possible Training Strategies	Peneva J. Ivanov S., Tuparov G.	Peneva J., Tuparov G.	peer reviewed Proceedings of International Conference on Computer Systems and Technologies CompSysTech'2006
On the database university curricula and the requirements of Computing Curricula 2005 (in Bulgarian)	Tuparov G., Peneva J.	Tuparov G., Peneva J.	peer reviewed Mathematics and education in mathematics 2006, 461 – 467
Of teacher’s readiness to apply e-learning technologies (in Bulgarian)	Dureva D., Tuparov G., Ivanov S., Karashtranov a E., Peneva J.	Tuparov G., Peneva J.	peer reviewed National Conference “Education in the information society”, Plovdiv, 2006, pp. 73-78
Restricted Self Directed Learning – a Proper Use of Distance Education	Stanislav Ivanov, Juliana Peneva	Juliana Peneva	peer reviewed Proc. 2 nd national conf. on e-learning in higher education, Kiten, 2006, стр.54-57

Teachers' Attitude Towards e-Learning Courses in Bulgarian Universities	Tuparov, G., Tuparova, D., Ivanov, S., Peneva J., Karashtranova, E.	Tuparov, G., Peneva J.	peer reviewed IV International Conference on Multimedia and Information and Communication Technologies in Education, Seville, Spain,
Distance Learning Courses in Computer Science – scope and structure (in Bulgarian)	Ivanov S., Peneva J.	Peneva J.	peer reviewed Mathematics and education in mathematics, 2007, 363-368
Distance Learning Courses in Computer Science – Initiation and Design	Ivanov S., Peneva J.	Peneva J.	peer reviewed Proc. of International Conference on Computer Systems and Technologies CompSysTech'2007, 14-15 юни 2007, pp IV.8-1-IV.8-6
Upskilling to Object-Oriented Software Development with UML	Tuparov G., Peneva J., Asenova P., Ivanov S.	Tuparov G., Peneva J.	peer reviewed Proceedings of International Conference on Computer Systems and Technologies CompSysTech'2007, 14-15 юни 2007, pp IV.1-1-IV.1-2
Technology oriented master programme in computer science (in Bulgarian)	Staynov P., Ivanov S., Peneva J.	Peneva J.	peer reviewed Mathematics and education in mathematics, 2008
An educational project for master's program in computing	Peneva J. Ivanov S	Peneva J.	peer reviewed Proc. 9 th Conf. CompSysTech 2008

Finalizing of Up2UML Project	Ivanov S., Peneva J., Tuparov G.	Peneva J., Tuparov G.	peer reviewed Proceedings of the 4-th International Workshop on “Computer Science and Education in Computer Science”, Borovetz-Sofia, 2008, pp.119-129
The “Rainbow” of Assessment Activities in e-Learning – Didactical and Technological Issues	Tuparova D., G. Tuparov	G. Tuparov	peer reviewed Proc. of ICL2008, Villach, Kassel University Press, 2008
Learning Styles Testing in Moodle	Tuparova D., G. Tuparov	G. Tuparov	peer reviewed Proc. of Fourth International Conference Computer Science'2008, Kavala, Greece
Learning Styles Testing in Moodle	Tuparova D., G. Tuparov	G. Tuparov	peer reviewed Proc. of CompSysTech 2008, Gabrovo, Bulgaria, 2008
Learning styles assessment module (in Bulgarian)	Dureva D., Tuparov G., Atanasov A.	Tuparov G.	peer reviewed Mathematics and education in mathematics, Sofia, 2008
Interactive evaluation of MS Word usage skills (in Bulgarian)	Tuparov G., Borisova N.	Tuparov G.	peer reviewed Mathematics and education in mathematics, Sofia, 2008
Communication and collaborative activities in open source e-learning environments	Tuparov G., D.Dureva	Tuparov G.	peer reviewed Proceedings of BCI2007, Sofia, 2007

e-Learning in Bulgaria – the State of the Art	Tuparova, D., Tuparov, G.	Tuparov, G.i	peer reviewed eLearning Papers, no. 4. ISSN 1887-1542, Barcelona, Spain, 2007
Technological characteristics of information systems for e-learning (in Bulgarian)	Tuparov G.	Tuparov G.	peer reviewed Mathematics and education in mathematics, Sofia, 2007
Assessment Models in e-Learning Environments	Tuparov G., D. Dureva	Tuparov G.	peer reviewed Proceedings of CompSysTech 2006
A Framework of Comparing the Testing Capabilities in the e-Learning Platforms	Tuparov G., D Tuparova	Tuparov G.	peer reviewed Mathematics and education in mathematics, Sofia, 2006
Testing in Open Source e-Learning Platforms- Didactical and Technological Issues	Tuparov G., D Tuparova	Tuparov G.	peer reviewed Proc. of TEL05 Workshop, Sofia 2005
Didactical Issues of E-learning- Problems and Future Trends	Tuparov G., D Tuparova	Tuparov G.	peer reviewed Proceedings of CompSysTech'2005, Varna, Bulgaria
Simulation of Failure and Repair in Discrete Manufacturing Systems by Petri Nets	Tuparov G.	Tuparov G.	peer reviewed Proc. of 7th International Conference on Discrete Mathematics and Application, Bansko, Bulgaria, 2004
Methodical aspects in the design of e-learning courses (in Bulgarian)	Dureva D., Tuparov G.	Tuparov G.	peer reviewed Nat. Conf. E-learning in higher education, Kiten, 2004

An e-learning model for students in low sciences (in Bulgarian)	Tuparov G., Dureva D., Shtrakov S., Kovachev D., Hristov B.	Tuparov G.	peer reviewed Nat. Conf. E-learning in higher education, Kiten, 2004
Entry level of students' knowledge and skills in information technologies – reality and perspectives (in Bulgarian)	Karashtranov a E., Dureva D., Tuparov G.	Tuparov G.	peer reviewed Proc. New technologies in education, Plovdiv, 2004
Of building of a unified domain model (in Russian)	Moskaleva N., Velichko F., Kirkova R.	R.Kirkova	peer reviewed Proc. ADUIS, Kiev, 2004, 125-131
Some Problems of Hypermedia Applications Design	R.Kirkova	R.Kirkova	peer reviewed Proc. ADUIS, Kiev, 2004, 65-72
An experiment in program annotation	Bantchev B.	Bantchev B.	peer reviewed Mathematics and education in mathematics, 2005, pp. 157-163
On the definition of integer division and modulus in programming languages	Bantchev B.	Bantchev B.	peer reviewed Mathematics and education in mathematics, 2006, pp. 223-229
Representing trees	Bantchev B.	Bantchev B.	peer reviewed Mathematics and education in mathematics, 2007, pp. 193-196

Calculating with vectors in plane geometry	Bantchev B.	Bantchev B.	peer reviewed Mathematics and education in mathematics, 2008, pp. 261-267
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3.12. Department “Mathematical Linguistics”

Monographs and publications in conference proceedings (distinguish: keynote; invited; peer reviewed) (<i>Department “Mathematical Linguistics”</i>)			
Title	Author, or all Co-Authors as appear on the publication	Author or co-Authors from the Institute	Books/ Proceedings/ distinguish: keynote; invited; peer reviewed
Similarities between geographically distant languages: the case of Kaingang and Oceanic	Pericliev	Pericliev	peer reviewed <i>Current Issues in Unity and Diversity of Languages, Collection of the Papers Selected from the 18 International Congress of Linguists, Seoul</i>
On Compatibility of Slavic Language Resources	Dimitrova, L., R. Pavlov	Dimitrova, L., R. Pavlov	peer reviewed In: <i>Lexicographic Tools and Techniques. Proceedings of the MONDILEX First Open International Workshop “Lexicographic Tools and Techniques”, Moscow, 3–4 October 2008. 15-22. ISBN 978-5-9900813-6-9</i>
The Significance of Entry Classifiers in Digital Dictionaries	Dimitrova, Ludmila, Violetta Koseska-Toszewa	Dimitrova, L.	peer reviewed In: <i>Lexicographic Tools and Techniques. Proceedings of the MONDILEX First Open International Workshop, 3-4 October 2008, Moscow. 89-97. ISBN 978-5-9900813-6-9</i>

<p>Electronic Lexicography and Its Applications: The Bulgarian Experience</p>	<p>Derzhanski, I., L. Dimitrova, E. Sendova</p>	<p>Derzhanski, I., L. Dimitrova</p>	<p>peer reviewed In: Applied Linguistics and Language Technologies. <i>Proceedings of the International Scientific Conference Megaling-2006, Parthenit, 20–27 September 2006, Ukraine: A collection of research papers</i>, Kiev: Dovira, pp. 111–118</p>
<p>Personalized and Adaptive Learning – Approaches and Solutions</p>	<p>Pavlov R., D. Paneva.</p>	<p>Pavlov R., D. Paneva</p>	<p>peer reviewed Proceedings of the Third CHIRON Workshop “Visions of Ubiquitous Learning”, 20 June, 2006, Stockholm, Sweden, 6-19</p>
<p>Innovative Learning Services in Web, Interactive TV and Mobile Applications,</p>	<p>Pavlov R., D. Paneva</p>	<p>Pavlov R., D. Paneva</p>	<p>peer reviewed Proceedings of the Fourth CHIRON Workshop “Ubiquitous Learning Challenges: Design, Experiments and Context Aware Ubiquitous Learning”, 20-21 September 2006, Turin, Italy, 4-16</p>
<p>Virtual Campuses – from Global Architecture to Local Solutions.</p>	<p>Dochev D., R. Pavlov, O. Hutter, I. Simonics, P. Arapi</p>	<p>R. Pavlov</p>	<p>peer reviewed Proceedings of the EDEN Annual Conference 2004 “New Challenges and Partnerships in an Enlarged European Union”, Budapest, 16-19 June 2004, 397-403</p>

E-Learning Solutions for On-The-Job Training.	Dochev D., R. Pavlov	R. Pavlov	peer reviewed In: Isaias P., P. Kommers, M. McPherson (Eds.). Proceedings of the IADIS e-Society 2005 Conference, Malta, 27-30 June 2005, 433-437
Analysis of Trust in Electronic Markets	Braynov S., R. Pavlov	Braynov S., R. Pavlov	peer reviewed Proceedings of the HUBUSKA Workshop “Generic Issues of Knowledge Technologies”, 14 September, 2005, Budapest, Hungary, 85-99
Towards Broader Learning Content and Multiple Channels Delivery in eLearning Systems	Dochev D., R. Pavlov, N. Moutoutzis, A. Aszenov	R. Pavlov	peer reviewed Proceeding of the HUBUSKA Workshop “Technology-enhanced Learning with Ubiquitous Applications of Integrated Web, Digital TV and Mobile Technologies”, 9-10 June, 2005, Budapest, Hungary, 17-25
Knowledge Technologies for Description of the Semantics of the Bulgarian Iconographical Artefacts	Pavlova-Draganova, L., D. Paneva, L. Draganov	D. Paneva, L. Draganov	peer reviewed In the Proceedings of the Fifth HUBUSKA Open Workshop „Knowledge Technologies and Applications”, 31 May – 1 June, 2007, Kosice, Slovakia, 41-46, ISBN: 978 80 969148 8 3

The Category of Predicatives in the Light of the Consistent Morphosyntactic Tagging of Slavic Languages'	Derzhanski, I., N. Kotsyba	Derzhanski, I.	peer reviewed In: Lexicographic Tools and Techniques. <i>Proceedings of the MONDILEX First Open International Workshop "Lexicographic Tools and Techniques", Moscow, 3–4 October 2008.</i> 15-22. ISBN 978-5-9900813-6-9
Old Cyrillic in Unicode	Derzhanski, I.	Derzhanski, I.	peer reviewed <i>Computer Applications in Slavic Studies: Proceedings of the Azbuky.NET International Conference and Workshop, 24–27 October 2005, Sofia</i>
On Diminutive Plurals and Plural Diminutives	Derzhanski, I.	Derzhanski, I.	peer reviewed In: G Booij, E Guevara, A Ralli, S Sgroi & S Scalise, <i>Morphology and Linguistic Typology: On-line Proceedings of the Fourth Mediterranean Morphology Meeting (MMM4), Catania, 21–23 September 2003</i> , Università degli Studi di Bologna, 73–90
The Generalised Category of Diminutive in Russian and Bulgarian	Derzhanski, I.	Derzhanski, I.	peer reviewed In: I A Sharonov (ed.), <i>Proceedings of the International Conference on Emotions in Language and Discourse</i> , Moscow, 74–85, 2005

Pluralia tantum Diminutives in Russian and Bulgarian	Derzhanski, I.	Derzhanski, I.	peer reviewed In: I M Kobozeva, A S Narinyani and V P Selegey (eds.), <i>Proceedings of the International Conference Dialogue 2004: Computational Linguistics and Intellectual Technologies</i> , Moscow: Nauka, 159–165. 2004
On the Translatability of Linguistic Problems: Lessons from the First International Linguistic Olympiad	Derzhanski, I., A. S. Berdichevsky, X A Guiliarova, B. L. Iomdin, E. V. Muravenko and M. L. Rubinstein	Derzhanski, I.	peer reviewed In: I M Kobozeva, A S Narinyani and V P Selegey (eds.), <i>Proceedings of the International Conference Dialogue 2004: Computational Linguistics and Intellectual Technologies</i> , Moscow: Nauka, pp. 166–171
Wieloagentowe systemy podejmowania decyzji	Radev, Sl., L. Kropiwnicki	Radev, Sl.	Book TELECOTRON Int., Warszawa, 2006 (in Polish)
Matematicae Finita	Radev, Sl.	Radev, Sl.	Book TELECOTRON Int., Warszawa, 2008 (in Polish)

3.13. Department “Mathematical Foundation of Informatics”

Monographs and publications in conference proceedings (distinguish: keynote; invited; peer reviewed) (Section/Department/Laboratory- “MATHEMATICAL FOUNDATION OF INFORMATICS”)			
Title	Author, or all Co-Authors as appear on the publication	Author or co-Authors from the Institute	Books/ Proceedings/ distinguish: keynote; invited; peer reviewed
Perfect (2, n) Threshold Secret Sharing Systems Based on Matrices with Constant Column Weight	H. Morita	T. Alexandrova	<i>Proc. of the Symposium on Information Theory and its Applications (SITA2005)</i> , Okinawa, Japan, vol.2, pp.697- 700, Nov. 2005 (peer reviewed)
Perfect (2, n) Threshold Secret Sharing Systems Based on Binary Matrices with Constant Column Weight	H. Morita	T. Alexandrova	<i>Proc. of the International Symposium on Information Theory and its Applications (ISITA2006)</i> , Seoul, Korea, Oct.-Nov. 2006 (peer reviewed)
Construction of q -ary (2, n) Threshold Secret Sharing Systems	H. Morita	T. Alexandrova	<i>Proc. of the Symposium on Information Theory and its Applications (SITA2006)</i> , Hakodate, Japan, vol.1, pp. 121-124, Nov.- Dec. 2006 (peer reviewed)
An Extension of (t, n) Threshold Secret Sharing Schemes Based on the Generalized Vector Space Construction	H. Morita	T. Alexandrova	<i>Proc. of the Symposium on Information Theory and its Applications (SITA2007)</i> , Mie, Japan, Nov. 2007 (peer reviewed)

Mutually anonymous communication using secret sharing schemes	C. Kawashima, B. Nugraha, H. Morita	T. Alexandrova	<i>Proc. of the Symposium on Information Theory and its Applications (SITA2008)</i> , Tochigi, Japan, pp.861-865, Oct. 2008 (peer reviewed)
On Some Properties of the (t, n) Threshold Secret Sharing Schemes Based on the Generalized Vector Space Construction	H. Morita	T. Alexandrova	<i>International Symposium on Information Theory and its Applications (ISITA2008)</i> , Auckland, New Zealand, pp. 30-35, 7th - 10th Dec. 2008 (peer reviewed)
On the ternary projective codes with dimensions 4 and 5		T. Baicheva and I. Boyukliev	<i>Proc of the International Workshop on Algebraic and Combinatorial Coding Theory, ACCT2004</i> , pp. 34-39, 2004 (peer reviewed)
Error control performance of CRC codes with up to 8 bit redundancy	F. Sallam	T. Baicheva	<i>Proc. of the International Workshop on Algebraic and Combinatorial Coding Theory, Zvenigorod, Russia</i> , pp. 11-14, 2006 (peer reviewed)
On the least covering radius of the binary linear codes of dimension 6		Baicheva T., Bouyukliev I.	Proceedings of the 11 th International Workshop ACCT, 7-12, (2008) (peer reviewed)
Linear codes of good error control performance		T. Baicheva	<i>Enhancing Cryptographic Primitives with Techniques from Error Correcting Codes</i> , NATO-ARW “Enhancing Cryptoprimitives with Techniques from Coding Theory”, October 6-9, NATO Science for Peace and Security Series, 2008 (peer reviewed)

Some bounds for equidistant codes		G. Bogdanova, T. Todorov	International Workshop on Algebraic and Combinatorial Coding Theory (ACCT2004), June, 2004 (peer reviewed)
Bounds on the Size of Equidistant codes over Alphabet of Five, Six and Seven Elements		Bogdanova G., T. Todorov	In Proceedings of MASSEE International Congress on Mathematics – MICOM 2006, Paphos, Cyprus, pages 22, 31.05-4.06.2006 (peer reviewed)
Development, Security and Analization of Experimental Multimedia Archive	T. Georgieva	Galina Bogdanova, Todor Todorov	In Proceedings of MASSEE International Congress on Mathematics – MICOM 2006, Paphos, Cyprus, pages 127-128, 31.05-4.06.2006 (peer reviewed)
On construction of q-ary equidistant codes, pp. 31-43, 3-9.09.2006	V. Zinoviev	G. Bogdanova, T. Todorov	In Proceedings of the Tenth International Workshop on Algebraic and Combinatorial Coding Theory, Zvenigorod, Russia (peer reviewed)
Enumeration of ternary constant-weight codes		G.Bogdanova	In Proceedings of the ACCT'08, 2008 (peer reviewed)
Covering radius of the (n-3)-rd order Reed-Muller code in the set of resilient functions	A. Braeken, S. Nikova	Y. Borissov	Twenty-Fifth Symposium on Information Theory in the Benelux (R. Pelikaan, ed.), 2004, pp. 89-96 (peer reviewed)
Classification of Boolean functions of 6 variables or less with respect to cryptographic properties	A. Braeken, S. Nikova, B. Preneel	Y. Borissov	Intenational Colloquium on Automata, Languages and Programming ICALP 2005, (M. Yung, G.F. Italiano, and C. Palamidessi, eds.), Lecture Notes Computer Science, vol. 3580, pp. 324-334, Springer-Verlag, 2005 (peer reviewed)

Classification of cubic Boolean functions in 7 variables	A. Braeken, S. Nikova	Y. Borissov	Twenty-Sixth Symposium on Information Theory in the Benelux (J. Cardinal, N. Cerf, O. Delgrange, and O. Markowitch eds.), , pp. 285-292, 2005 (peer reviewed)
On primitive polynomials over GF(2) the duals of which are also primitive	S. Nikova	Y. Borissov, N. L. Manev	27-th Symposium on Information Theory in the Benelux, June 8-9, Noordwijk, The Netherlands, pp. 221-226, 2006 (peer reviewed)
Asymptotic behavior of the ratio between the numbers of binary primitive and irreducible polynomials	S. Nikova, M. H. Lee	Y. Borissov	Finite Fields and Applications (FQ8), July 9-13, Melbourne, Australia, 2007 (peer reviewed)
Jacket matrix construction using M-sequences	M.H. Lee, S.P. Balakannan	Y.L. Borissov	in Proc. of the ISITC 2007, Jeonju, Korea, November 23-24, pp. 333-337, 2007 (peer reviewed)
Jacket matrix construction using balanced sequences with ideal autocorrelation property	M. H. Lee	Y. L. Borissov	in Proc. of the 2007 9th International Workshop on Multimedia Signal Processing & Transmission, Jeonju, Korea, December 8-9, pp. 9-11, 2007
Minimal/nonminimal codewords in the second order binary Reed-Muller code: revisited		Y.L. Borissov	in Proc. of the Eleventh International Workshop ACCT'2008, June 16-22, pp. 29-34, 2008 (peer reviewed)

Some Comments on Bossert-Mahr-Heilig Scheme		Y.Borissov, N.Manev	NATO-ARW “Enhancing Crypto-Primitives with Techniques from Coding Theory”, October 6-9, NATO Science for Peace and Security Series, 2008 (peer reviewed)
Some new arcs in projective Hjelmslev planes over chain rings		S. Boumova , I. Landjev	Proc. the 9th International Workshop on ACCT, 56—62, 2004 (peer reviewed)
Nonexistence results for spherical 7-designs	M. Stoyanova	S. Boumova, P. Boyvalenkov	Proc. Eleventh Intern. Workshop Alg. Combin. Coding Theory ACCT2008, 35-39, 2008 (peer reviewed)
A method for calculation the weight distribution of the coset leaders of a linear code	Gancheva, I.	Bouyukliev, I.	Proceedings of the 9 th International Workshop ACCT, 67-72 (2004) (peer reviewed)
Some results for linear binary codes with minimum distance 5	Varbanov, Z.	Bouyukliev, I.	Proceedings of the 9 th International Workshop ACCT, 62-66, (2004) (peer reviewed)
Hadamard matrices of order 36 and double-even self-dual [72,36,12] codes	Fack V., Winne J.	Bouyukliev I.	Proceedings of EUROCOMB'2005, Berlin, Germany, 93-98, (2005) (peer reviewed)
Some families of Griesmer codes		Bouyukliev, I.	Proceedings of the 10 th International Workshop ACCT, Zvenigorod, Russia, September 2006, 40-43, (2006) (peer reviewed)

Some methods for investigations of spherical designs	M. Stoyanova	P. Boyvalenkov	Proc. Ninth Intern. Workshop Alg. Combin. Coding Theory ACCT2004, 80-85, 2004 (peer reviewed)
Bounds on the cardinality of spherical codes with inner products in a given range	M. Stoyanova	P. Boyvalenkov	Proc. Tenth Intern. Workshop ACCT, Zvenigorod, Russia, Sept., 48-51, 2006 (peer reviewed)
Non-linear binary codes for error detection	R. Dodunekova, E. Nikolova	S. Dodunekov	Proc. ACCT2004, pp. 125-131, 2004 (peer reviewed)
Error detection with a class of cyclic codes	R. Dodunekova	S. Dodunekov	Preprint No. 2005:24, Dept. Math. Sciences, Chalmers University of Technology and Goeteborg University, 2005 (peer reviewed)
Error detection with a class of q-ary two-weight codes	R. Dodunekova	S. Dodunekov	In: Proc. IEEE Intern. Symposium on Information Theory, pp.2232-2235. Adelaide, 2005 (peer reviewed)
On q-nary Grey-Rankin bound and codes meeting this bound	T. Helleseth, V.A. Zinoviev	S. Dodunekov	Proc. IEEE Intern. Symposium on Inform. Theory, Uruguay, 2006 (peer reviewed)
A family of ternary quasi-perfect codes		S. Dodunekov, D. Danev	Proc. WCC 2007, April 10-20, Versailles, pp.109-115, 2007 (peer reviewed)
Nonadaptive search with a lie	N. Dichev	E. Kolev	Ninth International Workshop, Algebraic and Combinatorial Coding theory (ACCT2004), 120-124, 2004 (peer reviewed)

Nonadaptive search problem in weighted sets		E. Kolev	Eight International Workshop, Algebraic and Combinatorial Coding theory, Zvenigorod, Russia, September 3-9, 147-150, 2006 (peer reviewed)
Derivation on Bit Error Probability of Coded QAM using Integer Codes	H. Morita	H. Kostadinov, N.L. Manev	Proceedings of ISIT 2004, Chicago, USA June 26 -July 4, 2004, p. 540 (peer reviewed)
On Soft Decoding Coded QAM using Integer Codes	H. Morita, A. J. Han Vinck	H. Kostadinov	<i>International Symposium on Information Theory and its Applications (ISITA)</i> , Parma, Italy, Oct. 2004 (peer reviewed)
Integer Code and Its Application to QAM		H. Kostadinov	<i>Ph. D. Thesis</i> , Tokyo, March. 2005.
Coded modulation with single error correctable integer codes	H. Morita, A. J. Han Vinck	H. Kostadinov, N. L, Manev	10 th Int. Workshop on Algebraic and Combinatorial Coding Theory, Zvenigorod, Russia, Sept. 3-9, 2006 (peer reviewed)
Double ± 1 -error correctable codes and their applications to modulation schemes	H. Morita	H. Kostadinov, N. L. Manev	Eleventh Int. Workshop on Algebraic and Combinatorial Coding Theory (ACCT2008), June 16-22, 2008 (peer reviewed)
On Some Simulation Results For BER Over Integer Coded Modulation Using Integer Codes	N. Iijima, H. Morita	H. Kostadinov, N. Manev	<i>Symposium on Information Theory and its Applications (SITA)</i> , Kinugawa, Japan, Oct. 2008(peer reviewed)

Double error correctable integer code and its application to QAM	N. Iijima, H. Morita	H. Kostadinov, N. L. Manev	Intern. Symposium on Information Theory and Its Applications (ISITA2008), Auckland, New Zealand, December 7-10, 2008 (peer reviewed)
A note on spreads in projective Hjelmslev geometries		I. Landjev	Proc.of the 10th International Workshop on Algebraic and Combinatorial Coding Theory, Zvenigorod, Russia, 182—185, 2006 (peer reviewed)
Constructions of $(q^2+sq+s+1, q+s+1)$ -arcs in planes of odd order	A. Rousseva	I. Landjev	Proc. of the 9th International Workshop on ACCT, 260-265, 2004 (peer reviewed)
Blocking sets of Redei type in projective Hjelmslev planes	S. Boev	I. Landjev	Proc of the XI Workshop on ACCT, 166-170, 2008 (peer reviewed)
A note on a result by Hamada on minihypers	A. Rousseva	I. Landjev	Proc of the XI Workshop on ACCT, 171-176, 2008 (peer reviewed)
Fast computing of the positive polarity Reed-Muller transform over GF(2) and GF(3)	V. Bakoev	Kr. Manev	Proceedings of the IX International Workshop “Algebraic and Combinatorial Coding Theory”(ACCT2008), 13-21, 2008 (peer reviewed)
Linear recursions generating permutation and random number generators		N. L. Manev	Proceeding of ICTAMI'2005, 13-17. 09. 2005, Romania (peer reviewed)
Primes of shape $2pq+1$, p, q primes	F. A. Sallam	N. L. Manev	MASSE Int. Congress on Mathematics, May 31 – June 4, 2006, Cyprus (peer reviewed)

Construction of doubles of the 2-(21,5,1) design with automorphisms of order 2		Topalova S., Zlatarski R.	Proceedings of the Ninth International Workshop on Algebraic and Combinatorial Coding Theory ACCT2004, 379-383, 2004 (peer reviewed)
On the enumeration of uniquely reducible double designs	V. Fack, J. Winne	S. Topalova	Proceedings of EUROCOMB'2005 (Berlin, Germany), pp.129-132, 2005 (peer reviewed)
On the structure of doubly resolvable 2-(21,3,1) designs		S. Topalova, S. Zhelezova	<i>Proceedings of the Tenth International Workshop on Algebraic and Combinatorial Coding Theory</i> , Zvenigorod, Russia, 263-268, 2006 (peer reviewed)
On an algorithm for a double resolvability test		S. Topalova, S. Zhelezova	<i>Proc. Intern. Conference on Theory and Applications of Mathematics and Informatics</i> , Alba Iulia, Romania, 323-330, 2007 (peer reviewed)
Sets of mutually orthogonal resolutions of BIBDs		S. Topalova, S. Zhelezova	Proceedings of the Eleventh International Workshop on Algebraic and Combinatorial Coding Theory, pp.280-285, 2008 (peer reviewed)
On the error detection performance of some CRC codes	F. Sallam	T. Baicheva	<i>Proc. of the workshop 'Mathematics, Informatics and Computer Sciences'</i> , Veliko Tarnovo, Bulgaria, pp.107-110, 2006, (peer reviewed)

Binary and ternary quasi-perfect codes with small dimensions	V. Fack	T. Baicheva, I. Bouyukliev, S. Dodunekov	<i>Proc. of the International Workshop Optimal Codes and Related Topics, White Lagoon, Bulgaria, pp.13-18, 2007 (peer reviewed)</i>
Application of digital watermarking		G. Bogdanova, T. Todorov	Second International Symposium “Humanitarian Sciences 2004”, 14-16 april, Burgas, 2004
New Ternary and Quaternary Equidistant Constant Weight Codes		G. Bogdanova, T. Todorov	Mathematics and Education in mathematics, Borovec, April 6-9, 2005 (peer reviewed)
Analyzing the Data in OLAP Data Cubes	T.Georgieva	G.Bogdanova	In Proceedings of the Third International Conference on Information Research, Applications and Education, Varna, pages 33-38, 27-30.06.2005, (peer reviewed)
Discovering the Association Rules in OLAP Data Cube with Daily Downloads of Folklore Materials	T.Georgieva	G.Bogdanova	Proceedings of the International Conference on Computer Systems and Technologies, Varna, pages IIIB.23-1–IIIB.23-6m, 16-17.06.2005, (peer reviewed)
Finding the Error-Correcting Functional Dependency by Using the Fractal Dimension	T.Georgieva	G.Bogdanova	In Proceedings of the Fourth International Workshop on Optimal Codes and Related Topics – OC 2005, Pamporovo, pages 20-26, 17-23.06.2005 (peer reviewed)
Bounds on the size of equidistant codes over alphabet of five and six elements		Bogdanova, G., T. Todorov	Fourth International Workshop Optimal Codes and Related Topics, Pamporovo, Bulgaria, 2005 (peer reviewed)

Lexicographic Equidistant Constant Weight Codes	T. Pagkou	T. Todorov	In Proceeding of Conference on Mathematics, Informatics and Computer Science, V. Tarnovo, pp. 147-151, May 12-13, 2006, (peer reviewed)
Ternary equidistant codes of length $10 < n < 16$		G. Bogdanova	Proceedings of the International Workshop OCRT, White Lagoon, Bulgaria, pp.24-29, 2007 (peer reviewed)
Classification of cubic Boolean functions in 7 variables	A. Braeken, S. Nikova	Y. Borissov	Proc. of the International Conference "Pioneers of Bulgarian Mathematics", Sofia, Bulgaria, July 8-10, 2006, (peer reviewed)
Fast Jacket transform approach for the first order q-ary Reed-Muller codes	M. H. Lee	Y. Borissov	International Workshop on Optimal Codes and Related Topics, June 16-22, White Lagoon, Bulgaria, 2007, pp. 150-159 (peer reviewed)
New nonexistence results for spherical 5-designs	H. Kulina, M. Stoyanova	S. Boumova, P. Boyvalenkov	Proc. Intern. Workshop on Optimal Codes, White Lagoon, Bulgaria, 30-35, 2007 (peer reviewed)
Algorithms for computing the number of codewords of fixed weight in linear codes	Bakoev, V.	Bouyukliev, I.	Proceedings of the International Workshop OCRT, Pamporovo, Bulgaria, June 2005, 36-41, (2005) (peer reviewed)
Binary projective $[120,8;56,64]$ codes having an automorphism of order 3 and SDP designs	Bouyuklieva, S.	Bouyukliev, I., Dodunekov, S.	Proceedings of the International Workshop OCRT, Pamporovo, Bulgaria, June 2005, 47-52, (2005) (peer reviewed)

Projective two-weight codes with small parameters and their corresponding graphs	Fack V., Willems W., Winne J.	Bouyukliev I.	Proceedings of the International Workshop OCRT, Pamporovo, Bulgaria, June 2005, 139-145, (2005) (peer reviewed)
Some new Griesmer codes over F_4		Bouyukliev, I.	Proceedings of the International Workshop OCRT, White Lagoon, Bulgaria, June 2007, 36-39, (2007), (peer reviewed)
Upper bounds on the covering radius of spherical designs	M. Stoyanova	P. Boyvalenkov	Proc. Intern. Workshop on Optimal Codes, 53-58, 2005 (peer reviewed)
Error detection with a class of cyclic codes	R.Dodunekov a	S. Dodunekov	Proc. Int. Workshop on Optimal Codes and Related topics, June 17-23, Pamporovo, pp.127-132, 2005 (peer reviewed)
A search problem and cyclic codes of odd length		E. Kolev	Fourth International Workshop, Optimal Codes and related topics, Pamporovo, June 17-23, 201-204, 2005 (peer reviewed)
A software package for simulation of coded modulation	H. Morita	H. Kostadinov, N. L. Manev	Fifth International Workshop on Optimal Codes and Related Topics, 16-22 June, 2007, White Lagoon (peer reviewed)
On the geometric structure of some quaternary codes	A. Rousseva	I. Landjev	Proc. 4th Intern. Workshop on Optimal Codes and Related topics, Pamporovo, pp. 220-225, 2005 (peer reviewed)
On the automorphism group of the hypothetical 2-(40,10,3) design	Kr. Haralambiev	I. Landjev	Mathematics and Education in Mathematics, Borovetz, 487—492, 2005 (peer reviewed)

Analysis of the Correctness of an Electronic Voting Scheme		I. Landjev	Proc. 2 nd Intern. Workshop on Informatics and Education in Informatics, Borovets, 93—98, 2006, (peer reviewed)
Primes of shape $2pq+1$, p, q primes	F. A. Sallam	N. L. Manev	Proceeding of the conference "20 years mathematics and informatics in VTU "St. St. Kiril and Metodi", May 12-13, 2006, V. Turnovo, pp. 75—80, (peer reviewed)
Mathematics and Discrete Mathematics		Kr. Manev	Proceedings of Seventh Int. Conf. "Discrete Mathematics And Applications", South-West University, Blagoevgrad, pp. 131-138, June 2004, (peer reviewed)
On the Covering Radius of $RM(1, n)$ for odd n		Kr. Manev	Proceedings of the Fifth International Workshop "Optimal Codes and Related Topics", White Lagoon, Bulgaria, pp. 173-177, 2007 (peer reviewed)
A "Cross-Technology" Software Development Approach	St. Palanchov, A. Simeonov	Kr. Manev	Proceedings of the Conference i.TECH'2008, Varna, June 2008, (peer reviewed)
Lexicographic Equidistant Constant Weight Codes	T. Pagkou	T. Todorov	In <i>Proceeding of Conference on Mathematics, Informatics and Computer Science</i> , V. Tarnovo, pp. 147-151, May 12-13, 2006, (peer reviewed)
Enumeration of the reducible $2-(21, 5, 2)$ designs	V. Fack, J. Winne,	S. Topalova	In: Proceedings of OC'2005, IV Inter. Workshop on Optimal Codes and Related Topics (Pamporovo, Bulgaria), pp. 146-151, 2005, (peer reviewed)

On the classification of doubly resolvable designs		S. Topalova, S. Zhelezova	Proceedings of the Fourth International Workshop on Optimal Codes and Related Topics, Pamporovo, June, Bulgaria, 265-268, 2005 (peer reviewed)
Enumeration of 2-(15,7,6) designs with automorphisms of order 7 or 5	Z. Mateva	S. Topalova	<i>Mathematics and Education in Mathematics</i> , 270-274, 2006 (peer reviewed)
Quasidoubles of Hadamard 2-(15,7,3) Designs with Automorphisms of Order 3	Z. Mateva	S. Topalova	Mathematics and Education in Mathematics, pp. 180-185, 2007 (peer reviewed)
Doubles of Hadamard 2-(19,9,4) Designs with Automorphisms of Order 3	Z. Mateva	S. Topalova	<i>Proceedings of the Fifth International Workshop on Optimal Codes and Related Topics</i> , White Lagoon, pp.183-189, 2007 (peer reviewed)
Classification of the 2-spreads of PG(5,2)		S. Topalova, S. Zhelezova	<i>Mathematics and Education in Mathematics</i> , 163-169, 2008 (peer reviewed)

3.14. Department “Telecommunications”

Monographs and publications in conference proceedings (distinguish: keynote; invited; peer reviewed) (Section/Department/Laboratory- “Telecommunications”)			
Title	Author, or all Co-Authors as appear on the publication	Author or co-Authors from the Institute	Books/ Proceedings/ distinguish: keynote; invited; peer reviewed
Emerging Requirements for Telecommunication Product Design and System Modeling	Köster, G and Poryazov S.	Poryazov S.	peer reviewed Chapter 22 in “Recent Advances in Modeling and Simulation Tools for Communication Networks and Services”, pp. 429-441. Springer US Publisher, Ince, Nejat; Bragg, Arnold (Eds.), 2007, DOI 10.1007/978-0-387-73908-3, 2008, ISBN 978-0-387-73907-6 (Print) 978-0-387-73908-3
Digital re-discovery of culture game of inquiry & the physicality of soul	Mac an Airchinnigh, M., Sotirova, K., Tonta, Y.	Sotirova, K.	peer reviewed Review of the National Center for Digitisation, 2006 (9), 19-37 pp. ISSN: 1820-0109, publisher: Faculty of Mathematics, Belgrade

Redimensioning Network Resources Based on Users' Behavior	Saranova E.	Saranova E.	peer reviewed Chapter 20 in "Recent Advances in Modeling and Simulation Tools for Communication Networks and Services", pp. 389-407. Springer US Publisher, Ince, Nejat; Bragg, Arnold (Eds.), 2007, DOI 10.1007/978-0-387-73908-3, 2008, ISBN 978-0-387-73907-6 (Print) 978-0-387-73908-3
Edutainment games - Homo Culturalis VS Homo Ludens	Sotirova, K.	Sotirova, K.	peer reviewed Presented in MASSEE 2003 Published in National Digitalization Centre –Serbia and Monte Negro, 4 (2004), p. 84–98, ISSN 1820-0109
Presentation of the DigiCult Survey of New Technologies in the Scientific and Cultural Heritage Sector	Dobрева M., Ikonov N.	Dobрева M., Ikonov N.	peer reviewed Review of the National Center for Digitisation, No 4 (2004), Serbia and Montenegro, pp. 62-69. ISSN: 1820-0109, Faculty of Mathematics, Belgrade
New Technologies in the Cultural Heritage Sector: A View From Bulgaria	Dobрева M.	Dobрева M.	peer reviewed Linguistica Computazionale, vol. XX-XXI "Digital Technology and Philological Disciplines", edited by Andrea Bozzi, Laura Cignoni, Jean-Louis Lebrave, published by Istituti Editoriali e Poligrafici Internazionali, Italy, 2004, pp. 197–207

Ontology-Based Access to Digitized Cultural Heritage and Archival Collections	Nisheva-Pavlova, M., P. Pavlov, A. Devreni-Koutsouki	Nisheva-Pavlova, M.	peer reviewed Review of the National Center for Digitisation, Belgrade, ISSN 1820-0109, Vol. 12 (2008), pp. 9-16
Chronological distribution of the Bulgarian mediaeval manuscripts preserved in Bulgaria	Tabov, J., A. Velchev, M. Dobрева, K. Sotirova	Dobрева M., K. Sotirova	peer reviewed Mathematics and Education in Mathematics. Proc. Of the Thirty Third Spring Conference of the Union of Bulgarian Mathematicians, Borovets, April 1-4, 2004, 257-261
Cultural heritage studies – the needs for a new integrated educational approach based on visual comparative interpretation of the cultural past	Trifonov, T.	Trifonov, T.	peer reviewed Review of the National Center for Digitalization. № 4[2004], Beograd; From: Proceedings the symposium Digital Preservation of Cultural Heritage, 16-17 September 2003, Borovets, Bulgaria
Gait measurments and motor recovery after stroke.	Mateev P., I.Tarkka, E.Titianova.	Mateev P.	peer reviewed Pliska Stud.Math.Bulgar., (16), 2004, p.121-128.
Dimensioning of telecommunication network based on quality of services demand and detailed behaviour of users-	Saranova E.,	Saranova E.	peer reviewed IV International Conference “ Inf. research, appl., and education i.tech”, Varna, Bulgaria, 20-25 June 2006, FOI – COMMERCE, 2006, ISBN-13: 978-954-16-0036-8, pp. 245-256.

Traffic Offered Behaviour Regarding Target QoS Parameters in Network Dimensioning	Saranova, E.	Saranova E.	peer reviewed International Journal ITK – ITHEA, 2008, vol.2, N2, ISSN: 1313-0455, p. 173 – 180.
Primary and Secondary Empirical Values in Network Redimensioning	Saranova, E.	Saranova E.	peer reviewed International Book Series “Algorithmic and Mathematical Foundations of the Artificial Intelligence N1 - ITK – ITHEA, 2008 vol.2, ISSN: 1313-0455, p. 53 – 59.
Edutainment (game) - digital (re)discovery of culture	Sotirova K.	Sotirova K.	peer reviewed Journal of National Center for Digitalization (Serbia and Monte Negro), VI 4 /2005, ISSN 1820-0109
Digital re-discovery of culture game of inquiry & the physicality of soul	An Airchinnigh M., Sotirova K., Tonta Y.	Sotirova K.	peer reviewed Review of the National Centre for Digitization 9/2006, ISSN 1820-0109
Scientific Heritage in Bulgaria Does First Digital Steps	Dobрева M., N. Ikonov,	Dobрева M., Ikonov N.	peer reviewed ElPub 2007 Conference Proceedings, Vienna, June 2007, pp.247-252. ISBN 978-3-85437-292-9

<p>Challenges for IT education at Sofia University.</p>	<p>Gourova, E., Nisheva-Pavlova, M., A. Antonova</p>	<p>Nisheva-Pavlova, M.,</p>	<p>peer reviewed S. Misra et al. (Eds.), “Recent Advances in Education and Educational Technology” Proceedings of the 7th WSEAS International Conference on Education and Educational Technology (Venice, Italy, November 21-23, 2008)”. ISSN 1790-5109, ISBN 978-960-474-029-1, WSEAS Press, 2008, pp. 50–54.</p>
<p>All for One, One for All: Several Electronic Publishing Experiences within the KT-DigiCult-Bg Project, ELPUB2005</p>	<p>Ikonomov N., Dobrev M</p>	<p>Dobrev M., Ikonomov N</p>	<p>peer reviewed From Author to Reader: Challenges for the Digital Content Chain: Proc. of the 9th ICCC Int. Conf. on Electronic Publishing, Leuven-Heverlee(Belgium), 8-10 June 2005, M. Dobrev & J. Engelen (eds), Peeters Publishing Leuven, ISBN 90-429-1645-1, 2005, pp. 259-263.</p>
<p>Digital MultiCulture in Practice</p>	<p>Micheal Mac an Airchinnigh & Sotirova, K</p>	<p>Sotirova K.</p>	<p>peer reviewed First International Workshop Ontology Based Modelling in Humanities. Bericht 265, University of Hamburg, pp. 27-36, April 2006</p>

<p>Digitisation and Access to Archival Collections: A Case Study of the Sofia Municipal Government (1878 – 1879).</p>	<p>Nisheva-Pavlova, M., P. Pavlov, N. Markov, M. Nedeva.</p>	<p>Nisheva-Pavlova, M.</p>	<p>peer reviewed Proceedings of the 11th International Conference on Electronic Publishing (Vienna, Austria, 13-15 June 2007), ISBN 978-3-85437-292-9, 2007, pp. 277–284</p>
<p>Tools for Intelligent Search in Collections of Digitized Manuscripts</p>	<p>Nisheva-Pavlova, M., P. Pavlov.</p>	<p>Nisheva-Pavlova, M.</p>	<p>peer reviewed ELPUB2005. From Author to Reader: Challenges for the Digital Content Chain: Proc. of the 9th ICCC Int. Conf. on Electronic Publishing, Leuven-Heverlee(Belgium), 8-10 June 2005, M. Dobрева & J. Engelen (eds), Peeters Publishing Leuven, ISBN 90-429-1645-1, 2005, pp.145-150.</p>
<p>Conceptual Models of the Traffic in GSM Networks.</p>	<p>Poryazov S. , Vishnevsky V., Saranova E., Daskalova Hr.</p>	<p>Poryazov S., Saranova E.</p>	<p>peer reviewed Proceedings of the International Workshop "Distributed Computer and Communication Networks", Sofia, Bulgaria 24-25 April, 2005, Editors: V. Vishnevski and Hr. Daskalova, Technosphaera publisher, Moscow, Russia, 2005, ISBN 5-94836-048-2, p. 19-35.</p>

<p>Can Terminal Teletraffic Theory Be Liberated from the Main Illusions?</p>	<p>Poryazov S.</p>	<p>Poryazov S.</p>	<p>peer reviewed Proceedings of the International Workshop "Distributed Computer and Communication Networks", Editors: V. Vishnevski and Hr. Daskalova, Technosphaera publisher, Moscow, Russia, 2005, ISBN 5-94836-048-2, pp. 126-138., COST-285 TD/285/05/04; COST 290 TD(05)009.</p>
<p>What is Offered Traffic in a Real Telecommunication Network?</p>	<p>Poryazov S.</p>	<p>Poryazov S.</p>	<p>peer reviewed 19th International Teletraffic Congress, Beijing, China, August 29 - September 2, 2005, Volume 6a, Liang X.J., XIN Z.H., V.B. Iversen and Kuo G.S.(Editors), Beijing University of Posts and Telecommunications Press, p. 707-718.</p>
<p>Request Life Cycle States Concept in the Terminal Teletraffic Theory</p>	<p>Poryazov S., Kharkevich A.</p>	<p>Poryazov S.</p>	<p>peer reviewed Proceedings of the International Workshop "Distributed Computer and Communication Networks", Sofia, Bulgaria, 2008, Editors: V. Vishnevski and Hr. Daskalova, Technosphaera publisher, Moscow, Russia, 2008, ISBN: 978-5-901158-09-8, p. 133-137</p>

Model of Telecommunication System with Switching Mode, heterogeneous Terminals and all kind of losses.	Poryazov S., Kharkevich A.	Poryazov S.	peer reviewed Proceedings of <i>Russian Technology Society A.S.Popov</i> , LIX - 2. Moskva, 2004. p. 189-190.
Redimensioning of Telecommunication Network based on ITU definition of Quality of Services Concept	Saranova E.	Saranova E.	peer reviewed Proceedings of the International Workshop "Distributed Computer and Communication Networks", Sofia, Bulgaria, 2006, Editors: V. Vishnevski and Hr. Daskalova, Technosphaera publisher, Moscow, Russia, 2006, p. 165-179
Verification Results for an ITU Network Redimensioning Method	Saranova E., Poryazov S	Poryazov S., Saranova E.	peer reviewed Proceedings of the International Workshop "Distributed Computer and Communication Networks", Sofia, Bulgaria, 2008, Editors: V. Vishnevski and Hr. Daskalova, Technosphaera publisher, Moscow, Russia, 2008, ISBN: 978-5-901158-09-8, p. 137-145.
On the Minimization of Sidelobes in Large Antenna Arrays for Microwave Power Transmission	Shishkov B., Shinohara N., Hashimoto K., Matsumoto H.	Shishkov B.	peer reviewed Proc. of the 3rd International Symposium on Sustainable Energy System, August 30-September 1, Kyoto, Japan, pp. 108-110, 2006.

Mathematical Modeling and Optimization of the Sidelobe Level of Large Antenna Array	Shishkov, B. H. Matsumoto, N. Shinohara	Shishkov B.	peer reviewed Proc. of the XXVIIIth G.A. of the URSI, New Delhi, India, HX.5(0265), October 2005.
Edutainment (game) - Digital (Re)Discovery of Culture	Sotirova, K.	Sotirova K.	peer reviewed Third International Conference New Technologies and Standards: Digitisation of National Heritage and published II vol. of the Review of the National Center of Digitisation (Serbia and Montenegro), ISSN: 1820-0109 6/2005, pp.58-68; Available online: http://elib.mi.sanu.ac.rs/files/journals/ncd/6/d005download .
Developing a Statistically Literate Society	Stoimenova, E., D. Vandev, P. Mateev	P. Mateev	peer reviewed Proc. International Congress MASSEE'2003, September 15-21, Borovets, 2003, (ed.Ivan Derzhanski, Neli Dimitrova, Sava Grozdev and Evgenia Sendova), Univ of Latvia, Riga, ISBN 9984-725-88-X, p.31-35.
Outlier detection as a method for knowledge extraction from digital resources	Stoimenova, E., P.Mateev, M. Dobрева	Mateev P., Dobрева M.	peer reviewed Review Of The National Center For Digitization, ISSN 1820-0109, 9 (2006), pp.1–11

Visual Comparative Interpretation of Cultural Heritage.	Trifonov T.	Trifonov T.	peer reviewed Proceedings of 33 th Conference of UMB, Borovets, 1-4 April 2004, p. 262 – 267, ISBN 954-8880- 17-2
Alignment of Heterogeneous Ontologies: A Practical Approach to Testing for Similarities and Discrepancies.	Zlatareva, N., Nisheva-Pavlova, M.	Nisheva-Pavlova, M	peer reviewed D. Wilson, H. Chad Lane (Eds.), Proceedings of the Twenty-First International Florida Artificial Intelligence Research Society Conference (Coconut Grove, Florida. May 15–17, 2008). ISBN 978-1-57735-365-2, AAAI Press, Menlo Park, California, 2008, pp. 365–370
High - Order Statistics in Blind Image Restoration	Bekiarski, A., B. Shishkov, M. Dobрева	Shishkov B., Dobрева M.	peer reviewed Proc. of the First International Symposium on Radio Systems and Space Plasma, Sept. 2-5, 2007, pp. 23-26, Sofia, Bulgaria.
Digitisation of Cultural Heritage: Between EU Priorities and Bulgarian Realities	Dobрева M., N. Ikonov	Dobрева M., Ikonov N.	peer reviewed Proceedings of Third International Conference Information Research, Applications and Education, 27-30 June 2005, Varna, pp. 149-154
Some Observations on the Chronological Distribution of Mediaeval Manuscripts and Church Items from Bulgaria,	Hristova S., Dobрева M.,	Hristova S., Dobрева M.	peer reviewed Proceedings 33th Spring Conference of UMB, Borovets, 1-4 April 2004, p. 214-217, ISBN 954-8880-17-2.

Adoption of New Technologies in the Scientific And Cultural Heritage Sector: Institutional Policy Challenges	Ikonomov N., Dobрева M.	Ikonomov N., Dobрева M.	peer reviewed Proceedings 33th Spring Conference of UMB, Borovets, 1-4 April 2004, p. 218-224, ISBN 954-8880-17-2.
Implications of Recent Trends in Telecommunications on Modeling and Simulation for the Telecommunication Industry.	Köster G., Poryazov S.	Poryazov S.	peer reviewed Proceedings of i.Tech 2006, Varna, Bulgaria. FOI-COMMERCE - Publisher 2006, ISBN-13: 978-954-16-0036-8, pp.257-259.
Culture Aspects of Inforaction	Markov, K. Stoyan Poryazov, Krassimira Ivanova, Iliа Mitov, Vera Markova.	Poryazov S.	peer reviewed International Conference «Knowledge-Dialogue-Solutions» 2007. Proceedings, pp.625-633
Games with probability.	Mateev P.	Mateev P.	peer reviewed Proceedings of the 6 th Research Summer School of High School Students Institute at IMI, 2006, pp. 15-18 (in Bulgarian)
.Constructive Problem Solving Using CLIPS.	Nisheva-Pavlova, M.	Nisheva-Pavlova, M.	peer reviewed G. Venkov, M. Marinov (Eds.), Appl. of Math. in Engin. and Economics. Softtrade, Sofia, 2005, pp. 340-343. Proceedings of the 30 th Intern. Conference “Applications of Mathematics in Engin. and Economics”, Sozopol, 2004.

Visualization Tools of Knowledge Basis and Instrumental environment CLIPS.	Nisheva-Pavlova, M.	Nisheva-Pavlova, M.	peer reviewed Proceedings 33th Spring Conference of UMB, Borovets, 1-4 April 2004, p. 440-445, ISBN 954-8880-17-2.
Computer Processing of Manuscripts, Knowledge-Based Search in Collections of Digitized Manuscripts.	Nisheva-Pavlova, M., P. Pavlov	Nisheva-Pavlova, M.	peer reviewed Computer Applications in Slavic Studies, Proceedings of Azbuky.Net, International Conference and Workshop, 24–27 October 2005, Sofia, 2006, pp. 17–26.
Knowledge-based Search in Collections of Digitized Manuscripts: First Results.	Pavlov P., Nisheva-Pavlova, M.,	Nisheva-Pavlova, M.	peer reviewed Proceedings of the 10th ICCC International Conference on Electronic Publishing (Bansko, 14-16 June 2006), FOI-COMMERCE, Sofia, 2006, pp. 27-35.
A Subject – Machine – Object Interaction Reference Model and its Application in Electronic Publishing.	Poryazov S.	Poryazov S.	peer reviewed B. Martens & M. Dobрева (Editors), Proceedings of ELPUB 2006, the 10th International Conference on Electronic Publishing, 14-16 June, 2006, Bansko, Bulgaria. FOI-Commerce Publisher, Sofia, Bulgaria, 2006. ISBN-10: 954-16-0040-9; ISBN-13: 978-954-16-0040-5, pp. 389-390.

Computing Model of an Interactive Internet System for Terminal Traffic Models.	Poryazov S., Atanasov V.	Poryazov S.	peer reviewed Proceedings of XXXIII Conference of Bulgarian Mathematicians in – Borovets, 1 - 4 April 2004, p. 452-458, ISBN 954-8880-17-2
Necessity and Ways for Computer Visualization Personalization.	Poryazov S., Slavova- Petkova S.	Poryazov S.	peer reviewed Proceedings 2 nd Conference “New Technologies in Education”, Plovdiv, Bulgaria, 2004, ISBN 954-91551-1-0, pp. 255-264.
Influence of some Users’ Behaviour Parameters over Network Redimensioning	Saranova E. T.	Saranova E. T.	peer reviewed Proceedings of i.Tech 2007, FOI- ITHEA Publisher, 2007, pp.449-459 .
How to help the good ideas of our students?	Sendova E., Stefanova E., Kovacheva E., Dobrev M., Nikolova N.	Dobrev M.	peer reviewed Proc. of the national conference “Education in the information society”, 13-14 October 2006, Plovdiv, pp. 67-72 (in Bulgarian)
Probabilistic Approach to Design of Large Antenna Arrays	Shishkov B., Matsumoto H., Shinohara N.	Shishkov B.	peer reviewed Pliska Stud. Math. Bulgar. 17(2005), pp. 249-269.
Probabilistic Approach to Design of Large Antenna Arrays	Shishkov, B., H. Matsumoto, N. Shinohara	Shishkov B.	peer reviewed Pliska Studia Mathematica Bulgarica, Vol. 17, pp. 249 – 269, 2005.

Edutainment Games for Presenting Cultural Heritage	Sotirova, K.	Sotirova, K.	peer reviewed Proceedings 33th Spring Conference of UMB, Borovets, 1-4 April 2004, p. 241-247, ISBN 954 8880 17 2.
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3.15. Department “Humanities Informatics”

Monographs and publications in conference proceedings (distinguish: keynote; invited; peer reviewed) (Section/Department/Laboratory- “Humanities Informatics”)			
Title	Author, or all Co-Authors as appear on the publication	Author or co-Authors from the Institute	Books/ Proceedings/ distinguish: keynote; invited; peer reviewed
Emerging Technologies for the Cultural and Scientific Heritage Sector	Ross S., Donnelly M., Dobrev M.	M.Dobrev	Book European Commission, ISBN 92-894-5276-5. 2004, 212 pp.
Core Technologies for the Cultural and Scientific Heritage Sector.	S. Ross, M. Donnelly, M. Dobrev, D. Abbott, A. McHugh, A. Rusbridge	M.Dobrev	Book European Commission, ISBN 92-894-5277-3, 2005, 296 pp.
Preliminary framework for designing prototype tools for assisting with preservation quality metadata extraction for ingest into digital repository	Ross S., Kim Y., and Dobrev M,	M.Dobrev	Book Pisa: DELOS NoE, December 2007. ISBN: 2-912335-39-6, January 2008, 165 pp.

<p>The DELOS Digital Library Reference Model Foundations for Digital Libraries. Version 0.98.</p>	<p>Candela L., Castelli D., Ferro N., Koutrika G., Meghini C., Pagano P., Ross S., Soergel D., Agosti M., Dobrev M., Katifori V., and Schuldt H.</p>	<p>M.Dobrev</p>	<p>Book ISTI-CNR at Gruppo ALI, Pisa, Italy. ISSN 1082-9873, 2008, 215 pp.</p>
<p>Digital Preservation and Access to Cultural Heritage in South- Eastern Europe,</p>	<p>Ikonomov N.,</p>	<p>N. Ikonomov</p>	<p>Keynote In: Proc. Int. Symposium “Documentation Management and Cooperation among the Libraries in the Balkan Countries”, June 5-7 2008, Edirne, Turkey, p.p. 14-23</p>
<p>Preservation of Digital Content: Interoperability into the Future</p>	<p>Dobrev M.</p>	<p>M.Dobrev</p>	<p>Keynote In: Proc.. 4th SEEDI Int. Conf.: “Digitization of cultural and scientific heritage”, June 12-15, 2008, Belgrade, Serbia</p>

Long Term Preservation of Digital Content: Issues and Approaches	Dobrev M.	M.Dobrev	Keynote In: Proc.. Int. Conference "Modern Information Technologies and Written Heritage: From Ancient Texts to Electronic Libraries" El'Manuscript-08, Kazan, Russia, August 25-30, 2008
Digital MultiCulture in Practice	Micheal Mac an Airchinnigh & Sotirova, K,	K. Sotirova	Invited In: First International Workshop Ontology Based Modelling in Humanities. Bericht 265, University of Hamburg, pp. 27-36, April 2006.
Toward the Creation of a Spoken Corpus of Bulgarian Dialects	Ikonomov N., Dobrev M. ,	N. Ikonomov, M.Dobrev	Invited In: Dagstuhl seminar Digital Historical Corpora, 03.12. - 08.12.2006, Schloss Dagstuhl, Germany. ISSN: 1862-4405.
Keyimage Ontologization & Folksonomy in Web 2.0 Social Space.	Mac an Airchinnigh, M., & Sotirova, K.	K. Sotirova	Invited In: Değişen Dünyada Bilgi Yönetimi Sempozyumu, Ankara: H.Ü. 2006
Games with probability	Mateev, P.	P. Mateev	Invited Proceedings of the 6th Research Summer School of High School Students Institute at IMI, 2006, pp. 15-18 (in Bulgarian)

Digitisation of Cultural and Scientific Heritage in Bulgaria: Challenges and Realities,	Ikonomov N., M. Dobрева,	N. Ikonomov., M. Dobрева	Invited In: T. Aigner, K. Winter. "Alte Archive –Neue Technologien. Old Archives-New Technologies", DASP St. Polten 2006, pp. 67-75. ISBN 3-901863-26-5.
Appearance and Dissemination of Stochastic in Bulgaria	M. Slavchova-Bojkova, Mateev, P.	P. Mateev	Invited In: "Dissemination and development of the knowledge of Physics and Mathematics in Bulgaria", published by the Institute for Nuclear Research and Nuclear Energy-BAS, 2007, pp. 82-89. (in Bulgarian)
Assessment of Information Asymmetry	Christozov, D., Mateev P.	P. Mateev	Peer-reviewed In: Seminar on Statistical Data Analysis SDA'2004, 21-27 June Sozopol, 2004, Pliska Stud.Math.Bulgar., (17), 2005, p. 27-37.
Chronological Distribution of the Bulgarian Mediaeval manuscripts, preserved in Bulgaria	Tabov J., Velchev A., Dobрева M., Sotirova K.	Tabov J., A. Velchev, M. Dobрева, K. Sotirova.	Peer reviewed In: Proceedings of the 33d Spring Conference of the Union of Bulgarian Mathematicians, pp. 241-247, Sofia, 2004, ISBN 954 8880 17 2

Digital Preservation and Access to Cultural and Scientific Heritage: Presentation of the KT-DigiCult-BG project	Dobreva M., Ikonomov N.	M. Dobreva, N. Ikonomov	Peer reviewed In: International Journal Information Theories and Applications, Vol. 11 (2004), N 3, pp. 205-210.
Digitisation and the Faculty of Mathematics and Informatics, Sofia University	Nisheva-Pavlova, M.	M. Nisheva-Pavlova	Peer-reviewed In: International Journal Information Theories and Applications, Vol. 11 (2004), N 3, pp. 297-230.
Edutainment Games for Presenting Cultural Heritage	Sotirova, K.	K. Sotirova	Peer reviewed In: Proceedings of the 33rd Spring Conference of the Union of Bulgarian Mathematicians, pp. 241-247, Sofia, 2004, ISBN 954 8880 17 2
Gait measurements and motor recovery after stroke.	Mateev P., I.Tarkka, E.Titianova.	P. Mateev	Peer reviewed In: Seminar on Statistical Data Analysis SDA'2003, 21-28 June Sozopol, 2003, Pliska Stud.Math.Bulgar., (16), 2004, p.121-128. (in Bulgarian)
New Technologies in the Cultural Heritage Sector: A View From Bulgaria	Dobreva M.	M.Dobreva	Peer reviewed Linguistica Computazionale, vol. XX-XXI "Digital Technology and Philological Disciplines", edited by Andrea Bozzi, Laura Cignoni, Jean-Louis Lebrave, published by Istituti Editoriali e Poligrafici Internazionali, Italy, 2004, pp. 197-207.

On the Applicability of MuPAD in Learning and Teaching Mathematics	Nisheva-Pavlova, M.	M. Nisheva-Pavlova	Peer reviewed In: G. Venkov, M. Marinov (Eds.), Application of Mathematics in Engineering and Economics. Bulvest 2000, Sofia, 2004, pp. 315-320. (in Bulgarian)
Presentation of the DigiCult Survey of New Technologies in the Scientific and Cultural Heritage Sector	Dobrev M., Ikonov N.	M.Dobrev, N. Ikonov	Peer reviewed Review of the National Center for Digitisation ¹ , No 4 (2004), Serbia and Montenegro, pp. 62-69. ISSN: 1820-0109
Tools for Visualization of the Knowledge Base and the Inference Process in CLIPS	Nisheva-Pavlova, M.	M. Nisheva-Pavlova	Peer-reviewed In: Mathematics and Education in Mathematics, Vol. 33, Sofia, 2004, pp. 440-445 (in Bulgarian). ISBN 954-8880-17-2
A Model of Communication System via Random Walk over Simplex	Mateev P.	P. Mateev.	Peer-reviewed In: Matematica Balkanica, New Series Vol.19, 2005, 133-142. ISSN 0205-3217
All for One, One for All: Several Electronic Publishing Experiences within the KT-DigiCult-Bg Project	Ikonov N., Dobrev M.	N. Ikonov, M.Dobrev	Peer reviewed In: Proc. ELPUB2005. From Author to Reader: Challenges for the Digital Content Chain: Proc. of the 9th ICCA Int. Conf. on Electronic Publishing, Leuven-Heverlee (Belgium), 8-10 June 2005, M. Dobrev & J. Engelen (eds), Peeters Publishing Leuven, ISBN 90-429-1645-1, 2005, pp. 259-263.

¹ Note: this journal is not ranked but it is the ONLY specialised journal in digitisation in the EC.

Computer Technologies and Cultural-Historical Heritage	Dobрева M., J. Tabov.	M.Dobрева, J. Tabov.	Peer-reviewed In: Historical Review, LXI (2005), 5-6, 185-188 (in Bulgarian).
Constructive Problem Solving Using CLIPS	Nisheva-Pavlova, M.	M. Nisheva-Pavlova	Peer reviewed In: G. Venkov, M. Marinov (Eds.), Applications of Mathematics in Engineering and Economics. Softtrade, Sofia, 2005, pp. 340-343.
Digital Preservation and Access to Cultural and Scientific Heritage: Presentation of the KT-DigiCult-Bg project	Ikonomov N., Dobрева M.,	N. Ikonomov, M.Dobрева	Peer reviewed In: Proc. of the INFORUM 2005: 11th Conference on Professional Information Resources, Prague, May 24-26, 2005.
Digitisation of Cultural Heritage: Between EU Priorities and Bulgarian Realities	Dobрева M., N. Ikonomov	M.Dobрева N. Ikonomov	Peer reviewed In: Proceedings of Third International Conference Information Research, Applications and Education, 27-30 June 2005, Varna, pp. 149-154.
Edutainment (game) - Digital (Re)Discovery of Culture	Sotirova, K.	K. Sotirova	Peer reviewed Third International Conference New Technologies and Standards: Digitisation of National Heritage, and published II vol. of the Review of the National Center of Digitisation (Serbia and Montenegro), ISSN: 1820-0109 6/2005, pp.58-68.

On the Applicability of Protégé/OWL in Building Tools for Intelligent Search in Digitized Collections of Manuscripts	Nisheva-Pavlova, M., P. Pavlov	M. Nisheva-Pavlova	Peer reviewed In: Proc. 1 st SEEDI Conference “Digital (re-)Discovery of Culture” (Ohrid, Macedonia, 11-14 September 2005.
Tools for Intelligent Search in Collections of Digitized Manuscripts	Nisheva-Pavlova, M., P. Pavlov	M. Nisheva-Pavlova	Peer reviewed In: ELPUB2005. From Author to Reader: Challenges for the Digital Content Chain: Proc. of the 9th ICCC Int. Conf. on Electronic Publishing, Leuven-Heverlee(Belgium), 8-10 June 2005, M. Dobрева & J. Engelen (eds), Peeters Publishing Leuven, ISBN 90-429-1645-1, 2005, pp.145-150.
A Measure of Risk Caused by Information Asymmetry in e-Commerce,	Christozov D., S.Chukova, Mateev P.	P. Mateev	Peer-reviewed In: The Journal of Issues in Informatics and Information Technology, v. 3, 2006, 147-158. ISSN 0204-9805
Classification and Recognition of Neume Note Notation in Historical Documents.	Laskov, L.,	L. Laskov	Peer reviewed Proc. of CompSysTech’06, June 15-16, 2006, V.Tarnovo, Bulgaria, pp. V.4.1-4.
Computer Processing of Manuscripts, Knowledge-Based Search in Collections of Digitized Manuscripts	Nisheva-Pavlova, M., P. Pavlov	M. Nisheva-Pavlova	Peer reviewed In: Computer Applications in Slavic Studies, Proceedings of Azbuky.Net, International Conference and Workshop, 24–27 October 2005, Sofia, 2006, pp. 17–26.

Digital re-Discovery of Culture Game of Inquiry & the Physicality of Soul	Mac an Airchinnigh, M., Sotirova, K., & Tonta, Y.	K. Sotirova	Peer reviewed Review of the National Center for Digitisation, 2006 (9), 19-37 pp. ISSN: 1820-0109, publisher: Faculty of Mathematics, Belgrade
How to Help the Good Ideas of our Students?	Sendova E., Stefanova E., Kovacheva E., Dobrev M., Nikolova N	M.Dobrev	Peer reviewed Proc. of the national conference “Education in the information society”, 13-14 October 2006, Plovdiv, pp. 67-72 (in Bulgarian)
Knowledge-based Search in Collections of Digitized Manuscripts: First Results	P. Pavlov, Nisheva- Pavlova, M	M. Nisheva-Pavlova	Peer reviewed Proceedings of the 10th ICC International Conference on Electronic Publishing (Bansko, 14-16 June 2006), FOI-COMMERCE, Sofia, 2006, pp. 27- 35.
On the Applicability of Protégé/OWL in Building Software Tools for Intelligent Search in Digitized Collections of Manuscripts.	Nisheva- Pavlova, M., P. Pavlov.	M. Nisheva-Pavlova,	Peer reviewed Review of the National Center for Digitisation, Belgrade, ISSN 1820-0109, Vol. 9 (2006), pp. 13-17
Color Image Segmentation for Neume Note. Recognition	Laskov L., and D. Dimov.	L. Laskov	Peer reviewed In: Proceedings of the Int.Conf. A&I'07, 03-06.10.07, Sofia, 2007, pp. III.37-41

Digitisation and Access to Archival Collections: A Case Study of the Sofia Municipal Government (1878 – 1879)	Nisheva-Pavlova, M., P. Pavlov, N. Markov, M. Nedeva	M. Nisheva-Pavlova	Peer reviewed In: Proc.of the 11th International Conf. on Electronic Publishing (Vienna, Austria, 13-15 June 2007), ISBN 978-3-85437-292-9, 2007, pp. 277–284.
Digitisation Department at IMI-BAS: Three Years of Experience	Dobreva, M., Ikonomov N.	M.Dobreva, N. Ikonomov	Peer reviewed In: Scripta & e-Scripta, Vol. 5, 2007, pp. 9-22.
Knowledge Processing in Intelligent Sensor Systems: An Overview of Clustering Methods	Nisheva-Pavlova, M.	M. Nisheva-Pavlova	Peer reviewed In: K. Alexiev, St. Dimova, M. Nisheva (Eds.), Multisensor Signal, Image and Data Processing. ISBN 978-954-9526-44-8, Demetra Ltd, Sofia, 2007, pp. 55-62.
On the Relationship between Warranty and the Risk of Information Asymmetry	Christozov, D., S. Chukova, Mateev P.	P. Mateev	Peer-reviewed In: The Journal of Issues in Informing Science and Information Technology, v.4, 2007, 235-249. ISSN 0204-9805
Scientific Heritage in Bulgaria Does First Digital Steps	Dobreva M., N. Ikonomov	M.Dobreva, N. Ikonomov	Peer reviewed In: Proc.EIPub 2007 Vienna, June 2007, pp.247-252. ISBN 978-3-85437-292-9
South-Eastern European Digitisation Initiative – SEEDI	Ognjanović Z., Dobreva M., N. Ikonomov	M.Dobreva, N. Ikonomov	Peer reviewed In: INFORUM 2007: 13th Conference on Professional Information Resources Prague, May 22-24, 2007

Towards The Need For Immediate Action In Education Of Statistics/Stochastic	Mateev, P.	P. Mateev	Peer reviewed In: Proc. 36th Spring Conference of the Union of Bulgarian Mathematicians, April 2007, Varna (in Bulgarian)
Alignment of Heterogeneous Ontologies: A Practical Approach to Testing for Similarities and Discrepancies	Zlatareva, N., Nisheva-Pavlova, M.	M. Nisheva-Pavlova	Peer reviewed In: D. Wilson, H. Chad Lane (Eds.), Proceedings of the 21 st Int. Florida Artificial Intelligence Research Society Conference (Coconut Grove, Florida. May 15–17, 2008). ISBN 978-1-57735-365-2, AAAI Press, Menlo Park, California, 2008, pp. 365–370.
Automation in Digital Preservation: Three Scenarios	Kim Y., Oliver G., Ross S., Ruusalepp R.	M.Dobрева	Peer reviewed In: Proc. UK e-Science All Hands Meeting 2008 "Crossing Boundaries", 8-11 Sept., Edinburgh, UK
Challenges for IT education at Sofia University	Gourova, E., Nisheva-Pavlova, M., A. Antonova.	M. Nisheva-Pavlova	Peer reviewed In: S. Misra et al. (Eds.), "Recent Advances in Education and Educational Technology. Proc. of the 7th WSEAS International Conference on Education and Educational Technology (Venice, Italy, November 21-23, 2008)". ISSN 1790-5109, ISBN 978-960-474-029-1, WSEAS Press, 2008, pp. 50–54.

Designing an Automated Prototype Tool for Preservation Quality Metadata Extraction for Ingest into Digital Repository	Dobreva M., Kim Y., Ross S.	M.Dobreva	Peer reviewed In: P. Cunningham and M. Cunningham (Eds), eChallenges 2008. Collaboration and the Knowledge Economy: Issues, Applications, Case Studies. IOS Press, 2008 Amsterdam, ISBN 978-1-58603-924-0 (2008)
Digitisation of Photographic Collections in the Context of Digitisation of the Cultural Heritage of Bulgaria	Galibov Z.,	Z. Galibov	Peer reviewed In: Photo Video Salon magazine, (1)/ September 2008, pp. 98-104. (in Bulgarian)
Ontology-Based Access to Digitized Cultural Heritage and Archival Collections	Nisheva-Pavlova, M., P. Pavlov, A. Devreni-Koutsouki.	M. Pavlova-Nisheva	Peer-reviewed Review of the National Center for Digitisation, Belgrade, ISSN 1820-0109, Vol. 12 (2008), pp. 9-16.
Segmentation of Ancient Neumatic Musical Notation	Laskov L.,	L. Laskov	Peer reviewed In: Proc. of the international conference AUTOMATICS AND INFORMATICS.08, Sofia, October 2008, pp.II-21-24.
The education in probabilities and statistics in the schools of New Zealand	Chukova S, Mateev, P. Hristozov D	P. Mateev.	Peer-reviewed In: Mathematics and Informatics, ISSN 1310-2230, XXXIII (LI) 2008, 4, pp. 3-14. (in Bulgarian)

The Making of Digital Books	Ikonomov N.	N. Ikonomov	Peer reviewed The fourth SEEDI International Conference: Digitisation of cultural and scientific heritage, June 12-15, 2008, Belgrade, Serbia. In: Review of the National Center for Digitisation in Serbia, 2008, ISSN: 1820-0109
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3.16. Department “Mathematical modelling”

Monographs and publications in conference proceedings (distinguish: keynote; invited; peer reviewed) (Section/Department/Laboratory- “ <i>Mathematical modelling</i> ”)			
Title	Author, or all Co-Authors as appear on the publication	Author or co-Authors from the Institute	Books/ Proceedings/ distinguish: keynote; invited; peer reviewed
A Characterization of Weighted L_p Approximations by the Gamma and the Post-Widder Operators	Draganov B., K. G. Ivanov	Draganov B., K. G. Ivanov:	peer reviewed Proc. Intern. Conf. "Constructive Theory of Functions, Varna 2005, 2005
Characterizations of Weighted K-Functionals	Draganov B., K. G. Ivanov	Draganov B., K. G. Ivanov	peer reviewed Proc. Intern. Conf. "Constructive Theory of Functions, Varna 2005, 2005
Hausdorff Distance and Word Matching	Andreev A., N. Kirov	Andreev A., N. Kirov	peer reviewed Proceedings of the International Workshop “Computer Science and Education”, June 3-5, 2005, Borovetz-Sofia, Bulgaria, p. 19-28, 2005
Characterization of Weighted L_p Approximations by the Gamma and the Post-Widder operators	Draganov B., K.G. Ivanov	Draganov B., K.G. Ivanov	peer reviewed Proc. Intern. Conf. “Constructive Theory of Functions, Varna 2005”, Ed. B. Bojanov, Marin Drinov Academic Publishing House, Sofia, 80-87, 2006

Characterizations of Weighted K-Functionals and Their Applications	Draganov B., K.G. Ivanov	Draganov B., K.G. Ivanov	peer reviewed Proc. Intern. Conf. "Constructive Theory of Functions, Varna 2005", Ed. B. Bojanov, Marin Drinov Academic Publishing House, Sofia, 88-97, 2006
Optimal distribution of the parties mandates for 40 Parliament among electoral district	Ivanov K., N. Kirov, N. Yanev	Ivanov K.	peer reviewed Proceedings of the XXXI Spring Conference of the Union of Bulgarian Mathematicians, Sofia, 70-81 2006 (in Bulgarian)
On Recovering of a Bivariate Polynomial From its Radon Projections	Georgieva Irina and Saleem Ismail,	Georgieva Irina	peer reviewed Constructive Theory of Functions, Varna 2005, (B. Bojanov, Ed.), Marin Drinov Academic Publishing House, Sofia, 127-134, 2006
Averaged Moduli of Smoothness on the Plane and Runge-Kutta Methods	Andreev A. and M. Nikoltjeva-Hedberg,	Andreev A.	peer reviewed Constructive Theory of Functions, Varna 2005, (B. Bojanov Ed.) Marin Drinov Academic Publishing House, Sofia, 11-21, 2006
Surface reconstruction and Lagrange basis polynomials	Georgieva I., R. Uluchev,	Georgieva I.	peer reviewed 6 th International Conference on "Large Scale Scientific Computations", June 5-9, Sozopol, Bulgaria, 2007

Text Search in Document Images Based on Hausdorff Distance Measures	Andreev A., N. Kirov	Andreev A., N. Kirov	peer reviewed Proc. Intern. Conf. "Computer Systems and Technologies" (CompSysTech'08), June 12-13, Gabrovo, Bulgaria, II.5-1 – II.5-6, 2008
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3.17. Department “Probability and Statistics”

Monographs and publications in conference proceedings (distinguish: keynote; invited; peer reviewed) (Section/Department/Laboratory- “ Probability and Statistics ”)			
Title	Author, or all Co-Authors as appear on the publication	Author or co-Authors from the Institute	Books/ Proceedings/ distinguish: keynote; invited; peer reviewed
Branching processes with multi-type random control functions: Subcritical case.	I. M. Del Puerto, Yanev N. M.	Yanev N. M.	monograph Ch. 11 (363-374) in: <i>Leading-Edge Applied Mathematical Modeling Research</i> . Editor: M.P.Alvarez, <i>Nova Science Publishers, Inc.</i> , New York, 2008.
Regenerative branching processes.	K. V. Mitov, Yanev N. M.	Yanev N. M.	monograph Ch.3 (37-62) in: <i>Records and Branching processes</i> , Ed. M.Ahsanullah, G.P.Yanev, <i>Nova Science Publishers, Inc.</i> , New York, 2008.
Correlated probit model.	Gueorguieva R.V	Gueorguieva R.	monograph Encyclopedia of Biopharmaceutical Statistics. 10.1081/E-EBS-120041045: (2006) 1-10.

Statistical inference for branching processes.	Yanev N. M.	Yanev N. M.	monograph Ch.7 (143-168) in: <i>Records and Branching processes</i> , Ed. M.Ahsanullah, G.P.Yanev, <i>Nova Science Publishers, Inc.</i> , New York, 2008.
Mathematical Modeling and Optimization of the Sidelobe Level of Large Antenna Array	Shishkov, B. H. Matsumoto, N. Shinohara	Shishkov, B.	invited Proc. of the XXVIIIth G.A. of the URSI, New Delhi, India, HX.5(0265), October 2005
Extremal Processes: An Application to Ruin Probability.	Pancheva E.	Pancheva E.	peer reviewed Proceedings of ISSPSM, Salerno, Italy, 2005, 221-225.
Records and Branching Processes	M. Ahsanullah and George Yanev, Editors	George Yanev	monograph NOVA Science Publishers, New York, 2008.
Statistical Relationships of Storm Runoff Constituents with Storm Event Characteristics in Nine California Urban Watersheds.	Donald Duke, Alfred Mbah, and George P. Yanev.	George Yanev	peer reviewed In: Karen C. Kabbes (Editor) , Proc. of the World Environmental and Water Resources Congress 2007: Restoring our Natural Habitat, Published by the American Society of Civil Engineers, 2007, 221-239.

A review of offspring extremes in branching processes.	George Yanev	George Yanev	peer reviewed In: M. Ahsanullah and G. Yanev, Eds. Records and Branching Processes, NOVA Science Publishers, New York, 2008, 127-145.
Empirical Bayes Estimators for the Reproduction Parameter of Borel-Tanner Distribution	George Yanev	George Yanev	peer reviewed In: M. Ahsanullah (Editor), Applied Statistics Research Progress, NOVA Science Publ., New York, 2008, 27-33
Number of Families in Branching Processes with Size within Random Interval.	Yanev, G.P. and Hasan, H.	George Yanev	peer reviewed J. Applied Probability and Statistics, Special Issue for Selected Papers Presented at The 9th Islamic Countries Conference on Statistical Sciences, Dec. 12-14, 2007, Malaysia, 3(2008), 1:146-162.
Nadaraya-Watson density estimation for interval censored data	E.Stoimenova	E. Stoimenova	keynote Proceedings of the 8-th International Conference "Computer Data Analysis And Modeling", Minsk, Belarus, (2007), 104-107
Statistical approach in soilwatercharacteristic curve modelling	E. Stoimenova, M. Datcheva, T. Schanz	E. Stoimenova	peer reviewed Unsaturated Soils Numerical and Theoretical Approaches, (ed. T. Schanz), Springer Proceedings in Physics, (2005). vol. 94/II, 189-200

Inverse modelling of soil hydraulic characteristic functions.	E. Stoimenova, Y. Lins, M. Datcheva, T. Schanz	E. Stoimenova	Proceedings of the 17th International Conference on the Application of Computer Science and Mathematics in Architecture and Civil Engineering, (eds. K. Goerlebeck and C. Koenke), Weimar, Germany, 12–14 July 2006. peer reviewed
Forecasting electricity demand by time series models.	E. Stoimenova, K. Prodanova, R. Prodanova	E. Stoimenova	Applications of Mathematics in Engineering and Economics' 33, (ed. M.D. Todorov), Am. Inst. Phys. CP (2007), vol. 946, 81-88. peer reviewed
Outlier detection as a method for knowledge extraction from digital resources	E. Stoimenova, P.Mateev, M. Dobрева	E. Stoimenova	<i>Review Of The National Center For Digitization</i> , (2006), vol. 9, 1–11. peer reviewed
Branching Stochastic Processes	Slavtchova-Bojkova M., Yanev, N.	Slavtchova-Bojkova M., Yanev, N.	monograph University press "St. Kl. Ohridski", Sofia, p. 107.2007 ISBN- 978-954-07-2601-4.
Education in Stochastics/Statistics – A Compulsory Part from the European Culture	Slavtchova-Bojkova M.	Slavtchova-Bojkova M.	invited Proceedings of the Thirty Sixth Spring Conference, Bulgaria, 102-108
On the probability of ruin in infinite time for integer valued claims.	Ignatov, Z.G., and Kaishev, V.K.	Kaishev, V.K.	peer reviewed <i>Proceedings of the 2nd International Workshop in Applied Probability (IWAP 2004)</i> , 191-192.

A general representation of multivariate distribution with applications.	Kolev N., D. Paiva and J. Lopez-Mimbela.	Kolev N.	peer reviewed In: Proc. Third Brazilian Conference on Statistical Modelling in Insurance and Finance, (Eds. C. Fernandes, H. Schmidli and N. Kolev), Maresias, Brazil, (2007), 352-355.
Random sums of partially exchangeable variables.	Kolev N., D. Paiva and M. Fernandez.	Kolev N.	peer reviewed In: Proc. Second Brazilian Conference on Statistical Modelling in Insurance and Finance, (Eds. N. Kolev and P. Morettin), Maresias, Brazil, (2005), 306-309.
A unified approach to testing hypotheses about parameters of normal population.	Kolev N., D. Paiva.	Kolev N.	peer reviewed In: Proc. ICOTS7, Salvador, Brazil, (2006), 171-175.
Bivariate density approximation under marginal and conditional information.	Kolev N., M. Fernandez.	Kolev N.	peer reviewed In: Proc. Third Brazilian Conference on Statistical Modelling in Insurance and Finance, (Eds. C. Fernandes, H. Schmidli and N. Kolev), Maresias, Brazil, (2007), 322-325.
Bounds for distortion functions of dependent risks via copulas.	Kolev N., M. Goncalves and A. Fabris.	Kolev N.	peer reviewed In: Proc. Second Brazilian Conference on Statistical Modelling in Insurance and Finance, (Eds. N. Kolev and P. Morettin), Maresias, Brazil, (2005), 122-127.

Some probabilistic properties of Sibuya's dependence fiction.	Kolev N., M. Goncalves.	Kolev N.	peer reviewed In: Proc. Third Brazilian Conference on Statistical Modelling in Insurance and Finance, (Eds. C. Fernandes, H. Schmidli and N. Kolev), Maresias, Brazil, (2007), 336-339.
Copulas with given multivariate marginals.	Kolev N., U. Anjos.	Kolev N.	peer reviewed In: Proc. 3rd Conference in Actuarial Science and Finance, Samos, Greece, (2004), 55-62.
Algorithms for Gene-ration and Robust Estimation of Branching Processes with Random Number of Ancestors.	Stoimenova, V., Atanasov, D., Yanev, N.	Stoimenova, V., Yanev, N.	peer reviewed Math. & Education in Math. Proceedings of 34 Spring Conference, of UBM (2005), 196 - 201.
Nonparametric Robust Estimation of the Individual Distribution in Branching Processes with a Random Number of Ancestors.	Stoimenova, V., Atanasov, D.,	Stoimenova, V.	peer reviewed Math. & Education in Math. Proceedings of 35 Spring Conference of UBM (2006), 302 - 308.
Randomly Indexed Galton-Watson Branching Processes.	Mitov G. K., K. V. Mitov.	Mitov G. K.	peer reviewed Proceedings of the 35 th Conf. of the UBM, (2006).

Upper and Lower Bounds for Ruin Probability	Pancheva E., Z. Volkovich and L. Morozensky.	Pancheva E.	peer reviewed PLISKA Stud. Math. Bulgar., vol. 18 (2007), 315-326.
Revisiting offspring maxima in branching processes.	Yanev George	Yanev George	peer reviewed PLISKA Studia Mathematica Bulgarica, 18:(2007):401-426.
Application of two-phase regression to geotechnical data	Stoimenova, E., M. Datcheva and T. Schanz	E. Stoimenova	peer reviewed Pliska Stud. Math. Bulgar. (2004)., vol. 16, 245-257.
Comparison between Numerical and Simulation Method for Age-dependent Branching Models with Immigration	Martinez R., M. Slavtchova-Bojkova	M. Slavtchova-Bojkova	peer reviewed Pliska, (Studia Mathematica Bulgarica), 17, 147-155. 2005
Total Progeny in a Subcritical Branching Processes with State-dependent Immigration.	Slavtchova-Bojkova M., P. Becker-Kern, K. Mitov,	Slavtchova-Bojkova M.	peer reviewed Pliska, (Studia Mathematica Bulgarica), 16, 229-245. 2004
Simulation and Robust Modifications of Estimates in Branching Processes.	Stoimenova, V., Atanasov, D., Yanev, N.	Stoimenova, V., Yanev, N.	peer reviewed Pliska Stud. Math. Bulgar., 16, (2004) 259-271.

Parametric Estimation in Branching Processes with an Increasing Random Number of Ancestors.	Stoimenova, V., Yanev N.	Stoimenova, V., Yanev N.	peer reviewed Pliska Stud. Math. Bulgar., 17, (2005) 295 - 312.
Estimators in Branching Processes with Immigration.	Atanasov, D., Stoimenova, V., Yanev, N.	Stoimenova, V., Yanev N.	peer reviewed Pliska Stud. Math. Bulgar. 18, (2007) 19-40.
An estimate of the probability $P(X<Y)$.	Mitov G. K., K.V. Mitov.	Mitov G. K.	peer reviewed Pliska Stud. Math, Bulgar. 16, 159-170, (2004), S. Nadarajah.
Option Pricing by Branching Process.	Mitov G. K., K.V. Mitov	Mitov G. K.	peer reviewed Pliska Stud. Math, Bulgar. 18, 213-224, (2007).

3.18. Department “Operational Research”

Monographs and publications in conference proceedings (distinguish: keynote; invited; peer reviewed) (Section/Department/Laboratory- Operational Research)			
Title	Author, or all Co-Authors as appear on the publication	Author or co-Authors from the Institute	Books/ Proceedings/ distinguish: keynote; invited; peer reviewed
<i>Intuitionistic Fuzzy Concept for Navigation of Mobile Agents in Unknown Environment</i>	Dimitrov, D. Z. Minchev	Minchev Z.	peer reviewed WSEAS'08, Advanced Topics on Fuzzy Systems, Technical University, May 2-4, Sofia, (2008), 49-53, AI Series
<i>Competitions and Mathematics Education</i>	Kenderov P	Kenderov P	Keynote Proceedings of the International Congress of Mathematicians, Madrid, Spain, 2006,p. 1583-1598 (Sectional plenary lecture for the Section on Mathematics Education and Popularization of Mathematics)
<i>Instrumentarium for discovering and support of advanced students in mathematics (in Bulgarian</i>	Kenderov P., S. Grozdev	Kenderov P., S. Grozdev	Proc. 34 th Spring Conf. Union Bulg. Math., Borovets (2005), p.53-64 (peer reviewed).

<p><i>European Project MATHEU: Identification, Motivation and Support of Mathematical Talents in European Schools</i></p>	<p>Kenderov P., S. Grozdev</p>	<p>Kenderov P., S. Grozdev</p>	<p>Proc. 33rd Spring Conf. Union Bulg. Math., Borovets (2004), p.39-49 (peer reviewed).</p>
<p><i>Fuzzy Logic Based Intelligent Motion Control of Robot Swarm Simulated by Khepera Robots</i></p>	<p>Minchev Z., O. Manolov, S. Noykov, U. Witkowski, U. Rükert</p>	<p>Minchev Z.</p>	<p>Proceedings of the 2004 Second International IEEE Symposium “Intelligent Systems”, Varna, Bulgaria, June 22-24, vol.1, (2004), 305-310 – (peer reviewed)</p>
<p><i>Intelligent Scenario Development for CAX</i></p>	<p>Minchev Z.</p>	<p>Minchev Z.</p>	<p>Proceedings of NATO ARW: “Scientific Support for the Decision Making in the Security Sector” (Editors: Ognyan Kounchev, Rene Willems, Velizar Shalamanov and Tsvetomir Tsachev), Velingrad, Bulgaria, October 21-25, 2006, Published by IOS Press Amsterdam, NATO Science for Peace Security Series, D: Information and Communication Security, vol.12, ISSN 1874-6268, ISBN 978-1-58603-760-4, (2007), 6-24 – (peer reviewed)</p>

Dynamic Evacuation Models	Tsachev Ts.	Tsachev Ts.	<p style="text-align: center;">invited</p> <p style="text-align: center;">In Proceedings of NATO ARW: "Scientific Support for the Decision Making in the Security Sector" (Editors: O. Kounchev, R. Willems, V. Shalamanov and Ts. Tsachev), Velingrad, Bulgaria, October 21-25, 2006, Published by IOS Press Amsterdam, NATO Science for Peace Security Series, D: Information and Communication Security, vol.12, 324-338, 2007</p>
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3.19. Department “Computational mathematics”

Monographs and publications in conference proceedings (distinguish: keynote; invited; peer reviewed) (Section/Department/Laboratory- “Computational mathematics”)			
Title	Author, or all Co-Authors as appear on the publication	Author or co-Authors from the Institute	Books/ Proceedings/ distinguish: keynote; invited; peer reviewed
Flow simulation of the plastic injection moulding process	Moog, Mathias, Linn, Joachim, Iliev, Oleg	O. Iliev	peer reviewed Proc. NAFEMS Seminar of Complex Flows, May 2004
Simulations of viscoelastic polymer melts flows	Niedziela, Dariusz, Latz, Arnulf, Iliev, Oleg	O. Iliev	peer reviewed Proc. NAFEMS Seminar of Complex Flows, May 2004
On the performance of certain iterative solvers for coupled systems arising in discretization of non-newtonian flow equations	Iliev, Oleg; Linn, Joachim; Moog, Mathias; Niedziela, Dariusz; Starikovicius, Vadimas	O. Iliev	peer reviewed Proc. ECCOMAS 2004

Benchmark three-body calculations within the Kantorovich method., XXIV international conference on photonic electronic and atomic collisions	Chuluunbaatar O., A. A. Gusev, S. I. Vinitsky, M. S. Kaschiev, V. A. Kaschieva, Amaya-Tapia, S. Y. Larsen	M. Kaschiev	peer reviewed XXIV international conference on photonic electronic and atomic collisions, Rosario, Argentina, July 20 - 26, 2005
Kantorovich method for high accuracy calculations of a hydrogen atom in a strong magnetic field: lowlying excited states	Dimova M. G., M. S. Kaschiev and S. I. Vinitsky	M .Kaschiev, M. Dimova	peer reviewed XXIV international conference on photonic electronic and atomic collisions, Rosario, Argentina, July 20 - 26, 2005
High-accuracy calculations for kicked Zeeman states. XXIV international conference on photonic electronic and atomic collisions	Gusev A., O. Chuluunbaatar, S. I. Vinitsky, M. S. Kaschiev, K. A. Kouzakov	M. Kaschiev	peer reviewed XXIV international conference on photonic electronic and atomic collisions, Rosario, Argentina, July 20 - 26, 2005
Symbolic-numerical algorithm for solving the time-dipendet Shroedinger equation by split-operator method	Gusev A., V.Gerdt, M.Kaschiev, V.Rostovtsev, V.Samoylov, T.Tupikova, Y.Uwano,	M. Kaschiev	peer reviewed The 3rd International Workshop Quantum Physics and Communication, 30 June - 3 July, 2005, Dubna, Russia

	V.Vinitsky		
Magnetopause cusp indentation: an attempt for a new model consideration	Kartalev M., S.Savin, E.Amata, P.Dobрева, G.Zastenker, N. Shevyrev	P.Dobрева	peer reviewed Poceedings of The Conference Cluster and Double Star symposium, 5th anniversary of Cluster in Space - ESA/ESTEC, Noordwijk, The Netherlands, September 19-23, 2005
On interaction of fluid with deformable porous media	Iliev, O.; Muntz, S.; Naumovich, A.	O. Iliev	peer reviewed Proc. NAFEMS, June 2006
On new Challenges for CFD Simulation in Filtration	Dedering, Michael; Stausberg, Wolfgang, Iliev, Oleg; Lakdawala, Zahra; Ciegis, Raimondas; Starikovicius, Vadimas	O. Iliev	peer reviewed Proc. 10th World Filtration Congress, April 14-18, 2008 Leipzig, Germany, Vol.I, pp. 316-320 (2008)
On Coupled Micro- and Macro Simulation for Filtration Processes	Lakdawala, Zahra; Iliev, Oleg; Wiegmann, Andreas	O. Iliev	peer reviewed Proc. 10th World Filtration Congress, April 14-18, 2008 Leipzig, Germany, Vol.I, pp 285-289 (2008)

Quasi Monte Carlo Approach with Uniform Separation for Solving of the Rendering Equation	Penzov, Anton A., Ivan T. Dimov and Stanislava S. Stoilova	S. Stoilova	peer reviewed ICNAAM 2007, Corfu, Greece, in American Institute of Physics Conference Proceedings
Uniform Separation for Parallel Monte Carlo Image Creation	Penzov, Anton A., Stanislava S. Stoilova, Ivan T. Dimov and Nikolay M. Mitev	S. Stoilova	peer reviewed Fourth Hungarian Conference on Computer Graphics and Geometry, SZTAKI, Budapest, (2007), pp. 117-124
On a nonlinear pressure algorithm for dilute and dense granular flow	Schmidt, S., A. Latz, O. Iliev	O. Iliev	peer reviewed AIP Conference Proceedings, 936, pp. 496-498, 2007
On the numerical solution of a stationary two-phase Venttsel problem	Kolkovska N.	N. Kolkovska	peer reviewed Proc. 2 nd Annual Meeting of the Bulgarian Section of SIAM, pp. 26-29, 2008
On a local semirefinement multigrid algorithm for convection-diffusion problems	Vasileva D.	D. Vasileva	peer reviewed Proc. 2 nd Annual Meeting of the Bulgarian section of SIAM, pp. 60-63, 2008

Modelling and Simulation of Multiscale Problems in Industrial Filtration Processes	Starikovicius, Vadimas; Ciegis, Raimondas, Iliev, Oleg; Lakdawala, Zahra	O. Iliev	invited Proc. 2 nd Annual meeting of Bulgarian Section of SIAM, pp.18-21, 2008
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3.20. Department “Biomathematics”

Monographs and publications in conference proceedings (distinguish: keynote; invited; peer reviewed) (<i>Department “Biomathematics”</i>)			
Title	Author, or all Co-Authors as appear on the publication	Author or co-Authors from the Institute	Books/ Proceedings/ distinguish: keynote; invited; peer reviewed
On the synthesis of a stabilizing feedback control	Krastanov, M.I	M.I. Krastanov	Springer Lecture Notes in Computer Science 3743 (2006), 239-246 - peer reviewed
Lie Brackets and Stabilizing Feedback Controls	Krastanov, M.I	M.I. Krastanov	Springer Lecture Notes in Computer Science 4310 (2007), 329-336 - peer reviewed
Differential Games and Optimal Tax Policy	R. Rozenov, M.I. Krastanov	M.I. Krastanov	Springer Lecture Notes in Computer Science 4310 (2007), 353-360 - peer reviewed
On Optimal Redistributive Capital Income Taxation	M.I. Krastanov, R. Rozenov	M.I. Krastanov	Springer Lecture Notes in Computer Science 4818 (2008), 342- 349 - peer reviewed
On Chamley's Problem of Optimal Taxation	Krastanov, M.I., R. Rozenov	M.I. Krastanov	Proceedings of the 37th Spring Conference of the Union of Bulgarian Mathematicians, (2008), 216-220 - peer reviewed

Asymptotic stabilization of a biotechnological process with substrate inhibition	Dimitrova N.S. M.I.Krastanov	Dimitrova N.S. M.I.Krastanov	Mathematics and Education in Mathematics, Proc. Spring Conf. of UBM, 407-412, 2004- peer reviewed
Stabilizing Feedback of a Nonlinear Biological Wastewater Treatment Model	Dimitrova N.S. M.I.Krastanov	Dimitrova N.S. M.I.Krastanov	Springer Lecture Notes in Computer Science 3743 (2006), 208-215. - peer reviewed
Stability and Bifurcation Analysis of a Nonlinear Model of Bioreactor	Dimitrova, N. P. Zlateva	Dimitrova, N.	Springer Lecture Notes in Computer Science, 4310, 2007, 296–303. peer reviewed
Nonlinear Adaptive Control of an Uncertain Wastewater Treatment Model	Dimitrova, N. Krastanov, M.I	Dimitrova, N. Krastanov, M.I	IEEE Proc. 12th GAMM-IMACS Intern. Symp. on Scientific Computing, Computer Arithmetic and Validated Numerics, Duisburg, Germany, September 26-29, 2006. IEEE Computer Society, ISBN-13: 978-0-7695-2821-2, ISBN-10: 0-7695-2821-X – peer reviewed
Zur Berechnung von verlässlichen Außen- und Inneneinachließungen bei parameterabhängigen linearen Gleichungssystemen	W. Krämer Popova, E.	Popova, E.	peer reviewed PAMM, Volume 4, Issue 1, 2004, pp. 670–671. GAMM Annual Meeting - Dresden 2004

Improved Solution Enclosures for Over- and Underdetermined Interval Linear Systems	Popova, E.	Popova, E.	Springer Lecture Notes in Computer Science 3743, 2006, pp. 305–312. - peer reviewed
On the Interoperability Between Interval Software	Popova, E.	Popova, E.	Proceedings of Dagstuhl Seminar 08021, Internatio-nales Begegnungs- und Forschungszentrum fuer Informatik (IBFI), Schloss Dagstuhl, Germany, 2008. - peer reviewed
Computer-Assisted Proofs in Solving Linear Parametric Problems	Popova, E.	Popova, E.	Proceedings of 12th GAMM - IMACS International Symposium on Scientific Computing, Computer Arithmetic and Validated Numerics (SCAN 2006), IEEE Computer Society Press, 2007, p. 35. DOI:10.1109/SCAN.2006.12. - peer reviewed
Solving Linear Systems whose Input Data are Rational Functions of Interval Parameters	Popova, E.	Popova, E.	NMA 2006, Springer Lecture Notes in Computer Science 4310, 2007, pp. 345–352. - peer reviewed
Bounding the Response of Mechanical Structures with Uncertainties in all the Parameters	Popova, E., R. Yankov, Z. Bonev	Popova, E.	Proceedings of the NSF Workshop on Reliable Engineering Computing, Svannah, Georgia USA, 2006, pp. 245–265. - peer reviewed

Modelling a cavity expansion problem under uncertainties	Iankov, R., Popova, E., Datcheva, M., Schanz, T.	Popova, E.	Proceedings of the University of Rouse, 2004, vol. 41, book 6.1, Mathematics and informatics, Physics, pp. 51–55. - peer reviewed
Strong Regularity of Parametric Interval Matrices	Popova, E.	Popova, E.	Mathematics and Education in Mathematics, IMI, 2004, pp. 446–451. - peer reviewed
Scientific Visualization: Interactive Graphical Web Service	Popova, E. M. Ivanova	Popova, E., M. Ivanova	B. Bojanov et al. (Eds.) Mathematics and Education in Mathematics 34, 2005, 363–369. peer reviewed
Algebraic operations on the space of Hausdorff continuous interval functions	Anguelov, R., S. Markov, Bl. Sendov	S. Markov	In: B. D. Bojanov (Ed.), Constructive theory of functions, Varna 2005, Prof. Marin Drinov Academic Publ. House, 2006, 35--44. - peer reviewed
Numerical Computations with Hausdorff Continuous Functions	Anguelov, R., S. Markov,	Markov, S.	Lecture Notes in Computer Science 4310, 2007, 279–286. - peer reviewed
Numerical Study of Algebraic Solutions to Linear Problems Involving Stochastic Parameters	Alt, R., J.-L. Lamotte, S. Markov	S. Markov	In: Lirkov, I., S. Margenov, J. Wasniewski (Eds.), Large-Scale Scientific Computing (LSSC'2005), LNCS 3743, Springer, 2006, 273—280. - peer reviewed

On the quasivector space of zonotopes in the plane	Markov, S.	Markov, S.	peer reviewed Proc. Appl. Math. Mech. (PAMM) 5 (1), 2005, 711--712.
Towards an Axiomatization of Interval Arithmetic	Markov, S.	Markov, S.	peer reviewed Proc. Appl. Math. Mech. (PAMM) 6, 685--686 (2006)
On the numerical solution to linear problems using stochastic arithmetic	Alt, R., J.-L. Lamotte, S. Markov	Markov, S.	In: H. H. Haddat et al. (eds.), Applied Computing 2006 (Proc. 2006 ACM Symposium on Applied Computing, SAC'06, Dijon, France, April, 23--27, 2006), ACM, 2006, 1655--1659. - peer reviewed
Abstract structures in stochastic arithmetic	Alt, R., J.-L. Lamotte, S. Markov	Markov, S.	In: B. Bouchon-Meunier, R. R. Yager (Eds.), Proc. 11-th Conf. on Information Processing and Management of Uncertainties in Knowledge-based Systems (IPMU 2006), Editions EDK, Paris, 2006, 794—801. - peer reviewed
On the solution to numerical problems using stochastic arithmetic	Markov, S.	Markov, S.	In: Bob Werner (Ed.), SCAN 2006 Conf. Post-Proceedings, IEEE Proc. of the 12 th GAMM-IMACS Intern. Symp. on Scientific Computing, Computer Arithmetic and Validated Numerics, Duisburg, Germany, Sept. 26-29, 2006. IEEE Comp. Soc. Press. - peer reviewed

Numerical Study of Algebraic Problems Using Stochastic Arithmetic	Alt, R., J.-L. Lamotte, S. Markov	Markov, S.	In: I. Lirkov, S. Margenov, J. Wasniewski (Eds.): Large-Scale Scientific Computing, LNCS 4818, 123--130, Springer, 2008. - peer reviewed
Interval arithmetic on the Cell processor	S. Graillat, J.-L. Lamotte, S. M. Rump, S. Markov	Markov, S.	Proc. 13th GAMM - IMACS International Symposium on Scientific Computing, Computer Arithmetic and Verified Numerical Computations SCAN'08 (El Paso, Texas, Sept. 29 – Oct. 3, 2008). - peer reviewed
On the accuracy of the CELL processor	Alt, R., J.-L. Lamotte, S. Markov	Markov, S.	Proc. 13th GAMM - IMACS International Symposium on Scientific Computing, Computer Arithmetic and Verified Numerical Computations SCAN'08 (El Paso, Texas, Sept. 29 – Oct. 3, 2008). - peer reviewed
On the Interval Arithmetic in Midpoint-Radius Form	Markov, S., D. Claudio	Markov, S.	Mathematics and Education in Mathematics 33, 2004, Inst. Math. and Informatics, BAS, 434-439. - peer reviewed
On the Relation Inclusion of Zonotopes in the Plane	Markov, S., A. C. da Rocha Costa, G. P. Dimuro	Markov, S.	In: B. Bojanov et al. (Eds.) Mathematics and Education in Mathematics 34, 2005, 129–135. - peer reviewed

4. LIST OF PUBLICATIONS IN YEAR 2009

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