

ПРИЛОЖЕНИЕ 1. СПИСЪК НА ПУБЛИКАЦИИ НА ИИКТ-БАН ЗА 2013 Г.

1. Списъци на излезните от печат през 2013 г. от всеки вид публикации (273)

1.1. Списък на публикациите, които са реферирани и индексирани в световната система за рефериране, индексиране и оценяване (в световни вторични литературни източници) (170)

1. Ahmed, S., M. Nedjalkov, D. Vasileska. Comparative Study of Various Self-Consistent Event Biasing Schemes for Monte Carlo Simulations of Nanoscale MOSFETs. In: *Theory and Applications of Monte Carlo Simulations*, V. Chan (ed.). Intech Open Access Publisher, 2013, 109 – 133, ISBN: 978-953-51-1012-5. Doi: 10.5772/53113
2. Aleksandrov L., Djidjev H., Maheshwari A., Sack J.-R. An Approximation Algorithm for Computing Shortest Paths in Weighted 3-d Domains. *Discrete and Computational Geometry* 50 (1), 2013, 124-184, ISSN: 0179-5376.
3. Alexiev, K., I. Nikolova, An Algorithm for Error Reducing in IMU, *2013 IEEE International Symposium on Innovations in Intelligent Systems and Applications (INISTA)*, 19-21 June 2013, Albena, Bulgaria, IEEE Xplore®, 1-6ISBN: 978-1-4799-0659-8, DOI: 10.1109/INISTA.2013.6577663
4. Алексиев, К. Инерциални сензори и инерциални навигационни системи, *Автоматика и Информатика*, бр.1, 2013, 45-50, ISSN 0861-7562
5. Amoroso, S., L. Gerrer, A. Asenov, J. M. Sellier, I. T. Dimov, M. Nedjalkov, S. Selberherr. Quantum Insights in Gate Oxide Charge-Trapping Dynamics in Nanoscale MOSFETs. In: *Proceedings of the 18th International Conference on Simulation of Semiconductor Processes and Devices*, 2013, 25 – 28, ISBN: 978-1-4673-5733-3.
6. Andreev, A., M. Racheva. Nonconforming Rectangular Morley Finite Elements. In: I. T. Dimov, I. Faragó, and L. Vulkov (Eds.) In: *Proceedings of NAA 2012, LNCS 8236*, Springer, 2013, 158 – 165, ISSN: 0302-9743
7. Angelova, G. Automatic information extraction from patient records in Bulgarian Language. Keynote Lecture at CompSysTech 2013, Ruse, In: *Proceedings of CompSysTech-2013*, 11-14, ACM New York, NY, USA ©2013, ISBN: 978-1-4503-2021-4.
8. Angelova, D., L. Mihaylova, N. Petrov, A. Gning, A Convolution Particle Filtering Approach for Tracking Elliptical Extended Objects, In: *Proceedings of the International Conf. on Information Fusion*, Istanbul, Turkey, 2013, 1542-1549, IEEE 2013 ISBN 978-605-86311-1-3.
9. Ardis M., S. Bohner, L. Camilloni, D. Vallespir, S. Ilieva. Using GSWE2009 in the Creation and Modification of Graduate Software Engineering Programs and Related Curricula, In: *Proceedings of CSEE&T 2013*, San Francisco, CA, USA, 19-21 May 2013, IEE Explore, 109 – 118, ISSN 1093-0175.
10. Atanassova V., S. Fidanova, I. Popchev, P. Chountas. Chapter 5: Generalized Nets, ACO Algorithms, and Genetic Algorithms, In: (Sabelfeld, K., I. Dimov, Eds.), *Monte Carlo Methods and Applications, Proceedings of the 8th IMACS Seminar on Monte Carlo Methods*, Borovets, Bulgaria De Gruyter, 39-46, 2013, eBook ISBN: 9783110293586.

***Институт по информационни и комуникационни технологии –
Приложения към годишния отчет 2013 г.***

11. Atanassova V. From fuzzy to intuitionistic fuzzy: Easy and lazy, *Notes on Intuitionistic Fuzzy Sets*, vol. 19, №3, 51–55, 2013, ISSN 1310-4926.
12. Atanassova, L., On the intuitionistic fuzzy form of the classical implication ($A \rightarrow B$) $\vee (B \rightarrow A)$, *Notes on Intuitionistic Fuzzy Sets*, Vol. 19, 2013, No 4, 1-4, ISSN 1310-4926.
13. Atanassova, L., On the intuitionistic fuzzy implications $\rightarrow'@$ and $\rightarrow''@$, New Trends in Fuzzy Sets, *Intuitionistic Fuzzy Sets, Generalized Nets and Related Topics. Vol. 1: Foundations*, SRI, Polish Academy of Sciences, 2013, 9-15, ISBN 83-894-7546-4
14. Atanassova, L., On the modal form of the intuitionistic fuzzy implications $\rightarrow@$ and $\neg@$, *Issues in Intuitionistic Fuzzy Sets and Generalized Nets*, Vol. 10, 2013, 5-11, ISBN 978-83-61551-08-9.
15. Atanassov, E. M. Durchova, Generation of the Scrambled Halton Sequence Using Accelerators, In: *Proceedings of the 36th International Convention MIPRO 2013*, IEEE, 197-201, ISSN: 1847-3946.
16. Atanassov, E., T. Gurov, A. Karaivanova, Message Oriented Framework with Low Overhead for Efficient High-Performance Monte Carlo Simulations, *Proceedings of the 36th IEEE International Convention MIPRO 2013*, 2013, 189-191, ISSN: 1847-3946.
17. Atanassov, E., S. Ivanovska, Computation and Analysis of Sobol Coefficients for Air Pollution Concentrations over the Territory of Bulgaria, In: *Proceedings of the 36th IEEE, International Convention MIPRO 2013*, 2013, 254-257, ISSN: 1847-3946.
18. Axelsson, O., P. Boyanova, M. Kronbichler, M. Neytcheva, and X. Wu, Numerical and computational efficiency of solvers for two-phase problems, *Computers and Mathematics with Applications*, 65(3), 2013, 301-314, ISSN: 0898-1221
19. Bakanov, A., Bakanova, N., Tashev, T. About an approach to model development of man-computer interaction. *International Journal "Information Technologies & Knowledge"*, Volume 7, Number 4, 2013. ITHEA®, Sofia, Bulgaria. 392-397. ISSN 1313-0455.
20. Behar, V., Chr. Kabakchiev, I. Garvanov, Simple Algorithms for Target Detection in FSR using Local Statistics, In: *Proceedings of the 14th Interetional Radar Symposium ISR '2013*, June 19-21,2013, Dresden, Germany, 631-636, ISBN: 978-3-95404-223-4
21. Behar, V., Chr. Kabakchiev, I. Garvanov. Sound Source Localization in a Security System using a Microphone Array, In: *Proceedings of the 2nd International Conference on Telecommunications & Remote Sensing - ICTRS'2013*, 11-12 July, 2013, 85-94, Noordwijkerhout, the Netherlands, ISBN: 978-989-8565-57-0
22. Bocheva, N., D. Angelova, M. Stefanova, Age-related changes in fine motion direction discriminations. *Experimental Brain Research*, Springer, July 2013, Volume 228, Issue 3, 257-278, ISSN: 0014-4819.
23. Boiadjiev G., Delchev K., Boiadjiev T., Zagurski K., Kastelov R., Vitkov V., Controlled Trust Force Influence on Automatic Bone Drilling Parameters in the Orthopedic Surgery, *Int. Journal of Pure and Applied Mathematics IJPAM*, 2013, vol 88, No.4, 577 – 592, ISSN 1311-8080
24. Boiadjiev G., Kastelov R., Boiadjiev T., Kotev V., Delchev K., Zagurski K. , Vitkov V, Design and performance study of an orthopaedic surgery robotized module for automatic bone drilling, *Journal of Medical Robots and Computer Assisted Surgery*, 26 Feb. 2013, Wileyonlinelibrary.com, DOI:10.1002/rcs.1479, ISSN 1478-596X

*Институт по информационни и комуникационни технологии –
Приложения към годишния отчет 2013 г.*

25. Boiadziev G., Kotev V., Delchev K., Boiadziev T., Modeling and Development of a Robotized Hand-Hold Bone Cutting Device OCRO, Proceedings of the Int. Conf. ICMAM 2012, Dec. 5-6, Hong Kong, *Int. Journal Applied Mechanics and Materials*, Vols 300-301, 2013, 479-483, Trans Tech Publications, Switzerland, doi:10.4028/www.scientific.net/ AMM.300-301.479, ISSN 1662-7482
26. Boiadziev G., Kotev V., Zagurski K., Delchev K., Boiadziev T., Kastelov R., Robotized System for Bone Drilling and Cutting in Orthopedic Surgery, *Int. Journal Advanced Materials Research*, Vol 740, 2013, 92-98, Trans Tech Publications, Switzerland, doi:10.4028 /www.scientific.net/ AMR.740-92, ISSN 1662-8985
27. Borissova D., I. Mustakerov, E. Bantutov. Web-based architecture of a system for design assessment of night vision devices. *International Journal of Information Science and Engineering*, Vol.7, No7, 2013, 62-67, ISSN 2010-376X, eISSN 2010-3778.
28. Borissova D., I. Mustakerov. K-best night vision devices by multi-criteria mixed-integer optimization modeling. *International Journal of Information Science and Engineering*, Vol. 7, No 10, 2013, 205-210, ISSN 2010-376X, eISSN 2010-3778.
29. Borissova D., I. Mustakerov. A concept of intelligent e-maintenance decision making system. In: *Proc. of IEEE International Symposium on Innovations in Intelligent Systems and Applications (INISTA)*, 19-21 June 2013, IEEE Xplore®, Print ISBN: 978-1-4799-0659-8, DOI: 10.1109/INISTA.2013.6577668
30. Borissova, D., I. Mustakerov. An algorithm for an optimal staffing problem in open shop environment. *World Academy of Science, Engineering and Technology*, Vol. 76, 2013, 46-50, ISSN 2010-376X, eISSN 2010-3778.
31. Boshnakov K., L. Doukovska, E. Mihailov, V. Petkov, S. Vassileva, S. Kojnov. Predictive Maintenance Model-Based Approach for Objects Exposed to Extremely High Temperatures, In: *Proceedings of the Signal Processing Symposium – SPS'13*, Jachranka Village, Poland, art. no. 6623621, IEEE, 2013, ISBN 978-1-4673-6319-8-13-2013.
32. Boyanov K, Boyanov L, On the Measurement of Quantity of Information and its Link with Information Processing, *International Journal of Advanced Computer Science (IJACS)*, Vol. 03, No 9, September 2013, 448-452), ISSN: 2251-6379.
33. Boyanova, P., M. Neytcheva, Efficient numerical solution of discrete multi-component Cahn-Hilliard systems, *Computers and Mathematics with Applications*, 10.1016/j.camwa.2013.10.013, ISSN: 0898-1221
34. Cantoni, V., D.T. Dimov, Structural Blocks Retrieval in Macromolecules: Saliency and Precision Aspects, ICIAP Workshops, *Lecture Notes in Computer Science*, volume 8158, 2013, 372-380, Springer, ISSN 0302-9743, ISBN 978-3-642-41189-2, DOI 10.1007/978-3-642-41190-8
35. Dezert, J., Tchamova, A., Han, D., Tacnet, J. Why Dempster's rule doesn't behave as Bayes rule with informative priors, *IEEE International Symposium on Innovations in Intelligent Systems and Applications (INISTA)*, Albena, Bulgaria, 19-21 June, 2013, 1-5, IEEE Xplore®, ISBN:978-1-4799-0659-8, DOI: 10.1109/INISTA.2013.6577631
36. Dezert, J., A. Tchamova, D. Han, J.Tacnet.; Why Dempster's fusion rule is not a generalization of Bayes fusion rule, *16th International Conference on Information Fusion (FUSION)*, Istanbul, 9-12 July 2013, 1127 – 1134, ISBN: 978-605-86311-1-3

*Институт по информационни и комуникационни технологии –
Приложения към годишния отчет 2013 г.*

37. Dichev, Ch., D. Dicheva, G. Agre, G. Angelova. Current Practices, Trends and Challenges in K-12 Online Learning. *Cybernetics and Information Technologies*, Vol. 13, № 3, Sofia, 2013, 91-110, ISSN 1311-9702.
38. Dimitrov S., T.Stoilov. Loding Test of the Apache HTTP Server by videofile and usage measurements of the hardware components. In: *Proceedings of the International Conference Computer Systems and Technologies, CompSysTech'13*, 28-29 June 2013, Russe, ACM Conference Proceeding Series, 59-66, ISBN: 978-1-4503-2021-4.
39. Dimov, I. T., K. Atanassov. Interpretation of a Monte Carlo Approach of a Finite Difference Scheme by a Game Method for Modelling. In: *Proc. Jangjeon Math. Soc.* 16 (3), 2013, 381-388, ISSN: 1598-7264.
40. Dimov, I. T., R. Georgieva. Multidimensional Sensitivity Analysis of Large-scale Mathematical Models. O.P. Iliev et al. (eds.), *Numerical Solution of Partial Differential Equations: Theory, Algorithms, and Their Applications, Springer Proceedings in Mathematics & Statistics* 45, Springer Science+Business Media, New York, 2013, 137 – 156. ISBN: 978-1-4614-7171-4 (Print) 978-1-4614-7172-1 (Online). DOI 10.1007/978-1-4614-7172-1_8.
41. Dimov, I. T., R. Georgieva, Tz. Ostromsky, Z. Zlatev. Sensitivity Studies of Pollutant Concentrations Calculated by UNI-DEM with Respect to the Input Emissions. *Central European Journal of Mathematics, Numerical Methods for Large Scale Scientific Computing* 11 (8), 2013, 1531 – 1545, ISSN:1895-1074. Doi: 10.2478/s11533-013-0256-2.
42. Dimov, I. T., R. Georgieva, Tz. Ostromsky, Z. Zlatev. Advanced Algorithms for Multidimensional Sensitivity Studies of Large-scale Air Pollution Models based on Sobol Sequences. *Special issue of Computers and Mathematics with Applications* 65 (3), “Efficient Numerical Methods for Scientific Applications”. Elsevier, 2013, 338 – 351, ISSN: 0898-1221. Doi: 10.1016/j.camwa.2012.07.005.
43. Dimov, I. T. R., Georgieva, Tz. Ostromsky, Z. Zlatev. Variance-based Sensitivity Analysis of the Unified Danish Eulerian Model According to Variations of Chemical Rates. In: I. T. Dimov, I. Faragó, and L. Vulkov (Eds.) *Proceedings of NAA 2012, LNCS* 8236, Springer, 2013, 247 – 254. ISSN: 0302-9743.
44. Dimov, D., S. Nedkov, Emotion Recognition by Face Dynamics, In: *CompSysTech'13 Proceedings of the 14th International Conference on Computer Systems and Technologies*, ACM ICPS Vol. 767, ACM Inc., NY, USA, 2013, 128-136, ISBN: 978-1-4503-2021-4
45. Doukovska L., S. Vassileva. Knowledge-based Mill Fan System Technical Condition Prognosis, *Journal of the World Scientific and Engineering Academy and Society. WSEAS Transactions on Systems, Special Issue on Knowledge-based Modeling and Control of Multi-factorial Processes*, 398-408, 2013, Print ISSN 1109-2777, eISSN 2224-2678.
46. Elvesæter B., Benguria G., and Ilieva S., A Comparison of the Essence 1.0 and SPEM 2.0 Specifications for Software Engineering Methods, In: *Proc. of the Third Workshop on Process-based approaches for Model-Driven Engineering (PMDE 2013)*, Montpellier, France, 2013. ACM, art.n. 2, ISBN: 978-1-4503-2047-4, doi>10.1145/2489833.2489835.
47. Farago, I., K. Georgiev, A. Havasi and Z. Zlatev, Efficient numerical methods for scientific applications: Introduction, *Computers and Mathematics with Applications*, Vol. 65 (3), 2013, Elsevier. ISSN: 0898-1221. Doi: 10.1016/j.camwa.2012.07.005, 297 - 300

*Институт по информационни и комуникационни технологии –
Приложения към годишния отчет 2013 г.*

48. Fidanova S. Application of HPD Model for Predicting Protein Mutations. *Int. J. Cybernetics and Information Technologies* 13 (4), 2013, 95 – 103, ISSN: 1311-9702.
49. Fidanova, S., P. Marinov. Ant Colony Optimization Start Strategies Performance According Some of the Parameters. In: I. T. Dimov, I. Faragó, and L. Vulkov (Eds.). *Proceedings of NAA 2012, LNCS 8236*, Springer, 2013, 287-294, ISSN: 0302-9743.
50. Fidanova S., Roeva O., Hybrid Bat Algorithm for Parameter Identification of an *E. coli* Cultivation Process Model. *Biotechnology & Biotechnological Equipment* 27 (6), DIAGNOSIS PRESS Ltd, 2013, 4323-4326, ISSN:1310-2818.
51. Fidanova S., Roeva O., Ganzha M., ACO and GA for Parameter Settings of *E.coli* Fed-Batch Cultivation Model, In: *Recent Advancece in Computational Optimizattion, Studies in Computational Intelligence* 470, S. Fidanova (editor), Book chapter 4, Springer, 2013, 51 – 71, ISBN: 978-3-319-00409-9.
52. Fidanova, S., O. Roeva. Metaheuristic Techniques for Optimization of an *E. coli* Cultivation Model. *Biotechnology & Biotechnological Equipment* 27(3). DIAGNOSIS PRESS Ltd, 2013, 3870 – 3876, ISSN: 1310-2818. .
53. Fidanova, S., M. Shindarov, P. Marinov. Multi-Objective Ant Algorithm for Wireless Sensor Network Positioning. *Proceedings of the Bulgarian Academy of Sciences* 66(3), 2013, 353 – 360, ISSN: 1310-1331.
54. Ganzha, M., Ivan Lirkov, Marcin Paprzycki, Comparative analysis of high performance solvers for solving Stokes equation, *Application of Mathematics in Technical and Natural Sciences, AMiTaNs 2013*, Michail D. Todorov ed., AIP Conference Proceedings, 1561, 347–354, 2013. ISBN 978-0-7354-1189-0
55. Garvanov , Chr. Kabakchiev ,V. Behar, Sound Parameter Estimation in a Security System, *Proc. of the 2nd Intern., Conf. on Telecommunications & Remote Sensing - ICTRS'2013*, 11-12 July, 2013, 140-144, Noordwijkerhout, the Netherlands, ISBN: 978-989-8565-57-0.
56. Gadzhev, G., Ganev, K., Prodanova, M., Syrakov, D., Atanasov, E., Miloshev, N. Multi-scale Atmospheric Composition Modelling for Bulgaria. *NATO Science for Peace and Security Series C: Environmental Security* 137, 381-385, 2013, ISSN: 1874-6519.
57. Genova K., Kirilov L., Guliashki V. New Reference – Neighborhood Scalarization Problem for Multiobjective Integer Programming. *Cybernetics and Information Technologies*, Vol. 13, No 1, 2013, 104-114, ISSN: 1311-9702.
58. Georgieva P., I. Popchev. Fuzzy Logic Q-measure Model for Managing Financial Investments, *Comptes rendus de l'Academie bulgare des Sciences*, vol. 66, №5, 651-658, ISSN 1310-1331, 2013.
59. Georgieva, I., C. Hofreither, Interpolation of harmonic functions based on Radon projections, *Numerische Mathematik*, 2013. DOI:10.1007/s00211-013-0592-y, ISSN: 0029-599X.
60. Georgiev, K., N. Kosturski, S. Margenov, Y. Vutov, Parallel algorithms for adaptive time-stepping in radiofrequency liver ablation simulation: implementation on an IBM Blue Gene/P computer, *Preprints of Position Papers of the Federated Conference on Computer Science and Information Systems*, M. Ganzha, L. Maciaszek, M. Paprzycki (editors), 23–26, 2013, ISSN 2300-5963, ISBN 978-83-60810-55-2 (Web), 978-83-60810-56-9 (USB).

***Институт по информационни и комуникационни технологии –
Приложения към годишния отчет 2013 г.***

61. Georgiev, S., and Z. Minchev, An Evolutionary Prototyping for Smart Home Inhabitants Wearable Biomonitoring', In: *Proceedings of Conjoint Scientific Seminar 'Modelling & Control of Information Processes'*, IMI-BAS, November 19, 2013, 21-30, ISSN 1314-2771
62. Георгиев, С. Колев, Х., Обрешков, Н., Лалев, Е. Система за сигурност в домовете на бъдещето, *Сборник материали национална конференция с международно участие, HOME/2010/CIPS/AG/019, Част втора*, София, България, юни 4, 2013, 91-100, ISBN 978-954-92552-7-0
63. Gerdjikov, S., Mihov, S., Mitankin, P., Schulz, K.U., WallBreaker. Overcoming the wall effect in similarity search. In: *Proceeding EDBT '13, Proceedings of the Joint EDBT/ICDT 2013 Workshops*, 366-369, ACM, ISBN: 978-1-4503-1599-9, doi 10.1145/2457317.2457385
64. Gerdjikov, S., Mihov, S., Nenchev, V., Extraction of Spelling Variations from Language Structure for Noisy Text Correction, In: *12th International Conference on Document Analysis and Recognition (ICDAR)*, 2013, 324 - 328, ISSN: 1520-5363, DOI: 10.1109/ICDAR.2013.72
65. Guliashki V., Kirilov L., Genova K. An Interactive Evolutionary Algorithm for Multiple Objective Integer Problems. *International Journal on Information Technologies and Security*, No 2, 2013, 45-54, ISSN: 1313-8251.
66. Hadjiski M., L. Doukovska. CBR approach for Technical Diagnostics of Mill Fan System, *Comptes rendus de l'Academie bulgare des Sciences*, vol. 66, №1, 93-100, 2013, ISSN 1310-1331.
67. Hristov V, G. Agre. A Software System for Classification of Archaeological Artefacts Represented by 2D Plans. *Cybernetics and Information Technologies*, Vol. 13, № 2, Sofia, 2013, 82-96, ISSN 1311-9702.
68. Hristova, R., G. Goranov, User-level Framework for Performance Monitoring of HPC Applications, *AMITANS 2013, AIP Conference Proceedings*, 1561, 144-152, 2013, doi: 10.1063/1.4827223, ISSN: 0094-243X.
69. Ilchev, S., Accurate Data Embedding in JPEG Images for Image Authentication, *Comptes rendus de l'Acad'emie bulgare des Sciences*, vol. 66, no. 9, 1247-1254, Sep. 2013, ISSN 1310-1331.
70. Ilieva S., I. Krasteva, G. Benguria, B. Elvesæter, Enhance your Model-driven Modernization Process with Agile Practices, In: *Proceedings of the 1st International Workshop in Software Evolution and Modernization – SEM 2013*, Ricardo Perez-Castillo (Ed.), Angers Loire Valley, France, July 2013, 95-102, SCITEPRESS, ISBN 978-989-8565-66-2.
71. Ivanov, V. A program for an automatic PicoBlaze type embedded system generation .In; *Proc. of 14-th International Conference on Computer Systems and Technologies CompSysTech'13*, 28-29 June 2013, Ruse, Bulgaria, 91-97, ACM, ISBN: 978-1-4503-2021-4.
72. Ivanov V. On the approach for automatic generation of small embedded PicoBlaze system, In: *Proc. of the 13th International Conference on ACSD*, Barcelona, Spain, 2013, 257-260, ISBN 978-0-7695-5035-0, ISSN 1550-4808.

*Институт по информационни и комуникационни технологии –
Приложения към годишния отчет 2013 г.*

73. Jotsov V., S. Koynov. Applications of Knowledge Discovery Methods in Education, *International Journal „Information Technologies & Knowledge”* vol. 7, №2, 103-117, ITHEA®, 2013, ISSN 1313-0455 (printed), ISSN 1313-048X (online).
74. Kabakchiev, Chr., I. Garvanov, V. Behar, H. Rohling. The Experimental Study of Possibility for Radar Target Detection in FSR using L1-Based Non-Cooperative Transmitter, *Proc. of the 14th Intern. Radar Symposium ISR’2013*, June 19-21, 2013, Dresden, Germany, 625-630, ISBN: 978-3-95404-223-4
75. Kabakchiev, Chr., I. Garvanov, V. Behar, A. Lazarov , H. Rohling, The Experimental Study of Target FSR Shadow Detection using GPS Signals, *Proc. of the 3rd Intern. Symposium on Radio Systems and Space Plasma (ISRSSP’2013)*, 28-29 August, 2013, Sofia, Bulgaria, 64-73, ISBN: 978-619-90124-1-3
76. Kabakchieva, D., Chr. Kabakchiev, V. Behar, I. Garvanov, FSR Marine Target Classification with Data Mining Approach, *Proc. of the 2nd Intern., Conf. on Telecommunications & Remote Sensing - ICTRS’2013*, 11-12 July, 2013, Noordwijkerhout, the Netherlands, 145-152, ISBN: 978-989-8565-57-0
77. Kandeva M. , Ivanova B., Karastoyanov D., Composite Coatings to Improve Durability of the Working Body of the Drill., In: *Proc. of 5th World tribology congress WTC 2013*, September 8-13 2013, Torino, Italy, 61-62, ISBN 978-88-908-185
78. Kandeva M., Karastoyanov D., Ivanova B., Friction and Wear of Ni Coatings with Nanosize Particles of SiC., In: *Proc. of 5th World tribology congress WTC 2013*, September 8-13 2013, Torino, Italy, 63-64, ISBN 978-88-908-185
79. Karaivanova, A., E. Atanassov, and T. Gurov, Monte Carlo Simulation of Ultrafast Carrier Transport: Scalability Study, *ICCS 2013*, Published by Elsevier B.V., *Procedia Computer Science*, vol. 18, 2298-2306, 2013, ISSN: 1877-0509, doi:10.1016/j.procs.2013.05.401.
80. Karastoyanov D., Energy Efficient Control of Linear Micro Drives for Braille Screen., In: *Proc. of International Conference on Human and Computer Engineering ICHCE 2013*, October 14-15 2013, Osaka, Japan, 860-864, ISSN 2010-376x, eISSN 2010-3778
81. Karastoyanov, D., V. Monov, An advanced technology for renovation of extruding shafts, *World Academy of Science, Engineering and Technology*, Vol. 80, 407-410, ISSN 2010-376X, eISSN 2010-3778.
82. Karastoyanov, D., V. Monov, An intelligent system for knee and ankle rehabilitation, *World Academy of Science, Engineering and Technology*, Vol. 80, 411-416, ISSN 2010-376X, eISSN 2010-3778.
83. Karastoyanov, D., V. Monov, T. Penchev, New type electromagnetic drive for Braille screen, In: *Proceedings of the Third International IEEE Conference on Information Science and Technology*, March 23-25 2013, Yangzhou, Jiangsu, China, 178-182, ISBN 978-1-4673-5137-9.
84. Kirilov L., Gulashki V., Genova K., Vassileva M., Staykov B. Generalized scalarizing model GENS in DSS WebOptim. *International Journal of Decision Support System Technology*, Vol. 5, Issue 3, 2013, 1-11, ISSN: 1941-6296.
85. Kolchakov K. Class of Algorithms for synthesis of Non-Conflict Schedule in Communication Nodes. *International Journal “Information Theories and Applications”*, Vol. 20, Number 2, 2013, 167-172, ISSN 1313-0463.

*Институт по информационни и комуникационни технологии –
Приложения към годишния отчет 2013 г.*

86. Koprinkova-Hristova, P., Oubbati, M., Palm, G., Heuristic dynamic programming using echo state network as online trainable adaptive critic, *International Journal of Adaptive Control and Signal Processing*, vol.27, Issue 10, 902–914, October 2013, ISSN: 0890-6327, DOI: 10.1002/acs.2364
87. Koprinkova-Hristova P., L. Doukovska, P. Kostov. Working Regimes Classification for Predictive Maintenance of Mill Fan Systems, In: *Proceedings of the International Symposium on INnovations in Intelligent SysTems and Applications – INISTA'13*, , IEE Explore, 2013, 1-5, ISBN 978-1-4799-0661-1-13-2013, DOI: 10.1109/INISTA.2013.6577632
88. Koprinkova-Hristova, P., Tontchev, N., Popova, S., Two approaches to multi-criteria optimization of steel alloys for crankshafts production, *International Journal of Reasoning-based Intelligent Systems, Special Issue on Innovations of intelligent systems and engineering*, vol. 5, No2, 2013, 96-103. ISSN:1755-0564. DOI: 10.1504/IJRIS.2013.057271
89. Koprinkova-Hristova, P., Alexiev, K., Borisova, D., Jelev, G., Atanassov, V., Recurrent neural networks for automatic clustering of multispectral satellite images, SPIE Remote sensing, Sept. 23-26, 2013, Dresden, Germany, *Proceedings of SPIE*, vol. 8892, *Image and Signal Processing for Remote Sensing XIX*, Editor(s): Lorenzo Bruzzone, 88920X, October 17, 2013, ISSN: 0277-786X, doi:10.1117/12. ISBN: 9780819497611.
90. Koprinkova-Hristova, P., Alexiev, K., Echo State Networks in Dynamic Data Clustering, *Artificial Neural Networks and Machine Learning – ICANN 2013, Lecture Notes in Computer Science*, Eds.: Mladenov, V., Koprinkova-Hristova, P., Palm, G, Villa, A.E.P., Appollini, B., Kasabov, N., vol.8131, 2013, 343-350, ISSN: 0302-9743, ISBN: 978-3-642-40727-7, DOI: 10.1007/978-3-642-40728-4.
91. Koprinkova-Hristova, P., Angelova, D., Borisova, D., Jelev, G., Clustering of spectral images using Echo state networks, *2013 IEEE International Symposium on Innovations in Intelligent Systems and Applications, IEEE INISTA 2013*, June 19-21, Albena, Bulgaria, ISBN: 978-147990661-1, DOI: 10.1109/INISTA.2013.6577633
92. Korsemov Ch., Hr. Toshev, I. Mustakerov, D. Borissova, V. Grigorova. An optimal approach to design of joinery for renovation of panel buildings. *International Journal of Science and Engineering Investigations*, vol. 2(18), 2013, 123-128, ISSN: 2251-8843.
93. Kosturski, N., S. Margenov, Y. Vutov, Computer Simulation of RF Liver Ablation on an MRI Scan Data, *AIP Conf. Proc.* 1487, 2013, 120-126, ISSN: 0094-243X
94. Kotev V., Boiadjiev G., Kawasaki H., Mouri T., Delchev K., Boiadjiev T., A Design Concept of an Orthopedic Bone Drilling Mechatronics System, 2nd Int. Conf. on Mechanical Engineering and Materials, Jan. 27-28, 2013, Sanya, China, *Int. Journal Applied Mechanics and Materials*, Vol. 302, 2013, 248-251, Trans Tech Publications, Switzerland, doi:10.4028 /www.scientific.net/AMM.302.248, ISSN 1660-9336.
95. Krasteva I., S. Stavru, S. Ilieva, Agile Model-Driven Modernization to the Service Cloud, ICIW 2013, *The Eighth International Conference on Internet and Web Applications and Services*, Rome, Italy - June 23 - 28, 2013, 1-9, ISBN: 978-1-61208-280-6
96. Kraus, J., M. Lymbery, S. Margenov, Robust Multilevel Methods for Quadratic Finite Element Anisotropic Elliptic Problems, *Numerical Linear Algebra With Applications*, 2013, DOI: 10.1002/nla.1876, ISSN: 1099-1506

97. Kraus, J., M. Lymbery, S. Margenov. Robust algebraic multilevel preconditioners for anisotropic elliptic problems. *Springer Proceedings in Mathematics and Statistics*. Vol. 45, 217-246, 2013. doi=10.1007/978-1-4614-7172-1_12. ISSN 2194-1009.
98. Kraus, J., M. Lymbery, S. Margenov. Robust multilevel methods for quadratic finite element anisotropic elliptic problems. *Numer. Linear Algebra Appl.*. doi: 10.1002/nla.1876. 2013, Online ISSN: 1099-1506.
99. Manova D., Petrova-Antanova D., S. Ilieva. Testing web service's compositions following TASSA methodology *International Conference on Computer Systems and Technologies (CompSysTech 2013)*, Rousse, Bulgaria, June 28-29, 2013, 185-192, ACM New York, NY, USA ©2013, ISBN: 978-1-4503-2021-4
100. Marinov, P., Zhang, S., Kutiev, I., Comparison of topside ionosphere scale height modeled by the Topside Sounder Model and incoherent scatter radar ionospheric model, *Journal Advances in Space Research*, 52(10), 2013, 1717-1725, ISSN: 0273-1177.
101. Mihaylova, D. Angelova, A. Zvikhachevskaya, Sequential Monte Carlo Methods for Localization in Wireless Networks, *Chapter 4 in Advances in Intelligent Signal Processing and Data Mining*, P. Georgieva, L. Mihaylova, L. Jain, Editors, Springer-Verlag, 2013, 89-119, ISBN: 978-3-642-28695-7, e-ISBN: 978-3-642-28696-4.
102. Minchev, Z., L. Boyanov and S. Georgiev. Security of Future Smart Homes. Cyber-Physical Threats Identification Perspectives. In: *Proceedings of the National Conference with International Participation in Realization of the EU project “Development of Tools Needed to Coordinate Intersectorial Power and Transport CIP Activities at a Situation of Multilateral Terrorist Threat. Increase of the Capacity of Key CIP Objects in Bulgaria”*. June 2013, Sofia, Bulgaria, 165-169, ISBN 978-954-92552-7-0
103. Minchev, Z.. 2D vs 3D Visualization & Social Networks Entertainment Games. A Human Factor Response Case Study, In: *Proceedings of 12th International Conference, ICEC 2013*, São Paulo, Brazil, October 16-18, 2013 (Editors: Junia C. Anacleto, Esteban W. G. Clua, Flavio S. Correa da Silva, Sidney Fels, Hyun S. Yang), *Lecture Notes in Computer Science*, Vol. 8215 2013, 107-113, ISBN 978-3-642-41105-2 (Print) 978-3-642-41106-9 (Online)
104. Monov, V., D. Karastoyanov, T. Penchev, Advanced control methods and technologies for two industrial processes, In: *Proceedings of the Third International IEEE Conference on Information Science and Technology*, March 23-25 2013, Yangzhou, Jiangsu, China, 187-194, ISBN 978-1-4673-5137-9.
105. Monov, V.; Tashev, Tasho D. Determinant and norm inequalities for bialternate products of matrices. *Comptes rendus de l'Academie bulgare des Sciences*, Volume: 66 Issue: 3, 2013, Sofia, Bulgaria. 345-352., ISSN: 1310-1331.
106. Mustakerov I., D. Borissova. A combinatorial optimization ranking algorithm for reasonable decision making. *Comptes rendus de l'Academie bulgare des Sciences*, 66(1) 2013, 101-110, ISSN 0366-8681 0861-1459.
107. Mustakerov I., D. Borissova. A discrete choice modeling approach to modular systems design. *World Academy of Science, Engineering and Technology*, Vol. 76, 2013, 133-139, ISSN 2010-376X, eISSN 2010-3778.
108. Mustakerov I., D. Borissova. An intelligent approach for optimum maintenance strategy defining. In: *Proc. of 2013 IEEE International Symposium on Innovations in*

***Институт по информационни и комуникационни технологии –
Приложения към годишния отчет 2013 г.***

Intelligent Systems and Applications (INISTA), 19-21 June 2013, ISBN: 978-1-4799-0659-8, DOI: 10.1109/INISTA.2013.6577666.

109. Mustakerov I., D. Borissova. Data structures and algorithms of intelligent Web-based system for modular design. *International Journal of Computer Science and Engineering*, Vol.7, No7, 2013, 2013, 87-92, ISSN 2010-376X, eISSN 2010-3778.
110. Mustakerov I., D. Borissova. Investments attractiveness via combinatorial optimization ranking. *International Journal of Management Science and Engineering*, Vol. 7, No 10, 2013, 230-235, ISSN 2010-376X, eISSN 2010-3778.
111. Mustakerov I., D. Borissova. Modular systems design via multi-objective optimization. *AMO – Advanced Modeling and Optimization*, Vol. 15, No 2, 2013, 421-430, ISSN: 1841-4311.
112. Nedjalkov, M., P. Schwaha, S. Selberherr, J. M. Sellier, D. Vasileska. Wigner Quasi-Particle Attributes - An Asymptotic Perspective. *Applied Physics Letters* 102, 2013, art. no. 163113, 163113-1 - 163113-4. ISSN: 0003-6951.
113. Nikolova, I., G. Angelova, D. Tcharaktchiev and S. Boytcheva. Medical Archetypes and Information Extraction Templates in Automatic Processing of Clinical Narratives, In *Proceedings of ICCS 2013, 10-12 January, Mumbai, India, Conceptual Structures for STEM Research and Education, Springer, Lecture Notes in Computer Science Volume 7735, 2013, 106-120*, ISSN 0302-9743.
114. Nikolova, I., I. Temnikova and G. Angelova. Enriching Patent Search with External Keywords: a Feasibility Study. In: Angelova, G., K. Bontcheva, and R. Mitkov (Eds.) *Proceedings of the International Conference Recent Advances in Natural Language Processing (RANLP 2013)*, September 7-13, 2013, Hissar, Bulgaria, Incoma Ltd., Shoumen, Bulgaria, 2013, 525-531, ISSN 1313-8502.
115. Ostromsky, Tz., I. T. Dimov, R. Georgieva, P. Marinov, Z. Zlatev. High Performance Computing of Data for a New Sensitivity Analysis Algorithm, Applied in an Air Pollution Model. In: I. T. Dimov, I. Faragó, and L. Vulkov (Eds.) *Proceedings of NAA 2012, LNCS 8236*, Springer, 2013, 428 – 436, ISSN: 0302-9743.
116. Ostromsky, Tz., I. T. Dimov, R. Georgieva, P. Marinov, Z. Zlatev. Sensitivity Study of a Large-Scale Air Pollution Model by Using High-Performance Computations and Monte Carlo Algorithms. In: *Proceedings of Fifth International Conference AMiTaN'S'13*, June 24 - 29, 2013, Albena, Bulgaria, AIP Conf. Proceedings 1561, 2013, 153 – 163. ISSN: 0094-243X; ISBN: 978-0-7354-1189-0. Doi: 10.1063/1.4827224.
117. Pashova, L., Koprinkova-Hristova, P., Popova, S., Gap Filling of Daily Sea Levels by Artificial Neural Networks. *TransNav - the International Journal on Marine Navigation and Safety of Sea Transportation*, vol.7 (2), 2013, 225-232. ISSN:2083-6473, DOI:10.12716/1001.07.02.10
118. Pavlov, Y., Preferences, Utility And Prescriptive Decision Control In Complex Systems, *International journal of Intelligent Systems and Applications in Engineering (IJISAE)*, Vol.1, No. 4, 52-59, 2013, ISSN 2147-6799.
119. Pencheva T., O. Roeva, V. Atanassova, M. Angelova. Generalized Net Model of the lac Operon, *Issues in Intuitionistic Fuzzy Sets and Generalized Nets*, EXIT Press, Warsaw, vol. 11, 75-84, 2013, ISBN 978-83-61551-08-9.
120. Penchev, T., D. Karastoyanov, V. Monov, Control system for “Controlled impact “laboratory device, In: *Proceedings of the Third International IEEE Conference on*

*Институт по информационни и комуникационни технологии –
Приложения към годишния отчет 2013 г.*

Information Science and Technology, March 23-25 2013, Yangzhou, Jiangsu, China, 215-218, ISBN 978-1-4673-5137-9.

121. Penchev T., Karastojanov D., Altaparmakov I., Experimental Study on “Controlled Impact” Effect in Plastic Deformation Processes., *Advanced Materials Research* Vol. 772, 2013, 3-8, Trans Tech Publications, Switzerland, ISBN 1662-8985
122. Petrova-Antonova D., S. Ilieva, V. Stoyanova, I. Manova, V. Pavlov. An Automated Approach for Fault Injection Testing of BPEL Orchestrations. *Proceeding of the 17th Conference on European Systems & Software Process Improvement and Innovation* (EuroSPI’2013), June 25-27 2013, Dundalk, Ireland, F. McCaffery et al. (Eds.): *Systems, Software and Services Process Improvement 2013, Communications in Computer and Information Science*, Vol. 364, Springer, Heidelberg, 84-95, ISBN: 978-3-642-39178-1.
123. Petrova-Antonova D., S. Ilieva, V. Stoyanova. TESSI: A Web Service Testing Tool, *Proceedings of the 7th IEEE International Conference on Research Challenges in Information Science*, May 29-31 2013, Paris, France, 665-666, IEEE, ISBN 978-1-4673-2914-9/13
124. Petrov, N., L. Mihaylova, A. Gning, D. Angelova, Group Object Tracking with a Sequential Monte Carlo Method Based on a Parameterised Likelihood Function, *Chapter 19 in Proceedings from the 8th IMACS Seminar on Monte Carlo Methods and Applications*, Editors K. K. Sabelfeld, I. Dimov, De Gruyter GMBH, 69-77, 2013.
125. Popchev I., V. Angelova. Condition numbers and local perturbation bounds for the matrix equation $X^S \pm A^H X^t A = Q$, *Comptes rendus de l'Academie bulgare des Sciences*, vol. 66, №1, 21-28, 2013, ISSN 1310-1331.
126. Popchev I., V. Angelova. Residual bound of the matrix equation $X + A^H X^{-1} A + B^H X^{-1} B = I$, *Comptes rendus de l'Academie bulgare des Sciences*, vol. 66, №10, 1379-1384, 2013, ISSN 1310-1331.
127. Radeva I. Multi-Criteria Models for Cluster Design, *Cybernetics and Information Technologies*, vol. 13, №1, 18-33, 2013, ISSN 1311-9702.
128. Roeva O., Fidanova S., Paprzycki M., Influence of the Population Size on the Genetic Algorithm Performance in Case of Cultivation Process Modelling. In: *Proc. of FedCSIS 2013, IEEE Xplorer*. 2013, 371 – 376, ISSN: 2300-5963. ISBN: 978-1-4673-4471-5, IEEE Catalog Number: CFP1385N-ART.
129. Savov S., I. Popchev. Experimental Study of Lyapunov Equation Solution Bounds for Power Systems Models, *Cybernetics and Information Technologies*, vol. 13, №1, 3-12, 2013, ISSN 1311-9702.
130. Savov S., I. Popchev. Non-Iterative Improvement of Trace Bounds for the Lyapunov Equation Solution, *Comptes rendus de l'Academie bulgare des Sciences*, vol. 66, №5, 733-738, 2013, ISSN 1310-1331.
131. Schwaha, P., D. Querlioz, P. Dollfus, J. Saint-Martin, M. Nedjalkov, S. Selberherr. Decoherence effects in the Wigner function formalism. *Journal of Computational Electronics* 12 (3), 2013, 388 – 396, ISSN: 1569-8025.
132. Schwaha, P., J. M. Sellier, M. Nedjalkov, I. T. Dimov, S. Selberherr. The Ultimate Equivalence Between Coherent Quantum and Classical Regimes. In: *Proceedings of the 16th International Workshop on Computational Electronics*, 2013, 152-153, ISBN: 978-3-901578-26-7.

133. Sellier, J. M., M. Nedjalkov, I. T. Dimov, S. Selberherr. Two-dimensional Transient Wigner Particle Model. *Proceedings of the 18th International Conference on Simulation of Semiconductor Processes and Devices*, 2013, 404 – 407, ISBN: 978-1-4673-5733-3.
134. Sgurev V. An Approach to Constructing a Complex Propositional Logic, *Comptes rendus de l'Academie bulgare des Sciences*, vol. 66, №11, 1623- 1632, 2013, ISSN 1310-1331.
135. Sgurev V., L. Doukovska, S. Drangajov, V. Nikov. Network Flow Interpretation of Innovation Processes and Risks, In: *Proceedings of the Signal Processing Symposium – SPS'13*, Jachranka Village, Poland, art. no. 6623603, IEEE, 2013, ISBN 978-1-4673-6319-8-13-2013.
136. Sgurev V., S. Drangajov, L. Doukovska, V. Nikov. Innovation Cycles Control Through Markov Decision Processes, In: *Proceedings of the International Symposium on Business Modeling and Software Design – BMSD'13*, Noordwijkerhout, The Netherlands, 286-291, 2013, ISBN 978-989-8565-56-3.
137. Shahpazov G., L. Doukovska, K. Atanassov. Generalized Net Model of the Methodology for Analysis of the Creditworthiness and Evaluation of Credit Risk in SMEs Financing, In: *Proceedings of the International Symposium on Business Modeling and Software Design – BMSD'13*, Noordwijkerhout, The Netherlands, 292-297, 2013, ISBN 978-989-8565-56-3.
138. Shahpazov G., L. Doukovska. Generalized net model of internal financial structural unit's functionality with intuitionistic fuzzy estimations, In: *Proceedings of the 17th International Conference on Intuitionistic Fuzzy Sets, Notes on Intuitionistic Fuzzy Sets*, vol. 19, №3, 111–117, 2013, ISSN 1310-4926.
139. Shahpazov V., V. Velev, L. Doukovska, Design and Application of Artificial Neural Networks for Predicting the Values of Indexes on the Bulgarian Stock Market, In: *Proceedings of the Signal Processing Symposium – SPS'13*, Jachranka Village, Poland, art. no. 6623604, IEEE, 2013, ISBN 978-1-4673-6319-8-13-2013.
140. Shahpazov V., V. Velev, L. Doukovska. Forecasting Price Movement of Sofix Index on the Bulgarian Stock Exchange – Sofia Using an Artificial Neural Network Model, In: *Proceedings of the International Symposium on Business Modeling and Software Design – BMSD'13*, Noordwijkerhout, The Netherlands, 298-303, 2013, ISBN 978-989-8565-56-3.
141. Simov, K. Towards a System for Dynamic Language Resources in LOD. In: *Proceedings of the Joint Workshop on NLP&LOD and SWAIE: Semantic Web, Linked Open Data and Information Extraction*. Associated event to RANLP 2013, 16-22, 2013, ISBN: 978-954-452-025-0.
142. Simov, K., G. Ivanova, M. Mateva and P. Osenova. Integration of Dependency Parsers for Bulgarian. In: Sandra Kübler, Petya Osenova, Martin Volk (Eds.). *Proc. of the Twelfth Workshop on Treebanks and Linguistic Theories (TLT12)*. Bulgaria, 2013, 145-156, Published by IICT-BAS, ISBN: 978-954-91700-6-1.
143. Sotirova E., Bureva V., Velizarova E., Fidanova S., Marinov P., Atanassov K., Hexagonal Game Method Model of Forest Fire Spread with Intuitionistic Fuzzy Estimations, 17-th Int. Conf. on IFSs, Sofia 1-2 November 2013, *Notes on Intuitionistic Fuzzy Sets*, Vol. 19(3), 2013, 73 – 80, ISSN 1310-4926.

144. Stavru S., I. Krasteva, S. Ilieva, Challenges of Model-Driven Modernization: An Agile Perspective, In: *Proceedings of the 1st International Conference on Model-Driven Engineering and Software Development, MODELSWARD 2013*, Barcelona, Spain, 19-21 February 2013, 219-230, ISBN: 978-989856542-6, DOI: 10.5220/0004317502190230
145. Staykov B., T. Atanasova, V. Monov, L. Doukovska. The ERP Systems in Modern Business and Corporate Management, In: *Proceedings of the International Symposium on Business Modeling and Software Design – BMSD'13*, Noordwijkerhout, The Netherlands, 281-285, 2013, ISBN 978-989-8565-56-3.
146. Stojanović, V., P. Ribeiro, S. Stoykov, Non-linear vibration of Timoshenko damaged beams by a new p-version finite element method, *Computers & Structures* 120, 2013, 107-119, ISSN: 0045-7949.
147. Stoilova, K., T. Stoilov, K. Nikolov. Autonomic Properties in Traffic Control. *Cybernetics and Information Technology*, No4, 2013, 18-32, ISSN 1311-9702.
148. Stoyanova V., D. Petrova-Antanova, S. Ilieva. Automation of Test Case Generation and Execution for Testing Web Service Orchestrations, In: *Proceedings of the 7th IEEE International Symposium on Service Oriented System Engineering, (SOSE'2013)*. San Francisco Bay, March USA, 25-28, 2013, 274-279, ISBN: 978-076954944-6, DOI 10.1109/SOSE.2013.9
149. Stoykov, S., P. Ribeiro, Vibration analysis of rotating 3D beams by the p-version finite element method, *Finite Elements in Analysis and Design* 65, 2013, 76-88. ISSN: 0168-874X.
150. Stoykov, S., P. Ribeiro, Non-linear vibrations of beams with non-symmetrical cross sections, *International Journal of Non-Linear Mechanics* 55, 2013, 153–169. ISSN: 0020-7462.
151. Stoykov, S., S. Margenov, Nonlinear free vibrations of 3D composite beams, In: Z. Dimitrovová, J. Almeida, R. Gonçalves (Eds.), *Proceedings of the 11th International Conference on Vibration Problems*, 9 - 12 September 2013, Lisbon, Portugal, Paper id: 164, 10 p., ISBN: 978-989-96264-4-7.
152. Strandjev, B., G. Agre. On applicability of Principal Component Analysis to concept learning from images. 2013 IEEE International Symposium on Innovations in Intelligent Systems and Applications (INISTA), 9-21 June 2013, Albena, Bulgaria, *IEEE Xplore*, 1-5, ISBN 978-1-4799-0659-8, DOI: 10.1109/INISTA.2013.6577623.
153. Sviercoski, R.F., S. Margenov, Displacement decomposition ACO based preconditioning of FEM elasticity systems, *AIP Conf. Proc.* 1561, 2013, 112-119, DOI: 10.1063/1.4827220, ISSN: 0094-243X
154. Tashev, T., Monov, V. A Computer Modeling of the Throughput of a Crossbar Switch by PI-Patterns for Uniform Traffic with Variable Intensity. In: *Proceedings of the 14-th International Conference on Computer Systems and Technologies CompSysTech'13*, 28-29 June 2013, Ruse, Bulgaria. ACM PRESS, New York, NY, USA, ACM ICPS Volume 767, 2013, 53-58. ISBN: 978-1-4503-2021-4.
155. Ташев, Т., Н. Баканова, Р. Ташева. Исследование верхней границы пропускной способности коммутационного узла при входящем трафике типа “горячей точки”. *International Journal "Information Technologies & Knowledge"*, Volume 7, Number 2, 2013, 182-189, ITHEA®, Sofia, Bulgaria, ISSN 1313-0455.

***Институт по информационни и комуникационни технологии –
Приложения към годишния отчет 2013 г.***

156. Tchamova, A., Dezert, Jean. Tracking applications with fuzzy-based fusion rules, *IEEE International Symposium on Innovations in Intelligent Systems and Applications (INISTA)*, Albena, Bulgaria, 19-21 June 2013, 1-5, Print ISBN: 978-1-4799-0659-8, DOI: 10.1109/INISTA.2013.6577630
157. Temnikova, I., N. D. Hailu, G. Angelova, K. B. Cohen. Measuring Closure Properties of Patent Sublanguages. In: Angelova, G., K, Bontcheva, and R. Mitkov (Eds.), *Proc. of the Int. Conf. on Recent Advances in Natural Language Processing (RANLP 2013)*, September 07-13, 2013, Hissar, Bulgaria, Incoma Ltd., Shoumen, Bulgaria, 2013, 659-666, ISSN 1313-8502.
158. Temnikova, I., I. Nikolova, W. A. Baumgartner, G. Angelova, K. B. Cohen. Closure Properties of Bulgarian Clinical Text. In: Angelova, G., K, Bontcheva, and R. Mitkov (Eds.), *Proc. of the Int. Conf. on Recent Advances in Natural Language Processing (RANLP 2013)*, September 07-13, 2013, Hissar, Bulgaria, Incoma Ltd., Shoumen, Bulgaria, 2013, 667-675, ISSN 1313-8502.
159. Temnikova, I., K. Bretonnel Cohen. Recognizing sublanguages in scientific journal articles through closure properties. In: *Proceedings of the 2013 Workshop on Biomedical Natural Language Processing (BioNLP 2013)*, Sofia, Bulgaria, August 4-9 2013, 72–79, ISBN 978-954-452-024-3.
160. Todorov Y., M. Terziyska, S. Ahmed, M. Petrov. Fuzzy-Neural Predictive Control using Levenberg-Marquardt optimization approach, In: *Proceedings of International IEEE conference on Innovations in Intelligent Systems and Applications, INISTA'2013*, Albena, Bulgaria, IEE Explore, 1-5, 2013, ISBN 978-1-4799-0659-8.
161. Todorov Y., M. Terziyska, M. Petrov. Recurrent Fuzzy-Neural Network with fast learning algorithm for predictive control, In: Proceedings of International Conference on Artificial Neural Networks ICANN' 2013, (Eds. V. Mladenov et al.,), *Lecture Notes on Computer Science*, vol. 8131, 459-466, Springer, 2013, ISBN 987-3-642-40727-7.
162. Todorov Y., I. Nacheva, P. Metodieva, M. Doneva, T. Tsvetkov. Soft Computing Applications in Food Technology, *Bulgarian Journal of Agricultural Science*, vol. 19, Issue 3, 503-507, 2013, ISSN 1310-0351.
163. Trichkova, E., K. Stoilova. An Approach for Quality Assessment and Effectiveness of a Web-Based System for Distance Learning. *Cybernetics and Information Technology*, No4, 2013, 63-73, ISSN 1311-9702.
164. Trosheva A., V. Terzieva, A. Atanasova, P. Kademova-Katzarova .R. Andreev. Computer Games for Beginner Readers, Developing Abilities to Recognize Words, In: Proc. of International Conference Education, Research & Development, 05.09. – 06.09.2013, *Journal of International Scientific Publications: Educational Alternatives*, Vol. 11, part 2, 200- 211, ISSN 1313-2571
165. Wasielewska, K., M. Ganzha, M. Paprzycki, I. Lirkov, Developing Ontological Model of Computational Linear Algebra - Preliminary Considerations, *Application of Mathematics in Technical and Natural Sciences, AMiTaNS 2013*, Michail D. Todorov ed., AIP Conference Proceedings, 1561, 133–143, 2013. ISBN 978-0-7354-1189-0
166. Zhikov, Valentin, Georgiev, Georgi, Simov, Kiril, Osenova, Petya. Combining POS Tagging, Dependency Parsing and Coreferential Resolution for Bulgarian. In: (Angelova, G., K, Bontcheva, and R. Mitkov, Ed.). *Proceedings of the International Conference*

*Институт по информационни и комуникационни технологии –
Приложения към годишния отчет 2013 г.*

*Recent Advances in Natural Language Processing (RANLP 2013), September 7-13, 2013,
Hissar, Bulgaria, Incoma Ltd., Shoumen, Bulgaria, 2013, 755-762, ISSN 1313-8502.*

167. Zlatev, Z., I. T. Dimov, K. G.. Sensitivity of European Pollution Levels to Changes of Human-made Emissions, In: *Advanced Numerical Methods for Complex Environmental Models: Needs and Availability* (I. Farago, A. Havasi, Z. Zlatev, Eds), 2013, 166-202, eISBN: 978-1-60805-778-8, ISBN: 978-1-60805-777-1.
168. Zlatev, Z., K. Georgiev, I. T. Dimov. Parallel Computations in a Large-scale Air Pollution Model, In: *Advanced Numerical Methods for Complex Environmental Models: Needs and Availability* (I. Farago, A. Havasi, Z. Zlatev, Eds), 2013, 301-326, eISBN: 978-1-60805-778-8, ISBN: 978-1-60805-777-1
169. Zlatev, Z., K. Georgiev, I. Dimov. Influence of climatic changes on pollution levels in the Balkan Peninsula. *Computers and Mathematics with Applications*, Vol. 65 (3), “Efficient Numerical Methods for Scientific Applications”. Elsevier. ISSN: 0898-1221. Doi: 10.1016/j.camwa.2012.07.005
170. Zlatev, Z., K. Georgiev, Applying approximate LU-factorizations as preconditioners in eight iterative methods for solving systems of linear algebraic equations, *Cent. Eur. J. Math.* 11(8), 2013, 1510-1530, ISSN: 1895-1074, DOI: 10.2478/s11533-013-0248

1.2. Списък на публикациите, които са включени в издания с импакт фактор IF (Web Of Science) или импакт ранг SJR (SCOPUS) (63)

1.2.1. Списък на публикациите, които са включени в издания с импакт фактор, IF (Web Of Science) (31)

1. Aleksandrov L., Djidjev H., Maheshwari A., Sack J.-R. An Approximation Algorithm for Computing Shortest Paths in Weighted 3-d Domains. *Discrete and Computational Geometry* 50 (1), 2013, 124-184, ISSN: 0179-5376. IF = 0.649
2. Axelsson, O., P. Boyanova, M. Kronbichler, M. Neytcheva, and X. Wu, Numerical and computational efficiency of solvers for two-phase problems, *Computers and Mathematics with Applications*, 65(3), 2013, 301-314, ISSN: 0898-1221, IF = 2.069
3. Bocheva, N., D. Angelova, M. Stefanova, Age-related changes in fine motion direction discriminations. *Experimental Brain Research*, Springer, July 2013, Volume 228, Issue 3, 257-278. IF = 2.395
4. Boiadziev G., Kastelov R., Boiadziev T., Kotev V., Delchev K., Zagurski K. , Vitkov V, Design and performance study of an orthopaedic surgery robotized module for automatic bone drilling, *Journal of Medical Robots and Computer Assisted Surgery*, 26 FEB 2013, Wileyonlinelibrary.com, DOI:10.1002/rcs.1479, ISSN:1478-596X, IF = 1.488
5. Boyanova, P., M. Neytcheva, Efficient numerical solution of discrete multi-component Cahn-Hilliard systems, *Computers and Mathematics with Applications*, 10.1016/j.camwa.2013.10.013, ISSN: 0898-1221, IF = 1.747
6. Dimov, I. T., R. Georgieva, Tz. Ostromsky, Z. Zlatev. Sensitivity Studies of Pollutant Concentrations Calculated by UNI-DEM with Respect to the Input Emissions. *Central European Journal of Mathematics, Numerical Methods for Large Scale Scientific Computing* 11 (8), 2013, 1531 – 1545, ISSN:1895-1074. Doi: 10.2478/s11533-013-0256-2. IF = 0.44

7. Dimov, I. T., R. Georgieva, Tz. Ostromsky, Z. Zlatev. Advanced Algorithms for Multidimensional Sensitivity Studies of Large-scale Air Pollution Models based on Sobol Sequences. *Special issue of Computers and Mathematics with Applications* 65 (3), “Efficient Numerical Methods for Scientific Applications”. Elsevier, 2013, 338 – 351, ISSN: 0898-1221. Doi: 10.1016/j.camwa.2012.07.005. IF = 1.747
8. Farago, I., K. Georgiev, A. Havasi and Z. Zlatev, Efficient numerical methods for scientific applications: Introduction, *Computers and Mathematics with Applications*, Vol. 65 (3), 2013, Elsevier. ISSN: 0898-1221. Doi: 10.1016/j.camwa.2012.07.005, 297 – 300 IF = 1.747
9. Fidanova S., Roeva O., Hybrid Bat Algorithm for Parameter Identification of an E. coli Cultivation Process Model. *Biotechnology & Biotechnological Equipment* 27 (6), DIAGNOSIS PRESS LTD, 2013, 4323-4326, ISSN:1310-2818. IF = 0.76
10. Fidanova, S., O. Roeva. Metaheuristic Techniques for Optimization of an E. coli Cultivation Model. *Biotechnology & Biotechnological Equipment* 27(3). DIAGNOSIS PRESS LTD, 2013, 3870 – 3876, ISSN: 1310-2818. IF = 0.76
11. Fidanova, S., M. Shindarov, P. Marinov. Multi-Objective Ant Algorithm for Wireless Sensor Network Positioning. *Proceedings of the Bulgarian Academy of Sciences* 66(3), 2013, 353 – 360, ISSN: 1310-1331. IF = 0.21
12. Georgieva P., I. Popchev. Fuzzy Logic Q-measure Model for Managing Financial Investments, *Comptes rendus de l'Academie bulgare des Sciences*, vol. 66, №5, 651-658, ISSN 1310-1331, 2013. IF = 0.21
13. Georgieva, I., C. Hofreither, Interpolation of harmonic functions based on Radon projections, *Numerische Mathematik*, 2013. DOI:10.1007/s00211-013-0592-y, IF=1.321
14. Hadjiski M., L. Doukovska. CBR approach for Technical Diagnostics of Mill Fan System, *Comptes rendus de l'Academie bulgare des Sciences*, vol. 66, №1, 93-100, 2013, ISSN 1310-1331. IF = 0.21
15. Ilchev, S., Accurate Data Embedding in JPEG Images for Image Authentication, *Comptes rendus de l'Acad'emie bulgare des Sciences*, vol. 66, no. 9, 1247-1254, Sep. 2013, ISSN 1310-1331. IF = 0.21
16. Koprinkova-Hristova, P., Oubatti, M., Palm, G., Heuristic dynamic programming using echo state network as online trainable adaptive critic, *International Journal of Adaptive Control and Signal Processing*, vol.27, Issue 10, 902–914, October 2013, ISSN: 0890-6327, DOI: 10.1002/acs.2364, IF = 0.913
17. Kraus, J., M. Lymbery, S. Margenov, Robust Multilevel Methods for Quadratic Finite Element Anisotropic Elliptic Problems, *Numerical Linear Algebra With Applications*, 2013, DOI: 10.1002/nla.1876, ISSN: 1099-1506, IF= 1.202
18. Kraus, J., M. Lymbery, S. Margenov. Robust multilevel methods for quadratic finite element anisotropic elliptic problems. *Numerica Linear Algebra with Appl.* doi: 10.1002/nla.1876. 2013, Online ISSN: 1099-1506. IF = 1.202
19. Monov, V.; Tashev, Tasho D. Determinant and norm inequalities for bialternate products of matrices. *Comptes rendus de l'Academie bulgare des Sciences*, Volume: 66 Issue: 3, 2013, Sofia, Bulgaria. 345-352,. ISSN: 1310-1331. IF = 0.21

**Институт по информационни и комуникационни технологии –
Приложения към годишния отчет 2013 г.**

20. Mustakerov I., D. Borissova. A combinatorial optimization ranking algorithm for reasonable decision making. *Comptes rendus de l'Academie bulgare des Sciences*, 66(1) 2013, 101-110, ISSN 0366-8681 0861-1459. IF = 0.21
21. Nedjalkov, M., P. Schwaha, S. Selberherr, J. M. Sellier, D. Vasileska. Wigner Quasi-Particle Attributes - An Asymptotic Perspective. *Applied Physics Letters* 102, 2013, art. no. 163113, 163113-1 - 163113-4. ISSN: 0003-6951. IF = 3.844
22. Popchev I., V. Angelova. Condition numbers and local perturbation bounds for the matrix equation $X^S \pm A^H X^t A = Q$, *Comptes rendus de l'Academie bulgare des Sciences*, vol. 66, №1, 21-28, 2013, ISSN 1310-1331. IF = 0.21
23. Popchev I., V. Angelova. Residual bound of the matrix equation $X + A^H X^{-1} A + B^H X^{-1} B = I$, *Comptes rendus de l'Academie bulgare des Sciences*, vol. 66, №10, 1379-1384, 2013, ISSN 1310-1331, IF = 0.21
24. Savov S., I. Popchev. Non-Iterative Improvement of Trace Bounds for the Lyapunov Equation Solution, *Comptes rendus de l'Academie bulgare des Sciences*, vol. 66, №5, 733-738, 2013, ISSN 1310-1331, IF = 0.21
25. Schwaha, P., D. Querlio, P. Dollfus, J. Saint-Martin, M. Nedjalkov, S. Selberherr. Decoherence effects in the Wigner function formalism. *Journal of Computational Electronics* 12 (3), 2013, 388 – 396, ISSN: 1569-8025. IF = 1.211
26. Sgurev V. An Approach to Constructing a Complex Propositional Logic, *Comptes rendus de l'Academie bulgare des Sciences*, vol. 66, №11, 1623- 1632, 2013, ISSN 1310-1331. IF = 0.21
27. Stojanović, V., P. Ribeiro, S. Stoykov, Non-linear vibration of Timoshenko damaged beams by a new p-version finite element method, *Computers & Structures* 120, 2013, 107-119, ISSN: 0045-7949, IF= 1.509
28. Stoykov, S., P. Ribeiro, Vibration analysis of rotating 3D beams by the p-version finite element method, *Finite Elements in Analysis and Design* 65, 2013, 76-88. ISSN: 0168-874X, IF = 1.729
29. Stoykov, S., P. Ribeiro, Non-linear vibrations of beams with non-symmetrical cross sections, *International Journal of Non-Linear Mechanics* 55, 2013, 153–169. ISSN: 0020-7462. IF = 1.598
30. Todorov Y., I. Nacheva, P. Metodieva, M. Doneva, T. Tsvetkov. Soft Computing Applications in Food Technology, *Bulgarian Journal of Agricultural Science*, vol. 19, Issue 3, 503-507, 2013, ISSN 1310-0351. IF = 0.178
31. Zlatev, Z., K. Georgiev, I. Dimov. Influence of climatic changes on pollution levels in the Balkan Peninsula. *Computers and Mathematics with Applications*, Vol. 65 (3), “Efficient Numerical Methods for Scientific Applications”. Elsevier. ISSN: 0898-1221. Doi: 10.1016/j.camwa.2012.07.005, IF = 2.086

1.2.2. Списък на публикациите, които са включени в издания с импакт ранг SJR (SCOPUS)

1. Andreev, A., M. Racheva. Nonconforming Rectangular Morley Finite Elements. In: I. T. Dimov, I. Faragó, and L. Vulkov (Eds.) *Proceedings of NAA 2012, Lecture Notes in Computer Science (LNCS) 8236*, Springer, 2013, 158 – 165, ISSN: 0302-9743, SJR (2012) = 0.332

2. Boiadziev G., Delchev K., Boiadziev T., Zagurski K., Kastelov R., Vitkov V., Controlled Trust Force Influence on Automatic Bone Drilling Parameters in the Orthopedic Surgery, *Int. Journal of Pure and Applied Mathematics IJPAM*, 2013, vol 88, No.4, 577 – 592, ISSN 1311-8080, SJR = 0.186
3. Cantoni, V., D.T. Dimov, Structural Blocks Retrieval in Macromolecules: Saliency and Precision Aspects, ICIAP Workshops, *Lecture Notes in Computer Science*, volume 8158, 2013, 372-380, Springer, ISSN 0302-9743, ISBN 978-3-642-41189-2, DOI 10.1007/978-3-642-41190-8, SJR = 0.332
4. Dichev, Ch., D. Dicheva, G. Agre, G. Angelova. Current Practices, Trends and Challenges in K-12 Online Learning. *Cybernetics and Information Technologies*, Vol. 13, № 3, Sofia, 2013, 91-110, ISSN 1311-9702, SJR = 0.101
5. Dimov, I. T., K. Atanassov. Interpretation of a Monte Carlo Approach of a Finite Difference Scheme by a Game Method for Modelling. In: *Proc. Jangjeon Math. Soc.* 16 (3), 2013, 381-388, ISSN: 1598-7264, SJR = 0.363
6. Dimov, I. T. R., Georgieva, Tz. Ostromsky, Z. Zlatev. Variance-based Sensitivity Analysis of the Unified Danish Eulerian Model According to Variations of Chemical Rates. In: I. T. Dimov, I. Faragó, and L. Vulkov (Eds.) Proceedings of NAA 2012, *LNCS* 8236, Springer, 2013, 247 – 254. ISSN: 0302-9743, SJR (2012) = 0.332
7. Doukovska L., S. Vassileva. Knowledge-based Mill Fan System Technical Condition Prognosis, Journal of the World Scientific and Engineering Academy and Society. *WSEAS Transactions on Systems, Special Issue on Knowledge-based Modeling and Control of Multi-factorial Processes*, 398-408, 2013, Print ISSN 1109-2777, E-ISSN 2224-2678, SJR = 0.266
8. Fidanova S. Application of HPD Model for Predicting Protein Mutations. *Cybernetics and Information Technologies* 13 (4), 2013, 95 – 103, ISSN: 1311-9702, SJR = 0.101
9. Fidanova, S., P. Marinov. Ant Colony Optimization Start Strategies Performance According Some of the Parameters. In: I. T. Dimov, I. Faragó, and L. Vulkov (Eds.). Proceedings of NAA 2012, *LNCS* 8236, Springer, 2013, 287-294, ISSN: 0302-9743, SJR = 0.332
10. Ganzha, M., Ivan Lirkov, Marcin Paprzycki, Comparative analysis of high performance solvers for solving Stokes equation, Application of Mathematics in Technical and Natural Sciences, AMiTANS 2013, Michail D. Todorov ed., *AIP Conference Proceedings*, 1561, 347–354, 2013. ISBN 978-0-7354-1189-0, SJR = 0.161
11. Hristov V, G. Agre. A Software System for Classification of Archaeological Artefacts Represented by 2D Plans. *Cybernetics and Information Technologies*, Vol. 13, № 2, Sofia, 2013, 82-96, ISSN 1311-9702, SJR = 0.101.
12. Hristova, R., G. Goranov, User-level Framework for Performance Monitoring of HPC Applications, AMiTANS 2013, *AIP Conference Proceedings*, 1561, 144-152, 2013, doi: 10.1063/1.4827223, ISBN 978-0-7354-1189-0, SJR = 0.161.
13. Kirilov L., Guliashki V., Genova K., Vassileva M., Staykov B. Generalized scalarizing model GENS in DSS WebOptim. *International Journal of Decision Support System Technology*, Vol. 5, Issue 3, 2013, 1-11, ISSN: 1941-6296, SJR = 0.100
14. Koprinkova-Hristova, P., Oubbati, M., Palm, G., Heuristic dynamic programming using echo state network as online trainable adaptive critic, *International Journal of Adaptive*

Control and Signal Processing, vol.27, Issue 10, 902–914, October 2013, ISSN: 0890-6327, DOI: 10.1002/acs.2364, SJR = 1.063

15. Koprinkova-Hristova, P., Tontchev, N., Popova, S., Two approaches to multi-criteria optimization of steel alloys for crankshafts production, *International Journal of Reasoning-based Intelligent Systems, Special Issue on: "Innovations of intelligent systems and engineering"*, vol. 5, No2, 2013, 96-103. ISSN: 1755-0556. DOI: 10.1504/IJRIS.2013.057271, SJR = 0.112
16. Koprinkova-Hristova, P., Alexiev, K., Borisova, D., Jelev, G., Atanassov, V., Recurrent neural networks for automatic clustering of multispectral satellite images, SPIE Remote sensing, Sept. 23-26, 2013, Dresden, Germany, *Proceedings of SPIE*, vol. 8892, *Image and Signal Processing for Remote Sensing XIX*, Editor(s): Lorenzo Bruzzone, 88920X, October 17, 2013, ISSN: 0277-786X, doi:10.1117/12. ISBN: 9780819497611, SJR = 0.216.
17. Koprinkova-Hristova, P., Alexiev, K., Echo State Networks in Dynamic Data Clustering, Artificial Neural Networks and Machine Learning – ICANN 2013, *Lecture Notes in Computer Science*, Eds.: Mladenov, V., Koprinkova-Hristova, P., Palm, G, Villa, A.E.P., Appollini, B., Kasabov, N., vol.8131, 2013, 343-350, ISSN: 0302-9743, ISBN: 978-3-642-40727-7, DOI: 10.1007/978-3-642-40728-4, SJR = 0.332
18. Kosturski, N., S. Margenov, Y. Vutov, Computer Simulation of RF Liver Ablation on an MRI Scan Data, *AIP Conf. Proc.* 1487, 2013, 120-126, ISSN: 0094-243X, SJR = 0.161
19. Kotev V., Boiadzhiev G., Kawasaki H., Mouri T., Delchev K., Boiadzhiev T., A Design Concept of an Orthopedic Bone Drilling Mechatronics System, 2nd Int. Conf. on Mechanical Engineering and Materials, Jan. 27-28, 2013, Sanya, China, *Int. Journal Applied Mechanics and Materials*, Vol. 302, 2013, 248-251, Trans Tech Publications, Switzerland, doi:10.4028 /www.scientific.net/AMM.302.248, ISSN 1660-9336, SJR = 0.125.
20. Minchev, Z.. 2D vs 3D Visualization & Social Networks Entertainment Games. A Human Factor Response Case Study, In: Proceedings of 12th International Conference, ICEC 2013, São Paulo, Brazil, October 16-18, 2013 (Editors: Junia C. Anacleto, Esteban W. G. Clua, Flavio S. Correa da Silva, Sidney Fels, Hyun S. Yang), *Lecture Notes in Computer Science*, Vol. 8215 2013, 107-113, ISBN 978-3-642-41105-2 (Print) 978-3-642-41106-9 (Online), SJR = 0.332
21. Nikolova, I., G. Angelova, D. Tcharaktchiev and S. Boytcheva. Medical Archetypes and Information Extraction Templates in Automatic Processing of Clinical Narratives, In Proceedings of ICCS 2013, 10-12 January, Mumbai, India, Conceptual Structures for STEM Research and Education, Springer, *Lecture Notes in Computer Science* Volume 7735, 2013, 106-120, ISSN 0302-9743, SJR = 0.332
22. Ostromsky, Tz., I. T. Dimov, R. Georgieva, P. Marinov, Z. Zlatev. High Performance Computing of Data for a New Sensitivity Analysis Algorithm, Applied in an Air Pollution Model. In: I. T. Dimov, I. Faragó, and L. Vulkov (Eds.) *Proceedings of NAA 2012, LNCS* 8236, Springer, 2013, 428 – 436, ISSN: 0302-9743, SJR = 0.332.
23. Ostromsky, Tz., I. T. Dimov, R. Georgieva, P. Marinov, Z. Zlatev. Sensitivity Study of a Large-Scale Air Pollution Model by Using High-Performance Computations and Monte Carlo Algorithms. In: *Proceedings of Fifth International Conference AMiTaN'S13*, June 24 - 29, 2013, Albena, Bulgaria, *AIP Conf. Proceedings* 1561, 2013, 153 – 163. ISSN: 0094-243X; ISBN: 978-0-7354-1189-0. Doi: 10.1063/1.4827224, SJR = 0.161.

*Институт по информационни и комуникационни технологии –
Приложения към годишния отчет 2013 г.*

24. Petrova-Antonova D., S. Ilieva, V. Stoyanova, I. Manova, V. Pavlov. An Automated Approach for Fault Injection Testing of BPEL Orchestrations. Proceeding of the 17th Conference on European Systems & Software Process Improvement and Innovation (EuroSPI'2013), June 25-27 2013, Dundalk, Ireland, F. McCaffery et al. (Eds.): Systems, Software and Services Process Improvement 2013, *Communications in Computer and Information Science*, Vol. 364, Springer, Heidelberg, 84-95, ISBN: 978-3-642-39178-1, SJR = 0.140.
25. Radeva I. Multi-Criteria Models for Cluster Design, *Cybernetics and Information Technologies*, vol. 13, №1, 18-33, 2013, ISSN 1311-9702, SJR = 0.101.
26. Savov S., I. Popchev. Experimental Study of Lyapunov Equation Solution Bounds for Power Systems Models, *Cybernetics and Information Technologies*, vol. 13, №1, 3-12, 2013, ISSN 1311-9702, SJR = 0.101.
27. Stoilova, K., T. Stoilov, K. Nikolov. Autonomic Properties in Traffic Control. *Cybernetics and Information Technology*, No4, 2013, 18-32, ISSN 1311-9702, SJR = 0.101.
28. Sviercoski, R.F., S. Margenov, Displacement decomposition ACO based preconditioning of FEM elasticity systems, *AIP Conf. Proc.* 1561, 2013, 112-119, DOI: 10.1063/1.4827220, ISSN: 0094-243X, SJR = 0.161
29. Todorov Y., M. Terziyska, M. Petrov. Recurrent Fuzzy-Neural Network with fast learning algorithm for predictive control, In: Proceedings of International Conference on Artificial Neural Networks ICANN' 2013, (Eds. V. Mladenov et al.,), *Lecture Notes on Computer Science*, vol. 8131, 459-466, Springer, 2013, ISBN 987-3-642-40727-7. SJR = 0.332
30. Trichkova, E., K. Stoilova. An Approach for Quality Assessment and Effectiveness of a Web-Based System for Distance Learning. *Cybernetics and Information Technology*, No4, 2013, 63-73, ISSN 1311-9702, SJR = 0.101.
31. Wasielewska, K., M. Ganzha, M. Paprzycki, I. Lirkov, Developing Ontological Model of Computational Linear Algebra - Preliminary Considerations, Application of Mathematics in Technical and Natural Sciences, AMiTaNS 2013, Michail D. Todorov ed., *AIP Conference Proceedings*, 1561, 133–143, 2013. ISBN 978-0-7354-1189-0, SJR = 0.161
32. Zlatev, Z., K. Georgiev, Applying approximate LU-factorizations as preconditioners in eight iterative methods for solving systems of linear algebraic equations, *Cent. Eur. J. Math.* 11(8), 2013, 1510-1530, ISSN: 1895-1074, DOI: 10.2478/s11533-013-0248, SJR = 0.513

1.2.3. Списък на публикациите, които са индексирани в Web of Science или SCOPUS (57)

1. Ahmed, S., M. Nedjalkov, D. Vasileska. Comparative Study of Various Self-Consistent Event Biasing Schemes for Monte Carlo Simulations of Nanoscale MOSFETs. In: *Theory and Applications of Monte Carlo Simulations*, V. Chan (ed.). Intech Open Access Publisher, 2013, 109 – 133, ISBN: 978-953-51-1012-5. Doi: 10.5772/53113
2. Alexiev, K., I. Nikolova, An Algorithm for Error Reducing in IMU, *2013 IEEE International Symposium on Innovations in Intelligent Systems and Applications (INISTA)*, 19-21 June 2013, Albena, Bulgaria, IEEE Xplore®, 1-6, ISBN: 978-1-4799-0659-8, DOI: 10.1109/INISTA.2013.6577663
3. Amoroso, S., L. Gerrer, A. Asenov, J. M. Sellier, I. T. Dimov, M. Nedjalkov, S. Selberherr. Quantum Insights in Gate Oxide Charge-Trapping Dynamics in Nanoscale

- MOSFETs. In: *Proceedings of the 18th International Conference on Simulation of Semiconductor Processes and Devices*, 2013, 25 – 28, ISBN: 978-1-4673-5733-3.
4. Angelova, G. Automatic information extraction from patient records in Bulgarian Language. Keynote Lecture at CompSysTech 2013, Ruse, In: *Proceedings of CompSysTech-2013*, 11-14, ACM New York, NY, USA ©2013, ISBN: 978-1-4503-2021-4.
 5. Angelova, D., L. Mihaylova, N. Petrov, A. Gning, A Convolution Particle Filtering Approach for Tracking Elliptical Extended Objects, *Proceedings of the International Conf. on Information Fusion*, Istanbul, Turkey, 2013, 1542-1549, IEEE 2013 ISBN 978-605-86311-1-3.
 6. Ardis M., S. Bohner, L. Camilloni, D. Vallespir, S. Ilieva. Using GSWE2009 in the Creation and Modification of Graduate Software Engineering Programs and Related Curricula, In: *Proc. of CSEE&T 2013*, San Francisco, CA, USA, 19-21 May 2013, IEE Explore, 109 – 118, ISSN 1093-0175.
 7. Atanassova V., S. Fidanova, I. Popchev, P. Chountas. Chapter 5: Generalized Nets, ACO Algorithms, and Genetic Algorithms, In: (Sabelfeld, K., I. Dimov, Eds.), *Monte Carlo Methods and Applications, Proceedings of the 8th IMACS Seminar on Monte Carlo Methods*, Borovets, Bulgaria De Gruyter, 39-46, 2013, eBook ISBN 9783110293586.
 8. Atanassov, E. M. Durchova, Generation of the Scrambled Halton Sequence Using Accelerators, In: *Proceedings of the 36th International Convention MIPRO 2013*, IEEE, 197-201, ISSN: 1847-3946.
 9. Atanassov, E., T. Gurov, A. Karaivanova, Message Oriented Framework with Low Overhead for Efficient High-Performance Monte Carlo Simulations, In: *Proceedings of the 36th International Convention MIPRO 2013*, IEEE, 189-191, ISSN: 1847-3946.
 10. Atanassov, E., S. Ivanovska, Computation and Analysis of Sobol Coefficients for Air Pollution Concentrations over the Territory of Bulgaria, In: *Proceedings of the 36th International Convention MIPRO 2013*, IEEE, 254-257, ISSN: 1847-3946.
 11. Behar, V., Chr. Kabakchiev, I. Garvanov, Simple Algorithms for Target Detection in FSR using Local Statistics, *Proc. of the 14th Intern. Radar Symposium ISR'2013*, June 19-21, 2013, Dresden, Germany, 631-636, ISBN: 978-3-95404-223-4
 12. Behar, V., Chr. Kabakchiev, I. Garvanov. Sound Source Localization in a Security System using a Microphone Array, *Proc. of the 2nd Intern., Conf. on Telecommunications & Remote Sensing - ICTRS'2013*, 11-12 July, 2013, 85-94, Noordwijkerhout, the Netherlands, ISBN: 978-989-8565-57-0
 13. Boiadziev G., Kotev V., Delchev K., Boiadziev T., Modeling and Development of a Robotized Hand-Hold Bone Cutting Device OCRO, Int. Conf. ICMAM 2012, Dec. 5-6, Hong Kong, *Int. Journal Applied Mechanics and Materials*, Vols 300-301, 2013, 479-483, Trans Tech Publications, Switzerland, doi:10.4028/www.scientific.net/ AMM.300-301.479, ISSN 1662-7482
 14. Boiadziev G., Kotev V., Zagurski K., Delchev K., Boiadziev T., Kastelov R., Robotized System for Bone Drilling and Cutting in Orthopedic Surgery, *Int. Journal Advanced Materials Research*, Vol 740, 2013, 92-98, Trans Tech Publications, Switzerland, doi:10.4028 /www.scientific.net/ AMR.740-92, ISSN 1662-8985
 15. Borissova D., I. Mustakerov. A concept of intelligent e-maintenance decision making system. In: *Proc. of IEEE International Symposium on Innovations in Intelligent Systems*

*Институт по информационни и комуникационни технологии –
Приложения към годишния отчет 2013 г.*

and Applications (INISTA), 19-21 June 2013, Print ISBN: 978-1-4799-0659-8, DOI: 10.1109/INISTA.2013.6577668

16. Boshnakov K., L. Doukovska, E. Mihailov, V. Petkov, S. Vassileva, S. Kojnov. Predictive Maintenance Model-Based Approach for Objects Exposed to Extremely High Temperatures, In: *Proceedings of the Signal Processing Symposium – SPS'13*, Jachranka Village, Poland, art. no. 6623621, IEEE, 2013, ISBN 978-1-4673-6319-8-13-2013.
17. Dezert, J., Tchamova, A., Han, D., Tacnet, J. Why Dempster's rule doesn't behave as Bayes rule with informative priors , *IEEE International Symposium on Innovations in Intelligent Systems and Applications (INISTA)*, Albena, Bulgaria, 19-21 June, 2013, 1-5, Print ISBN:978-1-4799-0659-8, DOI: 10.1109/INISTA.2013.6577631
18. Dimitrov S., T.Stoilov. Loding Test of the Apache HTTP Server by videofile and usage measurements of the hardware components. *Proceedings of the International Conference Computer Systems and Technologies, CompSysTech'13*, 28-29 June 2013, Russe., ACM Conference Proceeding Series, 59-66, ISBN: 978-1-4503-2021-4.
19. Dimov, I. T., R. Georgieva. Multidimensional Sensitivity Analysis of Large-scale Mathematical Models. O.P. Iliev et al. (eds.), *Numerical Solution of Partial Differential Equations: Theory, Algorithms, and Their Applications, Springer Proceedings in Mathematics & Statistics* 45, Springer Science+Business Media, New York, 2013, 137 – 156. ISBN: 978-1-4614-7171-4 (Print) 978-1-4614-7172-1 (Online). DOI 10.1007/978-1-4614-7172-1 8.
20. Dimov, D., S. Nedkov, Emotion Recognition by Face Dynamics, *CompSysTech'13 Proceedings of the 14th International Conference on Computer Systems and Technologies*, ACM ICPS Vol. 767, ACM Inc., NY, USA, 2013, 128-136, ISBN: 978-1-4503-2021-4
21. Elvesæter B., Benguria G., and Ilieva S., A Comparison of the Essence 1.0 and SPEM 2.0 Specifications for Software Engineering Methods, In: *Proc. of the Third Workshop on Process-based approaches for Model-Driven Engineering (PMDE 2013)*, Montpellier, France, 2013. ACM, art.n. 2, ISBN: 978-1-4503-2047-4 doi>10.1145/2489833.2489835.
22. Fidanova S., Roeva O., Ganzha M., ACO and GA for Parameter Settings of E.coli Fed-Batch Cultivation Model, In: *Recent Advancece in Computational Optimizattion, Studies in Computational Intelligence* 470, S. Fidanova (editor), Book chapter 4, Springer, 2013, 51 – 71, ISBN: 978-3-319-00409-9.
23. Garvanov , Chr. Kabakchiev ,V. Behar, Sound Parameter Estimation in a Security System, *Proc. of the 2nd Intern., Conf. on Telecommunications & Remote Sensing - ICTRS'2013*, 11-12 July, 2013, 140-144, Noordwijkerhout, the Netherlands, ISBN: 978-989-8565-57-0
24. Gerdjikov, S., Mihov, S., Mitankin, P., Schulz, K.U., WallBreaker - Overcoming the wall effect in similarity search. In: *Proceeding EDBT '13, Proceedings of the Joint EDBT/ICDT 2013 Workshops*, 366-369, ACM, ISBN: 978-1-4503-1599-9, doi 10.1145/2457317.2457385
25. Gerdjikov, S., Mihov, S., Nenchev, V., Extraction of Spelling Variations from Language Structure for Noisy Text Correction, In: *12th International Conference on Document Analysis and Recognition (ICDAR)*, 2013, 324 - 328, ISSN: 1520-5363, DOI: 10.1109/ICDAR.2013.72
26. Kabakchiev, Chr., I. Garvanov, V. Behar, H. Rohling. The Experimental Study of Possibility for Radar Target Detection in FSR using L1-Based Non-Cooperative

*Институт по информационни и комуникационни технологии –
Приложения към годишния отчет 2013 г.*

- Transmitter, *Proc. of the 14th Intern. Radar Symposium ISR'2013*, June 19-21, 2013, Dresden, Germany, 625-630, ISBN: 978-3-95404-223-4
27. Kabakchiev, Chr., I. Garvanov, V. Behar, A. Lazarov , H. Rohling, The Experimental Study of Target FSR Shadow Detection using GPS Signals, *Proc. of the 3rd Intern. Symposium on Radio Systems and Space Plasma –ISRSSP'2013*, 28-29 August, 2013, Sofia, Bulgaria, 64-73, ISBN: 978-619-90124-1-3
28. Kabakchieva, D., Chr. Kabakchiev, V. Behar, I. Garvanov, FSR Marine Target Classification with Data Mining Approach, *Proc. of the 2nd Intern., Conf. on Telecommunications & Remote Sensing - ICTRS'2013*, 11-12 July, 2013, Noordwijkerhout, the Netherlands, 145-152, ISBN: 978-989-8565-57-0
29. Karastoyanov, D., V. Monov, T. Penchev, New type electromagnetic drive for Braille screen, In: *Proceedings of the Third International IEEE Conference on Information Science and Technology*, March 23-25 2013, Yangzhou, Jiangsu, China, 178-182, ISBN 978-1-4673-5137-9.
30. Koprinkova-Hristova P., L. Doukovska, P. Kostov. Working Regimes Classification for Predictive Maintenance of Mill Fan Systems, In: *Proceedings of the International Symposium on INnovations in Intelligent SysTems and Applications – INISTA'13*, CD, IEEE, 2013, ISBN 978-1-4799-0661-1-13-2013.
31. Koprinkova-Hristova, P., Angelova, D., Borisova, D., Jelev, G., Clustering of spectral images using Echo state networks, *2013 IEEE International Symposium on Innovations in Intelligent Systems and Applications, IEEE INISTA 2013*, June 19-21, Albena, Bulgaria, ISBN: 978-147990661-1, DOI: 10.1109/INISTA.2013.6577633
32. Kotev V., Boiadzhiev G., Kawasaki H., Mouri T., Delchev K., Boiadzhiev T., A Design Concept of an Orthopedic Bone Drilling Mechatronics System, 2nd Int. Conf. on Mechanical Engineering and Materials, Jan. 27-28, 2013, Sanya, China, *Int. Journal Applied Mechanics and Materials*, Vol. 302, 2013, 248-251, Trans Tech Publications, Switzerland, doi:10.4028 /www.scientific.net/AMM.302.248, ISSN 1660-9336.
33. Kraus, J., M. Lymbery, S. Margenov. Robust algebraic multilevel preconditioners for anisotropic elliptic problems. *Springer Proceedings in Mathematics and Statistics*. Vol. 45, 217-246, 2013. doi=10.1007/978-1-4614-7172-1_12. ISSN 2194-1009.
34. Manova D., Petrova-Antanova D., S. Ilieva. Testing web service's compositions following TASSA methodology *International Conference on Computer Systems and Technologies (CompSysTech 2013)*, Rousse, Bulgaria, June 28-29, 2013, 185-192, ACM New York, NY, USA ©2013, ISBN: 978-1-4503-2021-4
35. Mihaylova, D. Angelova, A. Zvikhachevskaya, Sequential Monte Carlo Methods for Localization in Wireless Networks, *Chapter 4 in Advances in Intelligent Signal Processing and Data Mining*, P. Georgieva, L. Mihaylova, L. Jain, Editors, Springer-Verlag, 2013, 89-119, ISBN: 978-3-642-28695-7, e-ISBN: 978-3-642-28696-4.
36. Monov, V., D. Karastoyanov, T. Penchev, Advanced control methods and technologies for two industrial processes, In: *Proceedings of the Third International IEEE Conference on Information Science and Technology*, March 23-25 2013, Yangzhou, Jiangsu, China, 187-194, ISBN 978-1-4673-5137-9.
37. Mustakerov I., D. Borissova. An intelligent approach for optimum maintenance strategy defining. In: *Proc. of 2013 IEEE International Symposium on Innovations in Intelligent*

*Институт по информационни и комуникационни технологии –
Приложения към годишния отчет 2013 г.*

Systems and Applications (INISTA), 19-21 June 2013, Print ISBN: 978-1-4799-0659-8,
DOI: 10.1109/INISTA.2013.6577666.

38. Nikolova, I., I. Temnikova and G. Angelova. Enriching Patent Search with External Keywords: a Feasibility Study. In: Angelova, G., K. Bontcheva, and R. Mitkov (Eds.) *Proceedings of the International Conference Recent Advances in Natural Language Processing (RANLP 2013)*, September 7-13, 2013, Hissar, Bulgaria, Incoma Ltd., Shoumen, Bulgaria, 2013, 525-531, ISSN 1313-8502.
39. Pencheva T., O. Roeva, V. Atanassova, M. Angelova. Generalized Net Model of the lac Operon, *Issues in Intuitionistic Fuzzy Sets and Generalized Nets*, EXIT Press, Warsaw, vol. 11, 75-84, 2013, ISBN 978-83-61551-08-9.
40. Penchev, T., D. Karastoyanov, V. Monov, Control system for “Controlled impact “laboratory device, In: *Proceedings of the Third International IEEE Conference on Information Science and Technology*, March 23-25 2013, Yangzhou, Jiangsu, China, 215-218, ISBN 978-1-4673-5137-9.
41. Penchev T., Karastojanov D., Altaparmakov I., Experimental Study on “Controlled Impact” Effect in Plastic Deformation Processes., *Advanced Materials Research* Vol. 772, 2013, 3-8, Trans Tech Publications, Switzerland, doi:10.4028/www.scientific.net/AMR.772.3, ISSN: 1662-8985
42. Petrova-Antanova D., S. Ilieva, V. Stoyanova. TESSI: A Web Service Testing Tool, *Proceedings of the 7th IEEE International Conference on Research Challenges in Information Science*, May 29-31 2013, Paris, France, 665-666, IEEE ISBN 978-1-4673-2914-9/13
43. Petrov, N., L. Mihaylova, A. Gning, D. Angelova, Group Object Tracking with a Sequential Monte Carlo Method Based on a Parameterised Likelihood Function, *Chapter 19 in Proceedings from the 8th IMACS Seminar on Monte Carlo Methods and Applications*, Editors K. K. Sabelfeld, I. Dimov, De Gruyter GMBH, 69-77, 2013, ISBN 978-3-11-029358-6
44. Roeva O., Fidanova S., Paprzycki M., Influence of the Population Size on the Genetic Algorithm Performance in Case of Cultivation Process Modelling. In: *Proc. of FedCSIS 2013, IEEE Xplorer*. 2013, 371 – 376, ISSN: 2300-5963. ISBN: 978-1-4673-4471-5, IEEE Catalog Number: CFP1385N-ART.
45. Schwaha, P., J. M. Sellier, M. Nedjalkov, I. T. Dimov, S. Selberherr. The Ultimate Equivalence Between Coherent Quantum and Classical Regimes. *Proceedings of the 16th International Workshop on Computational Electronics*, 2013, 152-153, ISBN: 978-3-901578-26-7.
46. Sellier, J. M., M. Nedjalkov, I. T. Dimov, S. Selberherr. Two-dimensional Transient Wigner Particle Model. *Proceedings of the 18th International Conference on Simulation of Semiconductor Processes and Devices*, 2013, 404 – 407, ISBN: 978-1-4673-5733-3.
47. Sgurev V., L. Doukovska, S. Drangajov, V. Nikov. Network Flow Interpretation of Innovation Processes and Risks, In: *Proceedings of the Signal Processing Symposium – SPS’13*, Jachranka Village, Poland, art. no. 6623603, IEEE, 2013, ISBN 978-1-4673-6319-8-13-2013.
48. Stavru S., I. Krasteva, S. Ilieva, Challenges of Model-Driven Modernization: An Agile Perspective, In: *Proceedings of the 1st International Conference on Model-Driven*

*Институт по информационни и комуникационни технологии –
Приложения към годишния отчет 2013 г.*

Engineering and Software Development, MODELSWARD 2013, Barcelona, Spain, 19-21 February 2013, 219-230, ISBN: 978-989856542-6, DOI: 10.5220/0004317502190230

49. Stoyanova V., D. Petrova-Antanova, S. Ilieva. Automation of Test Case Generation and Execution for Testing Web Service Orchestrations, In: *Proceedings of the 7th IEEE International Symposium on Service Oriented System Engineering, (SOSE'2013)*. San Francisco Bay, March USA, 25-28, 2013, 274-279, ISBN: 978-076954944-6, DOI 10.1109/SOSE.2013.9
50. Staykov B., T. Atanasova, V. Monov, L. Doukovska. The ERP Systems in Modern Business and Corporate Management, In: *Proceedings of the International Symposium on Business Modeling and Software Design – BMSD'13*, Noordwijkerhout, The Netherlands, 281-285, 2013, ISBN 978-989-8565-56-3.
51. Strandjev, B., G. Agre. On applicability of Principal Component Analysis to concept learning from images. 2013 IEEE International Symposium on Innovations in Intelligent Systems and Applications (INISTA), 9-21 June 2013, Albena, Bulgaria, *IEEE Xplore*, 1-5, ISBN 978-1-4799-0659-8, DOI: [10.1109/INISTA.2013.6577623](https://doi.org/10.1109/INISTA.2013.6577623).
52. Tashev, T., Monov, V. A Computer Modeling of the Throughput of a Crossbar Switch by PI-Patterns for Uniform Traffic with Variable Intensity. In: *Proceedings of the 14-th International Conference on Computer Systems and Technologies CompSysTech'13*, 28-29 June 2013, Ruse, Bulgaria. ACM PRESS, New York, NY, USA, ACM ICPS Volume 767, 2013, 53-58. ISBN: 978-1-4503-2021-4.
53. Tchamova, A., Dezert, Jean. Tracking applications with fuzzy-based fusion rules, *IEEE International Symposium on Innovations in Intelligent Systems and Applications (INISTA)*, Albena, Bulgaria, 19-21 June 2013, 1-5, Print ISBN: 978-1-4799-0659-8, DOI: 10.1109/INISTA.2013.6577630
54. Temnikova, I., N. D. Hailu, G. Angelova, K. B. Cohen. Measuring Closure Properties of Patent Sublanguages. In: Angelova, G., K. Bontcheva, and R. Mitkov (Eds.), *Proc. of the Int. Conf. on Recent Advances in Natural Language Processing (RANLP 2013)*, September 07-13, 2013, Hissar, Bulgaria, Incoma Ltd., Shoumen, Bulgaria, 2013, 659-666, ISSN 1313-8502.
55. Temnikova, I., I. Nikolova, W. A. Baumgarther, G. Angelova, K. B. Cohen. Closure Properties of Bulgarian Clinical Text. In: Angelova, G., K. Bontcheva, and R. Mitkov (Eds.), *Proc. of the Int. Conf. on Recent Advances in Natural Language Processing (RANLP 2013)*, September 07-13, 2013, Hissar, Bulgaria, Incoma Ltd., Shoumen, Bulgaria, 2013, 667-675, ISSN 1313-8502.
56. Todorov Y., M. Terziyska, S. Ahmed, M. Petrov. Fuzzy-Neural Predictive Control using Levenberg-Marquardt optimization approach, In: *Proceedings of International IEEE conference on Innovations in Intelligent Systems and Applications, INISTA'2013*, Albena, Bulgaria, IEE Explore, 1-5, 2013, ISBN 978-1-4799-0659-8.
57. Zhikov, Valentin, Georgiev, Georgi, Simov, Kiril, Osenova, Petya. Combining POS Tagging, Dependency Parsing and Coreferential Resolution for Bulgarian. In: (Angelova, G., K. Bontcheva, and R. Mitkov, Ed.). *Proceedings of the International Conference Recent Advances in Natural Language Processing (RANLP 2013)*, September 7-13, 2013, Hissar, Bulgaria, Incoma Ltd., Shoumen, Bulgaria, 2013, 755-762, ISSN 1313-8502

1.3. Списък на публикациите без рефериране и индексиране в световната система за рефериране, индексиране и оценяване (в световни вторични литературни източници) (70)

1. Ahmed S., M. Petrov, A. Taneva, Y. Todorov. Nonlinear model predictive control of an evaporator system using fuzzy-neural observer, In: *Proceedings of the International conference on Food Science, Engineering and Technologies'2013*, University of Food Technologies - Plovdiv, Bulgaria, vol. LX, 57-62, 2013, ISSN 1314-7102.
2. Altaparmakov I., Isaev G., Simulating the processes of plastic deformation with Finite Elements impact load, *Workshop NewNano + Int. Conf. RAM 2013*, October 8-10 2013, Bankya, Bulgaria, 123-126, ISSN 1314-4634
3. Andreev, A., M. Balev, P. Ivanov, M. Racheva. On the Polynomial Spaces of Rectangular Morley Elements, *International Conference UNITECH 2013*, Vol. 2, 402-405, 2013, Gabrovo, ISSN 1313-230X.
4. Аргиров, Х., Лазарова, Р., Тончев, Н., Копринкова-Христова, П., Лукарски, Я., Разработване на нови марки икономично легирани стомани за автомобилното машиностроене, Сборник материали с докладите от Трета Нац. Конф. с международно участие „Металознание, Хидро- и Аеродинамика, Национална Сигурност’2013”, 24-25 окт. 2013, София, 129-133, ISSN 1313-8308.
5. Atanasova, T., Integration of Heterogeneous Data and Processes in Digital Home, In: *Proc. of the International Conference Robotics, Automation and Mechatronics'13 RAM 2013*, 8-10 October 2013, Bankya, Bulgaria, 20-24, ISSN 1314-4634.
6. Atanassov, E. Development of Grid Services using Erlang, *CSIT2013 Conference*, Yerevan, Armenia, September 23-27, 2013, 286-289, ISBN: 978-5-8080-0797-0.
7. Atanassov, E., M. Dechev, G. Petrov, A. Karaivanova, T. Gurov, M. Durchova, HPC Cluster with GPGPU Capabilities. Performance and Features Evaluation, *Proceedings of the VIII Serbian-Bulgarian Astronomical Conference (VIII SBAC)*, No 12, 2013, 105-111, ISBN: 978-89035-02-5.
8. Balabosov I., Georgiev V., Hinov K., Karastoyanov D., Yatchev I., Influence of Different Geometric Parameters on the Static Force Characteristics of an Electromagnetic Actuator for Braille Screen., *International Symposium on Theoretical Electrical Engineering ISTET 2013*, June 24-26 2013, IV-39 – IV 42, Pilsen, Czech Republic, ISBN 978-80-261-0246-5
9. Bakanova, N., T. Atanasova, Data sources determination for information management in omis, *Proc. of the International Conference Robotics, Automation and Mechatronics'13 RAM 2013*, 8-10 October 2013, Bankya, Bulgaria, 25-28, ISSN 1314-4634.
10. Баканова, Н., Баканов, А., Ташев, Т. Програмный комплекс оценки управляемческой деятельности с использованием оборудования отслеживающего траекторию движения глаз пользователя. *Материалы 7-ой Международной конференции „Управление развитием крупномасшабных систем MLSД'2013”*. 30 Сентября-2 Октября 2013, Москва, Россия. Том 2. ИПУ РАН, Москва, Россия, 297-299, ISBN 978-5-91450-138-6.
11. Бонева А., З. Илчева, С. Ангелов, Д. Бъчваров, Д. Георгева, П. Гугутков, Н. Барух, М. Михов, Г. Исаев, Йо. Дошев, И. Стоянов, Апаратни и програмни средства

*Институт по информационни и комуникационни технологии –
Приложения към годишния отчет 2013 г.*

използвани за изграждане на комуникационна среда в проект БПМИО, *Сборник от доклади от международна конференция „RAM 2013”*, 17.10.2013, гр. София, 76-82, ISSN 1314-4634.

12. Боянов Л., „Образоването в дигиталното общество”. *Трудове на Международна научна конференция „Техника, технологии и образование“ ICTTE 2013*, Тракийски университет, Факултет „Техника и технологии“, 30 - 31 октомври 2013, 532-538, ISSN 1314-9474.
13. Бъчваров Д., А. Бонева, Б. Киров, Йо. Бонева, Г. Станев, Н. Барух, Система за обработка на първичната информация от прибори LP и DP - проект “Обстановка”, *Сборник от доклади от международна конференция „ RAM 2013”*, 17.10.2013, гр. София, 83-89, ISSN 1314-4634.
14. Димитров Ст., Тест за натоварване на Apache HTTP Server чрез различни видове файлове и измерване използването на хардуерните компоненти, *Първа национална тематична школа и борса за научни идеи в областта на информационните и комуникационните технологии*, Русе, 27-28 юни 2013, 212-217, ISSN 1314-9024
15. Димитров Ст., Информационна система за електронен абонамент на научно списание, International Workshop Autonomic Computing and Automatic Control in Computer Systems. *Международна конференция „Автоматика и информатика“ 2013 София*, 3-7 Октомври 2013, I-185 - I-188, ISSN 1313-1850
16. Dimov, D., and M. Dimitrijevic, Image Processing Suggestions to Improve the Astronomical Multiexposure Wide Plates Method, In: M. Dmitrievich, M. Tzvetkov (Eds.) *Proceedings of VIII Serbian-Bulgarian Astronomical Conference*, May 08-12, 2012, Leskovac, Serbia, 219-238, ISBN 978-8689035-02-5, Publ. Astron. Soc. “Rudjer Boskovic”, No.12,1-413 Belgrade, June 2013.
17. Fidanova S., Marinov P., Field Fire Simulation Applying Hexagonal Game Method, In *Proc. of Information System and Grid Technology International Conference*, Sofia, Bulgaria, 2013, 201- 209, ISSN: 1314-4855.
18. Guliashki V., Genova K., Kirilov L., Hybrid Evolutionary Algorithm for Integer Multiple-Objective Optimization Problems, In: *Proceedings of Papers of the XLVIII International Scientific Conference on Information, Communication and Energy Systems and Technologies ICEST2013*, (Editor Prof. Dr. Mitrovski, C.), June 26 – 29, 2013, Ohrid, Macedonia, vol. 1, 253-256, ISBN: 978-9989-786-90-7.
19. Guliashki V., Korsemov C., Toshev H., Kirilov L. and Genova K., Optimal Design of Elements in Confirmation of Panel Buildings, In: *Proceedings of Papers of the XLVIII International Scientific Conference on Information, Communication and Energy Systems and Technologies ICEST2013*, (Editor Prof. Dr. Mitrovski, C.), June 26 – 29, 2013, Ohrid, Macedonia, vol. 2, 555-558, ISBN: 978-9989-786-90-7.
20. Ilchev V., Zl. Ilcheva. Some Basic Properties of the Best Deviding Hyperplanes in the Problems of Classification. In: *Proceedings of International Conference “Automatics and Informatics’13”*, 4 -7 October , 2013, Sofia, SAI, Sofia, 2013, I-275 – I-278, ISSN: 1313-1850.
21. Ilchev V., Zl. Ilcheva. Some Basic Properties of the Best Deviding Hyperplanes in the Problems of Classification. *Proceedings of International Conference Automatics and*

***Институт по информационни и комуникационни технологии –
Приложения към годишния отчет 2013 г.***

Informatics'13, 4 -7 October 2013, Sofia, SAI, Sofia, 2013, I-275 – I-278, ISSN 1313-1869.

22. Ivanov R., Vasil Georgiev. Models of Quality for Cloud Services, *Proceedings of the 7th International Conference on Information Systems and Grid Technologies*, Sofia, Bulgaria, 30 May. – 1 June, 2013, 248-254, ISSN 1314-4855.
23. Иванов Вл. „Универсална апаратна среда за развой с препрограмириеми прибори”, *Сб. трудове на НМШ*, Руце, 2013, 35-40, ISSN 1314-9024.
24. Kandeva M., Sokolov B., Ivanova B., Pojidaeva V., Stoenchev S., C. Agalarev C., Influence of Nano-Diamond Particles on the Tribological Characteristics of Nickel Chemical Coatings, *Workshop NewNano + Int. Conf. RAM 2013*, October 8-10 2013, 5-11, Bankya, Bulgaria, ISSN 1314-4634
25. Kirilov L., Genova K., Guliashki V., Zhivkov P., Interactive Environment for Solving Multiple Objective Programming Problems GENS-IM, In: *Proceedings of Papers of the XLVIII International Scientific Conference on Information, Communication and Energy Systems and Technologies ICEST2013*, (Editor Prof. Dr. Mitrovski, C.), June 26 – 29, 2013, Ohrid, Macedonia, vol. 1, 179-182, ISBN: 978-9989-786-90-7.
26. Колев В., Компресия на цифрови изображения с ниски загуби, *Научна Конференция, Математика информатика и физика*, том 51, серия 6.1, 28–33, Руце, 2013, ISSN 1311-3321.
27. Койнов, Ст., Л. Дуковска. Интегриран подход за предсказващо поддържане в МСП, *Трудове на 21-ви Международен симпозиум „Управление на топлоенергийни обекти и системи”*, Баня, България, 55-59, 2013, ISSN 1313-2237.
28. Kolchakov, K., Comparative Analysis of Class Algorithms for Non-Conflict Schedule in Switching Nodes, In: *Proceeding of 17-th International Conference on Distributed Computer and Communication Networks (DCCN-2013): "Control, Computation, Communications"*, Moscow, October 07-10, 2013, 172-179, ISBN 978-5-94836-366-0.
29. Kolchakov K. Non-conflict schedule through finite automats in switching nodes. In: *Proc. of the International Conference Automatics and Informatics '13*, 03-07.10.2013, Sofia, Bulgaria, I-191 – I-194, ISSN 1313 – 1850.
30. Kolchakov K, Monov V. An Algorithm for Non – Conflict Schedule with Diagonal Activation of Joint Sub Matrices, In: *Proc. of the 17-th International Conference on Distributed Computer and Communication Networks, (DCCN-2013): "Control, Computation, Communications"*, Moscow, October 07-10, 2013, 180-187, ISBN 978-5-94836-366-0.
31. Kolchakov K., V. Monov. An Approach for Hardware Solution of the Conflicts Problem in Switching Nodes. In: *Proc. of the International Conference Robotics, Automation and Mechatronics'13 – RAM 2013*, Workshop ICT for new Materials and Nanotechnologies – New Nano, October 8-10, 2013 Bankya, Bulgaria, 138-141, ISSN 1314-4634
32. Koprinkova-Hristova, P., Reinforcement learning framework aimed at predictive maintenance of industrial plants, *21 Межд. Симпозиум Управление на енергийни, индустритални и екологични системи*, 7-8 ноември 2013 г., гр. Баня, 51-54. ISSN 1313-2237.

*Институт по информационни и комуникационни технологии –
Приложения към годишния отчет 2013 г.*

33. Лимбъри, М. Оптimalни многонивови методи за конформни квадратични, биквадратични и бикубични крайни елементи. *Автореферати на дисертации на Института по информационни и комуникационни технологии*, 4/2013, eISSN: 1314-6351.
34. Mihov M., Isaev G., Control of stand for research on effect "Combined impact" by means of swage with rocket engine, *Workshop NewNano + Int. Conf. RAM 2013*, October 8-10 2013, 127-132, Bankya, Bulgaria, ISSN 1314-4634
35. Милина, В., Т. Тагарев, В. Георгиев, Към изследването на политики за енергийна сигурност в условия на неопределеност, *Военен журнал* 120:1, 2013, 45-57. ISSN 0861-7392
36. Minchev, Z., Integrated Border Security Aspects: Bulgarian Academic Experience and Development Perspectives, In *Proceedings of International Conference “The Eastern Partnership: Assessment of Past Achievements and Future Trends”*, Bucharest, Romania, 24-25 November, 2012 Published by Military Publishing House, 346-355, ISBN 978-973-32-0929-4.
37. Минчев, З., Сигурност в дигиталното общество. Технологични перспективи и предизвикателства. Наука, образование, сигурност. *Сборник доклади от юбилейна международна научна конференция "Десет години образование по сигурност в НБУ: състояние и перспективи пред обучението в условия на динамична и труднопредвидима среда"*. София, Издателство „Планета-3“, 438-444, 2013, ISBN 978-954-535-796-1
38. Минчев, Д. Интерферометрични методи и алгоритми за моделиране и обработка на сателитни SAR изображения. *Автореферати на дисертации на Института по информационни и комуникационни технологии*. 2/2013, eISSN: 1314-6351.
39. Ockendon, H., S. Stoykov, T. Zorawik, S. Dimova, I. Georgiev, N. Kolkovska, M. Todorov, D. Vasileva, Prediction of sanding in subsurface hydrocarbon reser, *95th European Study Group with Industry (ESGI'95)*, Demetra Publishing House, Sofia, Bulgaria, 2013, ISBN 978-954-9526-84-4
40. Panteleev N., Medzhidieva B., Research on electromagnetic compatibility of E/ E /PE safety systems for industrial robots, *Workshop NewNano + Int. Conf. RAM 2013*, October 8-10 2013, 94-99, Bankya, Bulgaria, ISSN 1314-4634
41. Pavlov, Y., Preferences, Utility And General Equilibrium Analysis In: Edgeworth Box, *Proceeding of: International Conference "Automatics and Informatics'2013"*, Sofia, 3-7 October, 2013, I-15 – I-18, ISSN: 1313-1850.
42. Паунова, Е., К. Стоилова. Информационните технологии в помощ на изграждането на знания, *e-Journal VFU, Електронно списание на Варненския свободен университет „Ч. Храбър“*, бр 6, 2013, 1-27, ISSN 1313-7514.
43. Паунова Е. Проектиране и разработване на електронни игри за ученици като web-базирана услуга. *Автореферати на Института по информационни и комуникационни технологии*, 3/2013, e-ISSN: 1314-6351.
44. Паунова Е. Проектиране на игри за обучение. *International Workshop Autonomic Computing and Automatic Control in Computer Systems. Proceeding of Intern. Conf. Automatics and Informatics*, Sofia, October 3-7, 2013, I-181 – I-185, ISSN: 1313-1850

***Институт по информационни и комуникационни технологии –
Приложения към годишния отчет 2013 г.***

45. Peltakov, Alexander, Doychin Boyadzhiev, Mariusz Kozlowski, Zlatko Varbanov, Zlatogor Minchev, Optimization of the charging process in zinc hydrometallurgy, In: *ESGI' 95 Problems & Final Reports*, Demetra Publishing House, Sofia, 2013, 39- 45, ISBN 978-954-9526-84-4
46. Petrov, G., M. Dechev, E. Atanassov, Bulgarian Grid, Bulgarian Virtual Observatory and Some Astronomical Applications, *Proceedings of the VIII Serbian-Bulgarian Astronomical Conference (VIII SBAC)*, No 12, 2013, 57-89, ISBN: 978-89035-02-5.
47. Philipov, P., V.Lazarov, A Parallel Architecture for Fast Cosine Transform, ESI 2013: 3rd International Conference “Education, Science, Innovations” June 9-10 2013, Pernik, Bulgaria, 231 – 242, ISSN 1314-5711..
48. Pirinchev D., Bizhev B., Arshinkov S., Zheliazkov G., Ivanov D., Architecture of a portable handheld device for remotely collecting and transmitting data, *Workshop NewNano + Int. Conf. RAM 2013*, October 8-10 2013, Bankya, Bulgaria, 29-33, ISSN 1314-4634
49. Радева И. Модели за вземане на решения при формиране на кълстерни структури, *Автореферати на дисертации на Института по информационни и комуникационни технологии – БАН*, 1/2013, E-ISSN 1314-6351.
50. Sgurev V., S. Drangajov. Optimal Circulation of Mobile Robots, *Трудове на 21-ви Международен симпозиум „Управление на топлоенергийни обекти и системи“*, Баня, България, 77-80, 2013, ISSN 1313-2237.
51. Stoilov, T., K.Stoilova, M.Vladimirov. Modified Portfolio Optimization problem with lack of subjective influences. *Сб. Доклади от междуд. конф. „Перспективи пред индустритния бизнес“*, 6-7.12.2013, ИУ-Варна, 25-28, ISBN 978-954-8235-09-9.
52. Stoilova, K., T.Stoilov, K.Nikolov. Autonomic Computing Applications for Traffic Control. International Workshop Autonomic Computing and Automatic Control in Computer Systems. *Proceeding of Intern. Conf. “Automatics and Informatics 2013”*, 157-160, 2013, ISSN 1313-1850.
53. Stoymenov N., Gyoshev S., Thermography with infrared camera, *Workshop NewNano + Int. Conf. RAM 2013*, October 8-10 2013, Bankya, Bulgaria, 116-117, ISSN 1314-4634
54. Stoymenov N., Gyoshev S., Panev P., Klochkov L., Agalarev C., Automate the packaging processes and operation on foot "CURRY" - Part 2, *Workshop NewNano + Int. Conf. RAM 2013*, October 8-10 2013, Bankya, Bulgaria, 110-115, ISSN 1314-4634
55. Stoymenov N., Gyoshev S., Panev P., Klochkov L., Sokolov B., Automate the packaging processes and operation on foot "CURRY" - Part 1, *Workshop NewNano + Int. Conf. RAM 2013*, October 8-10 2013, Bankya, Bulgaria, 106-109, ISSN 1314-4634
56. Tagarev, T., Bulgaria: Protecting National Critical Infrastructures with the Contribution of the Ministry of Defense, *The European Journal of Critical Services and Infrastructure Protection* 1:1, October 2013, 28-31, ISSN 2344-3790
57. Tagarev, T. Good Governance of Intelligence from a Management Perspective, *Information & Security: An International Journal* 30, 2013, 34-40, ISSN 0861-5160
58. Tagarev, T., and P. Ivanova, Analytical support to foresighting EU roles as a Global Security Actor, *Information & Security: An International Journal* 29, no. 1, 2013, 21-33, ISSN 0861-5160

59. Tagarev, T., V. Georgiev, Barriers to the Implementation of the 'Smart Defence' Concept, *International High-level conference on "Smart Defence - Pooling and Sharing: Eastern European View on Multinational and Innovative Approaches to Capability Development"*, Sofia, Avangard Prima, 2013, 109-113. ISBN 978-619-160-101-1.
60. Tagarev, T., V. Georgiev, and J. Ahokas, Evaluating the Cross-impact of EU Functions as a Global Actor and Protector of Critical Infrastructures and Supply Chains, *Information & Security: An International Journal* 29, 2013, 34-48, ISSN 0861-5160
61. Tashev, T., Bakanov, A., Tasheva, R., Determination of the value of convergence parameter in a procedure of calculating the upper boundary of throughput for packet switch. In: *Proceedings of the International Conference Robotics, Automation and Mechatronics'13 RAM 2013*, 8-10 October 2013, Bankya, Bulgaria, 34-37, ISSN 1314-4634.
62. Ташев, Т., Моделирование пропускной способности MiMa алгоритма для пакетного коммутатора при входящем трафике типа «горячей точки». In: *Proceedings of the International Conference "Distributed Computer and communication networks DCCN 2013"*, October 7-10, 2013, Moscow, Russia. JSC "TECHNOSPHERA", Moscow, 2013. 257-264, ISBN 978-5-94836-366-0.
63. Ташев, Т., Монов, В., Каракоянов, Д. Обобщено-мрежов модел за определяне коефициента на филтрация на почвени проби. In: *Proceedings of the International Conference Automatics and Informatics '13*, 03-07 Октомври 2013 Sofia, Bulgaria, I-195-I-198, ISSN 1313-1850.
64. Terziyska M., Y. Todorov, M. Petrov. Predictive controller based on neuro-fuzzy model with multiple recurrent nodes, In: *Proceedings of the International conference on Food Science, Engineering and Technologies'2013*, University of Food Technologies-Plovdiv, Bulgaria, vol. LX, 63-68, 2013, ISSN 1314-7102.
65. Terziyska M., Y. Todorov, M. Petrov. Real-time Supervisory tuning of Predictive Controller, *Journal of Technical University-Sofia "Fundamental Sciences and Applications"*, , vol. 19, 155-160, Plovdiv, Bulgaria, 2013, ISSN 1310-8271.
66. Todorov Y., M. Terziyska, M. Petrov. Levenberg-Marcquadt training approach for Recurrent Fuzzy-Neural Network, In: *Proceedings of International Conference on Automatics and Informatics'2013*, I-139-I-141, 2013, ISSN 1313-1850.
67. Тричкова, Е., Уеб-базирана система за електронно обучение по медицински дисциплини – административен модул, *Първа национална тематична школа и борса за научни идеи в областта на информационните и комуникационни технологии*, Русе 2013, 27-28 Юни 2013, 107-112, ISSN 1314-9024
68. Zagurski K, Boyadziev T., Boyadziev G., Delchev K., Vitkov V. Controlling the pressing force in an automated drilling bone, *Workshop NewNano + Int. Conf. RAM 2013*, October 8-10 2013, Bankya, Bulgaria, 52-55, ISSN 1314-4634
69. Загурски К., Бояджиев Т., Бояджиев Г., Делчев К., Витков В. Контролиране на силата на натиск при автоматизирано пробиване на кости. *Int. Conf. Robotics, Automation and Mechatronics'13 RAM 2013*, 8-10.10.2013, Баня, София, CD, ISSN 1314-4634

70. Zheliazkov G., Ivanov D., Pirinchev D., Bizhev B., Arshinkov S., Methods and Technologies for Localization of Static and Dynamic Objects, *Workshop NewNano + Int. Conf. RAM 2013*, October 8-10 2013, Bankya, Bulgaria, 100-105, ISSN 1314-4634

1.4. Списък на монографиите (3)

1. Pavlov Y., R. D. Andreev, *Decision Control, Management, and Support in Adaptive and Complex Systems: Quantitative Models*. IGI Global, Pennsylvania (USA), 2013, ISBN: 13: 9781466629677, ISBN10: 1466629673, EISBN13: 9781466629684
2. Славов З., М. Брусева, В. Николаева, С. Ненков, Т. Стоилов, К. Стоилова, М. Владимиров. *Методи и модели за вземане на бизнес решения*. ВСУ „Ч. Храбър”, Унив. издат., 2013, ISBN 978-954-715-608-1
3. Tagarev, T. and G. Tsvetkov. *Relating Defence Policy to Data: Comparative Defence Data Analysis*, Geneva, Geneva Centre for the Democratic Control of Armed Forces, 2013, ISBN 978-92-9222-289-5

1.5. Списък на учебници, учебни помагала, публицистика, научно-популярни произведения, художествени творби от всякакъв вид (5)

1. Боянов К., Джон Атанасов 110 години от рождението, *сп. БАН*, кн. 5, 2013, изд. „М. Дринов”, София.
2. Boyanov K., Information Evolution and Man, Mathematics and Natural Science, In: *Proceedings of the Fifth International Scientific Conference-FMNS 2013*, June 2013, SWU “Neofit Rilski”, Blagoevgrad.
3. Боянов К., Влияние на приеманата и обработвана информация върху поведението на человека, *Сп. на БАН*, кн. 3, 2013, изд. „М. Дринов”, София.
4. Добринкова, Н. *Информационни системи за симулиране на поведението на горски и полски пожари*, 135 стр. , Издателство „Амикум” , 2013, ISBN: 978-619-90047-1-5.
5. Георгиев, В. *Планиране на способности за кибер сигурност на базата на сценарии*. София, изд. Авангард, 2013 г. ISBN 978-954-323-651-1.

1.6. Спъсък на редактирани научни сборници (18)

1. Angelova, G., K. Bontcheva and R. Mitkov (Eds.). *Proceedings of the International Conference RANLP-13 “Recent Advances in Natural Language Processing”*, Hissar, Bulgaria, 9-11 September 2013, Incoma Ltd., Shoumen, ISSN 1313-8502, 2013.
2. Dey, A., S. Krause, I. Nikolova, E. M. Vecchi, S. Bethard, P. I. Nakov, F. Xu. (Eds.) *Proceedings of the Student Research Workshop associated with the 51st Annual Meeting of the Association for Computational Linguistics*, Sofia, Bulgaria, August 5-7, 2013, Association for Computational Linguistics (ACL), ISBN 978-1-937284-50-3.
3. Dimov, I. T., I. Faragó, and L. Vulkov (Eds). *Proceedings of NAA 2012, LNCS 8236*, Springer, 2013, ISSN: 0302-9743.

4. Dimitrov, V., Georgiev, V. (Eds.) *Proceedings of the 7th International Conference on Information Systems and Grid Technologies*, Sofia, Bulgaria, 30 May – 1 June, 2013. ISSN 1314-4855.
5. Farago, I., K. Georgiev, A. Havasi, Z. Zlatev (Eds.), *Efficient Numerical Methods for Scientific Applications*, Special Issue of Computers&Mathematics with Applications, doi: 10.1016/j.camwa.2012.07.006, ISSN: 0898-122, Vol. 65, No.3, February 2013, ISSN 0898-122
6. Fidanova, S. (Ed.) Recent Advances in Computational Optimization, *Studies in Computational Intelligence*, Vol. 470, Springer, 2013, ISBN 978-3-319-00409-9.
7. Georgiev, K., Z. Zlatev, A. Ebel (Eds.), *Advanced Applications of Environmental Modelling Systems*, Special Issue in Int. J. of Environment and Pollution, Vol. 46, Nos. 1/2, 2011, ISSN: 0957-4352
8. Karátson, J., S. Korotov, S. Margenov (Eds.), *Numerical Methods for Large-Scale Scientific Computing*, I, Central European Journal of Mathematics, April 2013, Volume 11, Issue 4, ISSN:1895-1074
9. Karátson, J., S. Korotov, S. Margenov (Eds.), *Numerical Methods for Large-Scale Scientific Computing, II*, Central European Journal of Mathematics, August 2013, Volume 11, Issue 8, ISSN:1895-1074
10. Koprinkova-Hristova, P. and K. Alexiev (Eds.). *Proceedings of IEEE International Symposium on Innovations in Intelligent Systems and Applications (INISTA)*, ISBN: 978-1-4799-0661-1, IEEE Catalog Number: CFP1372N-ART
11. Kübler, S., P. Osenova, M. Volk (Eds.). *Proc. of the Twelfth Workshop on Treebanks and Linguistic Theories (TLT12)*. Bulgaria, 2013, IICT-BAS, ISBN: 978-954-91700-6-1.
12. Iliev, O., S. Margenov, P. Minev, P. Vassilevski, L. Zikatanov (Eds.), *Numerical Solution of Partial Differential Equations: Theory, Algorithms, and Their Applications*, Springer Proceedings in Mathematics & Statistics, 2013, ISSN: 2194-1009
13. Maynard, D., M. van Erp, B. Davis, P. Osenova, K. Simov, G. Georgiev, P. Nakov (Eds.). *Proceedings of the Joint Workshop on NLP&LOD and SWAIE: Semantic Web, Linked Open Data and Information Extraction. Corpora held in conjunction with RANLP-13*, Hissar, Bulgaria, 12 September 2013, Incoma Ltd., Shoumen, 2013, ISBN 978-954-452-025-0.
14. Mladenov, V.; Koprinkova-Hristova, P.; Palm, G.; Villa, A.; Apolloni, B.; Kasabov, N.K. (Eds.). *Proceedings of Artificial Neural Networks and Machine Learning - ICANN 2013, 23rd International Conference on Artificial Neural Networks*, Sofia, Bulgaria, September 10-13, 2013, *Lecture Notes in Computer Science*, Vol. 8131, , 2013, XVIII, ISBN 978-3-642-40727-7
15. Savova, G., K. B. Cohen and G. Angelova (Eds.). *NLP for Medicine and Biology 2013, Proceedings of the International Workshop held in conjunction with RANLP-13*, Hissar, Bulgaria, 13 September 2013, Incoma Ltd., Shoumen, 2013, ISBN 978-954-452-024-3.
16. Temnikova, Irina, Ivelina Nikolova and Natalia Konstantinova (Eds.). *Proceedings of the Student Research Workshop associated with the 9th International Conference on Recent Advances in Natural Language Processing (RANLP 2013)*, 9-11 September 2013, INCOMA Ltd. Shoumen, Bulgaria, 2013, ISSN 1314-9156.

*Институт по информационни и комуникационни технологии –
Приложения към годишния отчет 2013 г.*

17. Терзиева, В., Кадемова-Кацарова, П. (Eds.) Съвременни ИКТ базирани методи за обучение, Доклади на VI-та национална конференция „Образоването в информационното общество”, 237– 247, 30 - 31 май, Пловдив, 2013, ISSN 1314-0752.
18. Vertan, C., M. Slavcheva and P. Osenova (Eds.). *Adaptation of Language Resources and Tools for Closely Related Languages and Language Variants, Proceedings of International Workshop, RANLP 2013*, Hissar, Bulgaria, Incoma Ltd., Shoumen, 2013, ISBN 978-954-452-026-7.

1.7. Списък на отпечатани дисертационни трудове

(7)

1. Атанасова В. *Изследване на алгоритми за конструиране на обобщеномрежови модели*, Дисертационен труд за присъждане на ОС “Доктор”, ИИКТ – БАН, София, 2013, ISBN 978-954-322-593-4.
2. Георгиева П. *Изследване на модели на софт компютинг за управление в реално време*, Дисертационен труд за присъждане на ОС “Доктор”, ИИКТ – БАН, София, 2013, ISBN 978-954-322-604-7.
3. Илчев, С., *Модулни методи за вграждане на цифрова информация в изображения за подобряване сигурността на Интернет-базирани комуникационни платформи*, Академично издателство "Проф. Марин Дринов", София 2013, ISBN 978-954-322-715-0.
4. Костадинов Т., *Методи и алгоритми за обработка на SAR и ISAR изображения*, Дисертация за придобиване на ОНС “доктор”, ИИКТ-БАН, Изд. Марин Дринов, октомври 2013, ISBN: 979-954-322-654-2
5. Лимбери М. *Оптimalни многонивови методи за конформни квадратични, биквадратични и бикубични крайни елементи*, Дисертационен труд за присъждане на ОС “Доктор”, ИИКТ – БАН, София, 2013, ISBN 978-954-322-625-2
6. Паунова Е. *Проектиране и разработване на електронни игри за ученици като web-базирана услуга*. Академично издателство „Проф. Марин Дринов“ ISBN 978-954-322-598-9, 2013.
7. Вълканов В. *Контекстно ориентирано управление на електронни услуги*, Дисертационен труд за присъждане на ОС “Доктор”, ИИКТ – БАН, София, 2013, ISBN 978-954-322-701-3.