

Publications with DOI in Peer Reviewed Journals - AComIn months 1-18

1. Nedjalkov, M., P. Schwaha, S. Selberherr, J. M. Sellier, D. Vasileska. Wigner quasi-particle attributes—An asymptotic perspective. Applied Physics Letters 102, art. no. 163113, 163113-1 - 163113-4. ISSN: 0003-6951. IF (2012): 3.794. 5-year IF: 3.817. DOI [10.1063/1.4802931](https://doi.org/10.1063/1.4802931)
2. Sellier, J. M., M. Nedjalkov, I. Dimov, S. Selberherr. Decoherence and Time Reversibility: the Role of Randomness at Interfaces. Journal of Applied Physics, AIP Publishing, 2013. p. 174902 (7 pages). DOI [10.1063/1.4828736](https://doi.org/10.1063/1.4828736)
3. Karaivanova A., E. Atanassov, T. Gurov (2013), Monte Carlo Simulation of Ultrafast Carrier Transport: Scalability Study, In: Alexandrov V., M. Lees, V. Krzhizhanovskaya, Jack Dongarra and Peter M.A. Sloot (Eds.), Proceedings of ICCS 2013, 5-7 June 2013, Barcelona, ELSEVIER Procedia Computer Science 18 (2013), pp. 2298-2306, ISSN: 1877-0509. DOI: [10.1016/j.procs.2013.05.401](https://doi.org/10.1016/j.procs.2013.05.401)
4. Stoykov, S. and S. Margenov. Nonlinear Vibrations of 3D Laminated Composite Beams. Mathematical Problems in Engineering, Vol. 2014, pp. 1-14, DOI [10.1155/2014/892782](https://doi.org/10.1155/2014/892782)
5. Kraus, J., M. Lymbery, and S. Margenov. Robust algebraic multilevel preconditioners for anisotropic elliptic problems. Springer Proceedings in Mathematics and Statistics. Vol. 45, ISSN 2194-1009, pp. 217-246. DOI [10.1002/nla.1876](https://doi.org/10.1002/nla.1876)
6. J.M. Sellier, I. Dimov. *A Wigner approach to the study of wave packets in ordered and disordered arrays of dopants*. Physica A: Statistical Mechanics and its Applications, 2014, doi: <http://dx.doi.org/10.1016/j.physa.2014.03.065>
7. J.M. Sellier, I. Dimov. *A Wigner Monte Carlo Approach to Density Functional Theory*. Journal of Computational Physics, Elsevier, 2014. ISSN: 0021-9991. <http://dx.doi.org/10.1016/j.jcp.2014.03.065>
8. J.M. Sellier, S. Amoroso, M. Nedjalkov, S. Selberherr, A. Asenov, I. Dimov. *Electron Dynamics in Nanoscale Transistors by Means of Wigner and Boltzmann Approaches*. Physica A, Elsevier, 2013. DOI [10.1016/j.physa.2004.04.121](https://doi.org/10.1016/j.physa.2004.04.121)
9. Stoykov, S., S. Margenov. *Numerical computation of periodic responses of nonlinear large-scale systems by shooting method*, Computers & Mathematics with Applications, DOI [10.1016/j.camwa.2014.01.023](https://doi.org/10.1016/j.camwa.2014.01.023)
10. Georgieva, I. and C. Hofreither. *Interpolation of harmonic functions based on Radon projections*. Numerische Mathematik, November 2013. DOI [10.1007/s00211-013-0592-y](https://doi.org/10.1007/s00211-013-0592-y)
11. Georgieva, I. and C. Hofreither. *Cubature Rules for Harmonic Functions Based on Radon Projections*. Calcolo, March 2014. Springer Milan, DOI [10.1007/s10092-014-0111-2](https://doi.org/10.1007/s10092-014-0111-2)
12. Radeva, I., Multi-Criteria Models for Cluster Design. Cybernetics and Information Technologies, Vol. 13, No. 1, Sofia 2013, Print ISSN-9702, Online ISSN 1314-4081, pp. 18-33. DOI: [10.2478/cait-2013-0003](https://doi.org/10.2478/cait-2013-0003)
13. Hristov V, G. Agre. A Software System for Classification of Archaeological Artefacts Represented by 2D Plans. Cybernetics and Information Technologies, Vol. 13, № 2, ISSN 1311-9702, pp. 82-96. DOI: [10.2478/cait-2013-0017](https://doi.org/10.2478/cait-2013-0017)

14. Dichev, C., D. Dicheva, G. Agre, and G. Angelova. *Current Practices, Trends and Challenges in K-12 Online Learning*. *Cybernetics and Information Technology*, Vol. 13 No. 3, ISSN 1311-9702, pp. 91-110, DOI [10.2478/cait-2013-0028](https://doi.org/10.2478/cait-2013-0028)
15. Fidanova S. *Application of HPD Model for Predicting Protein Mutations*. *Cybernetics and Information Technologies*, Vol 13., No. 4, pp. 95-103. DOI: [10.2478/cait-2013-0056](https://doi.org/10.2478/cait-2013-0056)
16. Stoilova, K., T. Stoilov, K. Nikolov. *Autonomic Properties in Traffic Control*. *Cybernetics and Information Technology*, Vol. 13, No 4, pp. 18-32. DOI: [10.2478/cait-2013-0050](https://doi.org/10.2478/cait-2013-0050)
17. Trichkova, E., K. Stoilova. *An Approach for Quality Assessment and Effectiveness of a Web-Based System for Distance Learning*. *Cybernetics and Information Technology*, Vol. 13, No 4, pp. 63-73. DOI: [10.2478/cait-2013-0054](https://doi.org/10.2478/cait-2013-0054)
18. Vassil Sgurev, Stanislav Drangajov. *Risk Estimation and Stochastic Control of Innovation Processes*. *Cybernetics and Information Technology*, Volume 14, No 1, pp.3-10, DOI: [10.2478/cait-2014-0001](https://doi.org/10.2478/cait-2014-0001)
19. Doukovska L., S. Vassileva. *Intelligent Methods for Process Control and Diagnostics of Mill Fan System*. *Cybernetics and Information Technologies*, Vol. 14, No. 1, pp. 151-160, DOI: [10.2478/cait-2014-0012](https://doi.org/10.2478/cait-2014-0012)
20. Dzhambov, V. *High Precision Computing of Definite Integrals with .NET Framework C# and X-MPIR*. *Cybernetics and Information Technologies*, Vol. 14, No. 1, pp. 172-182, DOI: [10.2478/cait-2014-0014](https://doi.org/10.2478/cait-2014-0014)
21. Stoilova, K., T. Stoilov, H.Abouaïssa. *Traffic Lights Optimization with Measurements of Noise Levels*. *Proceedings of the 1st IFAC Workshop on Advances in Control and Automation Theory for Transportation Applications*, September 16-17, 2013. Istanbul, Turkey, *Control and Automation Theory for Transportation Applications*, Volume # 1, Part# 1, pp. 31-36, DOI [10.3182/20130916-2-TR-4042.00019](https://doi.org/10.3182/20130916-2-TR-4042.00019)

Articles/Sections with DOI in an Edited book or Book series - AComIn months 1-18

22. Georgieva, I., C. Hofreither and R. Uluchev. *Least Squares Fitting of Harmonic Functions Based on Radon Projections*. In: Morten Daehlen, Michael Floater, Tom Lyche, Marie-Laurence Mazure, Knut Morken, and Larry L. Schumaker (Eds.) *Mathematical Methods for Curves and Surfaces*, *Lecture Notes in Computer Science* Volume 8177, 2014, pp. 158-171, DOI [10.1007/978-3-642-54382-1_9](https://doi.org/10.1007/978-3-642-54382-1_9) (SJR: 0.332)
23. Cantoni, V., D.T. Dimov, *Structural Blocks Retrieval in Macromolecules: Saliency and Precision Aspects*. In: *ICIAP Workshops*, *Lecture Notes in Computer Science*, Vol. 8158, Springer, pp. 372-380, ISSN 0302-9743, ISBN 978-3-642-41189-2, DOI [10.1007/978-3-642-41190-8_40](https://doi.org/10.1007/978-3-642-41190-8_40)
24. Koprinkova-Hristova, P., K. Alexiev. *Echo State Networks in Dynamic Data Clustering* In: Mladenov, V., Koprinkova-Hristova, P., Palm, G, Villa, A.E.P., Appollini, B., Kasabov, N. (Eds.) *ICANN 2013*, *Lecture Notes in Computer Science*, vol. 8131, ISSN: 0302-9743, ISBN: 978-3-642-40727-7, DOI: [10.1007/978-3-642-40728-4_43](https://doi.org/10.1007/978-3-642-40728-4_43), Springer-Verlag Berlin Heidelberg, pp. 343-350.

25. Todorov, Y., M. Terzyiska, and M. Petrov. Recurrent Fuzzy-Neural Network with Fast Learning Algorithm for Predictive Control. In: Mladenov, V., Koprinkova-Hristova, P., Palm, G, Villa, A.E.P., Appollini, B., Kasabov, N. (Eds.) ICANN 2013, Lecture Notes in Computer Science, vol. 8131, ISSN: 0302-9743, ISBN: 978-3-642-40727-7, DOI [10.1007/978-3-642-40728-4_58](https://doi.org/10.1007/978-3-642-40728-4_58), Springer-Verlag Berlin Heidelberg, pp. 459-466.

Publications with DOI in Peer Reviewed Proceedings of a Conference/Workshop - AComIn months 1-18

26. Amoroso, S., L. Gerrer, A. Asenov, J. M. Sellier, I. Dimov, M. Nedjalkov, and S. Selberherr. Quantum Insights in Gate Oxide Charge-Trapping Dynamics in Nanoscale MOSFETs. Proceedings of the 18th International Conference on Simulation of Semiconductor Processes and Devices, IEEE, 2013, pp.25 – 28. DOI [10.1109/SISPAD.2013.6650565](https://doi.org/10.1109/SISPAD.2013.6650565)

27. Sellier, J.M., M. Nedjalkov, I. Dimov, and S. Selberherr. Two-dimensional Transient Wigner Particle Model. Proceedings of the 18th International Conference on Simulation of Semiconductor Processes and Devices, IEEE, 2013, pp. 404 –407. DOI [10.1109/SISPAD.2013.6650660](https://doi.org/10.1109/SISPAD.2013.6650660)

28. Angelova, G. Automatic information extraction from patient records in Bulgarian language. Proceedings of the 14th Int. Conf. CompSysTech '13, ACM Press, pp. 11-14, DOI [10.1145/2516775.2516777](https://doi.org/10.1145/2516775.2516777)

29. Dimitrov, S. and T. Stoilov. Loading test of Apache HTTP server by video file and usage measurements of the hardware components. Proceedings of the 14th Int. Conf. CompSysTech '13, ACM Press, pp. 59-66, DOI [10.1145/2516775.2516799](https://doi.org/10.1145/2516775.2516799)

30. Nedkov, S. and D. Dimov. Emotion recognition by face dynamics. Proceedings of the 14th Int. Conf. CompSysTech '13, ACM Press, pp. 128-136, DOI [10.1145/2516775.2516794](https://doi.org/10.1145/2516775.2516794)

31. Ivanov, V. A program for an automatic PicoBlaze type embedded system generation. Proceedings of the 14th Int. Conf. CompSysTech '13, ACM Press, pp. 91-97, DOI [10.1145/2516775.2516784](https://doi.org/10.1145/2516775.2516784)

32. Tashev, T. and V. Monov. A computer modeling of the throughput of a crossbar switch by PI-patterns for uniform traffic with variable intensity. Proceedings of the 14th Int. Conf. CompSysTech '13, ACM Press, pp. 53-58, DOI [10.1145/2516775.2516790](https://doi.org/10.1145/2516775.2516790)

33. Alexiev K., Iv. Nikolova, An Algorithm for Error Reducing in IMU. In: Proc. of 2013 IEEE International Symposium on Innovations in Intelligent Systems and Applications (INISTA), 19-21 June 2013, Albena, Bulgaria, IEEE Xplore©, ISBN: 978-1-4799-0659-8, pp.1-6, DOI [10.1109/INISTA.2013.6577663](https://doi.org/10.1109/INISTA.2013.6577663)

34. Borissova D., I. Mustakerov, A concept of intelligent e-maintenance decision making system. In: Proc. of 2013 IEEE International Symposium on Innovations in Intelligent Systems and Applications (INISTA), 19-21 June 2013, Albena, Bulgaria, IEEE Xplore©, ISBN: 978-1-4799-0659-8, DOI [10.1109/INISTA.2013.6577668](https://doi.org/10.1109/INISTA.2013.6577668)

35. Koprinkova-Hristova, P., D. Angelova, D. Borisova, and G. Jelev. Clustering of Spectral Images Using Echo State Networks. In: 2013 IEEE International Symposium on Innovations in Intelligent Systems and Applications, IEEE INISTA 2013, June 19-21, Albena, Bulgaria, IEEE Xplore©, ISBN: 978-147990661-1, DOI [10.1109/INISTA.2013.6577633](https://doi.org/10.1109/INISTA.2013.6577633)
36. Koprinkova-Hristova, P., L. Doukovska, and P. Kostov. Working regimes classification for predictive maintenance of mill fan systems. In: Proc. of 2013 IEEE International Symposium on Innovations in Intelligent Systems and Applications, IEEE INISTA 2013, June 19-21, Albena, Bulgaria, IEEE Xplore©, ISBN: 978-147990661-1, DOI [10.1109/INISTA.2013.6577632](https://doi.org/10.1109/INISTA.2013.6577632)
37. Dezert J., A. Tchamova, D. Han and J.-M. Tacnet. Why Dempster's rule doesn't behave as Bayes rule with informative priors". In: Proc. of IEEE International Symposium on Innovations in Intelligent Systems and Applications (INISTA), Albena, Bulgaria, 19-21 June, 2013, IEEE Xplore©, ISBN:978-1-4799-0659-8, DOI [10.1109/INISTA.2013.6577631](https://doi.org/10.1109/INISTA.2013.6577631)
38. Tchamova A. and J. Dezert. Tracking applications with fuzzy-based fusion rules. In: Proc. of IEEE International Symposium on Innovations in Intelligent Systems and Applications (INISTA), Albena, Bulgaria, 19-21 June 2013, IEEE Xplore©, ISBN:978-1-4799-0659-8, DOI [10.1109/INISTA.2013.6577630](https://doi.org/10.1109/INISTA.2013.6577630)
39. Mustakerov I., D. Borissova. An intelligent approach for optimum maintenance strategy defining. In: Proc. of 2013 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.2013.6577666](https://doi.org/10.1109/INISTA.2013.6577666)
40. Strandjev, B. and G. Agre. On applicability of Principal Component Analysis to concept learning from images. In: Proc. of 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)
41. Todorov Y., M. Terziyska, S. Ahmed, M. Petrov. Fuzzy-Neural Predictive Control using Levenberg-Marquardt optimization approach. In: Proc. of International IEEE conference on Innovations in Intelligent Systems and Applications, INISTA'2013, Albena, Bulgaria, ISBN 978-1-4799-0659-8, pp. 1-5. DOI [10.1109/INISTA.2013.6577624](https://doi.org/10.1109/INISTA.2013.6577624)
42. Garvanov, I. EXC CFAR BI Processor with Polar Hough Transform in the Presence of Binominal Impulse Interference, In: Proc of the Signal Processing Symposium SPS-2013, 5-7 June 2013, Jachranka, Poland, ISBN: 978-1-4673-6319-8-13- 2013 IEEE, 4 pages, DOI [10.1109/SPS.2013.6623594](https://doi.org/10.1109/SPS.2013.6623594)
43. Sgurev V., L. Doukovska, S. Drangajov, and V. Nikov, Network Flow Interpretation of Innovation Processes and Risks. In: Proc. of the Signal Processing Symposium – SPS'13, Jachranka Village, Poland, CD, ISBN 978-1-4673-6319-8-13- 2013 IEEE. DOI [10.1109/SPS.2013.6623603](https://doi.org/10.1109/SPS.2013.6623603)
44. Shahpazov V., V. Velevev, L. Doukovska (2013), Design and Application of Artificial Neural Networks for Predicting the Values of Indexes on the Bulgarian Stock Market. In: Proc. of the Signal Processing Symposium – SPS'13, Jachranka Village, Poland, CD, ISBN 978-1-4673-6319-8-13- 2013 IEEE. DOI [10.1109/SPS.2013.6623604](https://doi.org/10.1109/SPS.2013.6623604)

45. Boshnakov K., L. Doukovska, E. Mihailov, V. Petkov, S. Vassileva, S. Kojnov (2013), Predictive Maintenance Model-Based Approach for Objects Exposed to Extremely High Temperatures. In: Proc. of the Signal Processing Symposium – SPS'13, Jachranka Village, Poland, CD, ISBN 978-1-4673-6319-8-13- 2013 IEEE. DOI [10.1109/SPS.2013.6623621](https://doi.org/10.1109/SPS.2013.6623621)

46. Koprinkova-Hristova P., K. Alexiev, D. Borisova, G. Jeleu, V. Atanassov. Recurrent neural networks for automatic clustering of multispectral satellite images. In: Proc. of Image and Signal Processing for Remote Sensing XIX, SPIE, DOI [10.1117/12.2029191](https://doi.org/10.1117/12.2029191)