

# Vassil N Alexandrov

## List of Publications by Year in descending order

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Version: 2024-02-01

63  
papers

600  
citations

933264

10  
h-index

642610

23  
g-index

68  
all docs

68  
docs citations

68  
times ranked

801  
citing authors

| #  | ARTICLE                                                                                                                                                                   | IF  | CITATIONS |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 1  | A comprehensive sensitivity analysis of the WRF model for air quality applications over the Iberian Peninsula. Atmospheric Environment, 2008, 42, 8560-8574.              | 1.9 | 250       |
| 2  | Towards Understanding Uncertainty in Cloud Computing Resource Provisioning. Procedia Computer Science, 2015, 51, 1772-1781.                                               | 1.2 | 79        |
| 3  | Using Haptics to Improve Immersion in Virtual Environments. Lecture Notes in Computer Science, 2006, , 603-609.                                                           | 1.0 | 38        |
| 4  | Parallel genetic algorithms for stock market trading rules. Procedia Computer Science, 2012, 9, 1306-1313.                                                                | 1.2 | 21        |
| 5  | Is Virtual Reality a Memorable Experience in an Educational Context?. International Journal of Emerging Technologies in Learning, 2011, 6, 53-57.                         | 0.8 | 18        |
| 6  | Using Ontology Engineering Methods to Improve Computer Science and Data Science Skills. Procedia Computer Science, 2016, 80, 1780-1790.                                   | 1.2 | 13        |
| 7  | News clustering based on similarity analysis. Procedia Computer Science, 2017, 122, 715-719.                                                                              | 1.2 | 12        |
| 8  | Mixed Monte Carlo Parallel Algorithms for Matrix Computation. Lecture Notes in Computer Science, 2002, , 609-618.                                                         | 1.0 | 10        |
| 9  | Use of auditory cues for wayfinding assistance in virtual environment. , 2008, , .                                                                                        |     | 10        |
| 10 | Computational Science Research Methods for Science Education at PG Level. Procedia Computer Science, 2015, 51, 1685-1693.                                                 | 1.2 | 10        |
| 11 | Monte Carlo Numerical Treatment of Large Linear Algebra Problems. Lecture Notes in Computer Science, 2007, , 747-754.                                                     | 1.0 | 10        |
| 12 | Selection methods for interactive creation and management of objects in 3D immersive environments. Procedia Computer Science, 2010, 1, 2609-2617.                         | 1.2 | 8         |
| 13 | A Sparse Parallel Hybrid Monte Carlo Algorithm for Matrix Computations. Lecture Notes in Computer Science, 2005, , 743-751.                                               | 1.0 | 7         |
| 14 | On scalability behaviour of Monte Carlo sparse approximate inverse for matrix computations. , 2013, , .                                                                   |     | 6         |
| 15 | Enhancing Monte Carlo Preconditioning Methods for Matrix Computations. Procedia Computer Science, 2014, 29, 1580-1589.                                                    | 1.2 | 6         |
| 16 | Towards Monte Carlo preconditioning approach and hybrid Monte Carlo algorithms for Matrix Computations. Computers and Mathematics With Applications, 2015, 70, 2709-2718. | 1.4 | 6         |
| 17 | Territorial design optimization for business sales plan. Journal of Computational and Applied Mathematics, 2018, 340, 501-507.                                            | 1.1 | 6         |
| 18 | Perspectives on Potential of Sound in Virtual Environments. , 2007, , .                                                                                                   |     | 5         |

| #  | ARTICLE                                                                                                                                                                              | IF  | CITATIONS |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 19 | Route to exascale: Novel mathematical methods, scalable algorithms and Computational Science skills. Journal of Computational Science, 2016, 14, 1-4.                                | 1.5 | 5         |
| 20 | Creation and Control of Interactive Virtual Environments. Lecture Notes in Computer Science, 2006, , 595-602.                                                                        | 1.0 | 5         |
| 21 | Eye tracking and gaze vector calculation within immersive virtual environments. , 2007, , .                                                                                          |     | 4         |
| 22 | CAN AGENT INTELLIGENCE BE USED TO ACHIEVE FAULT TOLERANT PARALLEL COMPUTING SYSTEMS?. Parallel Processing Letters, 2011, 21, 379-396.                                                | 0.4 | 4         |
| 23 | Towards scalable mathematics and scalable algorithms for extreme scale computing. Journal of Computational Science, 2013, 4, iii-v.                                                  | 1.5 | 4         |
| 24 | Facilitating analysis of Monte Carlo dense matrix inversion algorithm scaling behaviour through simulation. Journal of Computational Science, 2013, 4, 473-479.                      | 1.5 | 4         |
| 25 | Automating fault tolerance in high-performance computational biological jobs using multi-agent approaches. Computers in Biology and Medicine, 2014, 48, 28-41.                       | 3.9 | 4         |
| 26 | On the Monte Carlo Matrix Computations on Intel MIC Architecture. Cybernetics and Information Technologies, 2017, 17, 49-59.                                                         | 0.4 | 4         |
| 27 | Psychological Warfare Analysis Using Network Science Approach. Procedia Computer Science, 2016, 80, 1856-1864.                                                                       | 1.2 | 3         |
| 28 | Comparing Electoral Campaigns by Analysing Online Data. Procedia Computer Science, 2016, 80, 1865-1874.                                                                              | 1.2 | 3         |
| 29 | Parallel RMCLP Classification Algorithm and Its Application on the Medical Data. IEEE Transactions on Cloud Computing, 2020, 8, 532-538.                                             | 3.1 | 3         |
| 30 | Error Analysis of a Monte Carlo Algorithm for Computing Bilinear Forms of Matrix Powers. Lecture Notes in Computer Science, 2006, , 632-639.                                         | 1.0 | 3         |
| 31 | Comparison of the Computational Cost of a Monte Carlo and Deterministic Algorithm for Computing Bilinear Forms of Matrix Powers. Lecture Notes in Computer Science, 2006, , 640-647. | 1.0 | 3         |
| 32 | Case study: interacting with volumetric medical datasets in networked CAVE environments. , 2005, , .                                                                                 |     | 2         |
| 33 | Implementing intelligent cores using processor virtualization for fault tolerance. Procedia Computer Science, 2010, 1, 2197-2205.                                                    | 1.2 | 2         |
| 34 | Intelligent Agents for Fault Tolerance: From Multi-agent Simulation to Cluster-Based Implementation. , 2010, , .                                                                     |     | 2         |
| 35 | The Role of Computational Science and Emerging Technologies in the Natural Sciences Education at University Level. Procedia Computer Science, 2012, 9, 1789-1798.                    | 1.2 | 2         |
| 36 | Quantifying Uncertainty in Phylogenetic Studies of the Slavonic Languages. Procedia Computer Science, 2013, 18, 2269-2277.                                                           | 1.2 | 2         |

| #  | ARTICLE                                                                                                                                                                                            | IF  | CITATIONS |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 37 | Parallel Regularized Multiple-criteria Linear Programming. Procedia Computer Science, 2014, 31, 58-65.                                                                                             | 1.2 | 2         |
| 38 | Discovering Most Significant News Using Network Science Approach. Procedia Computer Science, 2015, 51, 1811-1817.                                                                                  | 1.2 | 2         |
| 39 | Preparing input data for sensitivity analysis of an air pollution model by using high-performance supercomputers and algorithms. Computers and Mathematics With Applications, 2015, 70, 2773-2782. | 1.4 | 2         |
| 40 | A Stochastic Approach to Solving Bilevel Natural Gas Cash-Out Problems. Procedia Computer Science, 2016, 80, 1875-1886.                                                                            | 1.2 | 2         |
| 41 | On Advanced Monte Carlo Methods for Linear Algebra on Advanced Accelerator Architectures. , 2018, , .                                                                                              |     | 2         |
| 42 | Orlando Tools: Development, Training, and Use of Scalable Applications in Heterogeneous Distributed Computing Environments. Communications in Computer and Information Science, 2019, , 265-279.   | 0.4 | 2         |
| 43 | Immersive Open Surgery Simulation. Lecture Notes in Computer Science, 2006, , 868-871.                                                                                                             | 1.0 | 2         |
| 44 | A Collaborative Working Environment for a Large Scale Environmental Model. Lecture Notes in Computer Science, 2008, , 442-449.                                                                     | 1.0 | 2         |
| 45 | Facilitating Collaboration and Application Sharing with MAST and the Access Grid Development Infrastructures. , 2006, , .                                                                          |     | 1         |
| 46 | A Cluster-Based Implementation of a Fault Tolerant Parallel Reduction Algorithm Using Swarm-Array Computing. , 2010, , .                                                                           |     | 1         |
| 47 | Scalable Stochastic and Hybrid Methods and Algorithms for Extreme Scale Computing. Procedia Computer Science, 2014, 29, 1888-1892.                                                                 | 1.2 | 1         |
| 48 | On Monte Carlo Hybrid Methods for Linear Algebra. , 2016, , .                                                                                                                                      |     | 1         |
| 49 | On the Performance, Scalability and Sensitivity Analysis of a Large Air Pollution Model. Procedia Computer Science, 2016, 80, 2053-2061.                                                           | 1.2 | 1         |
| 50 | On Monte Carlo and Quasi-Monte Carlo for Matrix Computations. Lecture Notes in Computer Science, 2018, , 249-257.                                                                                  | 1.0 | 1         |
| 51 | Investigating scaling behaviour of monte carlo codes for dense matrix inversion. , 2011, , .                                                                                                       |     | 1         |
| 52 | A Data Forest: Multi-Dimensional Visualization. Proceedings / International Conference on Information Visualisation, 2007, , .                                                                     | 0.0 | 0         |
| 53 | A lightweight supercomputing Web portal for inferring phylogenetic trees. , 2009, , .                                                                                                              |     | 0         |
| 54 | An MPI-based implementation of intelligent agents on clusters. , 2010, , .                                                                                                                         |     | 0         |

| #  | ARTICLE                                                                                                                                                                                         | IF  | CITATIONS |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 55 | A Framework for Parallel Genetic Algorithms for Distributed Memory Architectures. , 2014, , .                                                                                                   |     | 0         |
| 56 | On efficient Monte Carlo preconditioners and hybrid Monte Carlo methods for linear algebra. , 2015, , .                                                                                         |     | 0         |
| 57 | Energy Study of Monte Carlo and Quasi-Monte Carlo Algorithms for Solving Integral Equations. Procedia Computer Science, 2016, 80, 1897-1905.                                                    | 1.2 | 0         |
| 58 | Grid Enablement of the Danish Eulerian Air Pollution Model. Lecture Notes in Computer Science, 2005, , 745-754.                                                                                 | 1.0 | 0         |
| 59 | Collaborative and Cooperative Environments. Lecture Notes in Computer Science, 2008, , 379-380.                                                                                                 | 1.0 | 0         |
| 60 | Immersive Co-operative Psychological Virtual Environments (ICPVE). Lecture Notes in Computer Science, 2008, , 438-445.                                                                          | 1.0 | 0         |
| 61 | Advanced scalable algorithms for advanced architectures. Proceedings of the International Conference on Computer Systems and Technologies and Workshop for PhD Students in Computing, 2009, , . | 0.0 | 0         |
| 62 | Modeling the Effects of Node Heterogeneity on the Performance of Grid Applications. Journal of Networks, 2009, 4, .                                                                             | 0.4 | 0         |
| 63 | Usability of Markov Chain Monte Carlo Preconditioners in Practical Problems. , 2021, , .                                                                                                        |     | 0         |