

Curriculum vitae and scientific activity

Dana PETCU

Chapter 1

Identification

April 10, 2018

Personal data

Date and place of birth: May 12, 1966, Timișoara, Romania
Marital status: Divorced, one child (Paula Petcu)
Birth name: Dana Gioncu
Languages: Romanian, English, German, French



Contacts

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IDs in research indexing services

As author – all fields: [Scopus](#), [WoS](#), [Google Scholar](#), [ResearchGate](#), [ORCID](#), [Mendeley](#),
As author – domain specific: [ACM Digital Library](#), [DBLP](#), [DBLP-Viz](#), [Microsoft Academic](#), [zbMATH](#),
As reviewer: [Elsevier](#), [publons](#)

Experience

Education

MSc studies	Computer Science	University of Timișoara	September 1984 - June 1988
Tempus	PhD scholarships	University of Heidelberg	Spring Semesters of 1992 & 1993
PhD studies	Numerical Analysis	West University of Timișoara	December 1991 - May 1994

Research experience

Primary: parallel and distributed computing
Secondary: numerical analysis, mathematical software, computer graphics

Teaching experience

Parallel Computing, Cloud computing, Grid computing, Distributed Systems, Mathematical Software, Computer Graphics, Algorithms, Programming Languages

Positions

West University of Timișoara	Assistant 1990-1994, Lecturer 1994-1997, Associate Professor 1997-2003, Professor 2003-present, PhD Advisor 2005-present
Bega-Pam, Timișoara	Programmer 1990
IURT Lugoj	Programmer 1988-1990

Management experience

Vice-rector	West University of Timișoara	2016-present
Director	Institute e-Austria Timișoara	2002-present
	Master studies in Software Engineering, WUT	2010-present
	Computer Science Department, West University of Timisoara	2008-2011
	Undergraduate studies on Computer Science, WUT	2004-2008
	PhD studies in Computer Science, WUT	2012-2016
President	CSCCU - Scientific Council for Research and Creation of the University, WUT	2013-2014
Member	CSUD - University Council for Doctoral studies, WUT	2012-2016
	Senate, WUT	2012-2016

Expert evaluator

European Commission	FP6-IST, FP7-ICT/Capacities/People, ESF, INTAS, H2020-ICT/INFRA
Foreign countries	Bulgarian, Czech, Irish, Italian, Polish, Portugesse, Norwegian, Russian R&D programmes
Romanian	CNCSIS (2001-2004), CEEEX (2005-2007), PNII (2008-2015), PNIII (2017)
PhD defence committees	Romania, Ireland, Spain, Italy, UK

Membership

Professional associations

IEEE Society Affiliate; IT History Society; INSTICC

Professional groups

Cloud Computing Expert Group of the European Commission, from 2011 - present

OW2, open source community, from 2013 - present

Coordination of the collaboration activities of Cloud related EC-funded projects: [Novel approaches and technologies for Cloud resource and service management \(NATRES\)](#), from 2015 - 2017

Domain Expert for Romanian Delegations at European forums

FP7-ICT Committee (2007-2013), Committee for CIP (2007-2008), COST programme - ICT Domain (2007-2008) e-IRG (2008-2015), e-Infrastructure Policy Forum (2011-2013), PRACE Council (2014-2015)

Awards

International: [Maria Sybilla Merian Award](#), 2005;
[IBM Faculty Award](#), 2009

National: ANCS award for the Romanian contribution to FP6 programme, 2006;
[MLNR Award "Spiru Haret"](#), for the Cloud related papers from 2014, June 2015;
[Romanian Academy Award "Gheorghe Cartianu"](#) for the FGCS paper from 2013, December 2015

Chapter 2 Publications

2.1 Journal papers

2.1.1 Journal papers with impact factor and indexed in Web of Science (WoS)

Note:

- Impact factor (IF) as registered in the year of publication
- Categories according to [article influence score \(AIS\) as in Science Citation Index Expanded 2017](#): 1:■, 2:■, 3:■;
- Number of citations (cits:) as exposed in section 3.5.1 of this document

Elsevier journals

- 2013 2.1 D. Petcu, G. Macariu, S. Panica, C. Craciun, *Portable Cloud Applications - from Theory to Practice*, Future Generation Computer Systems 29 (6), 2013, 1417-1430, WoS: 000319235600010, doi: [10.1016/j.future.2012.01.009](#) (IF: 2.639■, cits:108)
- 2012 2.2 D. Petcu, S. Panica, M. Frincu, M. Neagul, D. Zaharie, G. Macariu, D. Gorgan, T. Stefanut, *Experiences in building a Grid-based platform to serve Earth observation training activities*, Computers Standards & Interfaces 34, 2012, 493-508, WoS: 000306771800005, doi: [10.1016/j.csi.2011.10.010](#) (IF: 0.978■, cits:3)
- 2005 2.3 D.Petcu, *The performance of parallel iterative solvers*, Computers & Mathematics with Applications 50, 2005, 1179-1189, WoS: 000232326400020, doi: [10.1016/j.camwa.2005.08.018](#) (IF: 0.43■, cits:4)
- 2003 2.4 D.Petcu, V.Gioncu, *Computer program for available ductility analysis of steel structures*, Computers & Structures, 81 (22-23), 2003, 2149-2164, WoS: 000185409800003, doi: [10.1016/S0045-7949\(03\)00296-7](#) (IF: 0.634■, cits:6)
- 2001 2.5 D.Petcu, *Experiments with an ODE Solver on a Multiprocessor System*, Computers & Mathematics with Applications 42 (8-9), 2001, 1189-1199, WoS: 000170803800016, doi: [10.1016/S0898-1221\(01\)00232-2](#) (IF: 0.383■, cits:1)
- 1997 2.6 V.Gioncu,D.Petcu,*Available rotation capacity of wide-flange beams and beam-columns.Part 1.Theoretical approaches*, Journal of Constructional Steel Research 43 (1-3), 1997, 161-217, WoS: A1997YE87600008, doi: [10.1016/S0143-974X\(97\)00044-8](#) (IF: 0.259■, cits:62)
- 2.7 V.Gioncu, D.Petcu, *Available rotation capacity of wide-flange beams and beam-columns. Part 2. Experimental and numerical tests*, Journal of Constructional Steel Research 43 (1-3), 1997, 219-244, WoS: A1997YE87600009, doi: [10.1016/S0143-974X\(97\)00045-X](#) (IF: 0.259■, cits:33)

Springer journals

- 2014 2.8 D. Petcu, *Consuming Resources and Services from Multiple Clouds: From Terminology to Cloudware Support*, Journal of Grid Computing 12 (2), 321-345, 2014, WoS: 000339887600008, doi: [10.1007/s10723-013-9290-3](#) (IF:1.507■, cits.: 50)
- 2.9 V. Stankovski, D. Petcu, *Developing a Model Driven Approach for engineering applications based on mOSAIC. Towards Sharing Elastic Components in the Cloud*, Journal of Cluster Computing 17 (1), 2014, 101-110, WoS: 000333111000006, doi: [10.1007/s10586-013-0263-x](#) (IF: 1.510■, cits:3)
- 2012 2.10 N.M. Calcevecchia, B.A.Caprarescu, E. Di Nitto, D. J. Dubois, D. Petcu, *DEPAS: A Decentralized Probabilistic Algorithm for Auto-Scaling*, Computing 94 (8-10), 701-730,WoS: 000307971700005, doi: [10.1007/s00607-012-0198-8](#) (preliminary: Technical Report 2012.5 [259]) (IF: 0.807■, cits:21)

Other journals with IF and indexed in WoS

- 2015 2.11 D. Petcu, S. Panica, C. Craciun, M. Neagul, C. Sandru, *Cloud resource orchestration within an open-source component-based platform as a service*, *Concurrency and Computation: Practice and Experience* 27 (9), 2443-2469, 2015, WoS: 000355001700016, doi: [10.1002/cpe.3175](https://doi.org/10.1002/cpe.3175) (IF: 0.997₊, cites:2)
- 2014 2.12 A. Agathos, J. Li, D. Petcu, A. Plaza, *Multi-GPU Implementation of the Minimum Volume Simplex Analysis Algorithm for Hyperspectral Unmixing*, *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing* 7 (6), 2281-2296, 2014, WoS: 000340621200037, doi: [10.1109/JSTARS.2014.2320896](https://doi.org/10.1109/JSTARS.2014.2320896) (IF: 2.827₊, cites:21)
- 2.13 J. Južna, P. Češarek, D. Petcu, V. Stankovski, *Solving Solid and Fluid Mechanics Problems in the Cloud with mOSAIC*, *Computing in Science and Engineering* 16 (4), 68-77, 2014, WoS: 000337263400008, doi: [10.1109/MCSE.2013.135](https://doi.org/10.1109/MCSE.2013.135) (IF: 1.248₊, cites:1)
- 2010 2.14 D. Gorgan, V. Bacu, D. Rodila, F. Pop, D. Petcu, *Experiments on ESIP-Environment oriented satellite data processing platform*, *Earth Science Informatics* 3 (4), 2010, WoS: 000286014500011, doi: [10.1007/s12145-010-0065-0](https://doi.org/10.1007/s12145-010-0065-0) (IF: 0.657₊, cites: 7)
- 2005 2.15 D.Petcu, C.Popa, *A new version of Kovarik's approximate orthogonalization algorithm without matrix inversion*, *International Journal of Computer Mathematics* 82 (10), 2005, 1235-1246, Taylor & Francis Ltd, WoS: 000232207600007, doi: [10.1080/00207160512331331174](https://doi.org/10.1080/00207160512331331174), (IF: 0.254₊, cites:3)

2.1.2 Papers that are WoS related

Papers in Springer LNCS series with IF

- 2005 2.16 D. Petcu, M. Paprzycki, M. Ganzha, *Clustering Multiple and Cooperative Instances of Computational Intensive Software Tools*, LNCS 3606, ISSN 0302-9743, 452-456, WoS: 000232251100040, doi: [10.1007/11535294_40](https://doi.org/10.1007/11535294_40), 2005 (IF: 0.402, cites:1)
- 2.17 C. Bonchiş, G. Ciobanu, C. Izbaşa, D. Petcu, *A Web-Based P Systems Simulator and Its Parallelization*, LNCS 3699, ISSN 0302-9743, 58-69, WoS: 000233391700007, doi: [10.1007/11560319_7](https://doi.org/10.1007/11560319_7), 2005 (IF: 0.402, cites:2)
- 2004 2.18 D.Petcu, D.Dubu, M.Paprzycki, *Towards a Grid-aware Computer Algebra System*, LNCS 3036, ISSN 0302-9743, WoS: 000222043200073, doi: [10.1007/978-3-540-24685-5_73](https://doi.org/10.1007/978-3-540-24685-5_73), 490-495, 2004 (IF: 0.515)
- 2.19 D.Petcu, D.Dubu, M.Paprzycki, *A Grid-based parallel Maple*, LNCS 3241, ISSN 0302-9743, WoS: 000224114000027, doi: [10.1007/978-3-540-30218-6_33](https://doi.org/10.1007/978-3-540-30218-6_33), 215-223, 2004 (IF: 0.515, cites:1)
- 2002 2.20 D. Petcu, H. Popa, D.Țepeneu, *A user-level interface for clustering mathematical software kernels*, LNCS 2336, ISSN 0302-9743, WoS: 000181350300017, doi: [10.1007/3-540-47840-X_17](https://doi.org/10.1007/3-540-47840-X_17), 2002, 175-182 (IF: 0.415)
- 2.21 D. Petcu, *Solving large systems of differential equations with PAVIS*, LNCS 2328, ISSN 0302-9743, 2002, 437-445, WoS: 000180067200048, doi: [10.1007/3-540-48086-2_48](https://doi.org/10.1007/3-540-48086-2_48), (IF: 0.415 cites:1)
- 2001 2.22 D.Petcu, *Numerical Solution of ODEs with Distributed Maple*, LNCS 1988, ISSN 0302-9743, 2001, 666-674, WoS: 000174201600079, doi: [10.1007/3-540-45262-1_79](https://doi.org/10.1007/3-540-45262-1_79) (IF: 0.415, cites:2)
- 2.23 D. Petcu, *Solving initial value problems with parallel Maple processes*, LNCS 2150, ISSN 0302-9743, 2001, 926-934, doi: [10.1007/3-540-44681-8_129](https://doi.org/10.1007/3-540-44681-8_129) (IF: 0.415, cites:1)
- 2000 2.24 D.Petcu, *PVMaple: A Distributed Approach to Cooperative Work of Maple Processes*, LNCS 1908, ISSN 0302-9743, 2000, 216-224, WoS: 000171904500031, doi: [10.1007/3-540-45255-9_31](https://doi.org/10.1007/3-540-45255-9_31) (IF: 0.39, cites:3)
- 1999 2.25 D.Petcu, *Solving Initial Value Problems with a Multiprocessor Code*, LNCS 1662, ISSN 0302-9743, 1999, 452-466, WoS: 000165174100047, doi: [10.1007/3-540-48387-X_47](https://doi.org/10.1007/3-540-48387-X_47) (IF: 0.872, cites:1)

Papers in journals currently indexed in WoS with AIS

- 2006 2.26 D. Petcu, C. Bonchiş, C. Izbaşa *Symbolic Computations based on Grid Services*, *Int. Journal of Computers, Communications and Control*, vol. 1, no. 1, 2006, 44-50, ISSN 1841-9836, [link](#) (♣)
- 2.27 D.Petcu, C. Bonchiş, M. Radu, *Applying Task Farming Model over Grids*, *Int. Journal of Computers, Communications and Control*, vol. 1, supplement: S, 2006, 371-375, WoS: 000203014800062, [link](#) (♣)
- 2005 2.28 D.Petcu, M.Papryzcki, D.Dubu, *Design and implementation of a grid extension of Maple*, *Scientific Programming*, vol. 13, no. 2, 2005, ISSN 1058-9244, IOS Press, 137-149, [link](#) (♣, cites: 5)
- 2.29 D. Petcu, D. Dubu, *An Extension of Maple for Grid and Cluster Computing*, *Studies in Informatics and Control*, vol. 14, no. 1 (ISSN 1120-1766), 2005, 31-36 [link](#) (♣)
- 1994 2.30 D.Petcu, *A parallel algorithm for stiff ordinary differential equations*, *Informatica*, Vilnius, 1994, vol.5, no. 3-4, ISSN 0868-4952, doi: [10.3233/INF-1994-53-408](https://doi.org/10.3233/INF-1994-53-408), 373-384 (♣)
- 1993 2.31 D.Petcu, *On the Kantorovich Hypothesis for Newton's Method*, *Informatica*, Vilnius, 1993, vol. 4, no. 1-2, ISSN 0868-4952, doi: [10.3233/INF-1993-41-213](https://doi.org/10.3233/INF-1993-41-213), 188-198 (♣, cites: 3)

Papers in journals currently indexed in Emerging Sources Citation Index from WoS

- 2015 2.32 D. Petcu, G. Iuhasz, D. Pop, D. Talia, J. Carretero, R. Prodan, T. Fahringer, I. Grasso, R. Doallo, M.J. Martín, B. B. Fraguera, R. Trobec, M. Depolli, F. Almeida Rodriguez, F. de Sande, G. Da Costa, J.-M. Pierson, S. Anastasiadis, A. Bartzokas, C. Lolis, P. Gonçalves, F. Brito, N. Brown, *On Processing Extreme Data*, *Scalable Computing: Practice and Experience*, vol. 16, issue 4, 2015, 467-489, WoS: 000371914800009, doi: [10.12694/scpe.v16i4.1134](https://doi.org/10.12694/scpe.v16i4.1134) (cites: 1)
- 2014 2.33 D. Petcu, A.V. Vasilakos, *Portability in Clouds: Approaches and Research Opportunities*, *Scalable Computing: Practice and Experience*, vol. 15, Issue 3, 2014, 251-270, doi: [10.12694/scpe.v15i3.1019](https://doi.org/10.12694/scpe.v15i3.1019) (cites: 27)
- 2012 2.34 D. Petcu, *A Panorama of Cloud Services*, *Scalable Computing: Practice & Experience* 13 (4), 2012, 303-314, [link](#) (cites: 1)
- 2010 2.35 M. E. Frîncu, D. Petcu, *OSyRIS: a Nature Inspired Workflow Engine for Service Oriented Environments*, *Scalable Computing: Practice and Experience*, vol. 11, no. 1, ISSN 1895-1767, 2010, 81-97, [link](#) (cites: 3)
- 2008 2.36 D. Petcu, A. Cârstea, G. Macariu, M. Frîncu, *Service-oriented Symbolic Computing with SymGrid*, *Scalable Computing:*

Practice and Experience, vol. 9, no. 2, ISSN 1895-1767, 2008, 111-124, [link](#)

- 2006 2.37 D. Petcu, D. Vizman and M. Paprzycki, *Heuristic Load Balancing for CFD Codes Executed in Heterogeneous Computing Environments*, Scalable Computing: Practice and Experience, vol. 7, no. 2, 2006,15-23, [link](#) (cits: 1)
- 2.38 D. Petcu, *A Parallel Rule-based System and Its Experimental Usage in Membrane Computing*, Scalable Computing: Practice and Experience, vol. 7, no. 3, ISSN 1895-1767, 2006, 39-49, [link](#) (cits: 2)

2.1.3 Papers in internationally refereed journals

- 2018 2.39 S. Panica, B. Irimie, D. Petcu, *Enabling and monitoring platform for cloud-based application*, *International Journal of High Performance Computing and Networking*, Int. Journal of High Performance Computing and Networking, [in print](#)
- 2015 2.40 G. Da Costa, T. Fahringer, J.-A. Rico-Gallego, I. Grasso, A. Hristov, H.D. Karatza, A. Lastovetsky, F. Marozzo, D. Petcu, G. L. Stavrinides, D. Talia, P. Trunfio, H. Astsatryan, *Exascale Machines Require New Programming Paradigms and Runtimes*, *Supercomputing Frontiers and Innovations 2* (2), 6-27, 2015, doi: doi: [10.14529/jsfi150201](#) (cits:4)
- 2.41 P. Bouvry, R. Mayer, J. Muszynski, D. Petcu, A. Rauber, G. Tempesti, T. Trinh, S. Varrette, *Resilience within Ultrascale Computing System: Challenges and Opportunities from Nesus Project*, *Supercomputing Frontiers and Innovations vol 2*, No. 2, 46-63, 2015, doi: [10.14529/jsfi150203](#)
- 2.42 J. Carretero, S. Distefano, D. Petcu, D. Pop, T. Rauber, G. Runger, D.E. Singh, *Energy-efficient Algorithms for Ultrascale Systems*, *Supercomputing Frontiers and Innovations vol 2*, No. 2, 77-104, 2015, doi: [10.14529/jsfi150205](#) (cits: 2)
- 2014 2.43 V.I. Munteanu, C.Şandru, D. Petcu, *Multi-cloud resource management: cloud service interfacing*, *Journal of Cloud Computing: Advances, Systems and Applications*, 2014, 3:3, ISSN 2192-113X, doi: [10.1186/2192-113X-3-3](#) (cits: 10)
- 2013 2.44 D. Petcu, B. Di Martino, S. Venticinque, M. Rak, T. Mahr, G. Esnal Lopez, F. Brito, R. Cossu, M. Stopar, S. Šperka, V. Stankovski, *Experiences in Building a mOSAIC of Clouds*, *Journal of Cloud Computing: Advances, Systems and Applications 2013*, Vol. 2, Issue 1, 2:12, Springer, ISSN: 2192-113X, doi: [10.1186/2192-113X-2-12](#) (cits: 47)
- 2012 2.45 A. Bessani, R. Kapitza, D. Petcu, P. Romano, S.V. Gogouvitis, D. Kyriazis, R.G. Cascella, *A look to the old-world sky: EU-funded dependability cloud computing research*, *ACM SIGOPS Operating Systems Review* 46, 2 2012, 43-56, doi: [10.1145/2331576.2331584](#) (cits: 3)
- 2011 2.46 A. Carstea, M. Frincu, G. Macariu and D. Petcu, *Validation of SymGrid-services framework through event-based simulation*, *Int. J. Grid and Utility Computing*, Vol. 2, No. 1, 2011, doi: doi: [10.1504/IJGUC.2011.039979](#) (cits: 1)
- 2010 2.47 D. Petcu, S. Panica, M. Neagul, M. Frincu, D. Zaharie, R. Ciorba, A. Dinis, *Earth Observation Data Processing in Distributed Systems*, *Informatica* 34 (2010), 463-476, [link](#) (cits: 5)
- 2008 2.48 D. Petcu, *Teaching Grid Technologies to PhD Students, Part 1: Using Best Practices to Build the Course*, *IEEE Distributed Systems Online*, vol. 9, no. 3, 2008, art. no. 0803-o3002, doi: [10.1109/MDSO.2008.10](#) (cits: 1)
- 2.49 D. Petcu, *Teaching Grid Technologies to PhD Students, Part 2: Course Structure and Experiences*, *IEEE Distributed Systems Online*, vol. 9, no. 4, 2008, art. no. 0804-o4001, doi: [10.1109/MDSO.2008.13](#) (cits: 1)
- 2.50 D. Petcu, A. Eckstein, C. Giurgiu, *Adapting a Legacy Code for Ordinary Differential Equations to Novel Software and Hardware Architectures*, *Transactions on Computers*, Issue 5, vol. 7, May 2008, 463-472, [ACM DL](#) (cits: 3)
- 2.51 D. Petcu, D. Gorgan, F. Pop, D. Tudor, D. Zaharie, *Satellite Image Processing on a Grid-based Platform*, *International Scientific Journal of Computing*, vol. 7, 2008, issue 2, ISSN 1727-6209, 51-58, [link](#) (cits: 2)
- 2007 2.52 D. Petcu, S. Panica, A. Eckstein, *Land-Cover Classification on Computational Grids*, *International Journal of Computers*, Issue 2, Vol. 1, 2007, ISSN: 1998-4308, 22-27, [link](#) (cits: 1)
- 2.53 D. Petcu, *Grid Services for Satellite Image Processing*, *Transactions on Computers*, Issue 2, Vol. 6, ISSN 1109-2750, 347-354, 2007 [link](#) (cits: 2)
- 2.54 D. Petcu, *Towards Automated Creation of Clients for Grid Services Wrapping CFD Codes*, *Transactions on Computers*, Issue 3, Vol. 6, ISSN 1109-2750, 573-580, 2007, [link](#)
- 2005 2.55 D. Petcu, M. Petcu, *Concurrent Instance of a Rule-based System on a Condor Cluster*, *Transactions on Computers*, Issue 8, Vol. 4, ISSN 1109-2750, 995-1002, 2005, [link](#)
- 2.56 D.Petcu, *Speedup in solving differential equations on clusters of workstations*, *Int. J. Computational Science and Engineering*, Vol. 1, Nos. 2/3/4, 2005, Inderscience Enterprises Ltd., 134-141, ISSN 1742-7185, [ACM DL](#) (cits: 2)
- 2002 2.57 St. Maruster, V. Negru, D. Petcu, C.Şandru, *Intelligent front-end for solving differential and non-linear equations*, *Journal of Mathematical Sciences* 108 (6): 1139-1151, 2002, ISSN 1072-3374, doi: [10.1023/A:1013560909786](#). Extension of [58]
- 1999 2.58 S. Maruster, V. Negru, D. Petcu, S. Calin, *Intelligent Front-End for Solving Differential and Non-Linear Equations Systems*, *Zap. Nauchn. Sem. POMI*, 1999, Volume 258, 318-334, [link](#). Preliminary version of [57]
- 2.59 D.Petcu, V.Negru, *Interactive system for stiff computations and distributed computing*, *International Journal of Applied Science and Computations*, ISSN 1089-0025, vol. 6, no. 2, 1999 (cits: 1)

2.1.4 Papers in Romanian refereed journals

- 2012 2.60 D. Petcu, D. Zaharie, *Experience in Running a Computer Science Master’s Programme in English. First Steps towards Internationalization* *Quality Assurance Review for Higher Education*, Vol. 4, Nr. 1, 2012, 5 - 13, [link](#)
- 2.61 L. Donath, D. Petcu, D. Zaharie, M. Boldea, P. Craciun, E. Feker, *The internal evaluation of international master. The case of West University of Timisoara*, *Quality Assurance Review for Higher Education*, vol. 4, no. 2, 2012, 41-51, [link](#)
- 2009 2.62 D. Petcu, A. Eckstein, A. Carstea, A. Craciun, *Mathematics on the net: state of the art and challenges*, *Analele Universitatii din Timioara, Seria Matematica-Informatica*, vol. XLVII, 2, 2009, 95-116 [link](#)
- 2008 2.63 D. Petcu, S. Panica, *Document Conversions Using Grid-based e-Infrastructure for Digital Libraries*, *Scientific Bulletin of Politehnica Univ. Timioara*, *Transactions on Automatic Control and Computer Science* 53 (67:3), 2008, 139-144, [link](#)
- 2006 2.64 G. Neagu, N. Andrei, V. Sima, Al. Stanciu, N. Tapus, V. Cristea, C. Nae, R. Potolea, D. Petcu, *The virtual organisation GridMOSI - a component of the national research infrastructure* (in Romanian), *Revista Romana de Informatica si Automatica*, ISSN 1220-1758, vol. 16, nr. 4, 2006, 113-120

- 2004 2.65 D.Petcu, *Software issues in solving initial value problems for ordinary differential equations*, Creative Mathematics, North University of Baia Mare, vol. 13, 2004, 97-110, [link](#) (cits: 3)
- 2.66 D. Petcu, *Building a computational grid: design issues*, Analele Științifice ale Universității "Alexandru Ioan Cuza" din Iași, Informatică, Tomul XV, 2004, 139-152.
- 2.67 C.Popa, D. Petcu, M. Petcu, *On Kovarik's Orthogonalization Algorithm without Matrix Inversion*, Sci. Bull. Politehnica Univ. Timișoara, Transactions on Automatic Control and Computer Science 49 (63), 2004, ISSN 1224-600X, 223-226
- 2.68 D.Petcu, D.Dubu, *Mapping general purpose scientific computing environments onto a computational grid*, Analele Universității din Timișoara, Seria Matematică-Informatică, vol. XLII, 2004, 197-212, [link](#)
- 2002 2.69 D.Petcu, C.Popa, *On the Parallel Implementation of Kovarik's Approximate Orthogonalization Algorithm*, Analele Universității din Timișoara, Seria Matematică-Informatică, vol. XL, 2002, 197-212, [link](#)
- 2.70 D. Petcu, *On the speedup of parallel iterative numerical methods*, Analele Științifice ale Universității "Al. I. Cuza" din Iași, Tomul XI, 2002, p. 304-317, [link](#)
- 2001 2.71 D.Petcu, D. Vizman, M. Popescu *Computational Fluid Dynamic on a Cluster*, Analele Universității din Timișoara, Seria Matematică-Informatică, vol. XXXIX, 2001, 171-180, [link](#)
- 2000 2.72 D.Petcu, *A prototype system for cooperative CAS tasks*, Analele Universității din Timișoara, Seria Matematică-Informatică, vol. XXXVIII, 2000, 125-140, [link](#)
- 1999 2.73 D. Petcu, *Parallel Solving Environment for ODEs*, Analele Universității din Timișoara, Seria Matematică-Informatică, vol. XXXVII, 1999, 45-57, [link](#)
- 2.74 D. Petcu, *Design of an User Interface for Mathematical Software*, Analele Universității din Timișoara, Seria Matematică-Informatică, vol. XXXVII, 1999, 137-142, [link](#)
- 1995 2.75 D.Petcu, *Implicit Runge-Kutta Methods on a Distributed Computational System*, Analele Universității din Timișoara, Seria Matematică-Informatică, vol. XXXIII, fasc. 2, 1995, 209-220, [link](#)
- 2.76 D.Petcu, L.Cucu, *Plotting Conics and Quadrics on a Distributed Computational System*, Analele Universității din Timișoara, Seria Matematică-Informatică, vol. XXXIII, fasc. 2, 1995, 221-231, [link](#)
- 1994 2.77 D.Petcu, *One-step Methods for the Numerical Solution of Stiff Ordinary Differential Systems*, Revue D'Analyse Numérique et de Théorie de L'Approximation, Tome 23, no. 2, 1994, 197-216, ISSN 1220-6016
- 2.78 D.Petcu, *Parallel Algorithms for the Numerical Integration of Stiff ODE Systems*, Analele Universității din Timișoara, Seria Matematică-Informatică, vol. XXXII, fasc. 2, 1994, 65-81, [link](#)
- 1993 2.79 D.Petcu, *Modified Adams-Moulton Schemes for Solving Stiff Differential Equations*, Analele Universității din Timișoara, Seria Matematică-Informatică, vol. XXXI, fasc. 1, 1993, 101-112, [link](#)
- 2.80 D.Petcu, *Second Derivative Split Multistep Methods for Stiff Ordinary Differential Equations*, Analele Universității din Timișoara, Seria Matematică-Informatică, vol. XXXI, fasc. 2, 1993, 229-254, [link](#)
- 1992 2.81 D.Petcu, *One-step Discretization of Stiff Differential Equations*, Analele Universității din Timișoara, Seria Științe Matematice, vol. XXX, fasc. 1, 1992, 59-87, [link](#)
- 2.82 D.Petcu, *A Family of Multistep Linear Methods for Solving Stiff Ordinary Differential Equations*, Analele Universității din Timișoara, Seria Științe Matematice, vol. XXX, fasc. 2-3, 1992, 257-282, [link](#)
- 1990 2.83 D.Petcu, *Search Method For One-Dimensional Minimization*, Analele Universității din Timișoara, vol. XXVIII, fasc. 2-3, Seria Științe Matematice, 1990, 165-175, [link](#)
- 2.84 D.Petcu, *On the Error Estimate of Newton's Method for a Hölder Continuous F-derivate*, Analele Universității din Timișoara, vol. XXVIII, fasc. 2-3, Seria Științe Matematice, 1990, 149-163, [link](#)
- 1988 2.85 D.Petcu, *New Methods for Solving Stiff Differential Equation Systems*, Analele Universității din Timișoara, vol. XXVI, fasc. 3, Seria Științe Matematice, 1988, 67-72

2.2 Proceedings papers

Categories according CORE: A*, A, B, C.

2.2.1 Proceedings from ACM

- 2013 2.86 D. Petcu, *Multi-Cloud: expectations and current approaches*. Procs. 2013 international workshop on Multi-cloud applications and federated clouds (MultiCloud/ICPE 2013), 1-6, doi: [10.1145/2462326.2462328](#), 2013 (cits: 64)
- 2012 2.87 D. Petcu, *How to build a reliable mOSAIC of multiple cloud services*. Procs. 1st European Workshop on Dependable Cloud Computing (EWDCC '12). Article 4 , 2012, doi: [10.1145/2365316.2365320](#) (cits: 4)
- 2.88 D. Petcu, C. Sandru, *Towards Component-based Software Engineering of Cloud applications*, Procs. WICSA/ECSCA 2012 Companion Volume, ICPS - published by ACM, 80-81, 2012, doi: [10.1145/2361999.2362013](#) (cits: 5)
- 2008 2.89 D.Petcu, A. Eckstein, C. Giurgiu, *Reengineering a software system implementing parallel methods for differential equations*, 7th Int. Conf. Software Engineering, Parallel& Distributed Sys. (SEPADS), 2008, ISBN 9878-960-6766-42-8, 95-100, WoS: 000263783600013, [ACM](#)
- 2.90 S.Panica, D. Petcu, D. Zaharie, *Evolutionary multi-objective optimization on Grid environments*, Procs. PDCN 2008, Parallel and Distributed Computing and Networks - 2008, ISBN 978-0-88986-713-0, 81-86, [ACM](#) (cits: 1)
- 2006 2.91 D.Petcu, *Automatic Generated Clients of Grid Services for Computational Fluid Dynamics*, Procs. MATH'06, 10th International Conference on Applied Mathematics, ISBN 960-8457-55-6, 96-101, [ACM](#)
- 2005 2.92 D.Petcu, M. Petcu, *Distributed Jess on a Condor Pool*, Procs. ICCOMP'05, 9th International CSCC Multiconference - Computers'05, ISBN: 960-8457-29-7, paper 497-315, [ACM](#) (cits: 4)

2.2.2 Springer's LNCS, conference proceedings, starting from 2006

- 2016 2.93 D.Petcu, *Service Quality Assurance in Multi-Clouds*, Economics of Grids, Clouds, Systems and Services, eds. G.C. Silaghi, J. Altmann, O. Rana, LNCS 9512, 1-17, WoS: 000389717700006, doi: [10.1007/978-3-319-43177-2_6](#) (preliminary version:

[256], cits: 1)

- 2014 2.94 D. Petcu, *SLA-based Cloud Security Monitoring: Challenges, Barriers, Models and Methods*, L. Lopes et al. (Eds.), Euro-Par 2014 Workshops (I), LNCS 8805, 359-370, 2014, WoS: 000354783500031, doi: [978-3-319-14325-5_31](https://doi.org/10.1007/978-3-319-14325-5_31) (cits: 3)
- 2.95 D. Petcu, H. González-Vélez, B. Nicolae, J.M. Gariá-Gómez, E. Fuster-Garcia, C. Sheridan, *Next Generation HPC Clouds: A View for Large-Scale Scientific and Data-Intensive Applications*, in L. Lopes et al. (Eds.), Euro-Par 2014 Workshops, Part II, LNCS 8806, 26-37, 2014, WoS: 000354785000003, doi: [10.1007/978-3-319-14313-2_3](https://doi.org/10.1007/978-3-319-14313-2_3) (cits: 2)
- 2.96 D. Petcu, *On the Management of Cloud Services in Multi-Clouds for Scientific Applications*, in Ivan Lirkov et al (eds.): LSSC 2013, LNCS 8353, WoS: 000345642700062, doi: [10.1007/978-3-662-43880-0_62](https://doi.org/10.1007/978-3-662-43880-0_62), 540-549, 2014
- 2012 2.97 D. Petcu, S. Panica, C. Sandru, C. Craciun, M. Neagul, *Experiences in Building an Event-Driven and Deployable Platform as a Service*, In X.S. Wang et al. (Eds.): WISE 2012, LNCS 7651, 666-672, 2012, doi: [10.1007/978-3-642-35063-4_51](https://doi.org/10.1007/978-3-642-35063-4_51)
- 2.98 K. Wasielewska, M.Drozdzowicz, P. Szmeja, M. Ganzha, M. Paprzycki, I. Lirkov, D. Petcu, C. Badica, *Agents in Grid System - Design and Implementation*, LSSC 2011, I. Lirkov, S. Margenov, J. Wansiewski (Eds.): LNCS 7116, 2012, Springer, 662-669, doi: [10.1007/978-3-642-29843-1_76](https://doi.org/10.1007/978-3-642-29843-1_76)
- 2.99 D. Petcu, *Challenges of Future e-Infrastructure Governance*, M. Alexander et al. (Eds.): Euro-Par 2011 Workshops, Part II, LNCS 7156, 86-95, 2012, WoS: 000371244100011, doi: [10.1007/978-3-642-29740-3_11](https://doi.org/10.1007/978-3-642-29740-3_11)
- 2011 2.100 D. Petcu, *Portability and Interoperability between Clouds: Challenges and Case Study*, W. Abramowicz et al. (Eds.): ServiceWave 2011, LNCS 6994, 62-74, 2011, WoS: 000306345700006, doi: [10.1007/978-3-642-24755-2_6](https://doi.org/10.1007/978-3-642-24755-2_6) (cits: 87)
- 2.101 D. Petcu, C. Craciun, M. Neagul, S. Panica, B. Di Martino, S. Venticinque, M. Rak, R. Aversa, *Architecturing a Sky Computing Platform*, ServiceWave 2010 Workshops, LNCS 6569, 2011, 1-13, WoS: 000307028000001, doi: [10.1007/978-3-642-22760-8_1](https://doi.org/10.1007/978-3-642-22760-8_1) (cits:26)
- 2.102 B. Di Martino, D. Petcu, R. Cossu, P. Gonçalves, Tamás Máhr, M. Loichate, *Building a Mosaic of Clouds*, Euro-Par Workshops 2010, LNCS 6586, 2011, 529-536, WoS: 000371301900070,doi: [10.1007/978-3-642-21878-1_70](https://doi.org/10.1007/978-3-642-21878-1_70) (cits: 51)
- 2.103 S. Venticinque, R. Aversa, B. Di Martino, M. Rak, D. Petcu, *A Cloud Agency for SLA Negotiation and Management*, Euro-Par Works. 2010, LNCS 6586, 2011, 547-554, WoS: 000371301900072, doi: [10.1007/978-3-642-21878-1_72](https://doi.org/10.1007/978-3-642-21878-1_72) (cits: 60)
- 2008 2.104 A. Cârstea, M. Frîncu, A. Konovalov, G. Macariu, D. Petcu, *On Service-oriented Symbolic Computing*, Parallel Processing & Applied Mathematics (PPAM), LNCS 4967, 2008, 843-851, WoS: 000256665600089, doi: [10.1007/978-3-540-68111-3_89](https://doi.org/10.1007/978-3-540-68111-3_89)
- 2.105 A. Cârstea, G. Macariu, D. Petcu, A. Konovalov, *Pattern Based Composition of Web Services for Symbolic Computations*, M.Bubak et al.(Eds.):ICCS 2008, LNCS 5101, 126-135, WoS: 000257188800015, doi: [10.1007/978-3-540-69384-0_18](https://doi.org/10.1007/978-3-540-69384-0_18)
- 2007 2.106 K. Hammond, A.Al Zain, G. Cooperman, D. Petcu, Phil Trinder, *SymGrid: A Framework for Symbolic Computation on the Grid*, A.M. Kermarrec, L. Bouge, and T. Priol (Eds.): EuroPar 2007, LNCS 4641, 447-456, 2007, WoS: 000250368200048, doi: [10.1007/978-3-540-74466-5_49](https://doi.org/10.1007/978-3-540-74466-5_49) (cits: 10)
- 2.107 D.Zaharie, D.Petcu, S.Panica, *A Hierarchical Approach in Distributed Evolutionary Algorithms for Multiobjective Optimization*, LSSC 2007, LNCS 4818, 505-514, WoS: 000254817600059, doi: [10.1007/978-3-540-78827-0_59](https://doi.org/10.1007/978-3-540-78827-0_59) (cits: 6)
- 2006 2.108 D. Petcu, D. Vizman, M. Paprzycki, *Porting CFD Codes Towards Grids: A Case Study*, PPAM 2005, LNCS 3911, ISSN 0302-9743, 817-824, 2006, WoS: 000238107100098, doi: [10.1007/11752578_98](https://doi.org/10.1007/11752578_98)

2.2.3 Proceedings from IEEE Computer Press

- 2016 2.109 S. Panica, D. Petcu, *Unattended Deployment of Enabling Platforms for Cloud-Based Applications*, 2016 30th International Conference on Advanced Information Networking and Applications (AINA) workshops, Crans-Montana, Switzerland, 2016, 144-149, WoS: 000387075700026, doi: [10.1109/WAINA.2016.170](https://doi.org/10.1109/WAINA.2016.170)
- 2015 2.110 B.-C. Irimie, D. Petcu, *Scalable and Fault Tolerant Monitoring of Security Parameters in the Cloud*, Proceedings SYNASC 2015, WoS: 000384643800046, 289-297, doi: [10.1109/SYNASC.2015.53](https://doi.org/10.1109/SYNASC.2015.53) (cits: 1)
- 2014 2.111 D. Pop, M. Neagul, D. Petcu, *On Cloud deployment of digital preservation environments*, 2014 IEEE/ACM Joint Conference on Digital Libraries (JCDL), 443-444, 2014, WoS: 000383092300074, doi: [10.1109/JCDL.2014.6970216](https://doi.org/10.1109/JCDL.2014.6970216) (cits.: 2)
- 2.112 D. Petcu, *A Taxonomy for SLA-based Monitoring of Cloud Security*, 2014 IEEE 38th Annual Computer Software and Applications Conference (COMPSAC), 640-641, WoS: 000353962400090, doi: [10.1109/COMPSAC.2014.50](https://doi.org/10.1109/COMPSAC.2014.50) (cits: 8)
- 2.113 D. Petcu, E. Di Nitto, D. Ardagna, A. Solberg, G. Casale, *Towards Multi-Clouds Engineering* (invited paper), 2014 IEEE Conference on Computer Communications (INFOCOM) Workshops, 1-6, WoS: 000343582700001, doi: [10.1109/INF-COMW.2014.6849159](https://doi.org/10.1109/INF-COMW.2014.6849159) (cits: 3)
- 2013 2.114 S. Panica, D. Petcu, *Distributed Resource Identification Service for Cloud Environments*, 15th Int. Symp. on Symbolic & Numeric Alg. for Sci. Computing (SYNASC), 2013, 448-453, WoS: 000360988000060, doi: [10.1109/SYNASC.2013.65](https://doi.org/10.1109/SYNASC.2013.65)
- 2.115 M. Rak, N. Suri, J. Luna, D. Petcu, V. Casola, U. Villano, *Security as a Service Using an SLA-Based Approach via SPECS*, 2013 IEEE 5th International Conference on Cloud Computing Technology and Science (CloudCom), vol.2, 1-6, WoS: 000352079100001, doi: [10.1109/CloudCom.2013.165](https://doi.org/10.1109/CloudCom.2013.165) (cits: 24)
- 2.116 C. Marinescu, D. Petcu, *Quality Assessment in the Cloud: Is It Worthwhile?*, 2013 17th European Conference on Software Maintenance and Reengineering (CSMR), 453-456, 2013, WoS: 000321127000062, doi: [10.1109/CSMR.2013.70](https://doi.org/10.1109/CSMR.2013.70) (cits.: 1)
- 2012 2.117 C. Sandru, D. Petcu, V. Munteanu, *Building an Open-source Platform-as-a-Service with Intelligent Management of Multiple Cloud Resources*, Procs. UCC 2012, 333-338, WoS: 000317385100047, doi: [10.1109/UCC.2012.54](https://doi.org/10.1109/UCC.2012.54) (cits: 11)
- 2.118 V. Stankovski, J. Južna, D. Petcu, *Enabling Legacy Engineering Applications for Cloud computing: Experience with the mOSAIC API and Platform*, Procs. EIDWT 2012, 2012 Third International Conference on Emerging Intelligent Data and Web Technologies, 281-286, doi: [10.1109/EIDWT.2012.49](https://doi.org/10.1109/EIDWT.2012.49)
- 2.119 D. Petcu, M.E. Frîncu, S. Panica, M. Neagul *Towards Programmatic Management of Services from Multiple Clouds*, 4th Int.Conf.Intelligent Networking & Collaborative Sys (InCoS), 2012, 487-488, doi: [10.1109/iNCoS.2012.77](https://doi.org/10.1109/iNCoS.2012.77) (cits: 1)
- 2.120 S. Panica, D. Petcu, I. Lazkanotegi Larrate, T. Mahr, *Sky Computing Platform for Legacy Distributed Application*, 11th Int. Symposium on Parallel and Distributed Computing (ISPDC), 2012, 293-300, doi: [10.1109/ISPDC.2012.47](https://doi.org/10.1109/ISPDC.2012.47) (cits: 1)

- 2.121 D. Petcu, V. Stankovski, *Towards Cloud-enabled Business Process Management based on Patterns, Rules and Multiple Models*, 10th IEEE Int. Symposium on Parallel and Distributed Processing with Applications (ISPA), 454-459, 2012, doi: [10.1109/ISPA.2012.66](https://doi.org/10.1109/ISPA.2012.66) (cits: 7)
- 2.122 D. Ardagna, E. Di Nitto, G. Casale, D. Petcu, P. Mohagheghi, S. Mosser, P. Matthews, A. Gericke, C. Ballagny, F. D'Andria, C.S. Nechifor, C. Sheridan, *MODACLOUDS: A Model-Driven Approach for the Design and Execution of Applications on Multiple Clouds*, Procs. MISE/ICSE, 2012, 50-56, doi: [10.1109/MISE.2012.6226014](https://doi.org/10.1109/MISE.2012.6226014) (cits: 129)
- 2011 2.123 D. Petcu, M. Frincu, C. Craciun, S. Panica, M. Neagul, G. Macariu, *Towards Open-Source Cloudware*, Procs. 4th IEEE International Conference on Utility and Cloud Computing, UCC 2011, 330-331, doi: [10.1109/UCC.2011.53](https://doi.org/10.1109/UCC.2011.53) (cits.:8)
- 2.124 S. Panica, M. Neagul, C. Craciun, D. Petcu, *Serving Legacy Distributed Applications by a Self-configuring Cloud Processing Platform*, 6th IEEE International Conference on Intelligent Data Acquisition and Advanced Computing Systems: Technology and Applications (IDAACS), vol I, 2011, 139-145, doi: [10.1109/IDAACS.2011.6072727](https://doi.org/10.1109/IDAACS.2011.6072727) (cits: 5)
- 2.125 M. Frincu, N. Villegas, D. Petcu, H.A. Mueller, R. Rouvoy, *Self-Healing Distributed Scheduling Platform*, 11th IEEE/ACM Int. Symp. Cluster, Cloud and Grid Computing (CCGrid), 2011, 225 - 234, doi: [10.1109/CCGrid.2011.23](https://doi.org/10.1109/CCGrid.2011.23) (cits: 6)
- 2.126 D. Petcu, C. Craciun, M. Neagul, M. Rak, I. Lazcanotegui, *Building an Interoperability API for Sky Computing*, 2011 International Conference on High Performance Computing & Simulation, Workshop on Cloud Computing Interoperability and Services (InterCloud/HPCSim), 2011, 405-412, doi: [10.1109/HPCSim.2011.5999853](https://doi.org/10.1109/HPCSim.2011.5999853) (cits.:22)
- 2010 2.127 D. Petcu, *Identifying Cloud Computing Usage Patterns*, Procs. Cluster, 2010, ISBN 978-1-4244-8395-2, IEEE Computer Press, 2010, p. 1-8, doi: [10.1109/CLUSTERWKP.2010.5613106](https://doi.org/10.1109/CLUSTERWKP.2010.5613106) (cits: 12)
- 2.128 C. Mindruta, D. Petcu, *A Semantic Services Architecture for Solving ODE Systems*, Procs. SYNASC, 2010, IEEE Computer Press, 2010, 301-307, WoS: 000349920700042, doi: [10.1109/SYNASC.2010.47](https://doi.org/10.1109/SYNASC.2010.47)
- 2009 2.129 S. Panica, M. Neagul, D. Petcu, T. Stefanut, D. Gorgan, *Designing a Grid-based Training Platform for Earth Observation*, SYNASC, 2008, ISBN 978-0-7695-3523-4, IEEE, 2009, 394-397, WoS: 000274363300064, doi: [10.1109/SYNASC.2008.72](https://doi.org/10.1109/SYNASC.2008.72)
- 2.130 M. Neagul, S. Panica, D. Petcu, D. Zaharie, D. Gorgan, *Web and Grid Services for Training in Earth Observation*, IEEE Int. Workshop on Intelligent Data Acquisition & Advanced Computing Systems: Technology & Applications (IDAACS), 2009, ISBN 978-1-4244-4882-1-09, 241-246, WoS: 000280406400046, doi: [10.1109/IDAACS.2009.5342986](https://doi.org/10.1109/IDAACS.2009.5342986) (cits.: 1)
- 2.131 A. Carstea, G. Macariu, M. Frincu, D. Petcu, *Description and Execution of Patterns for Symbolic Computations*, SYNASC, 2009, ISBN: 978-0-7695-3964-5, IEEE, 2009, 205-212, WoS: 000361186200034, doi: [10.1109/SYNASC.2009.40](https://doi.org/10.1109/SYNASC.2009.40)
- 2008 2.132 G. Macariu, A. Carstea, M. Frincu, D. Petcu, *Towards a Grid Oriented Architecture for Symbolic Computing*, Procs. ISPDC, 2008, Krakow, ISBN: 978-0-7695-3472-5, 2008, 259-266, WoS: 000263137300034, doi: [10.1109/ISPDC.2008.46](https://doi.org/10.1109/ISPDC.2008.46)
- 2.133 A. Cârstea, G. Macariu, M. Frincu, D. Petcu, *Workflow Management for Symbolic Grid Services*, Procs. SYNASC, 2008, ISBN: 978-0-7695-3523-4, 2009, 373-379, WoS: 000274363300061, doi: [10.1109/SYNASC.2008.55](https://doi.org/10.1109/SYNASC.2008.55) (cits: 1)
- 2007 2.134 D. Petcu, *Distributed Symbolic Computations*, Invited talk, ISPDC, 2007, July 5-8 2007, Hagenberg, IEEE Computer Press, Los Alamitos (ISBN 0-7695-2917-8), 10-11, WoS: 000248622400002, doi: [10.1109/ISPDC.2007.15](https://doi.org/10.1109/ISPDC.2007.15)
- 2.135 A. Cârstea, Marc Frincu, G. Macariu, D. Petcu, K. Hammond, *Generic Access to Web and Grid-based Symbolic Computing Services*, ISPDC, 2007, ISBN 0-7695-2917-8, 143-150, WoS: 000248622400020, doi: [10.1109/ISPDC.2007.24](https://doi.org/10.1109/ISPDC.2007.24) (cits: 2)
- 2.136 D. Petcu, D. Zaharie, D. Gorgan, F. Pop, D. Tudor, *MedioGrid: a Grid-based Platform for Satellite Image Processing*, IEEE 4th International Workshop on Intelligent Data Acquisition and Advanced Computing Systems: Technology and Applications (IDAACS), 2007, 137-142, WoS: 000254690400030, doi: [10.1109/IDAACS.2007.4488392](https://doi.org/10.1109/IDAACS.2007.4488392) (cits: 16)
- 2.137 G. Macariu, M. Frincu, A. Carstea, D. Petcu, A. Eckstein, *Redesigning Parallel Symbolic Computations Packages*, 16th International Conference on Parallel Architecture and Compilation Techniques (PACT), 2007, ISSN 1089-795X, 417, doi: [10.1109/PACT.2007.4336245](https://doi.org/10.1109/PACT.2007.4336245)
- 2.138 D. Petcu, S. Panica, D. Banciu, V. Negru, A. Eckstein, *Optical character recognition on a Grid infrastructure*, Procs. 3rd International Conference on Automated Production of Cross Media Content for Multi-channel Distribution (AXMEDIS 2007), ISBN 0-7695-3030-3, 21-25, WoS: 000252342500005, doi: [10.1109/AXMEDIS.2007.23](https://doi.org/10.1109/AXMEDIS.2007.23) (cits: 1)
- 2.139 M. Frincu, D. Petcu, *Remote Control for Graphic Applications*, SYNASC, 2007, ISBN 0-7695-3078-8, 2007, 304-309, WoS: 000264583000043, doi: [10.1109/SYNASC.2007.22](https://doi.org/10.1109/SYNASC.2007.22) (cits: 1)
- 2.140 G. Macariu, D. Petcu, *Parallel Multiple Polynomial Quadratic Sieve on Multi-core Architectures*, SYNASC, 2007, ISBN 0-7695-3078-8, 59-65, WoS: 000264583000009, doi: [10.1109/SYNASC.2007.21](https://doi.org/10.1109/SYNASC.2007.21) (cits: 1)
- 2.141 A. Cârstea, G. Macariu, M. Frincu, D. Petcu, *Composing Web-based Mathematical Services*, SYNASC, 2007, ISBN 0-7695-3078-8, 327-334, WoS: 000264583000047, doi: [10.1109/SYNASC.2007.39](https://doi.org/10.1109/SYNASC.2007.39)
- 2006 2.142 D. Petcu, *Between Web and Grid-based Mathematical Services*, ICCGI 2006, ISBN 0-7695-2629-2, 41-47, doi: [10.1109/ICCGI.2006.13](https://doi.org/10.1109/ICCGI.2006.13) (cits: 4)
- 2.143 D. Petcu, V. Iordan, *Grid Service based on GIMP for Processing Remote Sensing Images*, SYNASC, 2006, ISBN 0 7695 2740 X, 251-258, WoS: 000245460500042, doi: [10.1109/SYNASC.2006.40](https://doi.org/10.1109/SYNASC.2006.40) (cits: 8)
- 2.144 N. Somosi, D. Petcu, *A Parallel Algorithm for Rendering Huge Terrain Surfaces*, SYNASC, 2006, ISBN 0 7695 2740 X, 274-278, WoS: 000245460500045, doi: [10.1109/SYNASC.2006.8](https://doi.org/10.1109/SYNASC.2006.8) (cits: 1)
- 2005 2.145 M. Petcu, D. Petcu, *Distributed rule-based system*, SOFA, 2005, ISBN 963 219 001 7, 257-262.
- 2.146 D. Petcu, *Parallel Jess*, ISPDC, 2005, ISBN 0-7695-2434-6, 307-314, WoS: 000234333400041, doi: [10.1109/ISPDC.2005.38](https://doi.org/10.1109/ISPDC.2005.38) (cits: 7)
- 2.147 D. Petcu, *Adapting a Partitioning-based Heuristic Load-balancing Algorithm to Heterogeneous Computing Environments*, SYNASC, 2005, ISBN 0 7695 2453 2, 170-173, WoS: 000235867000025 doi: [10.1109/SYNASC.2005.16](https://doi.org/10.1109/SYNASC.2005.16)
- 2004 2.148 D. Petcu, D. Dubu, M. Paprzycki, *Extending Maple to the Grid: Design and Implementation*, ISPDC, 2004, ISBN 0-7695-2210-6, 209-216, WoS: 000225488100028, doi: [10.1109/ISPDC.2004.25](https://doi.org/10.1109/ISPDC.2004.25) (cits: 6)
- 2003 2.149 D. Petcu, *Parallel explicit-state reachability analysis and state space construction*, 2nd International Symposium on Parallel and Distributed Computing (ISPDC, 2003), ISBN 0-7695-2069-3, 207-214, WoS: 000189447800030, doi: [10.1109/IS-](https://doi.org/10.1109/IS-)

PDC.2003.1267665 (cits: 12)

2000 2.150 D.Petcu, *Experiments with PVM Maple and Parallel Methods for ODEs*, Cluster. 2000: IEEE International Conference on Cluster Computing, 393-394, WoS: 000166002300075, [link](#).

2.2.4 Proceedings of international conferences, indexed in WoS

2016 2.151 E. Di Nitto, G. Casale, D. Petcu, *On MODA Clouds's Toolkit Support for DevOps*, In A. Celesti and P. Leitner (Eds.): ESOC 2015 Workshops, CCIS 567, Springer, 430-431, 2016, WoS: 000385259400035, doi: [10.1007/978-3-319-33313-7](#)

2015 2.152 G. Casale, D. Ardagna, M. Artac, F. Barbier, E. Di Nitto, A. Henry, G. Iuhasz, C. Joubert, J. Merseguer, V. I. Munteanu, J. F. Perez, D. Petcu, M. Rossi, C. Sheridan, I. Spais, D. Vladusic, *DICE: Quality-Driven Development of Data-Intensive Cloud Applications*, Procs. 7th International Workshop on Modeling in Software Engineering (MiSE/ICSE), 2015, 78-83, WoS: 000380568000014, doi: [10.1109/MiSE.2015.21](#) (cits: 11)

2012 2.153 D. Petcu, *Cloudware Support for Scientific Applications*, Procs. RO-LCG 2012, ISBN 978-973-662-701-1, 70-73, WoS: 000325983100018, [link](#)

2.154 A. Toma, S. Panica, D. Zaharie, D. Petcu, *Computational Challenges in Processing Large Hyperspectral Images*, Procs. RO-LCG 2012, ISBN 978-973-662-701-1, 111-114, WoS: 000325983100029, [link](#) (cits: 1)

2011 2.155 D. Petcu, D. Zaharie, S. Panica, A. S. Hussein, A. Sayed, H. El-Shishiny, *Fuzzy Clustering of Large Satellite Images using High Performance Computing*, In Proceedings of SPIE Volume 8183, article 818302 (2011), SPIE Remote Sensing Conference: High-Performance Computing in Remote Sensing, WoS: 000297788500001, doi: [10.1117/12.898281](#) (cits: 4)

2010 2.156 D. Petcu, S. Panica, M. Neagul, M. Frincu, D. Zaharie, D. Gorgan, T. Stefanut, V. Bacu, *GiSHEO: On-line Platform for Training in Earth Observation*, ICVL 2010: 5th International Conf. on Virtual Learning, Târgu Mureş, October 2010, Procs., M. Vlada, G. Albeanu, D.M. Popovici (eds.), Bucharest University Press, ISSN 1844-8933, 290-297, WoS: 000323685800041, [link](#)

2009 2.157 D. Petcu, V. Iordan, *Understanding Service Oriented Architectures in the Classroom: from Web Services to Grid Services*, Procs. ISD. 2008 - Information Systems Development Towards a Service Provision Society, ISBN: 978-0-387-84809-9, 2009, 831-838, WoS: 000299235500087, doi: [10.1007/b137171.87](#) (cits: 2)

2.158 B.A. Caprarescu, D. Petcu, *A Self-Organizing Feedback Loop for Autonomic Computing*, ADAPTIVE 2009, Best paper award. In Future Computing, Service Computation, Cognitive, Adaptive, Content, Patterns, 2009 (COMPUTATION-WORLD), IEEE, 126-131, WoS: 000277313700020, doi: [10.1109/ComputationWorld.2009.21](#) (cits: 11)

2007 2.159 D.Petcu, S. Panica, A. Eckstein, *Satellite Image Processing on Computational Grids*, ACMOS'07, 9th Internat. Conference on Automatic Control, Modeling & Simulation, ISBN 978-960-8457-72-0, 216-221, WoS: 000249671900038, [link](#)

2005 2.160 D.Zaharie, D.Petcu *Parallel implementation of multi-population differential evolution*, Revised version of (215) in Concurrent Information Processing and Computing, eds. Dan Grigoraş, Alex Nicolau, IOS Press, vol. 195 NATO Science Series: Computer & Systems Series, May 2005, ISBN 1-58603-502-9, 223-232, WoS: 000232181400018, [link](#) (cits: 31)

2000 2.161 D.Petcu, *Towards the automatic numerical solution of ODEs*, ITI. 2000: 22nd International Conference on Information Technology Interfaces, SRCE Publication ISBN 953-96769-1-6, 171-176, WoS: 000168535600022, [link](#)

2.162 A. Moldovan, D. Petcu, V. Gioncu, *Calibration of thin-walled members ductility*, In Behaviour of Steel Structures in Seismic Areas: Procs. 3rd International Conference on Behaviour of Steel Structures in Seismic Areas (STESSA 2000), eds. F. Mazzolani, R. Tremblay, 63-71, 2000, WoS: 000089123800009, [link](#) (cits: 1)

1999 2.163 A.Moldovan, D.Petcu, V.Gioncu, *Ductility of Thin-Walled Members*, SDSS'99: Pros. 6th International Colloquium on Stability and Ductility of Steel Structures, Elsevier Science Ltd., 299-307, WoS: 000083313700036, doi: [10.1016/B978-008043016-4/50036-2](#) (cits: 6)

2.2.5 Proceedings of other series of international conferences

2016 2.164 S. Ristov, R. Prodan, M. Gusev, D. Petcu, J. Barbosa, *Elastic Cloud Services Compliance with Gustafson's and Amdahl's Laws*, Procs. 3rd International Workshop on Sustainable Ultrascale Computing Systems (NESUS 2016), 1-10 [link](#)

2.165 D. Petcu, M. Fazio, R. Prodan, Z. Zhao, M. Rak, *On the Next Generations of Infrastructure-as-a-Services*. Procs. 6th Int. Conf. on Cloud Computing and Services Science (CLOSER) - Vol. 1, 320-326, ISBN: 978-989-758-182-3, 2016, SciTePress, WoS: 000393155100034, doi: [10.5220/0005912503200326](#)

2.166 T. Lynn, H. Xiong, D. Dong, B. Momani, G. Gravvanis, C. Filelis-Papadopoulos, A. Elster, M. M. Z. M. Khan, D. Tzovaras, K. Giannoutakis, D. Petcu, M. Neagul, I. Dragan, P. Kuppudayar, S. Natarajan, M. McGrath, G. Gaydadjiev, T. Becker, A. Gourinovitch, D. Kenny, J. Morrison, *CLOUDLIGHTNING: A Framework for a Self-organising and Self-managing Heterogeneous Cloud*. Procs. 6th Int. Conf. on Cloud Computing and Services Science (CLOSER) - Vol. 1, 333-338, ISBN 978-989-758-182-3, 2016, SciTePress, WoS: 000393155100036, doi: [10.5220/0005921503330338](#) (cits: 3)

2.167 M. Stopar, J. Modic, D. Petcu, M. Rak, *Towards a Proof-based SLA Management Framework - The SPECS Approach*. Procs. 6th Int. Conf. on Cloud Computing and Services Science (CLOSER 2016) - Vol. 2, 240-248, ISBN 978-989-758-182-3, 2016, SciTePress, WoS: 000393155000022, doi: [10.5220/0005771302400248](#)

2.168 D. Petcu, S. Panica, B. Irimie, G. Macarie, *On Security SLA-based Monitoring as a Service*, B.Mandler et al. (Eds.), Internet of Things. IoT Infrastructures, Lecture Notes of the Institute for Computer Sciences, Social Informatics & Telecommunications Engineering (LNICST), vol. 169, Springer, 326-336, 2016, WoS: 000398616500034 doi: [10.1007/978-3-319-47063-4_34](#)

2015 2.169 D. Petcu, *On Autonomic HPC Clouds*, Proceedings of the Second International Workshop on Sustainable Ultrascale Computing Systems (NESUS 2015), 29-40 [link](#) (cits: 1)

2014 2.170 D. Petcu, C. Craciun, *Towards a Security SLA-based Cloud Monitoring Service*. Procs. CLOSER 2014, 4th International Conference on Cloud Computing and Services Science, doi: [10.5220/0004957305980603](#), 598-603 (cits: 12)

2013 2.171 A. Edmonds, T. Metsch, D. Petcu, E. Elmroth, J. Marshall, P. Ganchosov, *FluidCloud: An Open Framework for Relocation*

- of Cloud Services, Procs. USENIX. ATC, 2013 [link](#) (cits: 1)
- 2.172 D. Petcu, *On the Interoperability in Multiple Clouds*. In Proceedings of the 3rd International Conference on Cloud Computing and Services Science, CLOSER 2013, 581-590, doi: [10.5220/0004503105810590](#)
- 2012 2.173 D. Petcu, *Towards Programmable Infrastructures: the Steps made by Cloud Computing and their Technical Support*, Procs. WoSS-4, CLASS Conference, 2012, 19-21, [link](#)
- 2.174 B. A. Caprarescu, D. Petcu. *Decentralized Probabilistic Auto-Scaling for Heterogeneous Systems*, Procs. ADAPTIVE 2012, ISBN: 978-1-61208-219-6, 7-12, [link](#) (extended version of [258]) (cits: 1)
- 2011 2.175 D. Petcu, S. Panica, M. Neagul, *From Grid Computing Towards Sky Computing. Case Study for Earth Observation*, Procs. Cracow Grid Workshop 2010, ISBN 978-83-61433-03-3, 11-20 (cits: 5)
- 2.176 S. Venticinque, R. Aversa, B. Di Martino, D. Petcu, *Agent based Cloud provisioning and management. Design and Prototypal Implementation*, Procs. CLOSER 2011 - 1st International Conference on Cloud Computing and Services Science, ISBN: 978-989-8425-52-2, 184-191, doi: [10.5220/0003395901840191](#) (cits: 19)
- 2.177 D. Petcu, C. Craciun, M. Rak, *Towards a cross platform Cloud API. Components for Cloud Federation*, Procs. CLOSER 2011 - 1st International Conference on Cloud Computing and Services Science, ISBN: 978-989-8425-52-2, 166-169, doi: [10.5220/0003388101660169](#) (cits: 38)
- 2010 2.178 S. Panica, M. Neagul, D. Petcu, *Processing remote sensing images on a Grid-based platform*, ICWI2010: IADIS Int. Conference WWW/Internet 2010, 397-399, ISBN: 978-972-8939-25-0, [link](#)
- 2008 2.179 Frîncu, M.E., Petcu, D., *On Designing an Asynchronous and Dynamic Platform for Solving Single Task Requests of Remote Applications*, ICCGI '08, 3rd International Multi-Conference on Computing in the Global Information Technology, 12-18, doi: [10.1109/ICCGI.2008.14](#)
- 2.180 D. Zaharie, M. Drăgan, S. Panica, D. Petcu, M. Stoia-Djeska, *Asynchronous master slave parallelization of evolutionary optimization in airfoil shape design*, Procs. PARA 2008, Trodheim (revised version of the technical report [260])
- 2007 2.181 K. Hammond, D. Petcu, P. Trinder, A.Al Zain, S. Linton, and G. Michaelson, *Using Parallel Functional Programming Technology to achieve Heterogeneous Symbolic Computing on the Grid*, Procs. 8th Symposium on Trends in Functional Programming (TFP 2007), TR-SHU-CS-2007-0-1, 22-34
- 2006 2.182 D. Petcu, *Improving Computer Algebra Systems by Using Grid Services*, in 1st Austrian Grid Symposium, Austrian Computer Society, Band 210, ISBN 3-85403-210-2, 2006, 102-110
- 2.183 D.Petcu, *A Solution for Satellite Image Processing on Grids*, Procs. DNCOCO'06, 5th Int. Conf. on Data networks, Communications and Computers, Bucharest, October 16-18, 2006, ISBN 960-8457-54-8, 75-80
- 2.184 D. Zaharie, S. Panica, M. Stoia-Djeska, M. Dragan, D. Petcu, *Airfoil shape optimization by coupling computational fluid dynamics with evolutionary multiobjective optimization*, Procs. International Multiconference on Computer Science and Information Technology (IMCSIT 2007), vol. 2, ISSN 1896-7094, Polskie Towarzystwo Informatyczne, 323-325, [link](#)
- 2005 2.185 D.Petcu, D.Tepeneu, M.Paprzycki, T.Mizutani, T.Ida, *Survey of Symbolic Computations on the Grid* (invited talk), SETIT 2005, 3rd Int.l Conf.: Sciences of Electronic, Technologies of Information and Telecommunications [link](#) (cits:1)
- 2.186 G. Ciobanu, D. Petcu, *P accelerators: Parallelization of sequential simulators*, in Cellular Computing: complexity aspects, ESF PESC Exploratory Workshop, Fenix Editora, Sevilla, 2005, 177-186.
- 2003 2.187 D.Petcu, D.Vizman, J.Friedrich, M.Popescu, *Crystal Growth Simulation on Clusters*, Proc. of HPC2003: High Performance Computing Symposium 2003, ISBN 1-56555-264-4, 41-46, [link](#)
- 2001 2.188 D. Petcu, D. Gheorghiu, *PAVIS: a parallel virtual environment for solving large mathematical problems*, Parallel Computing. Advances and Current Issues, Procs. PARCO. 2001, Imperial College Press, 2002, 490-497, [link](#)
- 2.189 D. Petcu, *Connected mathematical software kernels: a solution for large IVP integration*, HERCMA 2001: 5th Hellenic - European Conference on Computer Mathematics and its Applications, ISBN 960-85176-7-2, Hellas, 2002, 613-620
- 2000 2.190 D.Petcu, *Anatomy of an Automatic Solution Generator for Differential Equations*, Algorithm 2000: 15th Conference on Scientific Computing, Proceedings, ISBN 80-227-1391-0, Bratislava, 217-226, [link](#)
- 2.191 A. Moldovan, D. Petcu, V. Gioncu, *Post-critical behaviour of thin-walled beams. DuctRot-TWM computer program*, 3th International Conference on Coupled Instabilities in Metal Structures CIMS'2000, Imperial College Press, 595-604, [link](#)
- 1999 2.192 D.Petcu, *On the Use of Multiprocessor Systems for Initial Value Problems*, Procs. 3th International Conference on Parallel Processing & Applied Mathematics, PPAM. '99, Technical University of Czestochowa, 306-318.
- 1998 2.193 D.Petcu, *Problem solving environment for ordinary differential equations*, NMDE'98: 2nd Meeting on Numerical Methods for Differential Equations, Press of the University of Coimbra, 177-186.
- 2.194 D.Petcu, *Parallel quadric rendering with load balancing strategy*, VECPAR. '98: 3rd International Meeting on Vector and Parallel Processing, Part III, FEUP Press, Porto, 763-776.
- 2.195 D.Petcu, M.Drăgan, *Parallel rendering algorithm for curved surfaces*, PARELEC'98: International Conference on Parallel Computing in Electrical Engineering, Press of the Technical University of Bialystok, 191-196.
- 2.196 D.Petcu, *Computer environment for numerical ODE solvers*, DIFFEQ98: 2nd International Conference on Differential Equation and Applications, Press of State Technical University from Saint Petersburg, 72-85.
- 1996 2.197 V.Gioncu, L.Tîrcă, D.Petcu, *Rotation capacity of rectangular hollow section beams*, 7th International Symposium on Tubular Structures, Akadémiai Kiado, 345-356. (cits: 1)
- 2.198 V.Gioncu, L.Tîrcă, D.Petcu, *Interaction between in-plane and out-of-plane plastic buckling of wide-flange section members*, 2nd International Conf. Coupled Instabilities in Metal Structures, CIMS 96, Imperial College Press, 273-281. (cits: 2)
- 1995 2.199 V.Gioncu, D.Petcu, *Corrugated Hypar Structures*, in Lightweight Structures in Civil Engineering, Warsaw University of Technology, 1995, 637-644. (cits: 2)
- 2.200 V.Gioncu, D.Petcu, *Obliczenia, projektowanie i zastosowania blach faldowych w postaci faldodowej paraboloidy hiperbolicznej*, Sympozjum Blachy Faldowe, zaszosowania i rozwiazania, Rzeszów, grudzień 1995, 109-123
- 2.201 V.Gioncu, D.Petcu, *Numerical Investigations on the Rotation Capacity of Beams and Beam-Columns*, Proceedings of

2.2.6 Proceedings of conferences organized in Romania with international referees

- 2009 2.202 M. Frincu, S. Panica, M. Neagul, D. Petcu, *Gisheo: On Demand Grid Service Based Platform for EO Data Processing*, 3rd Int. Worksh. High Performance Grid Middleware (HiperGrid), Vol.2, Politehnica Press Bucharest, 2009, 415-422.
- 2008 2.203 S. Panica, D. Petcu, A. Eckstein, *Solving Computational-Intensive Tasks for Digital Libraries by using Grid-based e-Infrastructures*, Procs. CONTI 2008, vol. 2, 65-68.
- 2.204 D. Petcu, *Migrating an Expert System towards Service Oriented Architecture and Multicore Systems*, In Scientific and Educational Grid Applications, Ed. Politehniun, Iasi, 2008, ISBN 978-973-621-236-9, 39-48.
- 2.205 A. Cârstea, G. Macariu, M. E. Frincu, D. Petcu, *Secure Orchestration of Symbolic Grid Services*, Procs. HiperGrid 2008, IEEE Romania, Ed. Politehnica Press, ISSN 2065-0701, 25-32
- 2007 2.206 D. Petcu, D. Zaharie, H. Popa, M. Frincu, A. Eckstein, *Grid Services Based on Heuristic Methods for Multi-Objective Optimization Problems*, Procs. CSCS-16, 16th Intern. Conference on Control Systems and Computer Science, 22-25 May, 2007, Editura Printech, vol. 2, ISBN 978-973-718-743-7, 136-141.
- 2.207 D. Petcu, A. Eckstein, C. Giurgiu, *Using Statefull Web Services to Expose the Functionality of Legacy Software Codes*, Procs. SACCS 2007, Iasi, 9th Internat. Symposium on Automatic Control and Computer Science, ISSN 1843-665-X
- 2.208 S. Panica, D. Petcu, D. Zaharie, *A Grid-enabled Framework for Evolutionary Multiobjective Optimization*, Procs. SACCS 2007, Iasi, 9th Internat. Symposium on Automatic Control and Computer Science, ISSN 1843-665-X
- 2006 2.209 D.Petcu, *Building a Portal for Grid-based Services*, Procs. 7th International Conference on Technical Informatics - (CONTI), Ed. Politehnica, 2006, vol. 2: Computer and Software Engineering, 143-148
- 2.210 D. Zaharie, D. Petcu, *Communications Strategies in Distributed Evolutionary Algorithms for Multi-objective Optimization*, Procs. 7th International Conference on Technical Informatics (CONTI), Ed. Politehnica, 2006, vol. 1: Automation and Applied Informatics, 151-156
- 2004 2.211 D.Petcu, *Faster Computer Algebra Systems via Parallel and Grid Extensions*, Procs. 8th International Symposium on Automantic Control and Computer Science (SACCS), Ed. Politehniun, ISBN 973-621-086-3, Iasi, 2004, 42-45 and Bul. Inst. Polit. Iasi, fasc. 1-4, tom L (LIV), 2004, 101- 107.
- 2.212 D. Petcu, D. Dubu, *An extension of Maple for grid and cluster computing*, Procs. of the International Conference on Computers and Communications -ICCC 2004, ISBN 973-613-542-X, Metropolis SRL, Oradea, 355-360.
- 2.213 D.Petcu, D.Dubu, *Mapping General Purpose Scientific Computing Environments onto a Computational Grid*, Procs. SYNASC04, 6th International Symposium Timișoara, Workshop: Symbolic Computation on Grids, Ed.Mirton, ISBN 973-661-441-7, 574-585
- 2003 2.214 D.Petcu,D.Dubu, *Parallel state construction on a cluster*, Procs.s CSCS-14, 14th International Conference on Control Systems and Computer Science, 2003 Ed. Politehnica Press, ISBN 973-8449-18-9, 192-198.
- 2.215 D.Zaharie, D.Petcu, *Parallel implementation of multi-population differential evolution*, CIPC 2003, Concurrent Information Processing and Computing, Nato Advanced Research Workshop, Sinaia, July 2003, pre-proceeding, A.I.Cuza University Press, 262-269. (cits: 18)
- 2.216 D.Petcu, D.Dubu, *Load Balancing in Parallel State Space Exploration*, Procs SYNASC03, 5th International Workshop Timișoara, October 1-4, 2003 Ed.Mirton, ISBN 973-661-104-3, 211- 221
- 2.217 D.Petcu, A.Oprean, *Constructing a grid portal*, Proceedings SYNASC03, 5th International Workshop, Ed.Mirton, ISBN 973-661-104-3, 2003, 324- 328
- 2002 2.218 D.Petcu, C.Popa, *On the parallel implementation of Kovarik approximate orthogonalization algorithm*, Procs. SYNASC02, 4th International Workshop Timișoara, Ed.Mirton, ISBN 973-585-785-5, 263- 274
- 2001 2.219 D.Petcu, M.Petcu, *Efficiency model for parallel methods solving ODEs*, Procs. 9th Symposium of Mathematics and its Applications,"Politehnica " University of Timișoara 2001, Centru de Multiplicare al UPT, ISSN 1224-6069, 376-381.
- 2.220 D.Petcu, *Connecting scientific computing environments*, Procs. CSCS-13, 13th International Conference on Control Systems and Computer Science, 2001, Editura Politehnica Press, ISBN 973-85237-1-0, 388-393.
- 1999 2.221 D.Petcu, *Experiments with the method of line for time-dependent nonlinear partial differential equations*, 8th Symp. of Mathematics and its Applications,"Politehnica " Univ. Timișoara, 1999, Tipografia Politehnica Timișoara, 121-126.
- 1998 2.222 St.Măruster, V.Negru, D.Petcu, C.Sandru, *INTENSE - Intelligent non-linear algebraic and differential equations solver*, SINTES9: Int.Symp. on System Theory, Robotics, Computers & Process Informatics, 1998, Vol. I: Syst.Theory, 38-45.
- 1997 2.223 D.Petcu, *A numerical software product for solving ordinary differential equations*, Procs. 7th Symposium of Mathematics and its Applications, 6-9 November 1997, Tipografia Universității Politehnica Timișoara, 217-222
- 2.224 D.Petcu, *Distributed and Parallel Implementations of Runge-Kutta methods*, Procs. ICAOR: International Conference on Approximation and Optimization, 1996, vol. II, Transilvania Press, 1997, 193-202
- 1996 2.225 D.Petcu, L.Cucu, *Distributed plotting of curves and surfaces*, Procs. ROSYCS '96: Romanian Symposium on Computer Science. Concurrent Systems and Formal Languages. Evolutionary Computing, 215-224.
- 1995 2.226 D.Petcu, *Solving differential equations on a multiprocessor machine*, Procs. 6th Symposium of Mathematics and its Applications, 1995, Editura Mirton, 289-297
- 1993 2.227 D.Petcu, *Some Stiff Stable Methods for the Numerical Integration of Ordinary Differential Equations*, Proceedings of the 9th Romanian SYmposium on Computer Science, ROSYCS '93, Universitatea A.I.Cuza Iasi, 447-454
- 2.228 D.Petcu, *Efficient Methods for Numerical Solution of Ordinary Differential Equations*, Procs. 5th Symposium of Mathematics and its Applications, 1993, Ed. Mirton, 234-240

2.2.7 Proceedings of national conferences

- 2007 2.229 G. Neagu, N. Andrei, V. Sima, V. Cristea, C. Nae, R. Potolea, D. Petcu, Al. Stanciu, *Grid Enabled Applications for*

Modelling, Simulation and Optimization, Procs. AMCSIST, Oct 2007 (Best Session Technical Paper Award), [link](#)

- 2006 2.230 D. Petcu, *Adapting software applications to Grid environments* (in Romanian), MedioGrid workshop, eds. D.Gorgan, C.Meleti, Ed. Mediamira, Cluj-Napoca, 2006, 136-145.
- 2000 2.231 D.Petcu, *A tool for evaluating numerical methods for differential equations*, Proceedings CITTI 2000: Prima Conferință de Informatică Teoretică și Tehnologii Informatică, Constanța, 25-27 Mai 2000, 1-7, [link](#)
- 1996 2.232 D.Petcu, L.Cucu, *Concurrent drawing of curves and surfaces*, 5th Symposium in Descriptive Geometry, Design, Engineering and Computer Graphics, "Graphics, a scientific language", 17-19 June 1996, Timișoara, vol. IV: Grafică și proiectare asistată, procesarea imaginilor, partea a II-a, 861-868.
- 1991 2.233 D.Petcu, *On the Hypothesis for the Error Estimate of Newton's Method*, Lucrările celui de-al IV-lea Simpozion de Matematică și Aplicații al Universității Tehnice din Timișoara, Ed. Mirton, Timișoara, ed. N.Boja, 1991, 130-140
- 1988 2.234 D.Petcu, *New methods for solving stiff differential equations* (in Romanian), SNIC, IVth National Symposium in Informatics for Building Engineering, vol. 2, Timișoara, 26-27 May 1988, 287-294.

2.2.8 Extended abstracts

- 2016 2.235 M. Neagul, I. Drăgan, D. Petcu, *HPC Cloud Application Orchestration through Self-Organization*, RO-LCG 2016, Book of abstracts, p. 36
- 2.236 D. Petcu *Exploiting the Resources of a University HPC Center*, RO-LCG 2016, Book of abstracts, p. 17
- 2010 2.237 D. Petcu, D. Zaharie, D. Gorgan, S. Panica, M. Neagul, M. Frincu, V. Bacu, T. Stefanut, *On demand Grid services for training in Earth Observation*, 5th EGEE User Forum / Contributions book, 2010, 68-69.
- 2.238 D.Petcu, D. Zaharie, S. Panica, M. Frincu, M. Neagul, D. Gorgan, and T. Stefanut, *Grid-based platform for training in Earth Observation*, Geophysical Research Abstracts, Vol. 12, EGU2010-6713-1, 2010, [link](#)
- 2009 2.239 D. Gorgan, V. Băcu, G. Neagu, D. Petcu, F. Pop, *ESIP - Grid based Satellite Data Processing Platform*, 4rd EGEE User forum, Catania, Feb 2009, Book of abstracts. (cits: 1)
- 2.240 D.Petcu, *GiSHEO - Grid-based Services for Education in Earth Observation*, EGEE Conference, Barcelona, Sept 2009, Book of abstracts.
- 2.241 D.Gorgan, V. Bacu, D. Rodila, F. Pop, D. Petcu, *Experiments on ESIP - Environment oriented Satellite Data Processing Platform*, SEE-Grid User Forum, December 2009, Istanbul
- 2008 2.242 D.Petcu, S. Panica, *Porting legacy software codes towards Grid architectures*, presented at the National Workshop "Computational Physics and Modelling of Complex Phenomena", 29-20 May 2008, Timisoara.
- 2.243 D. Petcu, *Grid and Earth Science Education*, presented at 21st Internat. CODATA Conference, 3-8 Oct 2008, Kiev.
- 2.244 F. Serban, D. Petcu, *Grid and Earth Science Education*, presented at 3rd Grid & e-Collaboration Workshop for the Earth Science Community, 16-17 January 2008, Frascati.
- 2.245 G.Neagu, N.Andrei, V.Sima, V.Cristea, C.Nae, R.Potolea, D. Petcu, *Grid enabled applications for modeling, simulation and optimization*, 3rd EGEE User forum, Clermont-Ferrand, Feb 2008, Book of abstracts, 189
- 2007 2.246 D. Petcu, K. Hammond, P. Trinder, A. Al Zain, *SymGrid: Symbolic Computations on Grids*, 2nd EGEE User forum, Manchester, May 2007, Books of Abstracts, 241-242.
- 2004 2.247 D. Dubu, D. Petcu, *Augmenting computer algebra systems through grid*, CaVIS 2004: Computer Aided Verification of Information Systems, Timișoara, February 2004, Extended Abstract, 36-39
- 2.248 D. Petcu, D.Zaharie, *On applying random and genetic search in model checking*, CaVIS 2004: Computer Aided Verification of Information Systems, Timișoara, February 2004, Extended Abstract, 62-65
- 2.249 C. Bădică, D. Petcu, *Parallel state space exploration and partial order reduction for model based diagnosis of static systems*, CaVIS 2004: Computer Aided Verification of Information Systems, Timișoara, February 2004, Extended Abstract, 40-43
- 2003 2.250 D. Petcu, D. Dubu, *Parallel and distributed computing in model checking*, CaVIS 2003: Computer Aided Verification of Information Systems, Timișoara, February 2003, Extended Abstract, 47-50
- 2000 2.251 D.Petcu, *Experiments with Parallel Methods for ODEs*, NUMDIFF-9: 9th Seminar on Numerical Solution of Differential and Differential-Algebraic Equations, 4-8 September 2000, Proceedings, 29-30.
- 2.252 D. Petcu, *ODE-solving environment with distributed computing facilities*, ICCAM 2000: 9th International Congress on Computational and Applied Mathematics, Leuven, Belgium, 17-21 July, 2000, 78-80.
- 1998 2.253 D.Petcu, *Application du calcul parallèle aux systèmes des équations différentielles*, 4ème Colloque Franco-Roumain, Metz, 31 August-4 September 1998, 21-23.
- 1997 2.254 D.Petcu, V.Negru, T.Jebelean, *EPODE, a prototype ExPert system for solving initial value problems of ODEs*, SNADE '97, Praga, 11-17 June 1997, Proceedings, 19-21.

2.3 Technical reports

- 2016 2.255 D. Pop, G. Iuhasz, D. Petcu, *Distributed Platforms and Cloud Services Enabling Machine Learning for Big Data. An Overview*. preview of [276], IeAT Technical report, 2016, [link](#)
- 2015 2.256 D. Petcu, *Service Quality Assurance in Multi-Clouds*, preview of [93], IeAT Technical report, 2015, [link](#)
- 2012 2.257 B.A. Caprărescu, E. Kaslik, D. Petcu: *Theoretical Analysis and Tuning of Decentralized Probabilistic Auto-Scaling*. CoRR abs/1202.2981 (2012), [link](#)
- 2.258 B.A. Caprărescu, E. Kaslik, D. Petcu, *Decentralized Probabilistic Auto-Scaling for Heterogeneous Systems*. CoRR abs/1203.3885 (2012), [link](#) (preliminary version of [174])
- 2.259 N.M. Calcavecchia, B.A. Caprărescu, E. Di Nitto, D.J. Dubois, D. Petcu: *DEPAS: A Decentralized Probabilistic Algorithm for Auto-Scaling*. CoRR abs/1202.2509 (2012), [link](#), preview of [10] (cits: 2)
- 2008 2.260 D. Zaharie, M. Drăgan, S. Panica, D. Petcu, M. Stoia-Djeska, *Asynchronous master slave parallelization of evolutionary optimization in airfoil shape design*, IeAT Technical Report 08-11, [link](#) (preliminary version of [180])

- 2.261 A. Carstea, G. Macariu, M. Frincu, D. Petcu, *Secure Orchestration of Symbolic Grid Services*, IeAT Tech.Rep.08-08, [link](#)
- 2005 2.262 D.Petcu, Software Issues in Solving Initial Value Problems for Ordinary Differential Equations IeAT Tech.Rep.05-04, [link](#)
- 2004 2.263 D.Petcu, D. Dubu, *An Extension of Maple for Grid and Cluster Computing*, IeAT Technical Report 04-03, [link](#)
- 2.264 D.Petcu, *Speedup Involving Differential Equations on Cluster Workstations*, IeAT Technical Report 04-02, [link](#)
- 2003 2.265 D.Petcu, Building a Computational Grid: Design Issues, IeAT Technical Report 03-09, [link](#)
- 2.266 D.Petcu, A. Oprean, Constructing a Grid Portal IeAT Technical Report 03-08, [link](#)
- 2.267 D. Zaharie, D.Petcu, Parallel Implementation of multi-population differential evolution, IeAT Tech.Rep.03-07, [link](#)
- 2.268 D.Petcu, D. Dubu, Parallel State Space Construction on a Cluster, IeAT Technical Report 03-02, [link](#)
- 2001 2.269 D. Petcu, D. Vizman, M. Popescu, *Computational fluid dynamics on a cluster*, SYNASC 01: 3rd International Workshop on Symbolic and Numerical Algorithms for Scientific Computing, Proceedings, Risc-Linz Report Series No. 01-20, 15-21.
- 2.270 D.Petcu, *Working with multiple Maple kernels connected by Distributed Maple or PVMMaple*, RISC-Linz Technical Report Series No. 01-18, eds. RISC-Linz Faculty: E.S. Blurock, B.Buchberger et al., March 2001, [link](#)
- 2000 2.271 D.Petcu, *Numerical Solution of ODEs with Distributed Maple*, RISC-Linz Technical Report Series No. 00-09, eds. RISC-Linz Faculty: 12 pages, [link](#)

2.4 Books

2.4.1 Book chapters

- 2017 2.272 I. Drăgan, T.-F. Fortiș, G. Iuhasz, M. Neagul, D. Petcu, *Applying Self-* Principles in Heterogeneous Cloud Environments*, In N. Antonopoulos, L. Gillam (eds.), *Cloud Computing. Principles, Systems and Applications, Part IV*, Series Computer Communications and Networks, Springer, 255-274, doi: [10.1007/978-3-319-54645-2_10](#) (cits: 3)
- 2.273 G. Iuhasz, S. Panica, C. Crăciun, D. Petcu, *Deployment of Cloud Supporting Services, Model-Driven Development and Operation of Multi-Cloud Applications*, Part of the series SpringerBriefs in Applied Sciences and Technology pp 69-80, 2016, doi: [10.1007/978-3-319-46031-4_8](#)
- 2.274 E. Di Nitto, Petcu, D., *Introduction*, 2017, In *Model-Driven Development and Operation of Multi-Cloud Applications*, Part of the series SpringerBriefs in Applied Sciences and Technology, 1-11, 2016, doi: [10.1007/978-3-319-46031-4_1](#)
- 2016 2.275 M. C. Calzarossa, M. L. Della Vedova, L. Massari, D. Petcu, M. Tabash, D. Tessera, *Workloads in the Clouds*, in L. Fiondella, A. Puliafito, *Principles of Performance and Reliability Modeling and Evaluation*, Springer Series in Reliability Engineering, Springer, 2016, 525-550, WoS: 000386786000021, doi: [10.1007/978-3-319-30599-8_20](#) (cits: 4)
- 2.276 D. Pop, G. Iuhasz, D. Petcu, *Distributed Platforms and Cloud Services Enabling Machine Learning for Big Data. An Overview*, in *IJData Science and Big Data Computing: Frameworks and Methodologies* book, ed. Zaigham Mahmood, 139-159, Springer, 2016, ISBN 978-3319318592, doi: [10.1007/978-3-319-31861-5_7](#) (preliminary version: [255], cits: 1)
- 2015 2.277 D. Pop, A. Echeverria, D. Petcu, G. Conesa, *Enabling Open and Collaborative Public Service Advertising through Cloud Technologies*, In book: *Cloud Computing Technologies for Connected Government*, Edition: 1, Chapter: 11, Publisher: IGI Global, Editors: Zaigham Mahmood, 268-290 doi: [10.4018/978-1-4666-8629-8.ch011](#)
- 2.278 E. Di Nitto, A. Solberg, D. Petcu, *On MODAClouds' Approach for Application Design and Execution on Multi-Clouds*, M. Helfert, B. Donnelan (Eds.), *European Project Space, Cases and Examples*, SCITEPRESS, 2015, Portugal, ISBN: 978-989-758-034-5, 49-60, [link](#)
- 2014 2.279 M.E. Frincu, D. Petcu, *Resource Management for HPC on the Cloud*, E. Jeannot, J. Zilinskas (eds.): *High-Performance Computing on Complex Environments* ISBN: 978-1-118-71205-4, John Wiley & Sons, 2014, WoS: 000351612700017, doi: [10.1002/9781118711897.ch16](#), 303-323
- 2013 2.280 D. Petcu, *Building Automatic Clouds with an Open-source and Deployable Platform-as-a-service*, *Advances in Parallel Computing, Vol 23: Cloud Computing and Big Data*, eds. C. Catlett, W. Gentzsch, L. Grandinetti, G. Joubert, J.L. Vazquez-Poletti, 978-1-61499-321-6, 3-19, IOS Press, WoS: 000350347400001, doi: [10.3233/978-1-61499-322-3-3](#)
- 2.281 R. Cossu, C. Di Giulio, F. Brito and D. Petcu, *Cloud Computing for Earth Observation*, in *Data Intensive Storage Services for Cloud Environments*, ed. Dimosthenis Kyriazis, Athanasios Vouloimos, Spyridon V. Gogouvtis and Theodora Varvarigou, 166-191 (2013), WoS: 000417994600057 doi: [10.4018/978-1-4666-3934-8.ch012](#) (cits: 3)
- 2.282 D. Petcu, M. Rak, *Open-Source Cloudware Support for the Portability of Applications Using Cloud Infrastructure Services*, In Z. Mahmood (ed.), *Cloud Computing: Methods and Practical Approaches*, Computer Communications and Networks, doi: [10.1007/978-1-4471-5107-4_15](#), Springer-Verlag, London, 2013, 323-341 (cits: 4)
- 2012 2.283 D. Petcu, *Research Challenges of Cloud Computing*, chapter 6, C. Enachescu, F. G. Filip, B. Iantovics (Eds.), *Advanced computational technologies*, Romanian Academy Publishing House, 2012, ISBN 978-973-27-2256-5, 89-98
- 2.284 M. Rak, M. Ficco, J. Luna, H. Ghani, N. Suri, S. Panica, D. Petcu, *Security Issues in Cloud Federation*, In *Achieving Federated and Self-Manageable Cloud Infrastructures: Theory and Practice*, eds. Massimo Villari, Ivona Brandic, Francesco Tusa, IGI Global, 2012, 176-194, doi: [10.4018/978-1-4666-1631-8.ch010](#), ISBN: 978-1-4666-16318, WoS: 000416666700012 (cits: 9)
- 2.285 D. Petcu, *Invitation to a Journey in the ERA of Cloud Computing*, in D.Petcu, J.L. Vazquez-Poletti (eds), *European Research Activities in Cloud Computing*, Cambridge Scholars Publishing, UK, January 2012, 1-18, [link](#)
- 2011 2.286 K. Wasielewska, M. Ganzha, M. Paprzycki, M. Drozdowicz, D. Petcu, C. Badica, N. Attaoui, I. Lirkov, R. Olejnik, *Negotiations in an Agent-based Grid Resource Brokering System*, in P. Ivăᅇanyi, B.H.V. Topping (Eds.), *Trends in Parallel, Distributed, Grid and Cloud Computing for Engineering*, Saxe-Coburg Publications, Chapter 16, 355-374, 2011. Computational Science, Engineering & Technology Series, doi: [10.4203/cs.ets.27.16](#), ISBN 978-1-874672-53-1 (cits: 2)
- 2.287 M. Drozdowicz, K. Wasielewska, M. Ganzha, M. Paprzycki, N. Attaoui, I. Lirkov, R. Olejnik, D. Petcu, C. Badica, *Ontology for Contract Negotiations in an Agent-based Grid Resource Management System*, P. Ivăᅇanyi, B.H.V. Topping (Eds.), *Trends in Parallel, Distributed, Grid and Cloud Computing for Engineering*, Saxe-Coburg, Chapter 15, 335-354,

2011. Comput.Science, Engineering & Technology Series, doi: [10.4203/csets.27.15](https://doi.org/10.4203/csets.27.15), ISBN 978-1-874672-53-1 (cits: 3)
- 2.288 F. Moscato, R.Aversa, B. Di Martino, D. Petcu, M. Rak, S. Venticinque, *An Ontology for the Cloud in mOSAIC*, in Cloud Computing: Methodology, Systems, and Applications. L. Wang, R. Ranjan, J. Chen, B. Benatallah, 2011, CRC Press, ISBN: 978-1439856413, 467-486, WoS: 000357178400022, doi: [10.1201/b11149-24](https://doi.org/10.1201/b11149-24) (cits: 13)
- 2010 2.289 D. Petcu, G. Macariu, A. Carstea, M.E. Frincu, *Service-Oriented Symbolic Computing*. Chapter 15 in Handbook of Research on P2P and Grid Systems for Service-Oriented Computing: Models, Methodologies and Applications, Eds. N. Antonopoulos, G. Exarchakos, A. Liotta, M. Li, ISBN: 978-1-61520-686-5, Information Science Reference, Hershey, 2010, 1053-1075, doi: [10.4018/978-1-61520-686-5.ch045](https://doi.org/10.4018/978-1-61520-686-5.ch045) (cits: 1)
- 2009 2.290 D. Petcu, *Challenges of Data Processing for Earth Observation in Distributed Environments*, G.A. Papadopoulos and C. Badica (Eds.): Intelligent Distributed Computing III, Studies in Computational Intelligence SCI 237, ISSN: 1860-949X, Springer, 9-19 (invited talk at IDC 2009), WoS: 000274283000002, doi: [10.1007/978-3-642-03214-1_2](https://doi.org/10.1007/978-3-642-03214-1_2) (cits: 1)
- 2.291 D. Petcu, D. Zaharie, M. Neagul, S. Panica, M. Frincu, D. Gorgan, T. Stefanut, V. Bacu, *Remote Sensed Image Processing on Grids for Training in Earth Observation*, Chen Yung-Sheng (ed.), Image Processing, ISBN 978-953-307-026-1, In-Teh, 2009, 115 - 140, doi: [10.5772/7049](https://doi.org/10.5772/7049) (cits: 1, downloads over 11000)
- 2.292 D. Petcu, A. Baltat, *Transforming an Interactive Expert Code into a Statefull Service and a Multicore-Enabled System*, in Intelligent Systems and Technologies Methods and Applications, Series: Studies in Computational Intelligence, Vol. 217 Teodorescu, H.-N.; Watada, J.; Jain, L.C. (Eds.) 2009, ISBN: 978-3-642-01884-8, 137-159, WoS: 000268638100008, doi: [10.1007/978-3-642-01885-5_8](https://doi.org/10.1007/978-3-642-01885-5_8) (cits: 2)
- 2006 2.293 D.Petcu, D.Țepeneu, M.Paprzycki, T.Ida, *Symbolic Computations on Grids*, invited chapter 6 in the book "Engineering the Grid: status and perspective", eds. B. di Martino, J. Dongarra, A. Hoisie, L. Yang, H. Zima, American Scientific Publishers, ISBN: 1-58883-038-1, 2006, 91-107, [link](#)
- 2.294 D.Petcu, M. Paprzycki, M. Ganzha, *Cluster Computing facilities in a service-oriented architecture*, Russian book, 2006.
- 2003 2.295 D.Zaharie, D.Petcu, *Adaptive Pareto Differential Evolution and its Parallelization*, LNCS 3019, ISSN 0302-9743, 2003, 261-268, WoS: 000221559200034, doi: [10.1007/978-3-540-24669-5_34](https://doi.org/10.1007/978-3-540-24669-5_34) (cits:59)
- 2002 2.296 D. Petcu, V.Gioncu, *DUCTROT computer program*, in Ductility of Seismic-Resistant Steel Structures, V. Gioncu, F.M. Mazzolani, E & FN Spon, Londra (2002), 673-682, ISBN 049225501 & Demo CD with DuctRot-M, [link](#)
- 2000 2.297 D.Petcu, M.Drăgan, *Designing an ODE solving environment*, Lectures Notes in Computational Science and Engineering 10: Advances in Software Tools for Scientific Computing, eds. H.P. Langtangen, A.M. Bruaset, E. Quak, Springer-Verlag, Berlin, 2000, ISSN: 1439-7358, 319-338, WoS: 000086116500010, doi: [10.1007/978-3-642-57172-5_10](https://doi.org/10.1007/978-3-642-57172-5_10) (cits: 10)
- 2.298 D.Petcu, *The potential for distributing computation in large initial value problems*, Notes on Numerical Fluid Mechanics 73: Large Scale Scientific Computations of Engineering and Environmental Problems, 2000, eds. Michael Griebel, Svetozar Margenov, Plamen Yalamov, Springer, ISSN 0179-9614, 180-195, [link](#)
- 2.299 V.Gioncu, G. Mateescu, D. Petcu, A. Anastasiadis, *Prediction of available ductility by means of local plastic mechanism method: DuctRot computer program*, in Moment resistant connections of steel frames in seismic areas. Design and Reability, ed. F.M. Mazzolanni, E & FN Spon, Londra, 2000, 95-146, [link](#) (cits: 7)
- 1997 2.300 D.Petcu, *Implementation of some multiprocessor algorithms for ODEs using PVM*, LNCS 1332, ISSN 0302-9743, 1997, 375-383, WoS: 000077561700046, doi: [10.1007/3-540-63697-8_107](https://doi.org/10.1007/3-540-63697-8_107)

2.4.2 Monographs

- 1998 2.301 D.Petcu, *Parallelism in solving ordinary differential equations*, Mathematical Monographs 64, Tipografia Universității din Timișoara, 1998, 232 pages (cits: 15)
- 1996 2.302 D.Petcu, *Parallel Numerical Algorithms. Part I: Solving systems of linear, nonlinear or differential equations*, Mathematical Monographs 60, Tipografia Universității din Timișoara, 1996, 148 pages.
- 2.303 D.Petcu, *Parallel Numerical Algorithms. Part II: Solving partial differential equations*, Mathematical Monographs 61, Tipografia Universității din Timișoara, 1996, 134 pages.
- 1995 2.304 D.Petcu, *Multistep Methods for Stiff Initial Value Problems*, Mathematical Monographs 50, Tipografia Universității din Timișoara, 1995, 186 pages.
- 1994 2.305 D.Petcu, *Parallel computing* (in Romanian), Editura de Vest, Timișoara, 1994, ISBN 973-36-0227-2, 160 pages.

2.4.3 Textbooks

- 2006 2.306 D.Petcu, *Grid architectures and technologies* (in Romanian), Ed. Eubeea, Timișoara, ISBN 973-673-056-7, 2006, 292 pages (cits: 3)
- 2.307 L.Cucu, V.Iordan, V.Negru, D.Petcu, G.Petrov, P.Popovici, D.Zaharie, *Tests for informatics exams* (in Romanian), Ed. Mirton, Timișoara, ISBN 973-661-844-7, 2006, 166 pages.
- 2004 2.308 D.Petcu, D.Pop, *Modeling three-dimensional world* (in Romanian), Ed. Eubeea, Timișoara, ISBN 973-673-011-5, 2004.
- 2002 2.309 D.Petcu, V.Negru, *Distributed processing* (in Romanian), Editura Universității de Vest, Seria Alef, 2002, Timișoara, ISBN 973-85552-8-0 (cits: 3)
- 2001 2.310 D.Petcu, *Parallel processing* (in Romanian), Edit. Eubeea, 2001, Colecția Informatică, Timișoara, ISBN 973-9479-48-0
- 2000 2.311 D.Petcu, *Mathematics assisted by computers* (in Romanian), Colecția Informatică, Editura Eubeea, 2000, Timișoara, ISBN 973-9479-13-8.
- 1999 2.312 D.Petcu, L.Cucu, *Computer Graphics* (in Romanian), Tipografia Universității Timișoara, 1999.
- 1998 2.313 O. Dogaru, Gh. Bocșan, I. Despi, A. Ionică, V. Iordan, L. Luca, D. Petcu, P. Popovici, *Informatics for teachers* (in Romanian), Editura de Vest, Timișoara, 1998, ISBN 973-36-0308-2.
- 1997 2.314 D.Petcu, *Maple, a standard for computer assisted mathematics* (in Romanian), Tipografia Universității Timișoara, 1997.
- 1995 2.315 O.Dogaru, D.Petcu, Gh.Petrov, *Turbo Pascal. Exercises and problems* (in Romanian), Timișoara, Editura de Vest, 1995, ISBN 973-36-0200-0.

- 2.316 D.Petcu, L.Cucu, *Computer graphics principles* (in Romanian), Edit. Excelsior, Timișoara, 1995, ISBN 973-9015-51-4
 1994 2.317 D.Petcu, *Parallel algorithms* (in Romanian), Tipografia Universității Timișoara, 1994.

Chapter 3

Support activities

3.1 Special talks

3.1.1 Invited talks

- 2017 3.1 D. Petcu, *Mastering the heterogeneity in HPC as a Service*, NESUS Sixth Working Group, Bayreuth, Apr 2017, [link](#)
 2016 3.2 D. Petcu, *Service Quality Assurance for Cloud-based Data-intensive Applications*, SEE Data Science Forum, Belgrad, June 2016, [link](#) and [abstract](#)
 3.3 D. Petcu, *Big Data and DevOps in the Cloud: The role of monitoring and DICE approach*, NESUS Fifth Working Group Meeting, Ljubljana, Jul 2016, [link](#)
 2014 3.4 D. Petcu, *Challenges of Multi-Clouds*, AMGCC14 / ICAC 2014, London, September 2014, [link](#)
 2012 3.5 D. Petcu, *Benefits and Barriers of Symbolic Computations on Clouds and Grids*, ACA 2012, Sofia, June 2012, [link](#)
 2009 3.6 D. Petcu, *Challenges of Data Processing for Earth Observation in Distributed Environments*, IDC 2009 - 3rd International Symposium on Intelligent Distributed Computing, Cyprus, [link](#)
 2007 3.7 D. Petcu, *Distributed Symbolic Computations*, Invited talk, ISPDC 2007, July 5-8 2007, Hagenberg, [link](#)
 3.8 D. Petcu, *Trends in Grid Computing*, Procs. SACCS 2007, Iasi, 9th Internat. Symposium on Automatic Control and Computer Science, Proceedings, CD version, ISSN 1843-665-X
 3.9 D.Petcu, *Mathematics on the net: state-of-the-art and challenges*, 8th French-Romanian Colloquium on Applied Mathematics, 28-31 August 2006, Chambery, France
 2005 3.10 D.Petcu, *Software issues in solving initial value problems for ordinary differential equations*, ICCAM 2005, Baia Mare.
 2002 3.11 D. Petcu, *Applications of multiprocessing in solving differential equations*, Simpozion Intinerant, Secțiunea Matematică Aplicatăși Informatică, Constanța, 16.01.2002

3.1.2 Invited keynotes

- 2017 3.12 D. Petcu, *HPC as a Service: Challenges and Limitations*, ISPDC 2017, Innsbruck, July 2017, [link](#)
 2015 3.13 D. Petcu, *Service quality assurance in multi-clouds*, GECON 2015, Cluj, Sept 2015, [link](#)
 2012 3.14 D. Petcu, *HPC in the Cloud*, CLASS Conference 2012, Bled, Oct 2012
 3.15 D. Petcu, *From a Desktop to a Supercomputer, Cluster, Grid, Cloud, InterCloud: Where my Research Code Should Run?*, ComputationWorld 2012, Nisa, July 2012, [link](#)
 3.16 D. Petcu, *The Cloudy Sky of Programmable Infrastructures*, HEUNET workshop at SAINT 2012, Izmir, July 2012, [link](#)
 3.17 D. Petcu, *Building European consensus on sustainability*, e-FISCAL workshop, Samos, July 2012, [link](#)
 3.18 D. Petcu, *Open-source platform-as-a-service: requirements and implementation challenges*, High Performance Computing, Grids and Clouds, Cetraro, June 2012, [link](#)
 2011 3.19 D. Petcu, *How is built a mOSAIC of Clouds*, International Research Workshop on Advanced High Performance Computing Systems Cetraro, Italy, June 27 - 29, 2011, [link](#)
 2010 3.20 D.Petcu, *From Grid Computing towards Sky Computing. Case study for Earth Observation*, CGW 2010 - Cracow Grid Workshop, October 11-13, 2010, Cracow, [link](#)
 2009 3.21 D. Petcu, *Grid-based Services for High Education in Earth Observation*, 4th GRID & e-Collaboration Workshop, 25-26 Feb. 2009, Frascati, [link](#)
 3.22 D.Petcu, *e-Science and Grids*, EWM 2009, NoviSad, August 2009
 2008 3.23 D. Petcu, *Recent experiences in Grid-enabling legacy software codes*, presentation at Alice workshop, Sibiu, 2008.
 3.24 D. Petcu, S. Panica, *Using Desktop Grids for Evolutionary Multi-objective Optimization*, DAPSYS 2008, Debrecen.
 2001 3.25 D. Petcu, *ODE solving environment with distributed computing facilities*, Advanced Environments and Tools for High Performance Computing: EuroConference on Problem Solving Environments for Numerical Mathematics, Science and Engineering Applications, Castelvecchio Pascoli, 16-21.07.2001.
 1996 3.26 D.Petcu, *Parallel Calculus for Solving Differential Equations*, PARADIS 96, International Summer School on parallel and distributed systems, Vatra Dornei, 26-30.08.1996, 1-19.

3.1.3 Invited project presentations

- 2014 3.27 D. Petcu, *MODAClouds project*, European Project Space, CLOSER 2014, Barcelona, April 2014
 2013 3.28 D. Petcu, *Modelling Quality of Service for the Cloud*, Engineering the Cloud, ICT 2013, Vilnius, November 2013.
 3.29 D. Petcu, *Towards Application Level Interoperability in Multi-Clouds*, Cloud Standards and Interoperability Workshop, CloudPlugFest 2013, Madrid, September 2013.
 3.30 D. Petcu, *HOST & ICAM. Case study of synergies between FP7-RegPOT and Structural Funds*, A Research Potential capitalization exercise: Thematic workshop on capacity building - Ștairway to excellence, Brussels, June 2013.
 2012 3.31 D. Petcu, *Open-source platform-as-a-service*, 2nd Working Meeting of IFIP WG on Services-oriented Systems, Bologna, September 2012
 3.32 D. Petcu, *Storage and Software Components Management in Multiple Clouds using mOSAIC*, e-Challenges 2012, Lisbon, October 2012

- 3.33 D. Petcu, *mOSAIC- facts, objectives and current results*, CLASS conference, Bled, October 2012
 3.34 D. Petcu, *How to build a reliable mOSAIC of multiple Cloud services*, EWDC 2012, Sibiu, May 2012, [link](#)

3.1.4 Invited papers

- 2014 3.35 D. Petcu, E. Di Nitto, D. Ardagna, A. Solberg, G. Casale, *Towards Multi-Clouds Engineering*, 2014 IEEE INFOCOM Workshop on Cross-Cloud Systems, April 2014, Toronto.
 2011 3.36 D.Petcu *Portability and Interoperability between Clouds: Challenges and Case Study*, ServiceWave 2011, Poznan, [link](#)

3.1.5 Invited tutorials

- 2014 3.37 D. Petcu, *Multi-Clouds: from models to runtime support*, SummerSOC 2014, Advanced School on Service Oriented Computing, Hersonissos, July 2014, [link](#)
 2013 3.38 D. Petcu, *Cloud Management Software for Multi-Clouds*, Cloud computing SummerSchool, "Paving the way to the Cloud", Almere, July 2013.
 2012 3.39 D. Petcu, *How to Port an Application Between Clouds?*, ADAPTIVE 2012, Nice, July 2012, [link](#)
 2011 3.40 D. Petcu, *Playing with the mOSAIC of Clouds*, Contrail Summer School On Cloud and Grid computing, Hyères-les-Palmiers, France, June 27-July 1, 2011, [link](#)
 2003 3.41 D.Petcu, *Experiments with ODE and CFD Codes on Clusters*, Dagstuhl Seminar nr. 03211, May 18-23 2003, published in IJPDEC in 2005, no. 3/4.
 1997 3.42 D.Petcu, V.Gioncu, *DUCTROT '97, Ductility of rotation – Rotation Capacity of Steel Beams and Beam Columns*, Roma, Napoli, Salerno si Lecce (tutorials), 16.10.97-30.10.1997, TEMPUS JEP 11297.

3.1.6 Invited lectures

- 2015 3.43 D. Petcu, *Cloud Computing*, TEMPUS+ lecture at University of Pavia, 28-29 April 2015, [link](#)
 2013 3.44 D. Petcu, *The challenges of Multi-Clouds*, seminar at University of Pavia, December 19, 2013, [link](#)
 3.45 D. Petcu, *Cloud Computing challenges from a developer to a provider point of view*, seminar at University Carlos III Madrid, January 29-30 2013.
 2005 3.46 D.Petcu, *Extending Computer Algebra Systems to the Grids: State-of-the-art, Design and Implementation*, 28.01.2005, Seconda Università di Napoli, Italy
 1997 3.47 D.Petcu, V.Negru, *EPODE, front-end user interface for solving ODEs – implementation of some parallel algorithms*, PARADIS 97, Advanced Informatics Summer School, Parallel and Distributed Computer Systems, Mangalia, 1-10.

3.1.7 Invitations to expert panels

- 2014 3.48 D. Petcu, *Security in MultiClouds*, 2014 IEEE COMPSAC, IEEE Convergence Panel, Västerås, Sweden, July 2014
 3.49 D. Petcu, *Challenges of Cross-Clouds*, 2014 IEEE INFOCOM Workshop on Cross-Cloud Systems, Toronto, April 2014
 3.50 D. Petcu, *Cloud computing perspective in R&D projects*, European Project Space, CLOSER 2014, Barcelona, April 2014.
 2013 3.51 D.Petcu, *Multiple Clouds and multiple interest communities: challenges in developing open-source software in Cloud-related collaborative projects*, Community Summit: Open Source Communities as Collaborative Innovation Platforms, Opportunities and Challenges, Open World Forum 2013, Paris, Oct 2013.
 2012 3.52 D. Petcu, *Perspective on Fog computing*, FOG Panel, CLASS Conference, Bled, Oct 2012
 3.53 D. Petcu, *Where my application should run? HPC, Grids or Clouds?*, e-Fiscal workshop, Panel: e-Infrastructure for research and science: owned, leased or hybrid approaches? July 2012, Samos
 3.54 D. Petcu, *e-IRG and mOSAIC position*, CloudScape IV, Panel: Trust, Legal & Security Issues in Cloud Computing, Feb 2012, Brussels
 2008 3.55 D. Petcu, *HPC in Romania*, PARA 2008, Panel 2: Future Trends in Parallel & Scientific Computing, May 2008, Trondheim
 2006 3.56 D.Petcu, *QoS in Grid environments*, ICCGI Panel: Integrated Network and Application QoS for GRID Applications, July 30, 2006, Bucharest

3.1.8 Invited contributions to research policy documents

- 2016 3.57 InfraCluster of Cloud related projects, [White paper](#), April 2016
 2015 3.58 InfraCluster of Cloud related projects, [Recommendations](#) for the workprogramme H2020-ICT-2018-2019, December 2015
 3.59 InfraCluster of Cloud related projects, [Map of challenges](#), October 2015
 2012 3.60 e-IRG Task Force on Cloud Computing, [Cloud Computing for research and science: a holistic overview, policy, and recommendations](#), 30 Oct 2012,
 3.61 Cloud Computing Expert Group Report, [Advances in Clouds. Research in Future Cloud Computing](#), May 2012
 3.62 Cloud Expert Group Recommendations, [A Roadmap for Advanced Cloud Technologies under H2020](#), December 2012

3.2 Editorial activity

3.2.1 Editor-in-Chief

- 2009 3.63 Scalable Computing: Practice and Experience (SCPE, from 2009), in WoS from 2015

3.2.2 Member in editorial board

- 2018 3.64 Acta Cybernetica ([AC](#), from 2018)
 2016 3.65 EAI Endorsed Transactions on Cloud Systems, ISSN: 2410-6895 ([CloudSys](#), from 2016)
 2014 3.66 Complex Systems Informatics and Modeling Quarterly, ISSN: 2255-9922 ([CSIMQ](#), from 2014)
 2013 3.67 Soft Computing and Networking, ISSN: 2052-8450 ([IJSCN](#), from 2013)
 2008

- 3.68 International Scientific Journal of Computing, ISSN: 2312-5381 ([CISJ](#) from 2008)
- 2006 3.69 Multiagent and Grid Systems, ISSN: 1574-1702 ([MAGS](#), from 2006), in WoS
- 3.70 Journal on Computer Science and Information Systems, ISSN: 1646-3692 ([IJCSIS](#), from 2006),
- 3.71 International Review on Computers and Software, ISSN: 1828-6003 ([IRECOS](#), from 2006),
- 3.72 International Journal of Computers, Communications and Control, ISSN 1841-9836 ([IJCCC](#), from 2006), in WoS
- 2005 3.73 International Journal of Computer Science and Applications, ISSN: 0972-9038 ([IJCSA](#), from 2005)
- 3.74 Scalable Computing: Practice and Experience ([SCPE](#), from 2005), in WoS

3.2.3 Journal reviewer

- 2018 3.75 IEEE Transactions on Industrial Informatics ([THI](#), from 2018); PLoS One ([PONE](#), from 2018); Journal of Real-Time Image Processing ([RTIP](#), from 2018); Sustainability ([Sustainability](#), from 2018);
- 2017 3.76 IEEE Access ([Access](#), from 2017); IEEE Journal on Selected Areas in Communications ([JSAC](#), from 2017); Applied Soft Computing ([ASOC](#), from 2017); Symmetry ([Symmetry](#), from 2017); Sustainable Computing, Informatics and Systems ([SUSCOM](#), from 2017); Computer Languages, Systems & Structures ([COMLAN](#), from 2017); Journal of Software: Evolution and Process ([JSME](#), from 2017); Studies in Informatics and Control ([SIC](#), from 2017); Software: Practice and Experience ([SPE](#), from 2017); International Journal of Services Technology and Management ([IJSTM](#), from 2017); Open Cybernetics & Systemics Journal ([TOCSJ](#), from 2017);
- 2016 3.77 ACM Computing Surveys ([CSUR](#), from 2016); International Journal of High Performance Computing Applications ([IJHPCA](#), from 2016); International Journal of Cooperative Information Systems ([IJCIS](#), from 2016); Computing and Informatics ([CAI](#), from 2016); Journal of Applied Remote Sensing ([JARS](#), from 2016); Transactions on Large Scale Data and Knowledge Centered Systems ([TLDKS](#), from 2016); International Journal of Computer Engineering Research ([IJCER](#), from 2016); Journal of King Saud University - Computer and Information Sciences ([JKSUCIS](#), from 2016);
- 2015 3.78 IEEE Transactions on Services Computing ([TSCSI](#), from 2015); Journal of Hydrology ([HYDROL](#), from 2015); Journal of Systems and Software ([JSS](#), from 2015); Journal of Sensors ([JS](#), from 2015); Scientific Programming ([SP](#), from 2015); Journal of Computer Networks and Communications ([JCNC](#), from 2015); Central European Journal of Computer Science ([CEJCS](#), from 2015); Computers & Mathematics with Applications ([CAMWA](#), from 2015); Egyptian Informatics Journal, Elsevier ([EIJ](#), from 2015);
- 2014 3.79 IEEE Transactions on Computers ([TC](#), from 2014); IEEE Systems Journal ([ISJ](#), from 2014); Data & Knowledge Engineering ([DATA-K](#), from 2014); Journal of Parallel and Distributed Computing ([JPDC](#), from 2014); Concurrency and Computation: Practice and Experience ([CCPE](#), from 2014); Mathematical Problems in Engineering ([MPE](#), from 2014); Journal of Web Engineering ([JWE](#), from 2014); Journal of Computational and Applied Mathematics ([CAM](#), from 2013); International Journal of Distributed Sensor Networks ([IJDSN](#), from 2014); Peer-to-Peer Networking and Applications ([PPNA](#), from 2014); Journal of Cloud Computing: Advances, Systems and Applications ([JOCASA](#), from 2014); International Journal of Digital Earth ([IJDE](#), from 2014); IEEE Cloud Computing Magazine ([CCM](#), from 2014); Environment Research ([ER](#), from 2014);
- 2013 3.80 World Wide Web: Internet and Web Information Systems ([WWW](#), from 2013); Informatica ([Informatica](#), from Vilnius, 2013); Simulation Modelling Practice and Theory ([SIMPAT](#), from 2013); Computing ([COMP](#), from 2013); Journal of Universal Computer Science ([JUCS](#), from 2013); International Journal of Advanced Computer Science and Applications ([IJACSA](#), from 2013 until 2017); Geoinformatics & Geostatistics: An Overview ([GIGS](#), from 2013); Computer Science ([CSCI](#), from 2013); Applied Mathematics & Information Sciences ([AMIS](#), from 2013); IEEE Transactions on Cloud Computing ([TCC](#) from 2013);
- 2012 3.81 IEEE Transactions on Parallel and Distributed Systems ([TPDS](#), from 2012); IEEE Transactions on Dependable and Secure Computing ([TDSC](#), from 2012); Journal of Network and Computer Applications ([JNCA](#), from 2012); IEEE Computer ([Computer](#), from 2012); Scientific Research and Essays ([SRE](#), from 2012); Computer Science and Information Sciences ([ComSIS](#), from 2012);
- 2011 3.82 Journal of Grid Computing, Springer ([JGC](#), from 2011)
- 2010 3.83 Journal of Computational Science ([JoCS](#), from 2010); Computer Standards & Interfaces, Elsevier ([CSI](#), from 2010); Journal of Supercomputing ([JoS](#), from 2010);
- 2008 3.84 Information Sciences, Elsevier ([INS](#), from 2008)
- 2007 3.85 Engineering Applications of Computational Fluid Mechanics ([JEACFM](#), from 2007); International Journal of Grid and Utility Computing ([IJGUC](#), from 2007); Bulletin of the Belgian Mathematical Society ([BBMS](#), from 2007); International Journal of Computational Science and Engineering ([IJCSE](#), from 2007);
- 2006 3.86 Mathematical Reviews ([MR](#), from 2006 until 2012); International Journal of Computer Mathematics, Taylor & Francis ([IJCM](#), from 2006);
- 2005 3.87 Future Generation Computer Systems, Elsevier ([FGCS](#), from 2005); Parallel Computing, Elsevier ([PARCO](#), from 2005); Computing Reviews ([CR](#), from 2005 until 2013); Journal of Systemics, Cybernetics and Informatics ([JSCI](#), from 2005);
- 1998 3.88 Annals of West University of Timișoara, Mathematical-Computer Science Series ([AWUTM](#), from 1998)
- 1993 3.89 Zentralblatt für Mathematik ([ZBL](#), from 1993)

3.2.4 Journal editorials

- 2018 3.90 G.A. Gravvanis, J.P. Morrison, D. Petcu, T. Lynn, C.K. Filetos-Papadopoulos, *Special Issue: Recent trends in cloud computing*, Future Generation Computer Systems ([FGCS](#)), Vol. 79, Part 2, 2018, 700-702, WoS: 000418975100019 doi: [10.1016/j.future.2017.11.006](https://doi.org/10.1016/j.future.2017.11.006)
- 2016 3.91 D. Petcu, *Introduction to the Special Issue on New Approaches for Infrastructure Services*, Scalable Computing: Practice and Experience 17 (4), iii-iv, doi: [10.12694/scpe.v17i4.1199](https://doi.org/10.12694/scpe.v17i4.1199)
- 2013 3.92 V. Stankovski, D. Petcu: *Editors's Introduction to the Special Issue on "Grid, Cloud and Sky Applications for Knowledge-*

- based Industries and Businesses". Informatica (Slovenia) 37(2): 113 (2013), [link](#)
- 2012 3.93 J.L. Vasquez-Poletti, D. Petcu, F. Lelli, *Introduction to the Special Issue - Selected papers from the International Workshop on Clouds for Business and Business for Clouds*, Scalable Computing: Practice and Experiences 13 (3), 2012, [link](#)
- 3.94 D. Petcu, D. Zaharie, *Agent based systems & semantic software services*, Scalable Computing: Practice and Experiences 13 (1), 2012, [link](#)
- 2011 3.95 D. Petcu, J.L. Vasquez-Poletti, *Introduction to the Special Issue - Selected Papers from the 2nd Workshop on Software Services*, Scalable Computing: Practice and Experiences 12 (3 & 4), 2011, [link-1](#) and [link-2](#)
- 3.96 D. Petcu, M. Paprzycki, *Introduction to the Special Issue - New Directions in Cloud and Grid Computing*, Scalable Computing: Practice and Experiences 12 (2), 2011, [link](#)
- 3.97 D. Petcu, A. Galis, *Introduction to the Special Issue - Selected Papers from the 1st Workshop on Software Services*, Scalable Computing: Practice and Experiences 12 (1), 2011, [link](#)
- 2010 3.98 D. Petcu, E. Deelman, N. Meyer, M. Paprzycki *Introduction to the Special Issue - Grid and Cloud Computing and their Application*, Scalable Computing: Practice and Experiences 11 (2), 2010, [link](#)
- 2008 3.99 D. Petcu, P. Stpiczynski, *Editorial to Special Section on Multi-Agent Systems and Large-Scale Distributed Systems*, International Transactions on Systems Science and Applications (ITSSA), Vol. 3, No. 4, 2008, p. 289, ISSN 1751-1461
- 2007 3.100 D. Petcu, *Practical Aspects of Large-Scale Distributed Computing*, Scalable Computing: Practice and Experience (SCPE) 8 (3), 2007 (electronic version, ISSN 1097-2803, [link](#)
- 3.101 D. Petcu, *Challenges concerning symbolic computations on grids*, Scalable Computing: Practice and Experience (SCPE) 6 (3), 2005 (electronic version, ISSN 1895-1767, [link](#)
- ### 3.2.5 Proceedings editor
- 2016 3.102 J. Davenport, V. Negru, T. Ida, T. Jebelean, D. Petcu, S. Watt, D. Zaharie, 2016 18th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC₁₆), IEEE Comp. Soc., ISBN:978-1-5090-5707-8
- 3.103 J. Carretero, J. Garcia Blas, D. Petcu (Eds), *Proceedings of the First PhD Symposium on Sustainable Ultrascale Computing Systems (NESUS PhD 2016)* Timisoara, Romania, ISBN: 978-84-608-6309-0, [link](#)
- 2015 3.104 L.Kovacs, V.Negru, T.Ida, T.Jebelean, D.Petcu, S.Watt, D.Zaharie (eds.), 2015 17th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC₁₅), IEEE Comp. Soc., ISBN:978-0-7695-5742-2
- 2014 3.105 F.Winkler, V.Negru, T.Ida, T.Jebelean, D.Petcu, S.Watt, D.Zaharie(eds.): 2014 16th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC₁₄), IEEE Comp. Soc., ISBN:978-1-4799-8447-3
- 2013 3.106 N.Bjorner, V.Negru, T.Ida, T.Jebelean, D.Petcu, S.Watt, D.Zaharie(Eds.): 2013 15th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC₁₃), IEEE Comp. Soc., ISBN:978-1-4799-3035-7
- 2012 3.107 A.Voronkov, V.Negru, T.Ida, T.Jebelean, D.Petcu, S.Watt, D.Zaharie, 14th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, (SYNASC₁₂), 2012, IEEE Comp. Soc., ISBN:978-0-7695-4934-7, [link](#)
- 3.108 D. Petcu, E. Troubitsyna (eds.): *ADAPTIVE 2012*, 4th International Conference on Adaptive and Self-Adaptive Systems and Applications, ISBN: 978-1-61208-219-6
- 2011 3.109 D.Wang, V.Negru, T.Ida, T.Jebelean, D.Petcu, S.M.Watt, D.Zaharie (Eds.): 2011 13th International Symposium on Symbolic & Numeric Algorithms for Scientific Computing (SYNASC₁₁), IEEE Comp. Soc., ISBN 978-1-4673-0207-4 [link](#)
- 3.110 B. Di Martino, D. Petcu, *CCPI 2011: Workshop on Cloud Computing Projects and Initiatives*, LNCS 7155, EuroPar₁₁ 2011 Workshops, 1-3, WoS: 000371303500001, doi: [10.1007/978-3-642-29737-3_1](#)
- 2010 3.111 T. Ida, V. Negru, T. Jebelean, D. Petcu, S. Watt, D. Zaharie (eds.), 12th Int. Symp. on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC₁₀), 2010, IEEE Comp. Press, ISBN: 978-0-7695-4324-6, doi: [10.1109/SYNASC.2010.1](#)
- 3.112 B. Di Martino, D. Petcu, *CCPI 2010: Workshop on Cloud Computing Projects and Initiatives*, LNCS 6586, EuroPar₁₀ 2010 Workshops, 551-553, WoS: 000371301900067, doi: [10.1007/978-3-642-21878-1_67](#)
- 2009 3.113 N. Abdennadher, D. Petcu, *Advances in Grid and Pervasive Computing*, 4th Int. Conf. GPC₀₉, Springer, ISSN 0302-9743, ISBN 978-3-642-01670-7, LNCS 5529, [link](#)
- 3.114 S. Watt, V. Negru, T. Ida, T. Jebelean, D. Petcu, D. Zaharie, *Proceedings of SYNASC₀₉*, 11th Int. Symp. on Symbolic and Numeric Algorithms for Scientific Computing, , IEEE Computer Press, ISBN 978-0-7695-3964-5, [link](#)
- 2008 3.115 V. Negru, T. Jebelean, D. Petcu, D. Zaharie, *Proceedings of SYNASC₀₈*, 10th Int. Symp. on Symbolic and Numeric Algorithms for Scientific Computing, IEEE Computer Press, ISBN 978-0-7695-3523-4, [link](#)
- 2007 3.116 V.Negru, D.Petcu, D.Zaharie, A. Abraham, B. Buchberger, A. Cicortas, D. Gorgan, J. Quinqueton, 2007 9th Int.Symp.on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC₀₇), IEEE Comp.Press, ISBN 0-7695-3078-8 [link](#)
- 2006 3.117 D.Petcu, B.Foliot, D.Grigoras, J.Morrison, M.Paprzycki, I. Scherson, B.Toursal, M.Tudruj (eds.), *ISPDC₀₆*, 5th Int. Symp. on Parallel and Distributed Computing, IEEE Computer Press, ISBN 0-7695-2638-1, [link](#)
- 3.118 V.Negru, D.Petcu, D.Zaharie, A. Abraham, B. Buchberger, A. Cicortas, D. Gorgan, J. Quinqueton, *Proceedings of SYNASC₀₆*, 8th Int. Symp. on Symbolic and Numeric Algorithms for Scientific Computing, September 25-29, 2006, Timisoara, IEEE Computer Press, Los Alamitos, ISBN 978-0-7695-2740-6, 2006, 460 pages, [link](#)
- 2005 3.119 D.Zaharie, D.Petcu, V.Negru, T.Jebelean, G.Ciobanu, A. Cicortas, A. Abraham, M. Paprzycki, *Proceedings of SYNASC₀₅*, 7th Int. Symp. on Symbolic and Numeric Algorithms for Scientific Computing, September 25-29, 2005, Timisoara, IEEE Computer Press, Los Alamitos, ISBN 0-7695-2453-2, 2005, 470 pages, [link](#)
- 3.120 Abramson, D. , Alexandrov, V. , Ashworth, M. , Buyya, R., Coddington, P. , Deelman, E. , De Roure, D. , Hawick, K., King, C.T., Laforenza, D., Lau, F.C.M., Moore, R., Morrison, J., Ong, H., Paprzycki, M., Parastatidis, S., Petcu, D., Rana, O., Uthayopas, P., Wang, C.-L., Williams, R., Yang, J., Yunck, T., Zhang, L.-J., Katz, D.S., Baker, M., *Proceedings of the International Conference on Parallel Processing Workshops₀₅*, 2005
- 2004 3.121 D.Petcu, V.Negru, D. Zaharie, T. Jebelean, *Proceedings of SYNASC₀₄*, 6th Int. Symp. on Symbolic and Numeric Algorithms for Scientific Computing, September 26-30, 2004, Timisoara, Ed. Mirton, Timisoara, ISBN 973-661-441-7
- 2003

- 3.122 D.Petcu, V.Negru, D. Zaharie, T. Jebelean, Proceedings of SYNASC. 2003, 5th Int. Symp. on Symbolic and Numeric Algorithms for Scientific Computing, October 1-4, 2003, Timisoara, Ed. Mirton, Timisoara, ISBN 973-661-104-3
- 2002 3.123 D.Petcu, V.Negru, D. Zaharie, T. Jebelean, Proceedings of SYNASC. 2002, 4th Int. Symp. on Symbolic and Numeric Algorithms for Scientific Computing, October 9-12, 2002, Timisoara, Ed. Mirton, Timisoara, ISBN 973-585-785-5, 2002

3.2.6 Book editor

- 2017 3.124 E. Di Nitto, P. Matthews, D. Petcu, A. Solberg, Model-Driven Development and Operation of Multi-Cloud Applications. The MODAClouds Approach, Springer International Publishing, eBook ISBN 978-3-319-46031-4, Softcover ISBN 978-3-319-46030-7, Series ISSN 2282-2577 doi [10.1007/978-3-319-46031-4](https://doi.org/10.1007/978-3-319-46031-4) (open access) (cits: 5)
- 2012 3.125 D.Petcu, J.L. Vázquez-Poletti, European Research Activities in Cloud Computing, Cambridge Scholars Publishing, UK, 2012, ISBN (10): 1-4438-3507-2, ISBN (13): 978-1-4438-3507-7, [link](#) (cits: 4)

3.2.7 Book introductions

- 2013 3.126 D. Petcu, A. Galis, and S. Karnouskos, *The Future Internet Cloud: Computing, Networking and Mobility*, in Alex Galis, Anastasius Gavras (Volume Eds.) *The Future Internet – Future Internet Assembly 2013: Validated Results and New Horizons*, doi: [10.1007/978-3-642-38082-2](https://doi.org/10.1007/978-3-642-38082-2), LNCS 7858, XXI- XXIII, 2013, [link](#)

3.2.8 Book reviews

- 2008 3.127 D. Petcu, A Comprehensive Development Guide for the Globus Toolkit, IEEE Distributed Systems Online, vol. 9, no. 6, 2008, art. no. 0806-o6003, doi: [10.1109/MDSO.2008.15](https://doi.org/10.1109/MDSO.2008.15) (cits: 3)
- 2005 3.128 D. Petcu, Parallel Numerical Applications on Grid Environments, IEEE Distributed Systems Online, vol. 6, no. 4, Apr., 2005, doi: [10.1109/MDSO.2005.21](https://doi.org/10.1109/MDSO.2005.21)

3.3 Science support activities

3.3.1 Member in steering committees of conference series/Advisory Committee

- 2018 3.129 DS-DC (from 2018)
- 2015 3.130 [OBD](#) (from 2015),
- 2006 3.131 [ISPDC](#) (from 2006)
- 2003 3.132 [SYNASC](#) (from 2003)

3.3.2 Event organizer or co-organizer/ local chair/ programme chair

- 2018 3.133 [ICAC/SASO](#) (IT)
- 2017 3.134 [Innovate-Data](#) (CZ), Mobile, Hybrid and Emerging Cloud track & TAPEMS workshop/CCGrid. (ES), SOSeMC/ICAC. (US), [WSC/FedCSIS](#) (CZ), [HPC-ST/SYNASC](#) (RO)
- 2016 3.135 [SOSeMC/ICAC](#) (AT), [ICA3PP](#)/Track BigData&Appl (SP), [CLIoT/ESOCC](#) (AT), [MICAS](#) and [HPC-ST/SYNASC](#) (RO), [WSC/FedCSIS](#) (PL)
- 2015 3.136 [AIMC/Eurosys](#) (FR), [CLIoT](#) (IT), [MICAS](#) and [HPC-E5/SYNASC](#) (RO)
- 2014 3.137 MultiCloud/CLOSER (SP), [MICAS](#) and [HPCReS/SYNASC](#) (RO), [C4Bio/CCGrid](#) (US), [SCoDiS-LaSCoG](#) (PL), SoftwareArch/FiCloud (ES)
- 2013 3.138 [MoCSOP](#) (ES), [MICAS](#) and [HPCSP/SYNASC](#) (RO)
- 2012 3.139 [WoSS-4/CLASS](#) (SL), [C4BB4C/ISPA](#) (ES), [EIDWT](#) (RO), [CeBPM/WISE](#) (CY), [MICAS](#) and [WoHS/SYNASC](#) (RO)
- 2011 3.140 [CCPI/Euro-Par](#) (FR), [WoSS-2/SYNASC](#) (RO) -3/[FedCSIS](#) (PL), [IDAACS](#) (CZ), [SCoDiS-LaSCoG](#) (PL)
- 2010 3.141 [CCPI/Euro-Par](#) (IT), [WoSS-1/SYNASC](#) (RO), [SCoDiS-LaSCoG/FedCSIS](#) (PL)
- 2009 3.142 [GPC](#) (CH), [LaSCoG](#) (PL), [SYNASC](#) (RO)
- 2008 3.143 [LaSCoG](#) (PL), [GridTDT-1,-2](#) (RO), [SYNASC](#) (RO)
- 2007 3.144 [LaSCoG](#) (PL), [SYNASC](#) (RO)
- 2006 3.145 [ISPDC](#) (RO), [GridTDT](#) (RO), [LaSCoG](#) (PL), [SYNASC](#) (RO)
- 2005 3.146 [VISSAS](#) (RO), [LaSCoG](#) (PL), [SYNASC](#) (RO)
- 2004 3.147 [SGC](#) (RO), [LaSCoG](#) (PL), [CaVIS](#) (RO), [SYNASC](#) (RO)
- 2003 3.148 [LaSCoG](#) (PL), [CaVIS](#) (RO), [SYNASC](#) (RO)
- 2002 3.149 [SYNASC](#) (RO)

3.3.3 Panel organizer

- 2012 3.150 Session 2.3 Interoperability between Clouds /FIA-Aalborg (DK), May 2012
- 3.151 Interoperability in Cloud Federation / IoS 2012 (BE), Oct 2012

3.3.4 Member in Conference Program Committees

- 2018 3.152 Main tack & UC workshop at [ICCS](#) (CH), [CEBDA/IPDPS](#) (CA), Algorithms track at [ICPP](#) (US), HeteroPar & LSDVE & EduPar /EuroPar. (IT), [Cluster](#) (UK), [HCW](#) (CA), [HPCC](#) (UK), [MOWU/COMPSAC](#) (JP), [CCNCPS/ICC](#) (US), [HPCS](#) (FR), [ISPDC](#) (CH), [GPC](#) (CN), [ICDCIT](#) (IN), [CloudCom](#) - track Edge Computing and Distributed Cloud (CY), [ICDCIT](#) (IN), [FICC](#) (SG), [IoT-SIU](#) (IN), [IT4RIs](#) (NL), [SOSE](#) (DE), [CC](#) (UK), [IEEE BigDataService](#) (DE), [IEEE Mobile Cloud](#) (DE), [ICSOFT](#) (PT), [EIDWT](#) (AL), [i-Society](#) (IR), [CANAFedCSIS](#) (PL), [BIDMA](#) (CA), [CBDCOM](#) (CN), [EDOC](#) (SW), [SACI](#) (RO), [CoDIT](#) (GR), [PICOM](#) (GR), [ScalCom](#) (CN), [SmartCity](#) (UK), [ICCST](#) (MY), [ICT Innovations](#) (MK), [FAB](#) (SP), [SmartWorld](#) (CN), [GECON](#) (IT), [WCI](#) (IN), [CSE](#) (RO), [SETCAC](#) (IN), [FTC](#) (CA), [ACMiNS](#) (IN), [iThings](#) (CA), [LISS](#) (CA), [CompSysTech](#) (BG), [IEEE Big Data](#) (US)

2017

- 3.153 Mobile&HibridClouds track, TAPEMS, EBDMA/CCGrid. (SP), ICSoft. (SP), EduPar&HeteroPar& LSDVE /EuroPar. (SP), CloudNG/EuroSys. (RS), ICCS. (CH), MOWU/COMPSAC. (IT), HCW. (US), ICA3PP. (FI), EDOC. (CA), HPCS. (IT), ISPA. (CN), Cloud&ServicesComputing/AINA. (TW), ISPD. (AT), PPAM. (PL), GPC. (IT), CIT. (FI), CloudCom. - tracks Big Data; Architecture; Distributed cloud (HK), SYNASC. (RO) FTC (CA), iThings (UK), GreenCom (UK), GECON (FR), CSCS21 (RO), WCI (IN), CCNCP (US), Automatics&Informatics (BG), CPSCOM (UK), CBDCom (US), AC (PT), BCI (MK), IoTM (CZ), ICSTCC (RO), IDC (RS), FAB (AU), CANA/FedCSIS (CZ), QUDOS (IT), DewCom/MIPRO (HR), PICOM (US), IEEE Mobile Cloud (US), SOSE (US), SAI (UK), CompSysTech (BG), ARMS-CC/PODC (US), HPCS/3PGCIC (SP), CloudWays (NO), ICT Innovations (MK), ICACCA (IN), RoEduNet (RO), FCST (UK), ICDCIT (IN), BIDMA (CA), ICCSS (UK), CloudTech (MA), IDAACS (RO), ScalCom (US)
- 2016 3.154 Sci.Eng.Comp. track/ICSE. (FR), IT4RIs/RTSS. (PT), CCGrid. (SA), CompArch/WICSA. (IT), HeteroPar & LSDVE & Euro-EduPar/EuroPar. (FR), ICCS. (US), CN4IoT/EuroSys. (IT), HCW. (US), BIS. (DE), COMPSAC. (US), HPCS. (AT), HPCEE/VECPAR. (PT), EDOC. (AT), TAPEMS/ICA3PP. (SP), IEEE IPCCC-CCNSPS 2016 (US), GPC. (CN), ISPD. (CN), CloudCom. (LU), SYNASC. (RO) YSC (RU), PDCTA (SW), CPHPCA (SP), SAI (UK), SOSE (UK), ICDCIT (IN), Service Computation (MT), Mobile Cloud (UK), CloudTech (MA), Performance/FiCloud (AT), CloudScape (BE), ICCGI (SP), INTELLI (SP), ICGREEN (GR), BIDMA (CA), NAA (BG), 3PGCIC (KO), FAB (US), ScalCom (FR), i-Society (IE), IDC (FR), FTC (US), GECON (GR), FiCloud (AT), CIST (MA), AC (DE), LISS (AU), QUDOS/ICPE (DE), CF (SP), CloudCom-Asia (CN), CANA/FedCSIS (PL), RE-HPC (CN), CloudWays (AT), WCI (IN), DewCom (CA), COT (BR), MESOCA (US), PiCom (NZ), CoopIS (GR)
- 2015 3.155 C4BIE/CCGrid. (CN), MASCOTS. (US), QUDOS/FSE. (IT), LSDVE, DIHC, HeteroPar/Euro-Par. (AT), ENASE. (SP), HCW. (IN), COMPSAC. (TW), ICA3PP. (CN), GLOBECOM. (US), HPCS. (NL), GPC. (FJ), PPAM. (PL), ISPD. (CY), CMS. (SE), CST. (CN), CloudCom. (CA), SOCA. (IT), CIT. (UK), SYNASC. (RO) Service Comp. (FR), SAI (UK), MobileCloud (US), NetSoft (UK), INTELLI (MT), ICCGI (MT), BIS (PL), SOSE (US), BCI (RO), CSCS20 (RO), CloudTech (MA), CANA (PL), WCI (IN), FiCloud (IT), IDC (PT), ICGREEN (IT), CloudScape VII (BE), ABDIS (FR), Ro-LCG (RO), 3PGCIC (PL), IDAACS (PL), Cloudnet (CA), ICA CON (HU), FAB (FR), IoTaaS (IT), AIMC (FR), Euro-EduPar (AT), MESOCA (DE), LISS (SP), FDependSys (CN), CompSysTech (IR), AC (IR), ScoDis-LasCoG/ICTInnovation (MK), CN4IoT, SeaWave&CloudWay/ESSOC (IT), CLASS (SLO), EnCASE (IT), CF (IT), PiCom (UK), IoTaaS (IT), E-MuCoCos (PT) ModelsWard (FR), ICDCIT (IN), CLOSER (PT), ICEIS (SP)
- 2014 3.156 Cluster. (SP), FedICI&DIHC&LSDVE&TASUS&HeteroPar/Euro-Par. (PT), C4BIO&C4BIE/CCGrid. (US), HCW. (US), ENASE. (ES), ISPA. (IT), BIS. (CY), CCA. (IN), HPCS. (IT), CMS/DEXA. (DE), ICA3PP. (CN), MDHPCL/MODELS. (SP), CloudCom. (SG), ISPD. (FR), SYNASC. (RO), ICDCIT (IN), CLOSER (SP), ModelsWard (PT), IEEE MobileCloud (UK), SOSE (UK), IDC (SP), MobiWIS (SP), SERVICE (IT), INTELLI (IT), CCIT (KO), CIST (MO), ABDIS (MK), KSEM (RO), SAI (UK), LISS (US), INCoS (IT), IEEE Cloudnet (LU), MobiWIS (SP), EnCASE (DE), AC (PO), MESOCA (CA), IoTaaS (IT), PICOM (CN), RoEduNet/RENAM (MOL), BigdataFromSpace (IT), CIST (MA), CompSysTech (BG), SeaClouds/ESSOC (UK), NordiCloud (SE), BiDS (IT), WCI (IN), CloudMDE (SP)
- 2013 3.157 CCGrid. (NL), HeteroPar, FedICI&DIHC/EuroPar. (DE), HCW. (IR), ENASE. (FR), HPCS. (FI), ISPA. (AU), ICA3PP. (IT), CMS/DEXA. (CZ), ICEIS. (FR), GPC. (KO), PPAM. (PL), Applied Computing. (US), ICCP. (FR), CGC. (DE), ISPD. (RO), SYNASC. (RO), CIT. (AU), MobileCloud (US), SOSE (US), CLOSER (DE), RoEduNet (RO), IDC (CZ), ABDIS (IT), ICCGI (FR), CSCS19 (RO), PaCT (RU), CyPhySyA (DE), BCI (GR), SAI (UK), INTELLI (IT), IDAACS (DE), MESOCA (NL), Service Computation (SP), ADMNET (JP), BigData (US), 3PGCIC (FR), LISS (CN), NordiCloud (FI), CompSysTech (BG), CLOUSO (SP), RoEduNet (RO), DISCCO (PT), CSE (AU), AIIT (RS), CloudCom-Asia (CN)
- 2012 3.158 Doct.Symposium & NordiCloud/ECSA. (FI), HeteroPar/Euro-Par. (GR), ICA3PP. (JP), AINA. (JP), HCW. (CN), ENASE. (PL), HPCS. (SP), ICEIS. (PT), CISIS. (IT), ISPD. (DE), GPC. (CN), IoTCloud/CloudCom. (CN), SYNASC. (RO), BCI (SB), ICCGI (IT), ABDIS (PL), BalticDB&IS (LT), CLOSER (PT), EWDC (RO), INTELLI (FR), IDC (IT), ePaMus (IT), CloudCP (SW), HAC (SP), CMS (IT), SWISM (IT), CIST (MA), BIC-TA (MAL), MESOCA (IT), ICCGI (IT), 3PGCIC (CA), LISS (CN), MILES (RO), SeDiS (RO), CompSysTech (BG), CSE (CY), RO-LCG (RO), APPL-COMP (SP), HiperGrid (RO), A4C (IT), IDCS (CN)
- 2011 3.159 HeteroPar/Euro-Par. (FR), AINA. (SG), HCW. (US), ICA3PP. (AUS), ICAART. (IT), ICEIS. (CN), GPC. (FI), CIT. (CY), ISPD. (RO), PPAM. (PL), Cloud4SOA workshop/CloudCom. (GR), SYNASC. (RO), ICDCIT (IN), CIGIS (KO), LISS (CH), IDC (NL), IDAACS (CZ), ICCGI (LU), 3PGCIC (SP), PaCT (RU), NBIS (AL), HPAGC (IN), WICT (IN), EVACCS (CN), HPGC (KO), ServiceWave/Cloud (PL), CANA (PL), SCOPIN (AL), CompSysTech (A), RoEduNet (RO), MedDecSup (RO), SOCASE (PL), TARDIS (AU), CODS (DE), SocPros (IN), IOCIT (MAL)
- 2010 3.160 Cluster. (GR), Doct.Symp./ECSA. (DK), HeteroPar/Euro-Par. (IT), HCW. (US), ICA3PP. (KO), HPCS. (FR), GPC. (TW), ICEIS. (PT), ISPD. (TR), CIT. (UK), SYNASC. (RO), ADiS (PL), ICAART (SP), ICCGI (SP), SWISM (PL), IDC (MOR), FC (TW), ICAeT (RO), CODS (CN), 3PGCIC (JP), PARCA (RU), ICC (RO), SOCASE (CAN), CANA (PL), eGov Summit (BG), EDGeS (NL), ICCP (RO), MiDiS (JP), AG (US), INCoS (GR), SOCMAS (US), SEE (US)
- 2009 3.161 HeteroPar/Euro-Par. (NL), HCW. (IT), HPCS. (DE), GPC. (SW), ICEIS. (IT), ICETE. (IT), PPAM. (PL), ISPD. (PT), GADA. (PO), SYNASC. (RO), ICAART (PO), ICCGI (FR), CODS (DE), IDAACS (IT), PaCT (RUS), EMES (RO), HiperGrid (RO), CSCS17 (RO), HSSS (GR), BCI (GR), KEPT (RO), ICE-B (IT), SACI (RO), CSE (CA), DAIT (UK), ICCP (RO), AG (USA)
- 2008 3.162 HeteroPar/Cluster. (JP), HPCS. (CY), CIC. (US), ICEIS. (SP), ISPD. (PL), GADA. (MEX), SYNASC. (RO), ANSS (CAN), ICC (RO), SIWN (UK), CSE (BR), IDC (IT), CANA (PL), CODS (UK), CONTI (RO), ICDCIT (IN), ICCP (RO), KGCM (US), NCUS (CN), HyperGrid (RO), ICVL (RO), NCUS (CN)
- 2007 3.163 HeteroPar/Cluster. (USA), HPCS. (CZ), ICPADS. (TW), ICEIS. (SP), PPAM. (PL), GADA. (SP), CIC. (USA), SYNASC. (RO), ANSS (USA), ICCGI (FR), PaCT (RU), SMO (EG), ICTIS (MO), IDAACS (DE), SACCS (RO), IDC (RO), SCG (CAN), CANA (PL), EUC (TW)

- 3.164 HETEROPAR/Cluster_■ (SP), ICPADS_■ (USA), HPCS_■ (DE), ICEIS_■ (CY), CIC_■ (USA), ISPDC_■ (RO), SYNASC_■ (RO), ICCG (RO), ICCGI (RO), ADVIS (TK), WSGA (USA), ICCP (RO), ICVL (RO), NCUS (KO), HiPC-06 (IND), KICSS (THAI), CONTI (RO), CCCT (US), LASCOG (PL), FIMCSIT (PL)
- 2005 3.165 CIC_■ (US), ISPDC_■ (FR), PPAM_■ (PL), SYNASC_■ (RO), SOFA_■ (HU), IADIS (SP), ICTIS (MOR), WAGSSDA (NO), CCCT (US), ESM (LAT), ABC (US), LASCOG (PL), PARNUM (SI), ICCOMP (GR), HPC&S (LAT), NCUS (JP), CNIV (RO)
- 2004 3.166 ISPDC_■ (IR), SYNASC_■ (RO), ADVIS (TUR), SCI (US), CCCT (US), CONTI (RO), ICCG (RO), CNIV (RO)
- 2003 3.167 ISPDC_■ (SI), PPAM_■ (PL), SYNASC_■ (RO), SCI (US), CNIV (RO)
- 2002 3.168 SYNASC_■ (RO)
- 2001 3.169 SYNASC_■ (RO)

3.3.5 Member in Habilitation or PhD thesis defence committees

- 2018 3.170 Univ. Innsbruck (AT),
- 2017 3.171 Univ. Politehnica Bucharest (RO), Univ. Pavia (IT)
- 2016 3.172 West Univ. Timisoara (RO), Univ. Politehnica Bucharest (RO), Univ. Politehnica Timisoara (RO), Politecnico di Milano (IT), Univ. York (UK)
- 2015 3.173 West Univ. Timisoara (RO), 2 x Johannes Kepler Univ. of Linz (AT), Univ. Pisa (IT)
- 2014 3.174 Univ. Politehnica Timisoara (RO), Univ. Babes-Bolyai Cluj-Napoca (RO)
- 2013 3.175 2 x West Univ. Timisoara (RO), 2 x Univ. Politehnica Timisoara (RO), Univ. Politehnica Bucuresti (RO), Univ. Tehnica Cluj-Napoca (RO), Univ. Carlos III of Madrid (SP)
- 2012 3.176 West Univ. Timisoara (RO), Univ. Politehnica Timisoara (RO), Ss. Cyril and Methodius Univ. Skopje (MK)
- 2011 3.177 West Univ. Timisoara (RO), Univ. Politehnica Timisoara (RO), Univ. Tehnica Cluj-Napoca (RO), Univ. College Cork (IR)
- 2010 3.178 2 x Gh. Asachi Technical Univ. Iasi (RO)
- 2009 3.179 West Univ. Timisoara (RO), 3 x Univ. Politehnica Timisoara (RO), Univ. Pisa (IT)
- 2008 3.180 2 x Univ. Politehnica Bucuresti (RO)
- 2006 3.181 West Univ. Timisoara (RO), Univ. College Cork (IR)

3.3.6 Consolidation of research teams

- 3.182 attract R&D funds for Institute e-Austria Timisoara, 2002-present for 5+ team members

3.4 Research grants and attracted R&D funds for local teams

3.4.1 International research grants

Project coordinator

- 2012 3.183 FP7-RegPOT **HOST**: High Performance Computing Service Center, 2012-2014, 2 226 272 Euros/UVT
- 2010 3.184 FP7-ICT **SPRERS**: Strengthening the Participation of Romania at European R&D in Software Services, 2010-2011, 414415 Euros/UVT

Scientific coordinator

- 2010 3.185 FP7 **mOSAIC**: Open-source API and Platform for multiple Clouds, 2010-2013, 374 550 Euros/IeAT

Coordinator of bilateral projects

- 2009 3.186 SciCom: Scientific Computing Platform. Collaboration Romania-Austria, 2009-2010, 22 000 Lei/UVT
- 2008 3.187 AEMTIA: Automated Exploration of Mathematical Theories for Industrial Applications, Institute e-Austria Timisoara & RISC Linz, 2008-2011, 156 000 Euros/IeAT
- 2006 3.188 COBURDIS: Collaboration Romania-Ukraine in Distributed Computing, 2006-2007, 11 000 Lei/UVT
- 2002 3.189 Automated verification of software and hardware components, IeAT & RISC Linz, 2002-2005, 413 350 Euros/IeAT
- 1996 3.190 Entwicklung paralleler Algorithmen für die Lösung steifer Differentialgleichungen, 1996, U. Ruprecht-Karls Heidelberg,

Local team coordinator in collaborative projects

- 2017 3.191 InnoReg-Danube **InnoHPC**, 2017-2019, 131 000 Euros/UVT
- 2015 3.192 H2020-EINFRA **VI-SEEM**, 2015-2018, 148 750 Euros/UVT
- 3.193 H2020-EINFRA **SESAME NET**, 2015-2017, 114 062 Euros/UVT
- 3.194 H2020-ICT **CloudLightning**, 2015-2018, 283 750 Euros/IeAT
- 3.195 H2020-ICT **DICE**, 2015-2018, 295 375 Euros/IeAT
- 2014 3.196 CIP **Share-PSI 2.0**, 2014-2016, 20 000 Euros/UVT
- 3.197 COST **NESUS**, 2014-2018, 15 000 Euros/UVT
- 2013 3.198 FP7 **SPECS**, 2013-2016, 220 800 Euros/IeAT
- 3.199 FP7 **SCAPE**, 2013-2014, 90 880 Euros/UVT
- 2012 3.200 FP7 **MODAClouds**, 2012-2015, 355 136 Euros/IeAT
- 3.201 CIP **SEED**, 2012-2014, 115 722 Euros/IeAT
- 2010 3.202 FP7 **HP-SEE**, 2010-2013, 27 700 Euros/UVT
- 2009 3.203 COST **ComplexHPC**, 2009-2013, 15 000 Euros/UVT
- 2008 3.204 FP7 **DEHEMS** 2008-2011, 156 492 Euros/IeAT
- 3.205 FP7 **SEE-GRID-SCI**, 2008-2010, 24 346 Euros/UVT
- 2006 3.206 FP6 **SCIENCE**, 2006-2011, 208 560 Euros/IeAT

Member

- 2010 3.207 FP7 [EGI-Inspire](#), 2010-2014
- 2008 3.208 FP7 [EGEE-3](#), 2008-2010
- 2007 3.209 FP6 [SEE-GRID-2](#), 2007-2008
- 3.210 FP6 [EGEE-2](#), 2007-2008
- 2005 3.211 FP6 [VISP](#), 2005-2009
- 3.212 FP6-ERG5 [SysteMaThEx](#), 2005-2007

3.4.2 International funds, national execution

Project coordinator

- 2009 3.213 [InfraGrid](#): Service-oriented Grid Infrastructure, EC Structural Funds, 2009-2011, 1 911 601 Lei/UVT
- 2008 3.214 ESA [GISHEO](#): On-demand Grid services for training and high education in Earth Observation, 2008-2010, European Space Agency – PECS Programme, 166 500 Euros/UVT
- 2000 3.215 Distributed environments for solving scientific problems, 2000-2001, International Bank for Reconstruction and Development & CNCSIS, 10 000 USD/UVT.

3.4.3 National research grants

Project coordinator

- 2012 3.216 [AMICAS](#): Automated Management in Cloud, 2012-2016, 1 348 000 Lei/UVT
- 2006 3.217 [GRAI](#): Grid computing and Artificial Intelligence, 2006-2008, 472 500 Lei/UVT
- 2005 3.218 [ProWest](#): Promotion of the research activities in computer science in West Romania, 2005-2007, 180 000 Lei/IeAT& UVT& UPT
- 3.219 P-systems: Models and implementations for simulating P systems, 2005-2006, 3 000 Lei/IeAT
- 2004 3.220 [CompGrid](#): high performance computing on wide area networks, 2004-2006, 575 000 000 Lei/UVT
- 2002 3.221 High performance computing technologies based on grid and cluster architectures, 2002-2003, 70 000 000 Lei/UVT
- 1998 3.222 Parallel and distributed processing in graphics, image processing and computational geometry, 1998-1999, 22 000 000 Lei/UVT

Project coordinator in co-funding FP7 projects/'price' contracts for H2020 projects

- 3.223 [CloudLightning+](#), 2016-2018, 96 005 Lei/IeAT
- 3.224 [DICE+](#), 2016-2018, 99 939 Lei/IeAT
- 3.225 [MODAClouds-RO](#), 2013-2015, 494 280 Lei/IeAT
- 3.226 [mOSAIC-RO](#), 2011-2013, 471 000 Lei/IeAT
- 3.227 [DEHEMS-RO](#), 2009-2010, 214 223 Lei/IeAT

Local team coordinator in collaborative projects

- 2005 3.228 [MedioGrid](#): Parallel and distributed image processing on grid architecture of geographical and environment data, 2005-2008, 124 195 Lei/UVT
- 3.229 [GridMOSI](#): Virtual organization based on Grid technology for high performance modelling, simulation, and optimization, 2005-2008, 190 000 Lei/UVT
- 3.230 [NanoSim](#): Transport phenomena and structure formation at the micro/nanometer scale in biomedicine and materials science, 2005-2008, 118 000 Lei/IeAT
- 3.231 [ForMol](#): Computational formalism inspired by Molecular Biology, 2005-2008, 180 000 Lei/IeAT

Member

- 2008 3.232 [ASISTSYS](#): Integrated System of Assistance for Patients with Severe Neuromotor Affections, 2008-2011
- 3.233 [SCIPA](#): Semantic software services for collaboration and inter-operability for adaptive business processes, 2008-2011
- 2007 3.234 [SIPADOC](#): Integrated system for the digitization and capitalization of the document's cultural patrimony, 2007-2010
- 3.235 [PEGAF](#): Grid-based experimental platform for developing applications based on workflows and with dynamic allocation of resources, 2007-2010
- 2006 3.236 [SIAPOM](#): Integrated System for Analysis and Multidisciplinary Design Optimisation, 2006-2008
- 2005 3.237 [SINRED](#): National management system for digital resources in science and technologies based on Grid architectures, Oct 2005- Sept 2008
- 3.238 [MindSoft](#): Multi-agent models and soft computing in knowledge engineering, 2005-2007
- 2001 3.239 Distributed models for solving complex problems, 2001-2002.
- 2000 3.240 Center for advanced technologies in computer science, 2000-2001.
- 1998 3.241 Intelligent interfaces for nonlinear problems, 1998-2000.
- 1997 3.242 Pilot center for teaching informatics, 1997-2002
- 3.243 Computational geometry in movement planning, 1997.
- 3.244 Computer program for the strength to the seismic loads, 1997.
- 1996 3.245 Biographic methods for the study of nonlinear and unelastic behaviour of steel structures under seismic actions, 1996
- 1995 3.246 Intelligent environments for scientific computing, 1995-2002
- 3.247 Computing methods for seismic actions on steel structures, 1995.
- 1993 3.248 Coupling symbolic and numeric calculus, 1993-1994.

3.5.2 General indicators

Articles, citations and h-index in various indexing services

What	Google Academic (GA)	ResearchGate (RG)	Displayed above (UP)	Scopus/Mendeley (SC)	CrossRef (CR)	Web of Science (WS)
Articles	296	275	317	161	113	101
Citations	2769	1991	1425	1350	696	511
h-index	24	22	19	19	14	12

Citations per year as registered by indexing services

Service	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	Registered
GA	92	323	337	391	392	313	251	113	95	61	80	53	50	39	29	12	13	23	28	2769
RG	22	166	243	272	265	271	192	98	67	57	92	49	45	34	18	7	9	17	23	1991
UP	42	238	232	247	206	140	104	43	40	31	32	23	15	11	5	7	0	1	8	1425
SC	45	162	193	202	234	176	130	46	31	20	31	23	11	12	7	5	6	8	5	1350
WS	16	63	75	81	59	53	35	16	11	17	14	8	12	7	5	7	7	5	16	511

Top 40 papers (in Italics the ones which are contributing to h-index)

Top	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	
Ref	<i>122</i>	<i>1</i>	<i>100</i>	<i>102</i>	<i>6</i>	<i>103</i>	<i>86</i>	<i>44</i>	<i>177</i>	<i>8</i>	<i>295</i>	<i>101</i>	<i>160</i>	<i>126</i>	<i>115</i>	<i>10</i>	<i>176</i>	<i>152</i>	<i>106</i>	<i>7</i>	<i>301</i>	<i>33</i>	<i>297</i>	<i>288</i>	<i>12</i>	<i>135</i>	<i>14</i>	<i>136</i>	<i>149</i>	<i>24</i>	<i>166</i>	<i>170</i>	<i>125</i>	<i>299</i>	<i>158</i>	<i>287</i>	<i>17</i>	<i>148</i>	<i>124</i>	<i>127</i>	
GA	<i>205</i>	<i>168</i>	<i>128</i>	<i>104</i>	<i>101</i>	<i>97</i>	<i>84</i>	<i>81</i>	<i>74</i>	<i>73</i>	<i>71</i>	<i>68</i>	<i>62</i>	<i>56</i>	<i>50</i>	<i>41</i>	<i>37</i>	<i>39</i>	<i>34</i>	<i>34</i>	<i>32</i>	<i>33</i>	<i>25</i>	<i>26</i>	<i>23</i>	<i>21</i>	<i>21</i>	<i>21</i>	<i>19</i>	<i>19</i>	<i>18</i>	<i>18</i>	<i>18</i>	<i>18</i>	<i>18</i>	<i>17</i>	<i>17</i>	<i>17</i>	<i>17</i>	<i>15</i>	<i>15</i>
RG	<i>122</i>	<i>112</i>	<i>59</i>	<i>78</i>	<i>63</i>	<i>71</i>	<i>64</i>	<i>62</i>	<i>47</i>	<i>55</i>	<i>55</i>	<i>35</i>	<i>47</i>	<i>53</i>	<i>43</i>	<i>28</i>	<i>31</i>	<i>27</i>	<i>24</i>	<i>39</i>	<i>13</i>	<i>11</i>	<i>12</i>	<i>16</i>	<i>12</i>	<i>22</i>	<i>22</i>	<i>18</i>	<i>12</i>	<i>16</i>	<i>16</i>	<i>13</i>	<i>13</i>		<i>13</i>	<i>14</i>	<i>7</i>	<i>12</i>	<i>12</i>	<i>11</i>	
UP	<i>129</i>	<i>108</i>	<i>87</i>	<i>51</i>	<i>62</i>	<i>60</i>	<i>64</i>	<i>47</i>	<i>38</i>	<i>50</i>	<i>59</i>	<i>26</i>	<i>31</i>	<i>22</i>	<i>24</i>	<i>21</i>	<i>19</i>	<i>11</i>	<i>10</i>	<i>33</i>	<i>15</i>	<i>27</i>	<i>10</i>	<i>13</i>	<i>21</i>	<i>2</i>	<i>7</i>	<i>16</i>	<i>12</i>	<i>3</i>	<i>3</i>	<i>12</i>	<i>6</i>	<i>7</i>	<i>11</i>	<i>3</i>	<i>2</i>	<i>6</i>	<i>5</i>	<i>12</i>	
SC	<i>117</i>	<i>81</i>	<i>72</i>	<i>74</i>	<i>51</i>	<i>49</i>	<i>53</i>	<i>57</i>	<i>51</i>	<i>29</i>	<i>42</i>	<i>40</i>		<i>51</i>	<i>42</i>	<i>19</i>	<i>31</i>	<i>21</i>	<i>10</i>	<i>31</i>		<i>24</i>			<i>13</i>	<i>10</i>	<i>11</i>	<i>16</i>	<i>5</i>	<i>11</i>	<i>11</i>	<i>14</i>	<i>10</i>		<i>9</i>	<i>4</i>	<i>6</i>	<i>11</i>	<i>11</i>		
CR	<i>78</i>	<i>56</i>	<i>33</i>	<i>31</i>	<i>45</i>	<i>18</i>	<i>31</i>	<i>39</i>		<i>42</i>	<i>9</i>	<i>14</i>		<i>23</i>	<i>25</i>	<i>15</i>		<i>19</i>	<i>29</i>		<i>6</i>	<i>3</i>	<i>8</i>	<i>13</i>		<i>13</i>	<i>12</i>		<i>1</i>	<i>12</i>		<i>5</i>	<i>3</i>		<i>3</i>		<i>3</i>	<i>5</i>	<i>5</i>		
WS		<i>61</i>	<i>39</i>	<i>14</i>	<i>53</i>	<i>17</i>			<i>29</i>	<i>11</i>	<i>16</i>	<i>12</i>		<i>18</i>	<i>16</i>		<i>8</i>	<i>5</i>	<i>34</i>		<i>9</i>	<i>10</i>	<i>12</i>	<i>1</i>	<i>10</i>	<i>10</i>	<i>0</i>	<i>8</i>	<i>5</i>				<i>7</i>		<i>8</i>	<i>3</i>					

i10-index: Google Academic: 62

Displayed above: articles with DOI: 140 and with ids in WoS: 101

publons data: 279 confirmed reviews for journal papers from 2012 until now, 3 awards (top 1% in Computer Science & Mathematics, 3rd in Romania), top 10 female reviewers

Publish or Perish data: QueryDate: 2018-01-05 Years: 26 Cites_Year: 102.12 Cites_Paper: 8.97

Cites_Author: 1125.08 Papers_Author: 145.06 Authors_Paper: 3.31 g_index: 44 hc_index: 18 hI_index:6.13 hI_norm: 15

AWCR: 383.64 AW_index: 19.59 AWCRpA: 150.77 e_index: 32.63 hm_index: 14.95 ECC: 2656

Cites_Author_Year: 43.27 hI_annual: 0.58 h_coverage: 61.8 g_coverage: 74.7 star_count :10 year_first: 1992 year_last: 2018

Others: 109 papers with 1 author (75:2, 46:3, 55:4, 42:5, 31:6, 38:7, 2:8)

3.5.3 Romanian indicators

Scientific production: P: 242.98; A*+A: 62.13; A*+A+B: 105.43; Journals: 111.71 (45.98%); Conferences: 131.26 (54.02%)

Impact: C: 2,299.37; A*+A+B: 1,800.6

Academic perspective: D: 1,072.31; No. projects in D: 65

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