

Curriculum vitae and scientific activity

Dana PETCU

December 30, 2021



Chapter 1

Identification

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

Address: B-dul Vasile Pârvan 4, 300223 Timișoara, Romania, Skype: dana.petcu, <http://staff.fmi.uvt.ro/~dana.petcu>,
tel:+40-256-592-370,fax:-136/+40-256-244834, e-mails: Dana.Petcu@e-uvt.ro, petcu@info.uvt.ro, dana@ieat.ro

IDs in research indexing services

As author – all fields: [Scopus 6603604868](#), [WoS C-2889-2011](#), [Google Scholar 7.-VBTkAAAAJ](#), [ResearchGate Dana_Petcu](#),
[ORCID 0000-0002-4773-770X](#), [Mendeley dana-petcu](#),
As author – domain specific: [ACM Digital Library 81312484560](#), [DBLP Petcu:Dana.html](#), [Microsoft Academic 931727](#),
[zbMATH petcu.dana](#),
As reviewer: [publons 1199003](#)

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 (UVT)	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

Director	Institute e-Austria Timișoara, IeAT	2002-present
	Master studies in Software Engineering, UVT	2010-present
	Computer Science Department, UVT	2008-2011
	Undergraduate studies on Computer Science, UVT	2004-2008
	PhD studies in Computer Science, UVT	2012-2016
President	CSCCU - Scientific Council for Research and Creation of the University, UVT	2013-2014
	Senate Commission for International Relationships, UVT	2013-2015
	Senate Commission for PhD and Postdoc studies, UVT	2020
Vice-rector	International Relationships, UVT	2016-2018
	Research and Innovation, UVT	2018-2020
	Director of University Council for PhD Studies, UVT	2020-2021

Expert evaluator

European Commission FP6-IST, FP7-ICT/Capacities/People, ESF, INTAS, H2020-ICT/INFRA, HE-CL4/INFRA
Foreign countries (RDI) Bulgaria, Czech, Hungary, Ireland, Italia, Poland, Portugal, Norvegia, Russia, Belgia, Chile, Serbia
Romanian CNCSIS (2001-2004), CEEEX (2005-2007), PNII (2008-2015), PNIII (2017-2021)
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, 2011 – 2015
OW2, open source community, 2013 – present
Coordination of the collaboration activities of Cloud related EC-funded projects: [Novel approaches and technologies for Cloud resource and service management \(NATRES\)](#) - 2017
IEEE Computer Society Special technical Community on Dew Computing, ([DewCom STC](#)), 2018 – present

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 (2014-2018)

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) and Article Influence Score (AIS) as registered in the year of publication. Categories according to the IF or AIS: Q1:■ (best 25%), Q2:■ (best 50%), Q3/4:■ in WoS. Number of citations (cits:) as exposed in section 4.1 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■, AIS: 0.562■, cits:179)
- 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*, Computer Standards & Interfaces 34, 2012, 493-508, WoS: 000306771800005, doi: [10.1016/j.csi.2011.10.010](#) (IF: 0.978■, AIS: 0.41■, 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■, AIS: -, 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■, AIS: -, cits:11)
- 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■, AIS: -, cits:2)
- 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■, AIS: -, cits:110)
- 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■, AIS: -, cits:57)

Springer journals

- 2019 2.8 I. Drăgan, G. Iuhasz, D. Petcu, *A Scalable Platform for Monitoring Data Intensive Applications*, Journal of Grid Computing, September 2019, Volume 17, Issue 3, pp 503–528, WoS: 000487125900005 doi: [10.1007/s10723-019-09483-1](#) (IF:2.095■, AIS:0.482■, cits:2)
- 2014 2.9 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■, AIS:0.366■, cits:100)
- 2013 2.10 V. Stankovski, D. Petcu, *Developing a Model Driven Approach for engineering applications based on mOSAIC. Towards Sharing Elastic Components in the Cloud*, Cluster Computing 17 (1), 2013, 101-110, WoS: 000333111000006, doi: [10.1007/s10586-013-0263-x](#) (IF: 0.949■, AIS:0.421■, cits:4)

- 2012 2.11 N.M. Calcevacia, 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](https://doi.org/10.1007/s00607-012-0198-8) (preliminary: Technical Report 2012.5 [275]) (IF: 0.807_■, AIS: 0.643_■, cits:41)

Other journals with IF and indexed in WoS

- 2015 2.12 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: 0.942_■, AIS: 0.338_■ cits:2)
- 2014 2.13 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: 3.026_■, AIS: 0.821_■ cits:37)
- 2.14 J. Južna, P. Češarek, D. Petcu, V. Stankovski, *Solving Solid and Fluid Mechanics Problems in the Cloud with mOSAIC*, Computing in Science & 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_■, AIS: 0.725_■, cits:3)
- 2010 2.15 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_■, AIS: 0.121_■, cits: 8)
- 2006 2.16 D. Petcu, C. Bonchiş, C. Izbăşa *Symbolic Computations based on Grid Services*, Int. Journal of Computers, Communications and Control, vol. 1, no. 1, 2006, 44-50, ISSN 1841-9836, doi: [10.15837/ijccc.2006.1.2270](https://doi.org/10.15837/ijccc.2006.1.2270) (IF: 1.374_■, AIS: 0.159_■)
- 2005 2.17 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, WoS: 000232207600007, doi: [10.1080/00207160512331331174](https://doi.org/10.1080/00207160512331331174), Taylor & Francis Ltd (IF: 0.254_■, AIS: -, cits:4)

2.1.2 Papers that are WoS related

Papers in Springer LNCS series with IF

- 2005 2.18 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_■, AIS: -, cits:1)
- 2.19 C. Bonchiş, G. Ciobanu, C. Izbăşa, 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_■, AIS: -, cits:5)
- 2004 2.20 D. Petcu, D. Dubu, M. Paprzycki, *Towards a Grid-aware Computer Algebra System*, LNCS 3036, ISSN 0302-9743, 490-495, 2004, WoS: 000222043200073, doi: [10.1007/978-3-540-24685-5_73](https://doi.org/10.1007/978-3-540-24685-5_73), (IF: 0.513_■, AIS: -)
- 2.21 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: 0.513_■, AIS: -, cits:1)
- 2002 2.22 D. Petcu, H. Popa, D. Ţepeş, *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: 0.515_■, AIS: -)
- 2.23 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: 0.515_■, AIS: -, cits:1)
- 2001 2.24 D. Petcu, *Numerical Solution of ODEs with Distributed Maple*, LNCS 1988, 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_■, AIS: -, cits:3)
- 2.25 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_■, AIS: -, cits:1)
- 2000 2.26 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_■, AIS: -, cits:5)
- 1999 2.27 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_■, AIS: -, cits:1)

Papers in journals currently indexed in WoS with AIS

- 2006 2.28 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 2.29 D. Petcu, M. Paprzycki, 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, doi: [10.1155/2005/653638](https://doi.org/10.1155/2005/653638) (■, cits: 5)
- 2.30 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 2.31 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 2.32 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 (■, cits: 3)

Papers in journals currently indexed in WoS with IF

- 2014 2.33 V.I. Munteanu, C. Şandru, D. Petcu, *Multi-cloud resource management: cloud service interfacing*, J. Cloud Computing: Advances, Systems & Applications, 2014, 3:3, ISSN 2192-113X, WoS: 000215563500003, doi: [10.1186/2192-113X-3-3](https://doi.org/10.1186/2192-113X-3-3) (cits: 32)
- 2013 2.34 D. Petcu, B. Di Martino, S. Venticinque, M. Rak, T. Máhr, 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 2 (1), 2:12, Springer, 2013 ISSN: 2192-113X, WoS: 000215562800012, doi: [10.1186/2192-113X-2-12](https://doi.org/10.1186/2192-113X-2-12) (cits: 89)

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

- 2021 2.35 D. Kimovski, R. Mathá, G. Iuhasz, F. Marozzo, D. Petcu, R. Prodan, *Autotuning of exascale applications with anomalies detection*, Frontiers in Big Data, eISSN 2624-909X, Oct 2021 doi: [10.3389/fdata.2021.657218](https://doi.org/10.3389/fdata.2021.657218)
- 2.36 D. Petcu, *Service Deployment Challenges in Cloud-to-Edge Continuum*, Scalable Computing: Practice and Experience, Vol.

- 2020 2.37 T. Trieu, D. Petcu, Building a hierarchy of user's needs for learner-centered education applications, *International Journal of Computer Science and Network Security*, 2020, vol. 20, no. 8, 119-124, WoS: 000577887900012, doi: [10.22937/IJC-SNS.2020.20.08.12](https://doi.org/10.22937/IJC-SNS.2020.20.08.12)
- 2015 2.38 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) (cits: 2)
- 2014 2.39 D. Petcu, A.V. Vasilakos, *Portability in Clouds: Approaches and Research Opportunities*, Scalable Computing: Practice and Experience, Vol 15, Issue 3, 2014, 251-270, WoS: 000420411800005, doi: [10.12694/scpe.v15i3.1019](https://doi.org/10.12694/scpe.v15i3.1019) (cits: 60)
- 2012 2.40 D. Petcu, *A Panorama of Cloud Services*, Scalable Computing: Practice and Experience 13 (4), 2012, 303-314, WoS: 000420402800004, [link](#) (cits: 4)
- 2010 2.41 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, WoS: 000420382700009, [link](#) (cits: 5)
- 2008 2.42 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, WoS: 000420375500004, [link](#)
- 2006 2.43 D. Petcu, D. Vizman and M. Paprzycki, *Heuristic Load Balancing for CFD Codes Executed in Heterogeneous Computing Environments*, Scalable Computing: Practice and Experience 7 (2), 2006,15-23, WoS: 000420364700003, [link](#) (cits: 3)
- 2.44 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, WoS: 000420366100006, [link](#) (cits: 3)
- 2005 2.45 D.Petcu, *Speedup in solving differential equations on clusters of workstations*, International Journal Computational Science and Engineering, Vol.1, No.2/3/4, 2005, Inderscience Enterprises,134-141, ISSN 1742-7185, WoS: 000213111700007, doi: [10.1504/IJCSE.2005.009698](https://doi.org/10.1504/IJCSE.2005.009698) (cits: 2)

2.1.3 Papers in internationally refereed journals

- 2018 2.46 S. Panica, B. Irimie, D. Petcu, *Enabling and monitoring platform for cloud-based application*, International Journal of High Performance Computing and Networking, vol. 12, no. 4, 2018, 328-338 doi: [10.1504/IJHPCN.2018.10017914](https://doi.org/10.1504/IJHPCN.2018.10017914) (cits:2)
- 2015 2.47 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: [10.14529/jsfi150201](https://doi.org/10.14529/jsfi150201) (cits:26)
- 2.48 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](https://doi.org/10.14529/jsfi150203)
- 2.49 J. Carretero, S. Distefano, D. Petcu, D. Pop, T. Rauber, G. Rûnger, D.E. Singh, *Energy-efficient Algorithms for Ultrascale Systems*, Supercomputing Frontiers and Innovations vol 2, No. 2, 77-104, 2015, doi: [10.14529/jsfi150205](https://doi.org/10.14529/jsfi150205) (cits: 9)
- 2012 2.50 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, doi: [10.1145/2331576.2331584](https://doi.org/10.1145/2331576.2331584), 2 2012, 43-56 (cits: 6)
- 2011 2.51 A. Carstea, M. Frîncu, G. Macariu, D. Petcu, *Validation of SymGrid-services framework through event-based simulation*, Int. J. Grid and Utility Computing 2 (1), 2011, WoS: 000212389400004, doi: [10.1504/IJGUC.2011.039979](https://doi.org/10.1504/IJGUC.2011.039979) (cits: 2)
- 2010 2.52 D. Petcu, S. Panica, M. Neagul, M. Frîncu, D. Zaharie, R. Ciorba, A. Dinis, *Earth Observation Data Processing in Distributed Systems*, Informatica 34 (2010), 463-476, [link](#) (cits: 10)
- 2008 2.53 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](https://doi.org/10.1109/MDSO.2008.10) (cits: 3)
- 2.54 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](https://doi.org/10.1109/MDSO.2008.13) (cits: 1)
- 2.55 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)
- 2.56 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: 5)
- 2007 2.57 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)
- 2.58 D. Petcu, *Grid Services for Satellite Image Processing*, Transactions on Computers, Issue 2, Vol. 6, ISSN 1109-2750, 347-354, 2007 [link](#) (cits: 2)
- 2.59 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 2.60 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](#)
- 2002 2.61 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](https://doi.org/10.1023/A:1013560909786). Extension of [62]
- 1999 2.62 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 [61]
- 2.63 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: 3)

2.1.4 Papers in Romanian refereed journals

- 2012 2.64 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](#)

- 2.65 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 2.66 D. Petcu, A. Eckstein, A. Carstea, A. Craciun, *Mathematics on the net: state of the art and challenges*, Analele Universității din Timișoara, Seria Matematică-Informatică, vol. XLVII, 2, 2009, 95-116 [link](#)
- 2008 2.67 D. Petcu, S. Panica, *Document Conversions Using Grid-based e-Infrastructure for Digital Libraries*, Scientific Bulletin of Politehnica Univ. Timișoara, Transactions on Automatic Control and Computer Science 53 (67:3), 2008, 139-144, [link](#)
- 2006 2.68 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 2.69 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: 5)
- 2.70 D. Petcu, *Building a computational grid: design issues*, Analele Științifice ale Universității "Alexandru Ioan Cuza" din Iași, Informatică, Tomul XV, 2004, 139-152.
- 2.71 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
- 2.72 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 2.73 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](#)
- 2.74 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 2.75 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 2.76 D.Petcu, *A prototype system for cooperative CAS tasks*, Analele Universității din Timișoara, Seria Matematică-Informatică, vol. XXXVIII, 2000, 125-140, [link](#)
- 1999 2.77 D. Petcu, *Parallel Solving Environment for ODEs*, Analele Universității din Timișoara, Seria Matematică-Informatică, vol. XXXVII, 1999, 45-57, [link](#)
- 2.78 D. Petcu, *Design of an User Interface for Mathematical Software*, Analele Universității din Timișoara, Seria Matematică-Informatică, vol. XXXVII, 1999, 137-142, [link](#)
- 1995 2.79 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](#)
- 2.80 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 2.81 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
- 2.82 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 2.83 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](#)
- 2.84 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 2.85 D.Petcu, *One-step Discretization of Stiff Differential Equations*, Analele Universității din Timișoara, Seria Științe Matematice, vol. XXX, fasc. 1, 1992, 59-87, [link](#)
- 2.86 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 2.87 D.Petcu, *Search Method For One-Dimensional Minimization*, Analele Universității din Timișoara, vol. XXVIII, fasc. 2-3, Seria Științe Matematice, 1990, 165-175, [link](#)
- 2.88 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 2.89 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 2.90 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: 148)
- 2012 2.91 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)
- 2.92 D. Petcu, C. Sandru, *Towards Component-based Software Engineering of Cloud applications*, Procs. WICSA/ECSA 2012 Companion Volume, ICPS - published by ACM, 80-81, 2012, doi: [10.1145/2361999.2362013](#) (cits: 7)
- 2008 2.93 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](#)
- 2.94 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 2.95 D.Petcu, *Automatic Generated Clients of Grid Services for Computational Fluid Dynamics*, Procs. MATH'06, 10th Interna-

- 2005 2.96 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: 7)

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

- 2019 2.97 D. N. Doan, D. Zaharie, D. Petcu. *Auto-scaling for a Streaming Architecture on Clouds with Fuzzy Deep Reinforcement Learning*. Euro-Par. 2019 Workshops, LNCS. Springer, doi: [10.1007/978-3-030-48340-1_37](#) (cits: 1)
- 2016 2.98 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:[272],cits: 6)
- 2014 2.99 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](#) (cits: 8)
- 2.100 D. Petcu, H. González-Vélez, B. Nicolae, J.M. Garía-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](#) (cits: 3)
- 2.101 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](#), 540-549, 2014
- 2012 2.102 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](#)
- 2.103 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](#)
- 2.104 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](#)
- 2011 2.105 D. Petcu, *Portability and Interoperability between Clouds: Challenges and Case Study*, W. Abramowicz et al. (Eds.): Service-Wave 2011, LNCS 6994, 62-74, 2011, WoS: 000306345700006, doi: [10.1007/978-3-642-24755-2_6](#) (cits: 149)
- 2.106 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](#) (cits:51)
- 2.107 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](#) (cits: 76)
- 2.108 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](#) (cits: 91)
- 2008 2.109 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](#)
- 2.110 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](#) (cits: 1)
- 2007 2.111 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](#) (cits: 12)
- 2.112 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](#) (cits: 7)
- 2006 2.113 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](#)

2.2.3 Proceedings from IEEE Computer Press

- 2019 2.114 G. Iuhasz and D. Petcu, *Monitoring of Exascale data processing*, 2019 IEEE International Conference on Advanced Scientific Computing (ICASC), Romania, 2019, pp. 1-5, doi: [10.1109/ICASC48083.2019.8946279](#) (cits: 1)
- 2.115 A. Spătaru, L. Ricci, D. Petcu, B. Guidi, *Decentralized Cloud Scheduling via Smart Contracts. Operational Constraints and Costs*, 2019 6th Int. Conf. on Internet of Things: Systems, Management and Security (IOTSMS), Int. Symp. on Blockchain Computing and Applications (BCCA 2019), 482-489, WoS: 000526389700071, doi: [10.1109/IOTSMS48152.2019.8939210](#), Best paper award
- 2.116 G. Iuhasz, D. Petcu, *Perspectives on Anomaly and Event Detection in Exascale Systems*, IEEE International Conference on High Performance and Smart Computing (HPSC), 225-229 doi: [10.1109/BigDataSecurity-HPSC-IDS.2019.00051](#)
- 2.117 T. T. Trieu, D. Petcu, *Building a Prototype Netcloudbook for User Activities-centered Social Network based on Booked Open-source and Docker Technology*, 27th Telecommunications Forum (TELFOR), doi: [10.1109/TELFOR48224.2019.8971174](#), 2019, WoS: 000568618700138
- 2017 2.118 D. Pop, B. Irimie, D. Petcu, *Distributed Optical Character Recognition for Old Romanian Prints*, Proceedings SYNASC. 2017, 416-418, WoS: 000517584500066 doi: [10.1109/SYNASC.2017.00075](#)
- 2016 2.119 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](#)
- 2015 2.120 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](#) (cits: 2)
- 2014 2.121 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](#) (cits.: 4)
- 2.122 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](#) (cits: 12)
- 2.123 D. Petcu, E. Di Nitto, D. Ardagna, A. Solberg, G. Casale, *Towards Multi-Clouds Engineering* (invited paper), 2014 IEEE

- 2013 2.124 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)
- 2.125 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: 50)
- 2.126 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 2.127 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: 14)
- 2.128 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) (cits: 1)
- 2.129 D. Petcu, M.E. Frincu, 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)
- 2.130 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: 3)
- 2.131 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: 12)
- 2.132 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: 224)
- 2011 2.133 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.:10)
- 2.134 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: 6)
- 2.135 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: 11)
- 2.136 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.:35)
- 2010 2.137 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/CLUSTERWKSP.2010.5613106](https://doi.org/10.1109/CLUSTERWKSP.2010.5613106) (cits: 15)
- 2.138 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 2.139 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)
- 2.140 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)
- 2.141 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 2.142 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)
- 2.143 A. Cârstea, G. Macariu, M. Frîncu, 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 2.144 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) (cits: 1)
- 2.145 A. Cârstea, Marc Frîncu, G. Macariu, D. Petcu, K. Hammond, *Generic Access to Web an 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)
- 2.146 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: 19)
- 2.147 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)
- 2.148 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: 3)
- 2.149 M. Frîncu, 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)
- 2.150 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: 3)
- 2.151 A. Cârstea, G. Macariu, M. Frîncu, 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)

- 2.152 D.Petcu, *Between Web and Grid-based Mathematical Services*, ICCGI 2006, 41-47, doi: [10.1109/ICCGI.2006.13](https://doi.org/10.1109/ICCGI.2006.13) (cits: 6)
- 2.153 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)
- 2.154 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 2.155 M.Petcu, D.Petcu, *Distributed rule-based system*, SOFA. 2005, ISBN 963 219 001 7, 257-262.
- 2.156 D.Petcu, *Parallel Jess*, ISPDC. 2005, 307-314, WoS: 000234333400041, doi: [10.1109/ISPDC.2005.38](https://doi.org/10.1109/ISPDC.2005.38) (cits: 8)
- 2.157 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 2.158 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 2.159 D.Petcu, *Parallel explicit-state reachability analysis and state space construction*, ISPDC. 2003, WoS: 000189447800030, 207-214, doi: [10.1109/ISPDC.2003.1267665](https://doi.org/10.1109/ISPDC.2003.1267665) (cits: 15)
- 2000 2.160 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 2.161 E.Di Nitto,G.Casale,D.Petcu, *On MODAClouds Toolkit Support for DevOps*, In A.Celesti, P.Leitner (Eds.): ESOC 2015 Workshops, CCIS 567, Springer, 430-431, 2016, WoS: 000385259400035, doi: [10.1007/978-3-319-33313-7](https://doi.org/10.1007/978-3-319-33313-7) (cits: 2)
- 2.162 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](https://doi.org/10.5220/0005912503200326) (cits: 1)
- 2.163 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](https://doi.org/10.5220/0005921503330338) (cits: 10)
- 2.164 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](https://doi.org/10.5220/0005771302400248)
- 2.165 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](https://doi.org/10.1007/978-3-319-47063-4_34)
- 2015 2.166 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](https://doi.org/10.1109/MiSE.2015.21) (cits: 33)
- 2012 2.167 D. Petcu, *Cloudware Support for Scientific Applications*, RO-LCG 2012, 70-73, WoS: 000325983100018, [link](#)
- 2.168 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: 2)
- 2011 2.169 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](https://doi.org/10.1117/12.898281) (cits: 4)
- 2010 2.170 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 Internat. Conf. on Virtual Learning, 2010, Procs., M. Vlada, G. Albeanu, D.M. Popovici (eds.), Bucharest University Press, ISSN 1844-8933, 290-297, WoS: 000323685800041, [link](#)
- 2009 2.171 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](https://doi.org/10.1007/b137171.87) (cits: 3)
- 2.172 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 (COMPUTATIONWORLD), IEEE, 126-131, WoS: 000277313700020, doi: [10.1109/ComputationWorld.2009.21](https://doi.org/10.1109/ComputationWorld.2009.21) (cits: 16)
- 2007 2.173 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 2.174 D.Zaharie, D.Petcu *Parallel implementation of multi-population differential evolution*, Revised version of (2.231) in Concurrent Information Processing and Computing, eds. Dan Grigoras, 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: 43)
- 2003 2.175 D.Zaharie, D.Petcu, *Adaptive Pareto Differential Evolution and its Parallelization*, 5th International Conference, PPAM 2003 Czestochowa, Poland, September 7-10, 2003 Revised Papers, eds. R. Wyrzykowski et al., 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:71)
- 2000 2.176 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](#)
- 2.177 D.Petcu, M.Draăgan, *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: 11)
- 2.178 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. M. Griebel, S. Margenov, P. Yalamov, Springer, ISSN 0179-9614, 180-195, [link](#)

- 2.179 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 2.180 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: 7)
- 1997 2.181 D.Petcu, *Implementation of some multiprocessor algorithms for ODEs using PVM*, LNCS 1332, ISSN 0302-9743, Recent Advances in Parallel Virtual Machine and Message Passing Interface, eds. M. Bubak et al., Springer-Verlag Berlin, 1997, 375-383, WoS: 000077561700046, doi: [10.1007/3-540-63697-8_107](#)
- 2.2.5 Proceedings of other series of international conferences**
- 2016 2.182 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, ISBN 978-84-617-7450-0, [link](#) (cits: 1)
- 2015 2.183 D. Petcu, *On Autonomic HPC Clouds*, Proceedings of the Second International Workshop on Sustainable Ultrascale Computing Systems (NESUS 2015), 29-40, ISBN 978-84-608-2581-4, [link](#) (cits: 1)
- 2014 2.184 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: 28)
- 2013 2.185 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: 3)
- 2.186 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](#) (cits: 1)
- 2012 2.187 D. Petcu, *Towards Programmable Infrastructures: the Steps made by Cloud Computing and their Technical Support*, Procs. WoSS-4, CLASS Conference, 2012, 19-21, [link](#)
- 2.188 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 [274]) (cits: 1)
- 2011 2.189 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: 9)
- 2.190 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: 21)
- 2.191 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: 64)
- 2010 2.192 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 2.193 Frincu, 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](#)
- 2.194 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 [276])
- 2007 2.195 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 2.196 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
- 2.197 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
- 2.198 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 2.199 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:3)
- 2.200 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.
- 2.201 C. Bonchis, C. Izbasa, D. Petcu, G. Ciobanu, WebPS: A Web-based P System Simulator with Query Facilities. Proceedings of the Third Brainstorming Week on Membrane Computing, 63-72, 2005 (cits:2)
- 2003 2.202 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 2.203 D. Petcu, D. Gheorghiu, *PAVIS: a parallel virtual environment for solving large mathematical problems*, Parallel Computing. Advances& Current Issues, PARCO 2001, Imp. Col. Press, doi: [10.1142/9781860949630_0060](#), 2002, 490-497
- 2.204 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 2.205 D.Petcu, *Anatomy of an Automatic Solution Generator for Differential Equations*, Algoritmy 2000: 15th Conference on Scientific Computing, Proceedings, ISBN 80-227-1391-0, Bratislava, 217-226, [link](#)
- 2.206 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, doi: [10.1142/9781848160095_0066](#) (cits: 1)

- 2.207 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 2.208 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.
- 2.209 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.
- 2.210 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.
- 2.211 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 2.212 V.Gioncu, L.Tîrcă, D.Petcu, *Rotation capacity of rectangular hollow section beams*, 7th International Symposium on Tubular Structures, Akadémiai Kiado, 345-356. (cits: 3)
- 2.213 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: 3)
- 1995 2.214 V.Gioncu, D.Petcu, *Corrugated Hypar Structures*, in In Proceedings of the I International Conference on Lightweight Structures in Civil Engineering, Warsaw, Poland, 1995, 637-644. (cits: 18)
- 2.215 V.Gioncu, D.Petcu, *Obliczenia, projektowanie i zastosowania blach fałdowych w postaci fałdowej paraboloidy hiperbolicznej*, Sympozjum Blachy Fałdowe, zastosowania i rozwiązania, Rzeszów, grudzień 1995, 109-123
- 2.216 V.Gioncu, D.Petcu, *Numerical Investigations on the Rotation Capacity of Beams and Beam-Columns*, Proceedings of International Colloquium Stability of Steel Structures. Further Direction in Stability Research and Design, European Session, 1995, vol. I, Akadémiai Kiado, 163-174 (cits: 6)
- 2.2.6 Proceedings of conferences organized in Romania with international referees/participation**
- 2014 2.217 D. Pop, D. Petcu, M. Neagul, *Long Term Digital Preservation Using Cloud Services*, Procs. 7th RO-LCG Conference, Bucharest, Nov 2014, [link](#)
- 2009 2.218 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 2.219 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.
- 2.220 D. Petcu, *Migrating an Expert System towards Service Oriented Architecture and Multicore Systems*, In Scientific and Educational Grid Applications, Ed. Politehnium, Iasi, 2008, ISBN 978-973-621-236-9, 39-48.
- 2.221 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 2.222 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.
- 2.223 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
- 2.224 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 2.225 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
- 2.226 D. Zaharie, D. Petcu, *Communications Strategies in Distributed Evolutionary Algorithms for Multi-objective Optimization*, 7th Int.Conf.on Technical Informatics (CONTI), Ed.Politehnica,2006, vol.1:Automation& Applied Informatics,151-156
- 2004 2.227 D.Petcu, *Faster Computer Algebra Systems via Parallel and Grid Extensions*, Procs. 8th International Symposium on Automatic Control and Computer Science (SACCS), Ed. Politehnium, ISBN 973-621-086-3, Iași, 2004, 42-45 and Bul. Inst. Polit. Iasi, fasc. 1-4, tom L (LIV), 2004, 101- 107.
- 2.228 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.
- 2.229 D.Petcu, D.Dubu, *Mapping General Purpose Scientific Computing Environments onto a Computational Grid*, Procs. SYNASC 2004, Workshop: Symbolic Computation on Grids, Ed.Mirton, ISBN 973-661-441-7, 574-585
- 2003 2.230 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.
- 2.231 D.Zaharie, D.Petcu, *Parallel implementation of multi-population differential evolution*, pre-procs. CIPC 2003: Concurrent Information Processing& Computing, Nato Advanced Research Workshop, A.I.Cuza Univ. Press, 262-269. (cits: 24)
- 2.232 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
- 2.233 D.Petcu, A.Oprean, *Constructing a grid portal*, Proceedings SYNASC03, 5th International Workshop, Ed.Mirton, ISBN 973-661-104-3, 2003, 324- 328
- 2002 2.234 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 2.235 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.
- 2.236 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 2.237 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 2.238 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 2.239 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
- 2.240 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 2.241 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 2.242 D.Petcu, *Solving differential equations on a multiprocessor machine*, Procs. 6th Symposium of Mathematics and its Applications, 1995, Editura Mirton, 289-297
- 1993 2.243 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
- 2.244 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 2.245 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](#) (cits: 1)
- 2006 2.246 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 2.247 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 2.248 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 2.249 D.Petcu, *On the Hypothesis for the Error Estimate of Newton's Method*, Lucrările celui de-al IV-lea Simpozion de Matematici și Aplicații al Universității Tehnice din Timișoara, Ed. Mirton, Timișoara, ed. N.Boja, 1991, 130-140
- 1988 2.250 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 2.251 M. Neagul, I. Drăgan, D. Petcu, *HPC Cloud Application Orchestration through Self-Organization*, RO-LCG 2016, Book of abstracts, p. 36
- 2.252 D. Petcu *Exploiting the Resources of a University HPC Center*, RO-LCG 2016, Book of abstracts, p. 17
- 2010 2.253 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.
- 2.254 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](#) (cits: 1)
- 2009 2.255 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)
- 2.256 D.Petcu, *GiSHEO - Grid-based Services for Education in Earth Observation*, EGEE Conference, Barcelona, Sept 2009, Book of abstracts.
- 2.257 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 2.258 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.
- 2.259 D. Petcu, *Grid and Earth Science Education*, presented at 21st Internat. CODATA Conference, 3-8 Oct 2008, Kiev.
- 2.260 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.
- 2.261 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 2.262 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 2.263 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
- 2.264 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
- 2.265 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 2.266 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 2.267 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.
- 2.268 D. Petcu, *ODE-solving environment with distributed computing facilities*, ICCAM 2000: 9th International Congress on Computational and Applied Mathematics, Leuven, Belgia, 17-21 July, 2000, 78-80.
- 1998 2.269 D.Petcu, *Application du calcul parallèle aux systèmes des équations différentielles*, 4^{ème} Colloque Franco-Roumain, Metz, 31 August-4 September 1998, 21-23.
- 1997 2.270 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 2.271 D. Pop, G. Iuhasz, D. Petcu, Distributed Platforms and Cloud Services Enabling Machine Learning for Big Data. An Overview. preview of [293], IeAT Technical report, 2016, [link](#)
- 2015 2.272 D. Petcu, Service Quality Assurance in Multi-Clouds, preview of [98], IeAT Technical report, 2015, [link](#)
- 2012 2.273 B.A. Caprarescu, E. Kaslik, D. Petcu: Theoretical Analysis and Tuning of Decentralized Probabilistic Auto-Scaling. CoRR abs/1202.2981 (2012), [link](#)
- 2.274 B.A. Caprarescu, E. Kaslik, D. Petcu, Decentralized Probabilistic Auto-Scaling for Heterogeneous Systems. CoRR abs/1203.3885 (2012), [link](#) (preliminary version of [188])
- 2.275 N.M. Calcavecchia, B.A. Caprarescu, E. Di Nitto, D.J. Dubois, D. Petcu: DEPAS: A Decentralized Probabilistic Algorithm for Auto-Scaling. CoRR abs/1202.2509 (2012), [link](#), preview of [11] (cits: 2)
- 2008 2.276 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 [194])
- 2.277 A. Carstea, G. Macariu, M. Frincu, D. Petcu, *Secure Orchestration of Symbolic Grid Services*, IeAT Tech.Rep.08-08, [link](#)
- 2005 2.278 D.Petcu, Software Issues in Solving Initial Value Problems for Ordinary Differential Equations IeAT Tech.Rep.05-04, [link](#)
- 2004 2.279 D.Petcu, D. Dubu, *An Extension of Maple for Grid and Cluster Computing*, IeAT Technical Report 04-03, [link](#)
- 2.280 D.Petcu, *Speedup Involving Differential Equations on Cluster Workstations*, IeAT Technical Report 04-02, [link](#)
- 2003 2.281 D.Petcu, Building a Computational Grid: Design Issues, IeAT Technical Report 03-09, [link](#)
- 2.282 D.Petcu, A. Oprean, Constructing a Grid Portal IeAT Technical Report 03-08, [link](#)
- 2.283 D. Zaharie, D.Petcu, Parallel Implementation of multi-population differential evolution, IeAT Tech.Rep.03-07, [link](#)
- 2.284 D.Petcu, D. Dubu, Parallel State Space Construction on a Cluster, IeAT Technical Report 03-02, [link](#)
- 2001 2.285 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.
- 2.286 D.Petcu, *Working with multiple Maple kernels connected by Distributed Maple or PVM Maple*, RISC-Linz Technical Report Series No. 01-18, eds. RISC-Linz Faculty: E.S. Blurock, B.Buchberger et al., March 2001, [link](#)
- 2000 2.287 D.Petcu, *Numerical Solution of ODEs with Distributed Maple*, RISC-Linz Technical Report Series No. 00-09, [link](#)

2.4 Books

2.4.1 Book chapters

- 2018 2.288 I. Drăgan, T.F. Fortiș, M. Neagul, D. Petcu, T. Selea, A. Spătaru, *Application Blueprints and Service Description*, In T. Lynn, J. Morrison, D. Kenny (eds.), Heterogeneity, High Performance Computing, Self-Organization and the Cloud, Palgrave Macmillan, Cham, Series: Palgrave Studies in Digital Business & Enabling Technologies, 89-117, 2018, SpringerLink, WoS: 000457010300005, doi: [10.1007/978-3-319-76038-4_4](#)
- 2017 2.289 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: 8)
- 2.290 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](#)
- 2.291 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 2.292 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: 35)
- 2.293 D. Pop, G. Iuhasz, D. Petcu, *Distributed Platforms and Cloud Services Enabling Machine Learning for Big Data. An Overview*, in Data Science and Big Data Computing: Frameworks and Methodologies, ed. Zaigham Mahmood, 139-159, Springer, 2016, ISBN 978-3319318592, doi: [10.1007/978-3-319-31861-5_7](#) (preliminary version: [271], cits: 7)
- 2015 2.294 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](#) (cits: 1)
- 2.295 E. Di Nitto, A. Solberg, D. Petcu, *On MODAClouds' Approach for Application Design and Execution on Multi-Clouds*, M. Helfert, B. Donnellan (Eds.), European Project Space, Cases and Examples, SCITEPRESS, 2015, Portugal, ISBN: 978-989-758-034-5, 49-60, doi: [10.5220/0006183100490060](#), [link](#)
- 2014 2.296 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 (cits: 1)
- 2013 2.297 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](#)
- 2.298 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 Voulodimos, Spyridon V. Gogouvtis and Theodora Varvarigou, 166-191, 2013, doi: [10.4018/978-1-4666-3934-8.ch012](#); in Cloud Technology: Concepts, Methodologies, Tools, and Applications, by in Management Association, Information Resources, 2015, 1204-1230, WoS: WOS:000417994600057, doi: [10.4018/978-1-4666-6539-2.ch056](#) (cits: 5)
- 2.299 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 2.300 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

- 2.301 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. M. Villari, I. Brandic, F. Tusa, IGI Global, 2012, 176-194, doi: [10.4018/978-1-4666-1631-8.ch010](https://doi.org/10.4018/978-1-4666-1631-8.ch010) ISBN: 978-1-4666-16318, WoS: 000416666700012 (cits: 12)
- 2.302 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](https://doi.org/10.4018/978-1-4666-1631-8.ch010)
- 2.303 F. Moscato, R.Aversa, B. Di Martino, D. Petcu, M. Rak, S. Venticinque, *An Ontology for the Cloud in mOSAIC*, chapter 20 in Cloud Computing: Methodology, Systems, and Applications. L. Wang, R. Ranjan, J. Chen, B. Benatallah, 2012, CRC Press, 9781439856413 (ebook, 2017, 9781315217208), 467-486, WoS: 000357178400022, doi: [10.1201/b11149-20](https://doi.org/10.1201/b11149-20) (cits: 26)
- 2011 2.304 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. Iványi, 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/csets.27.16](https://doi.org/10.4203/csets.27.16) ISBN 978-1-874672-53-1 (cits: 4)
- 2.305 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. Iványi, 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: 5)
- 2010 2.306 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 2.307 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: 2)
- 2.308 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: 2, downloads over 11000)
- 2.309 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, Studies in Computational Intelligence, Vol. 217, Teodorescu, H.-N. et al. (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 2.310 D.Petcu, D.Țepeneu, M.Paprzycki, T.Ida, *Symbolic Computations on Grids*, chapter 6 in "Engineering the Grid: status and perspective", eds. B. di Martino et al., American Scientific Publishers, ISBN 1-58883-038-1, 2006, 91-107, [link](https://doi.org/10.1007/978-3-642-01885-5_8) (cits: 1)
- 2.311 D.Petcu, M. Paprzycki, M. Ganzha, *Cluster Computing facilities in a service-oriented architecture*, Russian book, 2006.
- 2002 2.312 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](https://doi.org/10.1007/978-3-642-01885-5_8)
- 2000 2.313 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](https://doi.org/10.1007/978-3-642-01885-5_8) (cits: 13)

2.4.2 Monographs

- 1998 2.314 D.Petcu, *Parallelism in solving ordinary differential equations*, Mathematical Monographs 64, Tipografia Universității din Timișoara, 1998, 232 pages (cits: 20)
- 1996 2.315 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.
- 2.316 D.Petcu, *Parallel Numerical Algorithms. Part II: Solving partial differential equations*, Mathematical Monographs 61, Tipografia Universității din Timișoara, 1996, 134 pages.
- 1995 2.317 D.Petcu, *Multistep Methods for Stiff Initial Value Problems*, Mathematical Monographs 50, Tipografia Universității din Timișoara, 1995, 186 pages.
- 1994 2.318 D.Petcu, *Parallel computing* (in Romanian), Editura de Vest, Timișoara, 1994, ISBN 973-36-0227-2, 160 pages.

2.4.3 Textbooks

- 2006 2.319 D.Petcu, *Grid architectures & technologies* (in Romanian), Ed.Eubeea, Timișoara, ISBN 973-673-056-7, 2006, 292 pages (cits: 3)
- 2.320 L.Cucu, V.Iordan, V.Negru, D.Petcu, G.Petrov, P.Popovici, D.Zaharie, *Tests for informatics exams* (RO), Ed. Mirton, Timișoara, ISBN 973-661-844-7, 2006, 166 pages.
- 2004 2.321 D.Petcu, D.Pop, *Modeling three-dimensional world* (in Romanian), Ed. Eubeea, Timișoara, ISBN 973-673-011-5, 2004.
- 2002 2.322 D.Petcu, V.Negru, *Distributed processing* (RO), Editura Universității de Vest, Seria Alef, 2002, Timișoara, ISBN 973-85552-8-0 (cits: 3)
- 2001 2.323 D.Petcu, *Parallel processing* (RO), Edit. Eubeea, 2001, Colecția Informatică, Timișoara, ISBN 973-9479-48-0
- 2000 2.324 D.Petcu, *Mathematics assisted by computers* (RO), Colecția Informatică, Ed.Eubeea, 2000, Timișoara, ISBN 973-9479-13-8.
- 1999 2.325 D.Petcu, L.Cucu, *Computer Graphics* (RO), Tipografia Universității Timișoara, 1999.
- 1998 2.326 O. Dogaru, Gh. Bocșan, I. Despi, A. Ionică, V. Iordan, L. Luca, D. Petcu, P. Popovici, *Informatics for teachers* (RO), Editura de Vest, Timișoara, 1998, ISBN 973-36-0308-2.
- 1997 2.327 D.Petcu, *Maple, a standard for computer assisted mathematics* (RO), Tipografia Universității Timișoara, 1997.
- 1995 2.328 O.Dogaru, D.Petcu, G.Petrov, *Turbo Pascal. Exercises and problems* (RO), Timișoara, Ed. Vest, 1995, ISBN 973-36-0200-0.
- 2.329 D.Petcu, L.Cucu, *Computer graphics principles* (RO), Edit. Excelsior, Timișoara, 1995, ISBN 973-9015-51-4
- 1994 2.330 D.Petcu, *Parallel algorithms* (RO), 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*, 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, Chambéry, 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 Aplicate Informatică, Constanța, 16.01.2002

3.1.2 Invited keynotes

- 2019 3.12 D. Petcu, *Scalable Monitoring applied to Exascale systems, Big Data frameworks or Security as a Service*, IWSG 2019, Ljubljana, June 2019, [link](#)
- 2017 3.13 D. Petcu, *HPC as a Service: Challenges and Limitations*, ISPDC 2017, Innsbruck, July 2017, [link](#)
- 2015 3.14 D. Petcu, *Service quality assurance in multi-clouds*, GECON 2015, Cluj, Sept 2015, [link](#)
- 2012 3.15 D. Petcu, *HPC in the Cloud*, CLASS Conference 2012, Bled, Oct 2012, [link](#)
- 3.16 D. Petcu, *From a Desktop to a Supercomputer, Cluster, Grid, Cloud, InterCloud: Where my Research Code Should Run?*, ComputationWorld 2012, Nisa, July 2012, [link](#)
- 3.17 D. Petcu, *The Cloudy Sky of Programmable Infrastructures*, HEUNET workshop at SAINT 2012, 2012 IEEE/IPSJ 12th Int. Symposium on Applications & the Internet, doi: [10.1109/SAINT.2012.89](#)
- 3.18 D. Petcu, *Building European consensus on sustainability*, e-FISCAL workshop, Samos, July 2012, [link](#)
- 3.19 D. Petcu, *Open-source platform-as-a-service: requirements and implementation challenges*, High Performance Computing, Grids and Clouds, Cetraro, June 2012, [link](#)
- 2011 3.20 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 3.21 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 3.22 D. Petcu, *Grid-based Services for High Education in Earth Observation*, 4th GRID & e-Collaboration Workshop, 25-26 Feb. 2009, Frascati, [link](#)
- 3.23 D. Petcu, *e-Science and Grids*, EWM 2009, NoviSad, August 2009
- 2008 3.24 D. Petcu, *Recent experiences in Grid-enabling legacy software codes*, Alice workshop, Sibiu, 2008.
- 3.25 D. Petcu, S. Panica, *Using Desktop Grids for Evolutionary Multi-objective Optimization*, DAPSYS 2008, Debrecen.
- 2001 3.26 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 3.27 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 3.28 D. Petcu, *MODAClouds project*, European Project Space, CLOSER 2014, Barcelona, April 2014, [link](#)
- 2013 3.29 D. Petcu, *Modelling Quality of Service for the Cloud*, Engineering the Cloud, ICT 2013, Vilnius, November 2013.
- 3.30 D. Petcu, *Towards Application Level Interoperability in Multi-Clouds*, Cloud Standards and Interoperability Workshop, Cloud-PlugFest 2013, Madrid, September 2013.
- 3.31 D. Petcu, *HOST & ICAM. Case study of synergies between FP7-RegPOT and Structural Funds*, A Research Potential capitalization exercise: Thematic workshop on capacity building – Stairway to excellence, Brussels, June 2013.
- 2012 3.32 D. Petcu, *Open-source platform-as-a-service*, 2nd Meeting of IFIP WG on Services-oriented Systems, Bologna, Sep 2012
- 3.33 D. Petcu, *Storage and Software Components Management in Multiple Clouds using mOSAIC*, e-Challenges, Lisbon, Oct 2012
- 3.34 D. Petcu, *mOSAIC- facts, objectives and current results*, CLASS conference, Bled, October 2012
- 3.35 D. Petcu, *How to build a reliable mOSAIC of multiple Cloud services*, EWDC 2012, Sibiu, May 2012, [link](#)

3.1.4 Invited papers

- 2014 3.36 D. Petcu, E. Di Nitto, D. Ardagna, A. Solberg, G. Casale, *Towards Multi-Clouds Engineering*, 2014 IEEE INFOCOM. Work-

shop on Cross-Cloud Systems, April 2014, Toronto.

2011 3.37 D.Petcu *Portability and Interoperability between Clouds: Challenges and Case Study*, ServiceWave 2011, Poznan, [link](#)

3.1.5 Invited tutorials

2014 3.38 D. Petcu, *Multi-Clouds: from models to runtime support*, SummerSOC 2014, Advanced School on Service Oriented Computing, Hersonissos, July 2014, [link](#)

2013 3.39 D. Petcu, *Cloud Management Software for Multi-Clouds*, Cloud computing SummerSchool, "Paving the way to the Cloud", Almere, July 2013, [link](#)

2012 3.40 D. Petcu, *How to Port an Application Between Clouds?*, ADAPTIVE 2012, Nice, July 2012, [link](#)

2011 3.41 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 3.42 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 3.43 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 3.44 D. Petcu, *Cloud Computing*, TEMPUS+ lecture at University of Pavia, 28-29 April 2015, [link](#)

2013 3.45 D. Petcu, *The challenges of Multi-Clouds*, seminar at University of Pavia, December 19, 2013, [link](#)

3.46 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 3.47 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 3.48 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 3.49 D. Petcu, *Security in MultiClouds*, 2014 IEEE COMPSAC, IEEE Convergence Panel, Västerås, Sweden, July 2014

3.50 D. Petcu, *Challenges of Cross-Clouds*, 2014 IEEE INFOCOM Workshop on Cross-Cloud Systems, Toronto, April 2014

3.51 D. Petcu, *Cloud computing perspective in R&D projects*, European Project Space, CLOSER 2014, Barcelona, April 2014.

2013 3.52 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 3.53 D. Petcu, *Perspective on Fog computing*, FOG Panel, CLASS Conference, Bled, Oct 2012

3.54 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

3.55 D. Petcu, *e-IRG and mOSAIC position*, CloudScape IV, Panel: Trust, Legal & Security Issues in Cloud Computing, Feb 2012, Brussels

2008 3.56 D. Petcu, *HPC in Romania*, PARA 2008, Panel 2: Future Trends in Parallel & Scientific Computing, May 2008, Trondheim

2006 3.57 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 3.58 InfraCluster of Cloud related projects, [White paper](#), April 2016

2015 3.59 InfraCluster of Cloud related projects, [Recommendations](#) for the workprogramme H2020-ICT-2018-2019, December 2015

3.60 InfraCluster of Cloud related projects, [Map of challenges](#), October 2015

2012 3.61 e-IRG Task Force on Cloud Computing, [Cloud Computing for research and science: a holistic overview, policy, and recommendations](#), 30 Oct 2012,

3.62 Cloud Computing Expert Group Report, [Advances in Clouds. Research in Future Cloud Computing](#), May 2012

3.63 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 3.64 Scalable Computing: Practice and Experience ([SCPE](#), from 2009), in WoS (ESCI) from 2015, in SCOPUS from 2011

3.2.2 Member in editorial board (starting from the mentioned year)

2021 3.65 Future Generation Computer Systems, Elsevier ([FGCS](#), from April until September 2021), in WoS;

2019 3.66 Journal of Grid Computing, Springer ([JGC](#)), in WoS

2018 3.67 Acta Cybernetica ([AC](#)), in WoS (ESCI) and Scopus

2016 3.68 EAI Endorsed Transactions on Cloud Systems, ISSN: 2410-6895 ([CloudSys](#)), in EBSCO

2014 3.69 Complex Systems Informatics and Modeling Quarterly, ISSN: 2255-9922 ([CSIMQ](#)), in EBSCO

2013 3.70 Soft Computing and Networking, ISSN: 2052-8450 ([IJSCN](#)), in Asian Digital Library and J-Gate

2008 3.71 International Scientific Journal of Computing, ISSN: 2312-5381 ([CISJ](#)), in Scopus

2006 3.72 Multiagent and Grid Systems, ISSN: 1574-1702 ([MAGS](#)), in WoS (ESCI)

3.73 Journal on Computer Science and Information Systems, ISSN: 1646-3692 ([IJCSIS](#)), in WoS (ESCI)

3.74 International Review on Computers and Software, ISSN: 1828-6003 ([IRECOS](#)), in EBSCO

3.75 International Journal of Computers, Communications and Control, ISSN 1841-9836 ([IJCCC](#), until 2017), in WoS

2005 3.76 International Journal of Computer Science and Applications, ISSN: 0972-9038 ([IJCSA](#)), in Scopus

3.2.3 Journal reviewer (starting from the mentioned year)

- 2021 3.78 International Journal of Parallel Programming (IJPP_■); Journal of Sensor and Actuator Networks (JSAN); Expert Systems with Applications (ESWA_■); Big Earth Data (TBED); SN Computer Science (SNCS); Big Data and Cognitive Computing (BDCC);
- 2020 3.79 Engineering with Computers (EWCO_■); Micromachines (Micromachines_■); Information (Information); Journal of Cleaner Production (JCLP_■); International Journal of Computing and Digital Systems (IJCDs); Processes (Processes_■); Journal of Surveillance, Security and Safety (JSSS);
- 2019 3.80 International Journal of Information Systems in the Service Sector (IJSSS); Advances in Engineering Software (ADES_■); Applied Sciences (APPLSCI_■); Engineering Science and Technology (JESTECH); Mathematics (Mathematics); Algorithms (ALGOCH); Electronics (Electronics_■); Open Computer Science (OPENCS); Water Supply (WS-EM); Social Sciences (SOC-SCI); ISPRS International Journal of Geo-Information (IJGI_■);
- 2018 3.81 IEEE Transactions on Industrial Informatics (TII_■); PLoS One (PONE_■); Journal of Real-Time Image Processing (RTIP_■); Entropy (Entropy_■); Sustainability (Sustainability_■);
- 2017 3.82 IEEE Access (Access_■); IEEE Journal on Selected Areas in Communications (JSAC_■); Applied Soft Computing (ASOC_■); Symmetry (Symmetry_■); Sustainable Computing, Informatics and Systems (SUSCOM_■); Computer Languages, Systems & Structures (COMLAN_■); Journal of Software: Evolution and Process (JSME_■); Studies in Informatics and Control (SIC_■); Software: Practice and Experience (SPE); International Journal of Services Technology and Management (IJSTM); Open Cybernetics & Systemics Journal (TOCSJ);
- 2016 3.83 ACM Computing Surveys (CSUR_■); International Journal of High Performance Computing Applications (IJHPCA_■); International Journal of Cooperative Information Systems (IJCIS_■); Computing and Informatics (CAI_■); Journal of Applied Remote Sensing (JARS); Transactions on Large Scale Data and Knowledge Centered Systems (TLDKS); International Journal of Computer Engineering Research (IJCER); Journal of King Saud University - Computer and Information Sciences (JKSUCIS);
- 2015 3.84 IEEE Transactions on Services Computing (TSCSI_■); Journal of Hydrology (HYDROL_■); Journal of Systems and Software (JSS_■); Journal of Sensors (JS_■); Scientific Programming (SP_■); Journal of Computer Networks and Communications (JCNC); Central European Journal of Computer Science (CEJCS); Computers & Mathematics with Applications (CAMWA); Egyptian Informatics Journal, Elsevier (EIJ);
- 2014 3.85 IEEE Transactions on Computers (TC_■); IEEE Systems Journal (ISJ_■); Data & Knowledge Engineering (DATA-K_■); Journal of Parallel and Distributed Computing (JPDC_■); Concurrency and Computation: Practice and Experience (CCPE_■); Mathematical Problems in Engineering (MPE_■); Journal of Web Engineering (JWE_■); Journal of Computational and Applied Mathematics (CAM_■); International Journal of Distributed Sensor Networks (IJDSN_■); Peer-to-Peer Networking and Applications (PPNA_■); Journal of Cloud Computing: Advances, Systems and Applications (CLCO); International Journal of Digital Earth (IJDE); IEEE Cloud Computing Magazine (CCM); Environment Research (ER);
- 2013 3.86 World Wide Web: Internet and Web Information Systems (WWW_■); Informatica (Informatica_■, from Vilnius, 2013); Simulation Modelling Practice and Theory (SIMPAT_■); Computing (COMP_■); Journal of Universal Computer Science (J.UCS_■); International Journal of Advanced Computer Science and Applications (IJACSA until 2017); Geoinformatics & Geostatistics: An Overview (GIGS); Computer Science (CSCI); Applied Mathematics & Information Sciences (AMIS); IEEE Transactions on Cloud Computing (TCC);
- 2012 3.87 IEEE Transactions on Parallel and Distributed Systems (TPDS_■); IEEE Transactions on Dependable and Secure Computing (TDSC_■); Journal of Network and Computer Applications (JNCA_■); IEEE Computer (Computer_■); Scientific Research and Essays (SRE); Computer Science and Information Sciences (ComSIS);
- 2011 3.88 Journal of Grid Computing, Springer (JGC_■)
- 2010 3.89 Journal of Computational Science (JoCS_■); Computer Standards & Interfaces (CSI_■); Journal of Supercomputing (JoS_■);
- 2008 3.90 Information Sciences, Elsevier (INS_■)
- 2007 3.91 Engineering Applications of Computational Fluid Mechanics (JEACFM); International Journal of Grid and Utility Computing (IJGUC); Bulletin of the Belgian Mathematical Society (BBMS); International Journal of Computational Science and Engineering (IJCSE);
- 2006 3.92 Mathematical Reviews (MR, until 2012); International Journal of Computer Mathematics (IJCM);
- 2005 3.93 Future Generation Computer Systems, Elsevier (FGCS_■); Parallel Computing, Elsevier (PARCO_■); Computing Reviews (CR until 2013); Journal of Systemics, Cybernetics and Informatics (JSCI);
- 1998 3.94 Annals of West University of Timișoara, Mathematical-Computer Science Series (AWUTM)
- 1993 3.95 Zentralblatt für Mathematik (ZBL)

3.2.4 Journal editorials

- 2018 3.96 J. Carretero, J. Garcia-Blas, G. Antoniu, D. Petcu, *New directions in mobile, hybrid, and heterogeneous clouds for cyberinfrastructures*, Future Generation Computer Systems (FGCS_■), Vol. 87, 2018, 615-617, WoS: 000437997500051, doi: [10.1016/j.future.2018.05.073](https://doi.org/10.1016/j.future.2018.05.073) (cits: 1)
- 3.97 G.A.Gravvanis, J.P.Morrison, D.Petcu, T.Lynn, C.K.Filesos-Papadopoulus, *Recent trends in cloud computing*, Future Generation Computer Systems (FGCS_■) 79, 2018, 700-702, WoS: 000418975100019, doi: [10.1016/j.future.2017.11.006](https://doi.org/10.1016/j.future.2017.11.006) (cits: 3)
- 2016 3.98 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 3.99 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), WoS: 000213238700001 [link](#)
- 2012 3.100 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, WoS: 000420400800001, [link](#)
- 3.101 D. Petcu, D. Zaharie, *Agent based systems & semantic software services*, Scalable Computing: Practice and Experiences 13

(1), 2012, WoS: 000420398400001, [link](#)

- 2011 3.102 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, WoS: 000420396200001, [link-1](#) and [link-2](#)
- 3.103 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](#)
- 3.104 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, WoS: 000371244100011, [link](#)
- 2010 3.105 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, WoS: 000420383400001, [link](#) (cits: 1)
- 2008 3.106 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 3.107 D. Petcu, *Practical Aspects of Large-Scale Distributed Computing*, Scalable Computing: Practice and Experience (SCPE) 8 (3), 2007 (electronic version, ISSN 1097-2803, WoS: 000420371200002, [link](#)
- 3.108 D. Petcu, *Challenges concerning symbolic computations on grids*, Scalable Computing: Practice and Experience (SCPE) 6 (3), 2005 (electronic version, ISSN 1895-1767, WoS: 000420360100001, [link](#) (cits: 1)

3.2.5 Proceedings editor

- 2020 3.109 E. De Nitto, D. Zaharie, V. Negru, D. Petcu, 2020 22nd International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC₊), IEEE, : 978-1-7281-7628-4 doi: [10.1109/SYNASC51798.2020.00001](#)
- 2019 3.110 H. Hong, V. Negru, D. Petcu, D. Zaharie, 2019 21st International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC₊), IEEE, 978-1-7281-5724-5 doi: [10.1109/SYNASC.2019.001](#)
- 2018 3.111 E. Abraham, V. Negru, D. Petcu, D. Zaharie, T. Ida, T. Jebelean, 2018 20th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC₊), IEEE, 978-1-7281-0624-3 doi: [10.1109/SYNASC.2018.001](#)
- 2017 3.112 T. Jebelean, V. Negru, D. Petcu, D. Zaharie, T. Ida, S. Watt, 2017 19th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC₊), IEEE, ISBN:978-1-5386-2625-2 doi: [10.1109/SYNASC.2017.001](#)
- 2016 3.113 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 (SYNASC₊), IEEE CSP, doi: [10.1109/SYNASC.2016.001](#)
- 3.114 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 3.115 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 (SYNASC₊), IEEE CSP, doi: [10.1109/SYNASC.2015.1](#)
- 2014 3.116 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 (SYNASC₊), IEEE CSP, doi: [10.1109/SYNASC.2014.1](#)
- 2013 3.117 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 (SYNASC₊), IEEE CSP, doi: [10.1109/SYNASC.2013.1](#)
- 3.118 D. Petcu, V. Stankovski: Introduction to the Proceedings of the Workshop on Cloud-enabled Business Process Management (CeBPM) 2012. Web Information Systems Engineering – WISE 2011 and 2012 Workshops, 01/2013: pages 53-54, doi: [10.1007/978-3-642-38333-5_7](#)
- 2012 3.119 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, (SYNASC₊), 2012, IEEE CSP, doi: [10.1109/SYNASC.2012.1](#)
- 3.120 D. Petcu, E. Troubitsyna (eds.): ADAPTIVE 2012, 4th International Conference on Adaptive and Self-Adaptive Systems and Applications, ISBN: 978-1-61208-219-6
- 3.121 D. Petcu, L. Barolli, R. Hill: Message from the workshops co-chairs of EIDWT 2012. doi: [10.1109/EIDWT.2012.5](#)
- 2011 3.122 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 (SYNASC₊), IEEE CSP, doi: [10.1109/SYNASC.2011.1](#)
- 3.123 B. Di Martino, D. Petcu, *CCPI 2011: Workshop on Cloud Computing Projects and Initiatives*, LNCS 7155, EuroPar₊ 2011 Workshops, 1-3, WoS: 000371303500001, doi: [10.1007/978-3-642-29737-3_1](#)
- 2010 3.124 T. Ida, V. Negru, T. Jebelean, D. Petcu, S. Watt, D. Zaharie (eds.), 12th Int. Symp. on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC₊), 2010, IEEE CSP, doi: [10.1109/SYNASC.2010.1](#)
- 3.125 B. Di Martino, D. Petcu, *CCPI 2010: Workshop on Cloud Computing Projects and Initiatives*, LNCS 6586, EuroPar₊ 2010 Workshops, 551-553, WoS: 000371301900067, doi: [10.1007/978-3-642-21878-1_67](#)
- 2009 3.126 N. Abdennadher, D. Petcu, *Advances in Grid and Pervasive Computing*, 4th Int. Conf. GPC₊ 2009, Springer, ISSN 0302-9743, ISBN 978-3-642-01670-7, LNCS 5529, doi: [10.1007/978-3-642-01671-4](#)
- 3.127 S. Watt, V. Negru, T. Ida, T. Jebelean, D. Petcu, D. Zaharie, *Proceedings of SYNASC₊ 2009*, 11th Int. Symp. on Symbolic and Numeric Algorithms for Scientific Computing, IEEE CSP, doi: [10.1109/SYNASC.2009.1](#)
- 2008 3.128 V. Negru, T. Jebelean, D. Petcu, D. Zaharie, *Proceedings of SYNASC₊ 2008*, 10th Int. Symp. on Symbolic and Numeric Algorithms for Scientific Computing, IEEE CSP, doi: [10.1109/SYNASC.2008.1](#)
- 2007 3.129 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 (SYNASC₊), IEEE CSP, doi: [10.1109/SYNASC.2007.1](#)
- 2006 3.130 D.Petcu, B.Foliot, D.Grigoras, J.Morrison, M.Paprzycki, I. Scherson, B.Toursal, M.Tudruj (eds.), *ISPDC₊ 2006*, 5th Int. Symp. on Parallel and Distributed Computing, IEEE CSP, doi: [10.1109/ISPDC.2006.27](#)
- 3.131 V.Negru, D.Petcu, D.Zaharie, A. Abraham, B. Buchberger, A. Cicortas, D. Gorgan, J. Quinqueton, *Proceedings of SYNASC₊ 2006*, 8th Int. Symp. on Symbolic and Numeric Algorithms for Scientific Computing, September 25-29, 2006, Timisoara, IEEE CSP, 2006, doi: [10.1109/SYNASC.2006.1](#)
- 3.132 D.S. Katz, M. Baker, A. Apon, M. Ashworth, R.M. Badia, J.C. Cunha, E. Deelman, K. Hawick, R. Moore, L. Moreau, J. Morrison, H. Ong, M. Paprzycki, D. Petcu, O. Rana, D. Roman, O. Shehory, P. Uthayopas, C.-L. Wang, T. Yunck, R. Boakes, G. Smith, R. Lakhoo, M. Grove: Message from the WSGA workshop co-chairs. doi: [10.1109/ICPPW.2006.52](#)
- 2005 3.133 D.Zaharie, D.Petcu, V.Negru, T.Jebelean, G.Ciobanu, A. Cicortas, A. Abraham, M. Paprzycki, *Proceedings of SYNASC₊*

2005, 7th Int. Symp. on Symbolic and Numeric Algorithms for Scientific Computing, September 25-29, 2005, Timisoara, IEEE Computer Press, 2005, doi: [10.1109/SYNASC.2005.1](https://doi.org/10.1109/SYNASC.2005.1)

- 3.134 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 Workshops, doi: [10.1109/ICPPW.2005.53](https://doi.org/10.1109/ICPPW.2005.53), 2005
- 2004 3.135 D.Petcu, V.Negru, D. Zaharie, T. Jebelean, Proceedings of SYNASC 2004, 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 3.136 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 3.137 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 3.138 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: 29)
- 3.139 A. Galis, A. Gavras, F. Álvarez, A. Bassi, M. Bezzi, L. Ciavaglia, F. Cleary, P. Daras, H. De Meer, P. Demestichas, J. Domingue, T. G. Kanter, S. Karnouskos, S. Krvco, L. Lefevre, J. Lentjes, M.-S. Li, P. Malone, A. Manzalini, V. Lotz, H. Müller, K. Oberle, N. E. O'Connor, N. Papanikolaou, D. Petcu, R. Rahmani, D. Raz, G. Richards, E. Salvadori, S. Sargento, H. Schaffers, J. Serrat, B. Stillier, A. F. Skarmeta, K. Tutschku, T. Zahariadis, The Future Internet – Future Internet Assembly 2013: Validated Results and New Horizons, LNCS 7858, Springer, 2013 (open access), doi: [10.1007/978-3-642-38082-2](https://doi.org/10.1007/978-3-642-38082-2) (cits: 11)
- 2012 3.140 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: 10)

3.2.7 Book introductions

- 2013 3.141 D. Petcu, A. Galis, and S. Karnouskos, *The Future Internet Cloud: Computing, Networking and Mobility*, in Alex Galis et al (Volume Eds.) The Future Internet – Future Internet Assembly 2013: Validated Results and New Horizons, LNCS 7858, XXI-XXIII, 2013, [link](#)

3.2.8 Book reviews

- 2008 3.142 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 3.143 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

- 2015 3.144 [OBD](#) (2015-2016),
- 2006 3.145 [ISPDC](#) (from 2006)
- 2003 3.146 [SYNASC](#) (from 2003)

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

- 2022 3.147 [Track Scientific and Industrial applications/CCGrid](#) (IT), [ECIS](#) (RO), [FiCloud](#) (IT)
- 2020 3.148 [SYNASC](#) (RO)
- 2019 3.149 [Track Edge Computing/CCGrid](#) (CY), [SYNASC](#) (RO)
- 2018 3.150 [ICAC/SASO](#) (IT), [HPC-ST/SYNASC](#) (RO), [WSC/FedCSIS](#) (PL), [SYNASC](#) (RO)
- 2017 3.151 [Innovate-Data](#) (CZ), Mobile, Hybrid and Emerging Cloud track & TAPEMS workshop/[CCGrid](#) (ES), [SOSeMC/ICAC](#) (US), [WSC/FedCSIS](#) (CZ), [HPC-ST/SYNASC](#) (RO), [SYNASC](#) (RO)
- 2016 3.152 [SOSeMC/ICAC](#) (AT), [ICA3PP](#)/Track BigData&Appl (SP), [CLIoT/ESOC](#) (AT), [MICAS](#) and [HPC-ST/SYNASC](#) (RO), [WSC/FedCSIS](#) (PL), [SYNASC](#) (RO)
- 2015 3.153 [AIMC/Eurosys](#) (FR), [CLIoT](#) (IT), [MICAS](#) and [HPC-E5/SYNASC](#) (RO), [SYNASC](#) (RO)
- 2014 3.154 [MultiCloud/CLOSER](#) (SP), [MICAS](#) and [HPCReS/SYNASC](#) (RO), [C4Bio/CCGrid](#) (US), [SCoDiS-LaSCoG](#) (PL), [SoftwareArch/FiCloud](#) (ES), [SYNASC](#) (RO)
- 2013 3.155 [MoCSOP](#) (ES), [MICAS](#) and [HPCSP/SYNASC](#) (RO), [SYNASC](#) (RO)
- 2012 3.156 [WoSS-4/CLASS](#) (SL), [C4BB4C/ISPA](#) (ES), [EIDWT](#) (RO), [CeBPM/WISE](#) (CY), [MICAS](#) and [WoHS/SYNASC](#) (RO), [SYNASC](#) (RO)
- 2011 3.157 [CCPI/Euro-Par](#) (FR), [WoSS-2/SYNASC](#) (RO) -3/[FedCSIS](#) (PL), [IDAACS](#) (CZ), [SCoDiS-LaSCoG](#) (PL), [SYNASC](#) (RO)
- 2010 3.158 [CCPI/Euro-Par](#) (IT), [WoSS-1/SYNASC](#) (RO), [SCoDiS-LaSCoG/FedCSIS](#) (PL), [SYNASC](#) (RO)
- 2009 3.159 [GPC](#) (CH), [LaSCoG](#) (PL), [SYNASC](#) (RO)
- 2008 3.160 [LaSCoG](#) (PL), [GridTDT-1,-2](#) (RO), [SYNASC](#) (RO)
- 2007 3.161 [LaSCoG](#) (PL), [SYNASC](#) (RO)
- 2006 3.162 [ISPDC](#) (RO), [GridTDT](#) (RO), [LaSCoG](#) (PL), [SYNASC](#) (RO)
- 2005 3.163 [VISSAS](#) (RO), [LaSCoG](#) (PL), [SYNASC](#) (RO)
- 2004 3.164 [SGC](#) (RO), [LaSCoG](#) (PL), [CaVIS](#) (RO), [SYNASC](#) (RO)
- 2003 3.165 [LaSCoG](#) (PL), [CaVIS](#) (RO), [SYNASC](#) (RO)
- 2002 3.166 [SYNASC](#) (RO)

3.3.3 Panel organizer

- 2012 3.167 Session 2.3 Interoperability between Clouds /FIA-Aalborg (DK), May 2012
3.168 Interoperability in Cloud Federation / IoS 2012 (BE), Oct 2012

3.3.4 Member in Conference Program Committees

- 2022 3.169 HCW&ESSA/IPDPS (FR), ICCS (UK), I4CS (NL), PPAM (PL), Modelsward (AT), IEEE WCNC (US), CLOSER (CZ), ENASE (CZ), ICEIS (CZ), CoDIT (TR), ISCC (DE), ICISOFT (FR), IEEE SETIT (TN), ISPDC (CH), SEAA (SP)
- 2021 3.170 HPS & HCW/IPDPS (US), ICCS (PL), BDPS/ICDCS (US), LSDVE&HeteroPar/EuroPar (PT), MOWU/COMPSAC (US), SEAA (SL), I4CS (DE), Modelsward (AT), ICEIS (AT), ENASE (AT), CLOSER (AT), FICC (CA), IEEE WCNC (CHI), ICISOFT (FR), ScalCom (US), Computing (UK), CCN-CPS/ICC (CA), ISPDC (RO), IEEE MobileCloud (V), CSCS23 (RO), IWSG (UK), EDOC (AU), AMDE (PL), SOSE (UK), FedCSIS (OL), CompSysTech (BG), BIR (AT), IDAACS (PL), HPCAsia (RO), CBDCom (CA), FTC (CA), ICT Innovations (MK), GECON (OL), BigData (US), TransAI (US), PiCom (CA), BigService (UAE), ICMLA (US), iThings (AU), RoEduNet (RO), AHPC (US), HPCC (CHI), BalticDB&IS (LT), HI-BI-BI (NL), IUCC (UK), HPCN (UK), CIT (UK), SmartCNS (UK)
- 2020 3.171 Algorithms track at ICPP (CA), HPS/IPDPS (US), CCNCPS/WoWMoM (IR), ICCS (NL), HeteroPar/ EuroPar (PL), HCW (US), Main track & HPBench & InterCloud-HPC/HPCS (SP), ISPA (UK), HPCC (FJ), I4CS (IN), CISIS (PL), CloudCom (TH), Modelsward (MT), ENASE (CZ), ICEIS (CZ), CLOSER (CZ), MobileCloud (UK), ICISOFT (FR), CloudTech (MA), SOSE (UK), ITGN (US), ICUA (TW), BDS (UK), AMDE/ANT (PL), PiCom (CA), CoDIT (CZ), Main track & Edge-Ways/ ESOCC (GR), CBDCom (CA), EDOC (NL), ISPDC (PL), GC/TransAI (US), IEEE iSCI (CHI), BIR (AT), IWSG (UK), CANA/FEDCSIS (BG), AC (PT), FTC (CA), ICT Innovations (MK), GECON (SI), CompSysTech (BG), CoCoNet (CHI), BigData (US), SETCAC (IN), iThings (GR), 3ICT (BH), ScalCom (AU), SRC (KB), FAB (CA)
- 2019 3.172 Edge Comp.Track&TAPEMS&CEBDA/CCGrid (CY), ICCS (PT), HCW/IPDPS (BR), Algorithms track/ICPP (JP), HeteroPar&Euro-EduPar&LSDVE/EuroPar (DE), SF ECS track/SAC (CY), MOWU/COMPSAC (US), WCNC (MO), Main track&HPBench&InterCloud-HPC/HPCS (IR), ICA3PP (AU), ISPA (CHI), ICDCIT (IN), I4CS (DE), PPAM (PL), ISPDC (NL), CloudCom (AU), SYNASC (RO) FICC (US), ICISOFT (CZ), MODELWARD (CZ), Main tracks & MaTCH-BOx/CLOSER (CZ), ENASE (CZ), ICEIS (CZ), IEEE BigDataService (US), CoDIT (FR), SOSE (US), ICCMIT (AT), CC (UK), IEEE Mobile Cloud (US), TAPEMS (CY), ScalCom (UK), SWC (UK), IWSG (SI), CANA/FedCSIS (PL), CEISEE (PT), CSCS22 (RO), IDAACS (FR), IDC (RU), EDOC (FR), CompSysTech (BG), PiCom (JP), BCI (BG), FTC (US), CP-SCOM (US), BigDataSE (NZ), ICACCI (IN), GECON (UK), ICT Innovations (MK), IEEE BigData (US), CBDCom (JP), BIDMA (CA), GC (US), ICSTCC (RO), AC (IT), iThings (US), BDP/HiPC (IN), CoCoNet (IN), FAB (CA), SETCAC (IN), WCI/CoCoNet (IN), DewCom (CA)
- 2018 3.173 Main track & 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), ICA3PP (CN), ISPA (AU), ISPDC (CH), GPC (CN), ICDCIT (IN), CloudCom - track Edge Computing and Distributed Cloud (CY), CIT (CA), SYNASC (RO) ICDCIT (IN), FICC (SG), IoT-SIU (IN), IT4RIs (NL), SOSE (DE), CC (UK), IEEE BigDataService (DE), IEEE Mobile Cloud (DE), ICISOFT (PT), EIDWT (AL), i-Society (IR), CANA/FedCSIS (PL), BIDMA (CA), CBDCom (CN), EDOC (SW), SACI (RO), CoDIT (GR), PICOM (GR), ScalCom (CN), SmartCity (UK), ICCST (MY), ICT Innovations (MK), FAB (SP), SWC (CN), GECON (IT), WCI (IN), CSE (RO), SETCAC (IN), FTC (CA), ACMINS (IN), iThings (CA), LISS (CA), CompSysTech (BG), IEEE Big Data (US), AC (HU), CloudWays (IT), PiCom (GR), CloudTech (BE), FICC (US), RoEduNet (RO), DewCom (CA)
- 2017 3.174 Mobile&HibridClouds track, TAPEMS, EBDMA/CCGrid (SP), ICISOFT (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), ISPDC (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), CCNCPS (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 3.175 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), ISPDC (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 3.176 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), ISPDC (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)

- 3.177 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), ISPDC (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 3.178 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), ISPDC (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 3.179 Doct.Symposium & NordiCloud/ECSA (FI), HeteroPar/Euro-Par (GR), ICA3PP (JP), AINA (JP), HCW (CN), ENASE (PL), HPCS (SP), ICEIS (PT), CISIS (IT), ISPDC (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 3.180 HeteroPar/Euro-Par (FR), AINA (SG), HCW (US), ICA3PP (AUS), ICAART (IT), ICEIS (CN), GPC (FI), CIT (CY), ISPDC (RO), PPAM (PL), Cloud4SOA workshop/CloudCom (GR), SYNASC (RO), ICDCIT (IN), CICIS (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 3.181 Cluster (GR), Doct.Symp./ECSA (DK), HeteroPar/Euro-Par (IT), HCW (US), ICA3PP (KO), HPCS (FR), GPC (TW), ICEIS (PT), ISPDC (TR), CIT (UK), SYNASC (RO), ADiS (PL), ICAART (SP), ICCGI (SP), SWISM (PL), IDC (MOR), FC (TW), ICAAdET (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), SOCMA (US), SEE (US)
- 2009 3.182 HeteroPar/Euro-Par (NL), HCW (IT), HPCS (DE), GPC (SW), ICEIS (IT), ICETE (IT), PPAM (PL), ISPDC (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 3.183 HeteroPar/Cluster (JP), HPCS (CY), CIC (US), ICEIS (SP), ISPDC (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 3.184 HeteroPar/Cluster (US), 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)
- 2006 3.185 HETEROPAR/Cluster (SP), ICPADS (USA), HPCS (DE), ICEIS (CY), CIC (USA), ISPDC (RO), SYNASC (RO), ICC (RO), ICCGI (RO), ADVIS (TK), WSGA (USA), ICCP (RO), ICVL (RO), NCUS (KO), HiPC (IND), KICSS (THAI), CONTI (RO), CCCT (US), LASCOG (PL), FIMCSIT (PL)
- 2005 3.186 CIC (US), ISPDC (FR), PPAM (PL), SYNASC (RO), SOFA (HU), IADIS (SP), ICTIS (MOR), WAGSSDA (NO), CCCT (US), ESM (LV), ABC (US), LASCOG (PL), PARNUM (SI), ICCOMP (GR), HPC&S (LV), NCUS (JP), CNIV (RO)
- 2004 3.187 ISPDC (IR), SYNASC (RO), ADVIS (TUR), SCI (US), CCCT (US), CONTI (RO), ICC (RO), CNIV (RO)
- 2003 3.188 ISPDC (SI), PPAM (PL), SYNASC (RO), SCI (US), CNIV (RO)
- 2002 3.189 SYNASC (RO)
- 2001 3.190 SYNASC (RO)

3.3.5 Member in Habilitation or PhD thesis defence committees

- 2021 3.191 West Univ. Timisoara (RO)
- 2020 3.192 West Univ. Timisoara (RO), Univ. Politehnica Timisoara (RO)
- 2019 3.193 Univ.College Cork (IE)
- 2018 3.194 Univ. Innsbruck (AT), Univ.College Cork (IE)
- 2017 3.195 Univ. Politehnica Bucharest (RO), Univ. Pavia (IT)
- 2016 3.196 West Univ. Timisoara (RO), Univ. Politehnica Bucharest (RO), Univ. Politehnica Timisoara (RO), Politehnico di Milano (IT), Univ. York (UK)
- 2015 3.197 West Univ. Timisoara (RO), 2 x Johannes Kepler Univ. of Linz (AT), Univ. Pisa (IT)
- 2014 3.198 Univ. Politehnica Timisoara (RO), Univ. Babes-Bolyai Cluj-Napoca (RO)
- 2013 3.199 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 3.200 West Univ. Timisoara (RO), Univ. Politehnica Timisoara (RO), Ss.Cyril and Methodius Univ. Skopje (MK)
- 2011 3.201 West Univ. Timisoara (RO), Univ. Politehnica Timisoara (RO), Univ. Babes Bolyai Cluj-Napoca (RO), Univ.College Cork (IE)
- 2010 3.202 2 x Gh. Asachi Technical Univ. Iasi (RO)
- 2009 3.203 West Univ. Timisoara (RO), 3 x Univ. Politehnica Timisoara (RO), Univ. Pisa (IT)
- 2008 3.204 2 x Univ. Politehnica Bucuresti (RO), 1 x Univ. Tehnica Cluj (RO)
- 2006 3.205 West Univ. Timisoara (RO), Univ. College Cork (IE)

3.3.6 Consolidation of research teams

3.206 attract R&D funds for Institute e-Austria Timisoara, 2002-present for 5+ team members (yearly)

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

3.4.1 International research grants

Project coordinator

2012 3.207 FP7-RegPOT **HOST**: High Performance Computing Service Center, 2012-2014, 2 226 272 Euros/UVT
2010 3.208 FP7-ICT **SPRERS**: Strengthening the Participation of RO at EU R&D in Software Services, 2010-2011, 414415 Euros/UVT

Scientific coordinator

2010 3.209 FP7 **mOSAIC**: Open-source API and Platform for multiple Clouds, 2010-2013, 374 550 Euros/IeAT

Coordinator of bilateral projects

2009 3.210 SciCom: Scientific Computing Platform. Collaboration Romania-Austria, 2009-2010, 22 000 Lei/UVT
2008 3.211 AEMTIA: Automated Exploration of Mathematical Theories for Industrial Applications, 2008-2011, 156 000 Euros/IeAT
2006 3.212 COBURDIS: Collaboration Romania-Ukraine in Distributed Computing, 2006-2007, 11 000 Lei/UVT
2002 3.213 Automated verification of software and hardware components, IeAT & RISC Linz, 2002-2005, 413 350 Euros/IeAT
1996 3.214 Entwicklung paralleler Algorithmen für die Lösung steifer Differentialgleichungen, 1996, U. Ruprecht-Karls Heidelberg,

Local team coordinator in collaborative projects

2020 3.215 CHIST-ERA **DIPET**, 2020-2023, 200 000 Euros/UVT
2018 3.216 H2020-FETHPC **ASPIDE**, 2018-2020, 227 175 Euros/IeAT
2017 3.217 InnoReg-Danube **InnoHPC**, 2017-2018, 131 000 Euros/UVT
2015 3.218 H2020-EINFRA **VI-SEEM**, 2015-2018, 148 750 Euros/UVT
3.219 H2020-EINFRA **SESAME NET**, 2015-2017, 114 062 Euros/UVT
3.220 H2020-ICT **CloudLightning**, 2015-2018, 283 750 Euros/IeAT
3.221 H2020-ICT **DICE**, 2015-2018, 295 375 Euros/IeAT
2014 3.222 CIP **Share-PSI 2.0**, 2014-2016, 20 000 Euros/UVT
3.223 COST **NESUS**, 2014-2018, 15 000 Euros/UVT
2013 3.224 FP7 **SPECS**, 2013-2016, 220 800 Euros/IeAT
3.225 FP7 **SCAPE**, 2013-2014, 90 880 Euros/UVT
2012 3.226 FP7 **MODAClouds**, 2012-2015, 355 136 Euros/IeAT
3.227 CIP **SEED**, 2012-2014, 115 722 Euros/IeAT
2010 3.228 FP7 **HP-SEE**, 2010-2013, 27 700 Euros/UVT
2009 3.229 COST **ComplexHPC**, 2009-2013, 15 000 Euros/UVT
2008 3.230 FP7 **DEHEMS** 2008-2011, 156 492 Euros/IeAT
3.231 FP7 **SEE-GRID-SCI**, 2008-2010, 24 346 Euros/UVT
2006 3.232 FP6 **SCIence**, 2006-2011, 208 560 Euros/IeAT

Member

2010 3.233 FP7 **EGI-Inspire**, 2010-2014
2008 3.234 FP7 **EGEE-3**, 2008-2010
2007 3.235 FP6 **SEE-GRID-2**, 2007-2008
3.236 FP6 **EGEE-2**, 2007-2008
2005 3.237 FP6 **VISP**, 2005-2009
3.238 FP6-ERG5 **SystemaThEx**, 2005-2007

3.4.2 International funds, national execution

Project coordinator

2009 3.239 **InfraGrid**: Service-oriented Grid Infrastructure, EC Structural Funds, 2009-2011, 1 911 601 Ron/UVT
2008 3.240 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 3.241 Distributed environments for solving scientific problems, 2000-2001, International Bank for Reconstruction and Development & CNC SIS, 10 000 USD/UVT.

3.4.3 National research grants

Project coordinator

2021 3.242 **COCO**: Adaptivity in cloud-to-edge COntinuum COmputing, 2021-2023, 1 198 032 Ron/UVT
2018 3.243 **BID**: Big Data Science, 2018-2020, 5 000 000 Ron/UVT
2012 3.244 **AMICAS**: Automated Management in Cloud, 2012-2016, 1 348 000 Ron/UVT
2006 3.245 **GRAI**: Grid computing and Artificial Intelligence, 2006-2008, 472 500 Ron/UVT
2005 3.246 **ProWest**: Promotion of the research activities in computer science in West Romania, 2005-2007, 180000 Ron/IeAT&UVT
3.247 P-systems: Models and implementations for simulating P systems, 2005-2006, 3 000 Ron/IeAT
2004 3.248 CompGrid: high performance computing on wide area networks, 2004-2006, 575 000 000 Lei/UVT
2002 3.249 High performance computing technologies based on grid and cluster architectures, 2002-2003, 70 000 000 Lei/UVT
1998 3.250 Parallel& distributed processing in graphics,image processing& computational geometry,1998-1999,22000000 Lei/UVT

