

Anexa nr.5 - Metodologia de concurs pentru ocuparea posturilor didactice și de cercetare vacante
din UTCB – Lista de lucrări publicate

Candidat	Jianu Marilena
Lista celor maximum 10 lucrări relevante pentru realizările profesionale ale candidatului. (pentru ocuparea postului de profesor universitar se vor specifica lucrările realizate după dobândirea atestatului de abilitare).	
1	G. Groza, M. Jianu , N. Pop - <i>Infinitely differentiable functions represented into Newton interpolating series</i> , Carpathian Journal of Mathematics, 30(3), 309 – 316 (2014). ISSN: 1452-8630 (SRI: 0.664 , FI: 1.4). https://www.webofscience.com/wos/woscc/full-record/WOS:000346884500006
2	L. Dăuș, M. Jianu - <i>Full Hermite interpolation of the reliability of a hammock network</i> , Applicable Analysis and Discrete Mathematics, 14(1), 198 – 220 (2020). ISSN: 1584-2851 (SRI: 1.176 , FI: 1.4). DOI:10.2298/AADM190805017D https://www.webofscience.com/wos/woscc/full-record/WOS:000530043000012
3	M. Jianu , S. Achimescu, L. Dăuș, A. Mihai, O.A. Roman, D. Tudor, <i>Characterization of Rectifying Curves by Their Involutes and Evolutes</i> , Mathematics, 9(23), Art. 3077 (2021). ISSN: 2227-7390 (SRI: 0.734 , FI: 2.4). DOI:10.3390/math9233077 https://www.webofscience.com/wos/woscc/full-record/WOS:000742639000001
4	M. Jianu , D. Ciuiu, L. Dăuș, M. Jianu - <i>Markov chain method for computing the reliability of hammock networks</i> , Probability in the Engineering and Informational Sciences, 36(2), 276 – 293 (2022). ISSN: 0269-9648 (SRI: 1.016 , FI: 1.1). DOI:10.1017/S0269964820000534 https://www.webofscience.com/wos/woscc/full-record/WOS:000778571200007
5	L. Dăuș, G. Groza, M. Jianu , <i>Full Hermite interpolation and approximation in topological fields</i> , Mathematics, 10(11), Art.1864 (2022). ISSN: 2227-7390 (SRI: 0.734 , FI: 2.4). DOI:10.3390/math10111864 https://www.webofscience.com/wos/woscc/full-record/WOS:000809087700001
6	M. Jianu , S. Achimescu, L. Dăuș, I. Mierluș-Mazilu, A. Mihai, D. Tudor, <i>On a Surface Associated to the Catalan Triangle</i> , Axioms, 11(12), Art. 685 (2022). ISSN: 2075-1680 (SRI: 0.602 , FI: 2). DOI: 10.3390/axioms11120685 https://www.webofscience.com/wos/woscc/full-record/WOS:000900298500001
7	M. Jianu , L. Dăuș, V.-F. Drăgoi, V. Beiu, <i>Reliability polynomials of consecutive-k-out-of-n:F systems have unbounded roots</i> , Networks 82 (2023), 222–228. ISSN: 0028-3045 (SRI: 2.465 , FI: 2.1). DOI:10.1002/net.22168 https://www.webofscience.com/wos/woscc/full-record/WOS:001019193600001
8	M. Jianu , L. Dăuș, V.-F. Drăgoi, V. Beiu, <i>The roots of the reliability polynomials of circular consecutive-k-out-of-n:F systems</i> , Mathematics 11 (20), 4252 (2023). ISSN: 2227-7390 (SRI: 0.734 , FI: 2.4). DOI:10.3390/math11204252 https://www.webofscience.com/wos/woscc/full-record/WOS:001094359800001
9	M. Jianu , <i>On the Roots of a Family of Polynomials</i> , Fractal and Fractional, 7(4), Art. 339 (2023). ISSN: 2504-3110 (SRI: 0.914 , FI: 5.4). DOI:10.3390/fractalfract7040339 https://www.webofscience.com/wos/woscc/full-record/WOS:000979658300001

10	G. Groza, M. Jianu , I. Mierluș-Mazilu, <i>Some properties of the functions representable as fractional power series</i> , Mathematics, 12(7), Art.961 (2024). ISSN: 2227-7390 (SRI: 0.734 , FI: 2.4). DOI: 10.3390/math12070961 https://0u10ql13-y-https-www-webofscience-com.z.e-nformation.ro/wos/woscc/full-record/WOS:001201015000001
A. Teza sau tezele de doctorat	
A1	<i>Modele de optimizare pentru identificarea parametrilor hidrogeologici</i> , Universitatea Tehnică de Construcții București, 2009, Conducător științific: Prof. Radu Drobot.
A2	
B. Brevete de invenție și alte titluri de proprietate intelectuală	
B1	
B2	
C. Cărți și capitole din cărți	
C1	S.A. Popescu, M. Jianu – <i>A Course in Differential Equations, Calculus of Variations and Probabilities, Vol I + Vol II</i> : Editura Conspress, București, 2015, ISBN 978-973-100-380-1, 268 p. (vol I)+138 p. (vol II).
C2	G. Păltineanu, M. Jianu , A.N. Marcoci, L. Majercsik, A.D. Matei – <i>Culegere de probleme de analiză matematică, Vol. I. Calcul diferențial</i> , Editura Conspress, București, 2016, ISBN 978-973-100-409-9, 305 p.
C3	M. Jianu , A.N. Marcoci, L. Majercsik, A.D. Matei – <i>Culegere de probleme de analiză matematică, Vol. II. Calcul integral</i> , Editura Conspress, București, 2017, ISBN 978-973-100-436-5, 327 p.
C4	S.A. Popescu, M. Jianu – <i>Advanced Mathematics for Engineers and Physicists</i> , Springer, Cham, Switzerland, 2023, ISBN 978-3-031-21501-8; 828 p. https://zbmath.org/1515.00004
D. Articole / studii in extenso, publicate în reviste din fluxul științific internațional principal - Articole publicate în reviste indexate WoS:	
D1	G. Groza, M. Jianu , N. Pop – <i>Infinitely differentiable functions represented into Newton interpolating series</i> , Carpathian Journal of Mathematics, 30(3), 309 – 316 (2014). ISSN: 1452-8630 (SRI: 0.664 , FI: 1.4). https://www.webofscience.com/wos/woscc/full-record/WOS:000346884500006
D2	L. Dăuș, M. Jianu - <i>Full Hermite interpolation of the reliability of a hammock network</i> , Applicable Analysis and Discrete Mathematics, 14(1), 198 – 220 (2020). ISSN: 1584-2851 (SRI: 1.176 , FI: 1.4). DOI:10.2298/AADM190805017D https://www.webofscience.com/wos/woscc/full-record/WOS:000530043000012
D3	A.N. Dimache, G. Groza, M. Jianu , S. Perju, L. Rece, M. Harničárová, J. Valiček, <i>Optimization of the solution of a dispersion model</i> , Mathematics, 8(3), Art. 318 (2020). ISSN: 2227-7390 (SRI: 0.734 , FI: 2.4). DOI:10.3390/math8030318 https://www.webofscience.com/wos/woscc/full-record/WOS:000524085900017
D4	M. Jianu , S. Achimescu, L. Dăuș, A. Mihai, O.A. Roman, D. Tudor, <i>Characterization of Rectifying Curves by Their Involutes and Evolutes</i> , Mathematics, 9(23), Art. 3077 (2021). ISSN: 2227-7390 (SRI: 0.734 , FI: 2.4). DOI:10.3390/math9233077 https://www.webofscience.com/wos/woscc/full-record/WOS:000742639000001

D5	M. Jianu , S.A. Popescu – <i>On a problem related to Egyptian fractions</i> , Bulletin Mathematique de la Societe de Sciences Mathematiques de Roumanie, 64(4), 401-411 (2021). ISSN: 1220-3874 (SRI: 0.384 , FI: 0.6) https://www.webofscience.com/wos/woscc/full-record/WOS:000722925400008
D6	M. Jianu , D. Ciuiu, L. Dăuș, M. Jianu - <i>Markov chain method for computing the reliability of hammock networks</i> , Probability in the Engineering and Informational Sciences, 36(2), 276 – 293 (2022). ISSN: 0269-9648 (SRI: 1.016 , FI: 1.1). DOI:10.1017/S0269964820000534 https://www.webofscience.com/wos/woscc/full-record/WOS:000778571200007
D7	L. Dăuș, G. Groza, M. Jianu , <i>Full Hermite interpolation and approximation in topological fields</i> , Mathematics, 10(11), Art.1864 (2022). ISSN: 2227-7390 (SRI: 0.734 , FI: 2.4). DOI:10.3390/math10111864 https://www.webofscience.com/wos/woscc/full-record/WOS:000809087700001
D8	M. Jianu , S. Achimescu, L. Dăuș, I. Mierluș-Mazilu, A. Mihai, D. Tudor, <i>On a Surface Associated to the Catalan Triangle</i> , Axioms, 11(12), Art. 685 (2022). ISSN: 2075-1680 (SRI: 0.602 , FI: 2). DOI: 10.3390/axioms11120685 https://www.webofscience.com/wos/woscc/full-record/WOS:000900298500001
D9	V. Beiu, L. Dăuș, M. Jianu , A. Mihai, I. Mihai, <i>On a surface associated to Pascal's triangle</i> , Symmetry, 14(2), Art. 411 (2022). ISSN: 2073-8994 (SRI: 0.687 , FI: 2.7). DOI: 10.3390/sym14020411 https://www.webofscience.com/wos/woscc/full-record/WOS:000767781100001
D10	M. Jianu , L. Dăuș, M. Nagy, R.M. Beiu, <i>Approximating the Level Curves on Pascal's Surface</i> , International Journal of Computers Communications & Control, 17(4), Art. 4865 (2022). ISSN: 1841-9836 (SRI: 0.491 , FI: 2.7) DOI: 10.15837/ijccc.2022.4.4865 https://www.webofscience.com/wos/woscc/full-record/WOS:000829406100009
D11	M. Jianu , L. Dăuș, V.-F. Drăgoi, V. Beiu, <i>Reliability polynomials of consecutive-k-out-of-n:F systems have unbounded roots</i> , Networks 82 (2023), 222–228. ISSN: 0028-3045 (SRI: 2.465 , FI: 2.1). DOI:10.1002/net.22168 https://www.webofscience.com/wos/woscc/full-record/WOS:001019193600001
D12	M. Jianu , L. Dăuș, V.-F. Drăgoi, V. Beiu, <i>The roots of the reliability polynomials of circular consecutive-k-out-of-n:F systems</i> , Mathematics 11 (20), 4252 (2023). ISSN: 2227-7390 (SRI: 0.734 , FI: 2.4). DOI:10.3390/math11204252 https://www.webofscience.com/wos/woscc/full-record/WOS:001094359800001
D13	M. Jianu , <i>On the Roots of a Family of Polynomials</i> , Fractal and Fractional, 7(4), Art. 339 (2023). ISSN: 2504-3110 (SRI: 0.914 , FI: 5.4). DOI:10.3390/fractalfract7040339 https://www.webofscience.com/wos/woscc/full-record/WOS:000979658300001
D14	G. Groza, M. Jianu , I. Mierluș-Mazilu, <i>Some properties of the functions representable as fractional power series</i> , Mathematics, 12(7), Art.961 (2024). ISSN: 2227-7390 (SRI: 0.734 , FI: 2.4). DOI: 10.3390/math12070961 https://doi.org/10.3390/math12070961 https://www.webofscience.com/wos/woscc/full-record/WOS:001201015000001
- Articole publicate în reviste indexate în baze de date internaționale (zbMath, ProQuest):	

D15	M. Jianu – <i>The Pilot Point Method for Solving a Groundwater Flow Inverse Problem (I)</i> , Mathematical Modelling in Civil Engineering, nr. 1, 33-41 (2008). (ISSN: 2066-6934) (ProQuest) https://www.proquest.com/other-sources/pilot-point-method-solving-groundwater-flow/docview/195910664/se-2
D16	M. Jianu, R. Drobot – <i>The Pilot Point Method for Solving a Groundwater Flow Inverse Problem (II) Case Study: The Alluvial Fan of Somes River</i> , Mathematical Modelling in Civil Engineering, nr. 2, 13-25 (2008). (ISSN: 2066-6934) (ProQuest) https://www.proquest.com/other-sources/pilot-point-method-solving-groundwater-flow/docview/195905565/se-2
D17	M. Jianu, R. Drobot – <i>Stochastic Generation of Daily Climate Data</i> , Mathematical Modelling in Civil Engineering, nr. 3, 12-22 (2008). (ISSN: 2066-6934) (ProQuest) https://www.proquest.com/other-sources/stochastic-generation-daily-climate-data/docview/195902272/se-2
D18	G. Groza, M. Jianu – <i>Functions of two variables represented into Newton interpolating series</i> , Annals of Oradea University – Mathematics Fascicula, 24(2), 91 – 99 (2017). (ISSN: 1221-1265) (zbMath) https://zbmath.org/1399.41004
D19	M. Jianu, M. Jianu, S.A. Popescu , <i>A combinatorial solution for bridge and torch problem</i> , SN Operations Research Forum, volume 1, Art. 21 (2020). DOI: 10.1007/s43069-020-00022-3. (zbMath) https://zbmath.org/1459.90182
E. Publicații în extenso, apărute în lucrări ale principalelor conferințe internaționale de specialitate.	
E1	M. Jianu, R. Drobot , <i>Application of simulated annealing for solving a groundwater flow inverse problem</i> , Păltineanu, Gavriil (ed.) et al., Trends and challenges in applied mathematics. Conference proceedings of the international conference, ICTCAM 2007, Bucharest, Romania, June 20–23, 2007. Bucharest: Matrix Rom (ISBN 978-973-755-283-9), 233-236 (2007). (zbMath) https://zbmath.org/1347.76036
E2	G. Groza, M. Jianu , <i>Polynomial approximations of solutions of boundary value problems for ODEs which arise from engineering</i> , Mihai, Adela (ed.) et al., Riemannian geometry and applications. Proceedings of the international conference – RIGA, Bucharest, Romania, May 19–21, 2014. Editura Universității din București (ISBN 978-606-16-0553-8), 131-143 (2014) (zbMath) https://zbmath.org/1326.41035
E3	G. Groza, M. Jianu , <i>Functions represented into fractional Taylor series</i> , ITM Web of Conferences, Vol. 29 (2019) Proceedings of the 1st International Conference on Computational Methods and Applications in Engineering (ICMAE 2018) Timisoara, Romania, May 23 – 26, 2018, Art. 01017; (ProQuest). https://www.proquest.com/conference-papers-proceedings/functions-represented-into-fractional-taylor/docview/2488523434/se-2
E4	L. Dăuș, M. Jianu – <i>The shape of the reliability polynomial of a hammock network</i> , International Conference on Computing, Communication and Control (ICCCC 2020), Oradea, Romania, May 11-15, 2020. Intelligent Methods in Computing, Communication and Control. Book Series: Advances in Intelligent Systems and Computing, Volume: 1243, Springer International Publishing: Cham, Switzerland (ISBN 978-3-030-53651-0); 93–105 (2021) publicație indexată ISI: https://www.webofscience.com/wos/woscc/full-record/WOS:000621675100008

E5	M. Jianu , L. Dăuș, S.H. Hoară, V. Beiu – <i>Using Delta-Wye Transformations for Estimating Networks' Reliability</i> , International Conference on Computing, Communication and Control (ICCCC 2022), Oradea, Romania, May 16-20, 2022. Intelligent Methods Systems and Applications in Computing, Communication and Control. Book Series: Advances in Intelligent Systems and Computing, Vol 1435, Springer, Cham, Switzerland (ISSN 978-3-031-16684-6); 415-426 (2023). https://link.springer.com/chapter/10.1007/978-3-031-16684-6_35
E6	L. Dăuș, V.F. Drăgoi, M. Jianu , D.Bucerzan, V. Beiu – <i>On the Roots of Certain Reliability Polynomials</i> , International Conference on Computing, Communication and Control (ICCCC 2022), Oradea, Romania, May, 16-20, 2022. Intelligent Methods Systems and Applications in Computing, Communication and Control. Book Series: Advances in Intelligent Systems and Computing, Vol 1435, Springer, Cham, Switzerland (ISSN 978-3-031-16684-6); 401-414 (2023). https://link.springer.com/chapter/10.1007/978-3-031-16684-6_34
E7	L. Dăuș, M. Jianu , R.M. Beiu, V. Beiu – <i>A Tale of Catalan Triangles: Counting Lattice Paths</i> , International Workshop Soft Computing Applications (SOFA 2020), Arad, Romania, November 27-29, 2020. Book Series: Advances in Intelligent Systems and Computing, vol. 1438, Springer, Cham, Switzerland (ISSN 978-3-031-23636-5); 677-690 (2023). https://link.springer.com/chapter/10.1007/978-3-031-23636-5_52
F. Alte lucrări publicate	
F1	M. Jianu , R. Drobot, A. Matei, <i>Calibration of groundwater models using particle swarm optimization</i> , Proceedings of the 10th Workshop on Mathematics, Computer Science and Technical Education, Department of Mathematics and Computer Science, TUCEB, 80-84, Matrix Rom, București (2009) (ISSN: 2067-3132).
F2	G. Groza, M. Jianu , <i>Simultaneous interpolation and approximation for infinitely differentiable functions</i> , Proceedings of the 12th Workshop on Mathematics, Computer Science and Technical Education, Department of Mathematics and Computer Science, TUCEB, 50-53, Matrix Rom, București (2013) (ISSN: 2067-3132).
F3	M. Jianu , <i>Solving boundary value problems for ordinary differential equations using different software</i> , Proceedings of the Mathematics and Educational Symposium of the Department of Mathematics and Computer Science, 73-78, Matrix Rom, București (2014) (ISSN: 2067-3132).
F4	M. Jianu , <i>Partial differential equations numerically solved by using Taylor expansion</i> , Proceedings of the 13th Workshop on Mathematics, Computer Science and Technical Education, Department of Mathematics and Computer Science, TUCEB, 90-95, Matrix Rom, București (2015) (ISSN: 2067-3132).
F5	M. Jianu , I. Popescu, <i>Heat and wave-like equations with variable coefficients solved by Taylor series method</i> , Romanian Journal of Building Services 1(2) (2015) (ISSN: 2393-5154).
F6	M. Jianu , S.A. Popescu, <i>A succesive projection method for solving linear systems of equations</i> , Proceedings of the Mathematics and Educational Symposium of the Department of Mathematics and Computer Science, TUCEB, 69-74, Matrix Rom, București (2016) (ISSN: 2067-3132).
F7	M. Jianu , I. Popescu, <i>A numerical method for solving Bagley-Torvik equation using fractional Taylor polynomials</i> , Proceedings of the 14th Workshop on Mathematics,

	Computer Science and Technical Education, Department of Mathematics and Computer Science, TUCEB, 60-65, Matrix Rom, București (2017) (ISSN: 2067-3132).
F8	G. Groza, M. Jianu , <i>On the convergence of certain series</i> , Proceedings of the 15th Workshop on Mathematics, Computer Science and Technical Education, Department of Mathematics and Computer Science, TUCEB, 43-48, Matrix Rom, București (2018) (ISSN: 2601-9299).
F9	M. Jianu , L. Dăuș, <i>Some properties of the reliability polynomial of a hammock network</i> , Proceedings of the 15th Workshop on Mathematics, Computer Science and Technical Education, Department of Mathematics and Computer Science, TUCEB, 49-54, Matrix Rom, București (2018) (ISSN: 2601-9299).
F10	N.M. Goșoniu, M. Jianu , S.A. Popescu, <i>A generalization of the bridge and torch problem. An exact optimization algorithm</i> , Proceedings of the 16th Workshop on Mathematics, Computer Science and Technical Education, Department of Mathematics and Computer Science, TUCEB, 55-58, Matrix Rom, București (2019) (ISSN: 2601-9299).
F11	M. Jianu , L. Dăuș, <i>Full Hermite interpolation of the reliability of hammock networks</i> , Proceedings of the 16th Workshop on Mathematics, Computer Science and Technical Education, Department of Mathematics and Computer Science, TUCEB, 59-64, Matrix Rom, București (2019) (ISSN: 2601-9299).
F12	L. Dăuș, M. Jianu , <i>The reliability polynomial of a network by Bernstein polynomials</i> , Proceedings of the 17th Workshop on Mathematics, Computer Science and Technical Education, Department of Mathematics and Computer Science, TUCEB, 38-43, Matrix Rom, București (2020) (ISSN: 2601-9299).
F13	M. Jianu , I. Popescu, <i>Approximation of the Solution of BVP by Full Hermite Interpolation Polynomial</i> , Proceedings of the 17th Workshop on Mathematics, Computer Science and Technical Education, Department of Mathematics and Computer Science, TUCEB, 61-67, Matrix Rom, București (2020) (ISSN: 2601-9299).
F14	M. Jianu , L. Dăuș, <i>A note on Heaviside Step Function</i> , Proceedings of the 18th Workshop on Mathematics, Computer Science and Technical Education, Department of Mathematics and Computer Science, TUCEB, 31-38, Matrix Rom, București (2021) (ISSN: 2601-9299).
F15	M. Jianu , L. Dăuș, <i>The roots of reliability polynomials for series-parallel networks</i> , Proceedings of the 19th Workshop on Mathematics, Computer Science and Technical Education, Department of Mathematics and Computer Science, TUCEB, 36-43, Matrix Rom, București (2022) (ISSN: 2601-9299).
F16	L. Dăuș, M. Jianu , <i>Chromatic polynomials for some families of graphs</i> , Proceedings of the 20th Workshop on Mathematics, Computer Science and Technical Education, Department of Mathematics and Computer Science, TUCEB, 46-54, Matrix Rom, București (2023) (ISSN: 2601-9299).

Candidat Jianu Marilena	Semnătura 	Data 3.06.2024
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