

Candidat: Conf. dr. ing. Călin-Adrian POPA

Centralizator Standarde minime necesare și obligatorii

1. Structura activității candidatului								Activitate candidat	
Nr. crt.	Domeniul activităților	2	3	Subcategorii	Indicatori (kpi)	Criterii minime necesare (PROFESOR)	Număr realizat	Sumă indicatori realizati	
0	1	2	3	4	5	6C	7	8	
1	Activitatea didactică și profesională (A1)	Cărți de autor sau capitole de specialitate la edituri cu ISBN	Cărți / monografii	A1.1.1 internationale A1.1.2 naționale	50 / nr. de autori sau 100 / nr. de autori	1 carte			
		Material didactic / Lucrări didactice publicate la edituri cu ISBN	Manuale didactice	A1.2.1	50 / nr. de autori		2	100	
2	Activitatea de cercetare (A2)	Articole în reviste cotate ISI, și lucrări în volumele unor manifestări științifice indexate ISI		A2.1	(25+30* factor impact) / nr. de autori	15 din care minimum 3 în reviste cotate ISI Q1 sau Q2	36 din care 8 în reviste cotate ISI Q1 sau Q2	140	1992.05
		Factor de impact ISI cumulat pentru publicații							
		Articole în reviste și în volumele unor manifestări științifice indexate în alte baze de date internaționale recunoscute (BDI)		A2.2	20 / nr. de autori		2	40	
		Proprietate intelectuală, brevete de invenție, certificate ORDA		A2.3.1 internationale A2.3.2 naționale	35 / nr. de autori 25 / nr. de autori				
		Granturi/proiecte de cercetare câștigate prin competiție sau Contracte cu agenți economici, în valoare de minimum 10.000 dolari SUA echivalent încasată	Director/ responsabil partener	A2.4.1.1 internationale A2.4.1.2 naționale	20 * ani de desfășurare 10 * ani de desfășurare	2 granturi / proiecte			
			Membru în echipă	A2.4.2.1 internationale A2.4.2.2 naționale	4 * ani de desfășurare 2 * ani de desfășurare		2	15	
						Σ kpi ≥ 600		2047.05	
3	Recunoașterea și impactul activității (A3)	Citări în cărți, reviste și volume ale unor manifestări științifice		A3.1.1 cărți, ISI A3.1.2 BDI	8 / nr. aut. art.citat 4 / nr. aut. art.citat	25 citări ISI	111	1404	
		Membru în colectivele de redacție sau comitele științifice ale revistelor indexate ISI, chair, co-chair sau membru în comitetele de organizare ale manifestărilor științifice internaționale indexate ISI		A3.2	10		17	64	
		Membru în colectivele de redacție sau comitele științifice ale revistelor indexate BDI, chair, co-chair sau membru în comitetele de organizare ale manifestărilor științifice internaționale indexate BDI		A3.3	6				
		Premii în domeniul conferite de Academia Română, ASTR, AOSR, sau premii internaționale de prestigiu		A3.4	15				
		Indicatorul de merit (A = A1+A2+A3)				Σ k1i + Σ k2i + Σ k3i	850	3655.05	

<b>Scorul de referință</b> (se completează de cadrul didactic în cauză: 400 la conf, s.l., as. și 850 la prof. sau habil.)	<b>850</b>
<b>Punctaj C2.1</b>	<b>3655.05</b>
<b>C2.1./Ref</b>	<b>4.30</b>
<b>Punctaj C2.2</b>	<b>7.2</b>
<b>H^3/2</b>	<b>19.31963</b>
<b>Punctaj C2.3</b>	<b>14</b>

Director Departament,  
Prof.dr.habil.ing. Mihai V. MICEA

Candidat,  
Conf. dr. ing. Călin-Adrian POPA

**Candidat: Conf. dr. ing. Călin-Adrian POPA**

**A1.1.1 - Cărți de autor sau capitulo de specialitate la edituri cu ISBN - internaționale**

Nr. crt.	Lucrarea publicată	Indicator realizat
	<b>TOTAL</b>	<b>0</b>

**A1.1.2 - Cărți de autor sau capitulo de specialitate la edituri cu ISBN - naționale**

Nr. crt.	Lucrarea publicată	Indicator realizat
1	Călin-Adrian Popa, "Algoritmi de învățare pentru rețele neuronale Clifford", Colecția Teze de doctorat ale UPT, seria 14: Calculatoare și Tehnologia Informației, nr. 28, 232 pag., Editura Politehnica, Timișoara, 2015, ISBN 978-606-554-965-4.	50
2	Călin-Adrian Popa, "Rețele neuronale de ordin fractionar", 106 pag., Editura Politehnica, Timișoara, 2019, ISBN 978-606-35-0224-8.	50
	<b>TOTAL</b>	<b>100</b>

Candidat,  
Conf. dr. ing. Călin-Adrian POPA

**Universitatea Politehnica Timișoara**

**Departamentul Calculatoare și Tehnologia Informației**

RAMURA DE ȘTIINȚĂ: CALCULATOARE, TEHNOLOGIA INFORMAȚIEI ȘI INGINERIA SISTEMELOR

**Candidat: Conf. dr. ing. Călin-Adrian POPA**

**A1.2.1 - Material didactic / Lucrări didactice publicate la edituri cu ISBN**

Nr. crt.	Lucrarea publicata	Indicator realizat
1	Călin-Adrian Popa, "Analiză numerică. Exerciții rezolvate", 106 pag., Editura Politehnica, Timișoara, 2019, ISBN 978-606-35-0225-5.	40
<b>TOTAL</b>		<b>40</b>

Candidat,  
Conf. dr. ing. Călin-Adrian POPA

**Candidat: Conf. dr. ing. Călin-Adrian POPA**

**A2.1 - Articole în reviste cotate ISI și lucrări în volumele unor manifestări științifice indexate ISI**

Nr. crt.	Lucrarea publicată	Nr. autori	Factor impact	Indicator realizat
1	Petre Birtea, Dan Comănescu, Călin-Adrian Popa, "Averaging on Manifolds by Embedding Algorithm", Journal of Mathematical Imaging and Vision, volume 49, issue 2, Jun., 2014, pp. 454 - 466, ISSN 0924-9907.	3	1.353	21.86
2	Călin-Adrian Popa, "Learning Algorithms for Quaternion-Valued Neural Networks", Neural Processing Letters, volume 47, issue 3, Jun., 2018, pp. 949 - 973, ISSN 1370-4621.	1	2.891	111.73
3	Călin-Adrian Popa, Eva Kaslik, "Multistability and multiperiodicity in hybrid impulsive quaternion-valued neural networks with mixed delays", Neural Networks, volume 99, Mar., 2018, pp. 1 - 18, ISSN 0893-6080.	2	5.535	95.53
4	Călin-Adrian Popa, "Global exponential stability of octonion-valued neural networks with leakage delay and mixed delays", Neural Networks, volume 105, Sep., 2018, pp. 277 - 293, ISSN 0893-6080.	1	5.535	191.05
5	Călin-Adrian Popa, "Global exponential stability of neutral-type octonion-valued neural networks with time-varying delays", Neurocomputing, volume 309, Oct., 2018, pp. 117 - 133, ISSN 0925-2312.	1	4.438	158.14
6	Călin-Adrian Popa, "Global $\mu$ -stability of neutral-type impulsive complex-valued BAM neural networks with leakage delay and unbounded time-varying delays", Neurocomputing, volume 376, Feb., 2020, pp. 73 - 94, ISSN 0925-2312.	1	4.438	158.14
7	Călin-Adrian Popa, "Dissipativity of impulsive matrix-valued neural networks with leakage delay and mixed delays", Neurocomputing, volume 405, Sep., 2020, pp. 85 - 95, ISSN 0925-2312.	1	4.438	158.14
8	Călin-Adrian Popa, Eva Kaslik, "Finite-Time Mittag-Leffler Synchronization of Neutral-Type Fractional-Order Neural Networks with Leakage Delay and Time-Varying Delays", Mathematics, volume 8, Jul., 2020, pp. 1 - 17, ISSN 2227-7390.	2	1.747	38.71
9	Călin-Adrian Popa, "Exact Hessian Matrix Calculation for Complex-Valued Neural Networks", în SOFA 2014: Soft Computing Applications, 2016, Springer International Publishing Switzerland, pp. 439-455, ISBN 978-3-319-18295-7.	1	0.25	32.5
10	Călin-Adrian Popa, "Enhanced Gradient Descent Algorithms for Complex-Valued Neural Networks", 16th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC), IEEE, Timișoara, Romania, Sep., 2014, pp. 272 - 279, ISBN 978-1-4799-8447-3.	1	0.25	32.5
11	Călin-Adrian Popa, "Scaled Conjugate Gradient Learning for Complex-Valued Neural Networks", 21st International Conference on Soft Computing (MENDEL), Springer International Publishing Switzerland, Brno, Cehia, Jun., 2015, pp. 221 - 233, ISBN 978-3-319-19823-1.	1	0.25	32.5
12	Călin-Adrian Popa, "Matrix-Valued Neural Networks", 21st International Conference on Soft Computing (MENDEL), Springer International Publishing Switzerland, Brno, Cehia, Jun., 2015, pp. 245 - 255, ISBN 978-3-319-19823-1.	1	0.25	32.5
13	Călin-Adrian Popa, "Conjugate Gradient Algorithms for Complex-Valued Neural Networks", 22nd International Conference on Neural Information Processing (ICONIP), 2015, pp. 412 - 422, Springer International Publishing Switzerland, ISBN 978-3-319-26534-6. (Rang A - CORE2020)	1	0.75	47.5
14	Călin-Adrian Popa, "Quasi-Newton Learning Methods for Complex-Valued Neural Networks", International Joint Conference on Neural Networks (IJCNN), Killarney, Irlanda, Jul., 2015, pp. 1142 - 1149, ISBN 978-1-4799-1959-8. (Rang A - CORE2020)	1	0.75	47.5
15	Călin-Adrian Popa, "Lie Algebra-Valued Neural Networks", International Joint Conference on Neural Networks (IJCNN), Killarney, Irlanda, Jul., 2015, pp. 3589 - 3594, ISBN 978-1-4799-1959-8. (Rang A - CORE2020)	1	0.75	47.5
16	Călin-Adrian Popa, "Lie Algebra-Valued Hopfield Neural Networks", 17th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC), IEEE, Timișoara, Romania, Sep., 2015, pp. 212 - 215, ISBN 978-0-7695-5742-2.	1	0.25	32.5
17	Călin-Adrian Popa, "Matrix-Valued Bidirectional Associative Memories", în SOFA 2016: Soft Computing Applications, 2017, Springer International Publishing Switzerland, pp. 36-44, ISBN 978-3-319-62523-2.	1	0.25	32.5
18	Călin-Adrian Popa, "Enhanced Gradient Descent Algorithms for Quaternion-Valued Neural Networks", în SOFA 2016: Soft Computing Applications, 2017, Springer International Publishing Switzerland, pp. 45-53, ISBN 978-3-319-62523-2.	1	0.25	32.5

19	Călin-Adrian Popa, "Matrix-Valued Hopfield Neural Networks", în Advances in Neural Networks – ISNN 2016, 2016, Springer International Publishing Switzerland, pp. 127-134, ISBN 978-3-319-40662-6.	1	0.25	32.5
20	Călin-Adrian Popa, "Octonion-Valued Neural Networks", în Artificial Neural Networks and Machine Learning – ICANN 2016, 2016, Springer International Publishing Switzerland, pp. 435-443, ISBN 978-3-319-44777-3.	1	0.25	32.5
21	Călin-Adrian Popa, "Levenberg-Marquardt Learning Algorithm for Quaternion-Valued Neural Networks", 18th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC), IEEE, Timișoara, Romania, Sep., 2016, pp. 272 - 279, ISBN	1	0.25	32.5
22	Călin-Adrian Popa, "Scaled Conjugate Gradient Learning for Quaternion-Valued Neural Networks", în Neural Information Processing – ICONIP 2016, Part III, 2016, Springer International Publishing Switzerland, pp. 243-252, ISBN 978-3-319-46674-3. (Rang A - CORE2020)	1	0.75	47.5
23	Călin-Adrian Popa, "Octonion-Valued Bidirectional Associative Memories", International Joint Conference on Neural Networks (IJCNN), Anchorage, Alaska, SUA, May, 2017, pp. 783 - 787, ISBN 978-1-5090-6182-2. (Rang A - CORE2020)	1	0.75	47.5
24	Călin-Adrian Popa, "Complex-Valued Convolutional Neural Networks for Real-Valued Image Classification", International Joint Conference on Neural Networks (IJCNN), Anchorage, Alaska, SUA, May, 2017, pp. 816 - 822, ISBN 978-1-5090-6182-2. (Rang A - CORE2020)	1	0.75	47.5
25	Călin-Adrian Popa, "Global Asymptotic Stability for Matrix-Valued Recurrent Neural Networks with Time Delays", International Joint Conference on Neural Networks (IJCNN), Anchorage, Alaska, SUA, May, 2017, pp. 4474 - 4481, ISBN 978-1-5090-6182-2. (Rang A - CORE2020)	1	0.75	47.5
26	Călin-Adrian Popa, "Quasi-Newton Learning Methods for Quaternion-Valued Neural Networks", în IWANN 2017: Advances in Computational Intelligence, 2017, Springer International Publishing Switzerland, pp. 362-374, ISBN 978-3-319-59152-0.	1	0.25	32.5
27	Călin-Adrian Popa, "Exponential Stability for Delayed Octonion-Valued Recurrent Neural Networks", în IWANN 2017: Advances in Computational Intelligence, 2017, Springer International Publishing Switzerland, pp. 375-385, ISBN 978-3-319-59152-0.	1	0.25	32.5
28	Călin-Adrian Popa, "Global Exponential Stability for Matrix-Valued Neural Networks with Time Delay", în ISNN 2017: Advances in Neural Networks - ISNN 2017, 2017, Springer International Publishing Switzerland, pp. 429-438, ISBN 978-3-319-59071-4.	1	0.25	32.5
29	Călin-Adrian Popa, "Global Asymptotic Stability for Octonion-Valued Neural Networks with Delay", în ISNN 2017: Advances in Neural Networks - ISNN 2017, 2017, Springer International Publishing Switzerland, pp. 439-448, ISBN 978-3-319-59071-4.	1	0.25	32.5
30	Călin-Adrian Popa, "Exponential Stability of Matrix-Valued BAM Neural Networks with Time-Varying Delays", în ICONIP 2017: Neural Information Processing – ICONIP 2017, Part III, 2017, Springer International Publishing Switzerland, pp. 718-727, ISBN 978-3-319-70089-2. (Rang A - CORE2020)	1	0.75	47.5
31	Călin-Adrian Popa, "Asymptotic Stability of Delayed Octonion-Valued Neural Networks with Leakage Delay", în ICONIP 2017: Neural Information Processing – ICONIP 2017, Part III, 2017, Springer International Publishing Switzerland, pp. 728-736, ISBN 978-3-319-70089-2. (Rang A - CORE2020)	1	0.75	47.5
32	Călin-Adrian Popa, Cosmin Cernăzanu-Glăvan, "Fourier Transform-Based Image Classification Using Complex-Valued Convolutional Neural Networks", în ISNN 2018: Advances in Neural Networks – ISNN 2018, 2018, Springer International Publishing Switzerland, pp. 300-309, ISBN 978-3-319-92536-3.	2	0.25	16.25
33	Călin-Adrian Popa, "Complex-Valued Deep Belief Networks", în ISNN 2018: Advances in Neural Networks – ISNN 2018, 2018, Springer International Publishing Switzerland, pp. 72-78, ISBN 978-3-319-92536-3.	1	0.25	32.5
34	Călin-Adrian Popa, "Complex-Valued Stacked Denoising Autoencoders", în ISNN 2018: Advances in Neural Networks – ISNN 2018, 2018, Springer International Publishing Switzerland, pp. 64-71, ISBN 978-3-319-92536-3.	1	0.25	32.5
35	Călin-Adrian Popa, "Deep Hybrid Real–Complex-Valued Convolutional Neural Networks for Image Classification", International Joint Conference on Neural Networks (IJCNN), Rio de Janeiro, Brazilia, Jul., 2018. (Rang A - CORE2020)	1	0.75	47.5
36	Călin-Adrian Popa, "Complex-Valued Deep Boltzmann Machines", International Joint Conference on Neural Networks (IJCNN), Rio de Janeiro, Brazilia, Jul., 2018. (Rang A - CORE2020)	1	0.75	47.5
<b>TOTAL</b>			<b>42.875</b>	<b>1992.05</b>

Candidat,  
Conf. dr. ing. Călin-Adrian POPA

**Universitatea Politehnica Timișoara**

**Departamentul Calculatoare și Tehnologia Informației**

RAMURA DE ȘTIINȚĂ: CALCULATOARE, TEHNOLOGIA INFORMAȚIEI ȘI INGINERIA SISTEMELOR

**Candidat: Conf. dr. ing. Călin-Adrian POPA**

**A2.2 - Articole în reviste și lucrări în volumele unor manifestări științifice indexate în alte baze de date internaționale recunoscute (BDI)**

Nr. crt.	Lucrarea publicată	Baza de date	Nr. autori	Indicator realizat
1	Călin-Adrian Popa, "Lie Algebra-Valued Bidirectional Associative Memories", în ICSC-MENDEL 2016: Recent Advances in Soft Computing, 2017, Springer International Publishing Switzerland, pp. 127-135, ISBN 978-3-319-58087-6.	SpringerLink	1	20
2	Călin-Adrian Popa, "Conjugate Gradient Algorithms for Quaternion-Valued Neural Networks", în ICSC-MENDEL 2016: Recent Advances in Soft Computing, 2017, Springer International Publishing Switzerland, pp. 176-185, ISBN 978-3-319-58087-6.	SpringerLink	1	20
<b>TOTAL</b>				<b>40</b>

Candidat,  
Conf. dr. ing. Călin-Adrian POPA

**Candidat: Conf. dr. ing. Călin-Adrian POPA**

**A2.4.1.1 - Granturi/proiecte de cercetare câștigate prin competiție sau Contracte cu agenți economici, în valoare de minimum 10.000 dolari SUA echivalent încasăți - Internaționale - ca Director / responsabil partener**

Nr. crt.	Grantul / proiectul	Nr. ani desfasurare	Indicator realizat
	<b>TOTAL</b>		<b>0</b>

**A2.4.1.2 - Granturi/proiecte de cercetare câștigate prin competiție sau Contracte cu agenți economici, în valoare de minimum 10.000 dolari SUA echivalent încasăți - Naționale - ca Director / responsabil partener**

Nr. crt.	Grantul / proiectul	Nr. ani desfasurare	Indicator realizat
1	Proiect de cercetare PCD-TC-2017-41, Universitatea Politehnica Timișoara, Director proiect Călin-Adrian Popa, Buget 46500 RON (10000 EUR), Câștigat prin competiție.	1	10
2	Proiect de cercetare "Bayesian Deep Learning for Depth Estimation with Application to 3D Object Detection", Continental Automotive România S.R.L., Director proiect Călin-Adrian Popa, Buget 48089,49 RON (10010,88 EUR), Câștigat prin competiție.	0.5	5
	<b>TOTAL</b>		<b>15</b>

Candidat,  
Conf. dr. ing. Călin-Adrian POPA

**Candidat: Conf. dr. ing. Călin-Adrian POPA****A3.1.1 - Citări în cărți, reviste și volume ale unor manifestări științifice indexate ISI**

Nr. crt.	Sursă citare	Lucrarea citată	Nr. autori lucrare citată	Jurnal Q1 sau Q2?	Indicator realizat
1	Călin-Adrian Popa, "Enhanced Gradient Descent Algorithms for Complex-Valued Neural Networks", 16th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC), IEEE, Timișoara, Romania, Sep., 2014, pp. 272 - 279, ISBN 978-1-4799-8447-3.	Călin-Adrian Popa, "Enhanced Gradient Descent Algorithms for Complex-Valued Neural Networks", 16th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC), IEEE, Timișoara, Romania, Sep., 2014, pp. 272 - 279, ISBN 978-1-4799-8447-3.	1	DA	16.00
2	Bright Keswani, Ambarish G. Mohapatra, Poonam Keswani, Ashish Khanna, Deepak Gupta, Joel J P C Rodrigues, "Improving weather dependent zone specific irrigation control scheme in IoT and big data enabled self driven precision agriculture mechanism", Enterprise Information Systems, 2020.	Călin-Adrian Popa, "Enhanced Gradient Descent Algorithms for Complex-Valued Neural Networks", 16th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC), IEEE, Timișoara, Romania, Sep., 2014, pp. 272 - 279, ISBN 978-1-4799-8447-3.	1	NU	8.00
3	Zhongying Dong, He Huang, "A training algorithm with selectable search direction for complex-valued feedforward neural networks", Neural Networks, volume 137, 2021, pp. 75-84.	Călin-Adrian Popa, "Conjugate Gradient Algorithms for Complex-Valued Neural Networks", 22nd International Conference on Neural Information Processing (ICONIP), 2015, pp. 412 - 422, Springer International Publishing Switzerland, ISBN 978-3-319-26534-6.	1	DA	16.00
4	Rongrong Wu, He Huang, Tingwen Huang, "Learning of Phase-Amplitude-Type Complex-Valued Neural Networks with Application to Signal Coherence", 24th International Conference on Neural Information Processing (ICONIP), 2017, pp. 91-99.	Călin-Adrian Popa, "Quasi-Newton Learning Methods for Complex-Valued Neural Networks", International Joint Conference on Neural Networks (IJCNN), Killarney, Irlanda, Jul., 2015, pp. 1142 - 1149, ISBN 978-1-4799-1959-8.	1	NU	8.00
5	Dongpo Xu, Jian Dong, Chengdong Zhang, "Convergence of Quasi-Newton Method for Fully Complex-Valued Neural Networks", Neural Processing Letters, volume 46, 2017, pp. 961-968.	Călin-Adrian Popa, "Quasi-Newton Learning Methods for Complex-Valued Neural Networks", International Joint Conference on Neural Networks (IJCNN), Killarney, Irlanda, Jul., 2015, pp. 1142 - 1149, ISBN 978-1-4799-1959-8.	1	DA	16.00
6	Rongrong Wu, He Huang, Xusheng Qian, Tingwen Huang, "A L-BFGS Based Learning Algorithm for Complex-Valued Feedforward Neural Networks", Neural Processing Letters, volume 47, 2018, pp. 1271-1284.	Călin-Adrian Popa, "Quasi-Newton Learning Methods for Complex-Valued Neural Networks", International Joint Conference on Neural Networks (IJCNN), Killarney, Irlanda, Jul., 2015, pp. 1142 - 1149, ISBN 978-1-4799-1959-8.	1	DA	16.00
7	Ruoyu Sang, Qiang Liu, Qijun Zhang, "FPGA-based acceleration of neural network training", 2016 IEEE MTT-S International Conference on Numerical Electromagnetic and Multiphysics Modeling and Optimization (NEMO), 2016.	Călin-Adrian Popa, "Quasi-Newton Learning Methods for Complex-Valued Neural Networks", International Joint Conference on Neural Networks (IJCNN), Killarney, Irlanda, Jul., 2015, pp. 1142 - 1149, ISBN 978-1-4799-1959-8.	1	NU	8.00
8	Ahmet Kayabasi, Berat Yıldız, M. Fatih Aslan, Akif Durdu, "Comparison of ELM and ANN on EMG Signals Obtained for Control of Robotic-Hand", 2018 10th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), 2018.	Călin-Adrian Popa, "Quasi-Newton Learning Methods for Complex-Valued Neural Networks", International Joint Conference on Neural Networks (IJCNN), Killarney, Irlanda, Jul., 2015, pp. 1142 - 1149, ISBN 978-1-4799-1959-8.	1	NU	8.00
9	Seiya Satoh, Ryohei Nakano, "How complex-valued multilayer perceptron can predict the behavior of deterministic chaos", 2016 International Joint Conference on Neural Networks (IJCNN), 2016, pp. 4118-4124.	Călin-Adrian Popa, "Quasi-Newton Learning Methods for Complex-Valued Neural Networks", International Joint Conference on Neural Networks (IJCNN), Killarney, Irlanda, Jul., 2015, pp. 1142 - 1149, ISBN 978-1-4799-1959-8.	1	NU	8.00

10	Fuqiang Ma, Hongying Bai, Xiaotong Zhang, Cheng Xu, Yiping Li, "Generalised maximum complex correntropy-based DOA estimation in presence of impulsive noise", IET Radar, Sonar & Navigation, volume 14, issue 6, 2020, pp. 793 – 802.	<u>Călin-Adrian Popa</u> , "Quasi-Newton Learning Methods for Complex-Valued Neural Networks", International Joint Conference on Neural Networks (IJCNN), Killarney, Irlanda, Jul., 2015, pp. 1142 - 1149, ISBN 978-1-4799-1959-8.	1	NU	8.00
11	Kabin Kanjamapornkul, Richard Pinčák, Sanphet Chunthipaisan, Erik Bartoš, "Support spinor machine", Digital Signal Processing, volume 70, 2017, pp. 59-72.	<u>Călin-Adrian Popa</u> , "Lie Algebra-Valued Hopfield Neural Networks", 17th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC), IEEE, Timișoara, Romania, Sep., 2015, pp. 212 - 215, ISBN 978-0-7695-5742-2.	1	DA	16.00
12	Masaki Kobayashi, "O(2) -Valued Hopfield Neural Networks", IEEE Transactions on Neural Networks and Learning Systems, volume 30, issue 12, 2019, pp. 3833 - 3838.	<u>Călin-Adrian Popa</u> , "Lie Algebra-Valued Hopfield Neural Networks", 17th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC), IEEE, Timișoara, Romania, Sep., 2015, pp. 212 - 215, ISBN 978-0-7695-5742-2.	1	DA	16.00
13	Masaki Kobayashi, "Matrix-valued twin-multistate Hopfield neural networks", Neurocomputing, volume 397, 2020, pp. 108-113.	<u>Călin-Adrian Popa</u> , "Lie Algebra-Valued Hopfield Neural Networks", 17th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC), IEEE, Timișoara, Romania, Sep., 2015, pp. 212 - 215, ISBN 978-0-7695-5742-2.	1	DA	16.00
14	Masaki Kobayashi, "Diagonal rotor Hopfield neural networks", Neurocomputing, volume 415, 2020, pp. 40-47.	<u>Călin-Adrian Popa</u> , "Lie Algebra-Valued Hopfield Neural Networks", 17th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC), IEEE, Timișoara, Romania, Sep., 2015, pp. 212 - 215, ISBN 978-0-7695-5742-2.	1	DA	16.00
15	Masaki Kobayashi, "Hopfield neural networks using Klein four-group", Neurocomputing, volume 387, 2020, pp. 123-128.	<u>Călin-Adrian Popa</u> , "Lie Algebra-Valued Hopfield Neural Networks", 17th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC), IEEE, Timișoara, Romania, Sep., 2015, pp. 212 - 215, ISBN 978-0-7695-5742-2.	1	DA	16.00
16	Masaki Kobayashi, "Synthesis of complex- and hyperbolic-valued Hopfield neural networks", Neurocomputing, volume 423, 2021, pp. 80-88.	<u>Călin-Adrian Popa</u> , "Lie Algebra-Valued Hopfield Neural Networks", 17th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC), IEEE, Timișoara, Romania, Sep., 2015, pp. 212 - 215, ISBN 978-0-7695-5742-2.	1	DA	16.00
17	Masaki Kobayashi, "Bicomplex-valued twin-hyperbolic Hopfield neural networks", Neurocomputing, volume 434, 2021, pp. 203-210.	<u>Călin-Adrian Popa</u> , "Lie Algebra-Valued Hopfield Neural Networks", 17th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC), IEEE, Timișoara, Romania, Sep., 2015, pp. 212 - 215, ISBN 978-0-7695-5742-2.	1	DA	16.00
18	Masaki Kobayashi, "Bicomplex-valued twin-hyperbolic Hopfield neural networks", Neurocomputing, volume 434, 2021, pp. 203-210.	<u>Călin-Adrian Popa</u> , "Matrix-Valued Bidirectional Associative Memories", în SOFA 2016: Soft Computing Applications, 2017, Springer International Publishing Switzerland, pp. 36-44, ISBN 978-3-319-62523-2.	1	DA	16.00
19	Eva Kaslik, Ileana Rodica Rădulescu, "Dynamics of complex-valued fractional-order neural networks", Neural Networks, volume 89, 2017, pp. 39-49.	<u>Călin-Adrian Popa</u> , "Matrix-Valued Neural Networks", 21st International Conference on Soft Computing (MENDEL), Springer International Publishing Switzerland, Brno, Cehia, Jun., 2015, pp. 245 - 255, ISBN 978-3-319-19823-1.	1	DA	16.00
20	Zhe-Cheng Fan, Tak-Shing T. Chan, Yi-Hsuan Yang, Jyh-Shing Roger Jang, "Backpropagation With N -D Vector-Valued Neurons Using Arbitrary Bilinear Products", IEEE Transactions on Neural Networks and Learning Systems, volume 31, issue 7, 2020, pp. 2638 - 2652.	<u>Călin-Adrian Popa</u> , "Matrix-Valued Neural Networks", 21st International Conference on Soft Computing (MENDEL), Springer International Publishing Switzerland, Brno, Cehia, Jun., 2015, pp. 245 - 255, ISBN 978-3-319-19823-1.	1	DA	16.00
21	Zhe-Cheng Fan, Tak-Shing Chan, Yi-Hsuan Yang, Jyh-Shing Roger Jang, "Deep Cyclic Group Networks", 2019 International Joint Conference on Neural Networks (IJCNN), 2019.	<u>Călin-Adrian Popa</u> , "Matrix-Valued Neural Networks", 21st International Conference on Soft Computing (MENDEL), Springer International Publishing Switzerland, Brno, Cehia, Jun., 2015, pp. 245 - 255, ISBN 978-3-319-19823-1.	1	NU	8.00
22	Bingjie Zhang, Yusong Liu, Jinde Cao, Shujun Wu, Jian Wang, "Fully complex conjugate gradient-based neural networks using Wirtinger calculus framework: Deterministic convergence and its application", Neural Networks, volume 115, 2019, pp. 50-64.	<u>Călin-Adrian Popa</u> , "Scaled Conjugate Gradient Learning for Complex-Valued Neural Networks", 21st International Conference on Soft Computing (MENDEL), Springer International Publishing Switzerland, Brno, Cehia, Jun., 2015, pp. 221 - 233, ISBN 978-3-319-19823-1.	1	DA	16.00

23	Marcos Eduardo Valle, Fidelis Zanetti de Castro, "On the Dynamics of Hopfield Neural Networks on Unit Quaternions", IEEE Transactions on Neural Networks and Learning Systems, volume 29, issue 6, 2018, pp. 2464 - 2471.	Călin-Adrian Popa, "Scaled Conjugate Gradient Learning for Quaternion-Valued Neural Networks", în Neural Information Processing – ICONIP 2016, Part III, 2016, Springer International Publishing Switzerland, pp. 243-252, ISBN 978-3-319-46674-3.	1	DA	16.00
24	Sushil Kumar, Bipin Kumar Tripathi, "On the learning machine with compensatory aggregation based neurons in quaternionic domain", Journal of Computational Design and Engineering, volume 6, issue 1, 2019, pp. 33–48.	Călin-Adrian Popa, "Scaled Conjugate Gradient Learning for Quaternion-Valued Neural Networks", în Neural Information Processing – ICONIP 2016, Part III, 2016, Springer International Publishing Switzerland, pp. 243-252, ISBN 978-3-319-46674-3.	1	DA	16.00
25	Sushil Kumar, Bipin Kumar Tripathi, "High-dimensional information processing through resilient propagation in quaternionic domain", Journal of Industrial Information Integration, volume 11, 2018, pp. 41-49.	Călin-Adrian Popa, "Scaled Conjugate Gradient Learning for Quaternion-Valued Neural Networks", în Neural Information Processing – ICONIP 2016, Part III, 2016, Springer International Publishing Switzerland, pp. 243-252, ISBN 978-3-319-46674-3.	1	DA	16.00
26	Marcos Eduardo Valle, "Quaternionic Recurrent Correlation Neural Networks", 2018 International Joint Conference on Neural Networks (IJCNN), 2018.	Călin-Adrian Popa, "Scaled Conjugate Gradient Learning for Quaternion-Valued Neural Networks", în Neural Information Processing – ICONIP 2016, Part III, 2016, Springer International Publishing Switzerland, pp. 243-252, ISBN 978-3-319-46674-3.	1	NU	8.00
27	Marcos Eduardo Valle, Fidelis Zanetti de Castro, "On the Dynamics of Hopfield Neural Networks on Unit Quaternions", IEEE Transactions on Neural Networks and Learning Systems, volume 29, issue 6, 2018, pp. 2464 - 2471.	Călin-Adrian Popa, "Matrix-Valued Hopfield Neural Networks", în Advances in Neural Networks – ISNN 2016, 2016, Springer International Publishing Switzerland, pp. 127-134, ISBN 978-3-319-40662-6.	1	DA	16.00
28	Masaki Kobayashi, "O(2) -Valued Hopfield Neural Networks", IEEE Transactions on Neural Networks and Learning Systems, volume 30, issue 12, 2019, pp. 3833 - 3838.	Călin-Adrian Popa, "Matrix-Valued Hopfield Neural Networks", în Advances in Neural Networks – ISNN 2016, 2016, Springer International Publishing Switzerland, pp. 127-134, ISBN 978-3-319-40662-6.	1	DA	16.00
29	Fidelis Zanetti de Castro, Marcos Eduardo Valle, "A broad class of discrete-time hypercomplex-valued Hopfield neural networks", Neural Networks, volume 122, 2020, pp. 54-67.	Călin-Adrian Popa, "Matrix-Valued Hopfield Neural Networks", în Advances in Neural Networks – ISNN 2016, 2016, Springer International Publishing Switzerland, pp. 127-134, ISBN 978-3-319-40662-6.	1	DA	16.00
30	Masaki Kobayashi, "Matrix-valued twin-multistate Hopfield neural networks", Neurocomputing, volume 397, 2020, pp. 108-113.	Călin-Adrian Popa, "Matrix-Valued Hopfield Neural Networks", în Advances in Neural Networks – ISNN 2016, 2016, Springer International Publishing Switzerland, pp. 127-134, ISBN 978-3-319-40662-6.	1	NU	8.00
31	Masaki Kobayashi, "Diagonal rotor Hopfield neural networks", Neurocomputing, volume 415, 2020, pp. 40-47.	Călin-Adrian Popa, "Matrix-Valued Hopfield Neural Networks", în Advances in Neural Networks – ISNN 2016, 2016, Springer International Publishing Switzerland, pp. 127-134, ISBN 978-3-319-40662-6.	1	DA	16.00
32	Masaki Kobayashi, "Hopfield neural networks using Klein four-group", Neurocomputing, volume 387, 2020, pp. 123-128.	Călin-Adrian Popa, "Matrix-Valued Hopfield Neural Networks", în Advances in Neural Networks – ISNN 2016, 2016, Springer International Publishing Switzerland, pp. 127-134, ISBN 978-3-319-40662-6.	1	DA	16.00
33	Masaki Kobayashi, "Synthesis of complex- and hyperbolic-valued Hopfield neural networks", Neurocomputing, volume 423, 2021, pp. 80-88.	Călin-Adrian Popa, "Matrix-Valued Hopfield Neural Networks", în Advances in Neural Networks – ISNN 2016, 2016, Springer International Publishing Switzerland, pp. 127-134, ISBN 978-3-319-40662-6.	1	DA	16.00
34	Masaki Kobayashi, "Bicomplex-valued twin-hyperbolic Hopfield neural networks", Neurocomputing, volume 434, 2021, pp. 203-210.	Călin-Adrian Popa, "Matrix-Valued Hopfield Neural Networks", în Advances in Neural Networks – ISNN 2016, 2016, Springer International Publishing Switzerland, pp. 127-134, ISBN 978-3-319-40662-6.	1	DA	16.00
35	Jiasong Wu, Ling Xu, Fuzhi Wu, Youyong Kong, Lotfi Senhadji, Huazhong Shu, "Deep octonion networks", Neurocomputing, volume 397, 2020, pp. 179-191.	Călin-Adrian Popa, "Octonion-Valued Neural Networks", în Artificial Neural Networks and Machine Learning – ICANN 2016, 2016, Springer International Publishing Switzerland, pp. 435-443, ISBN 978-3-319-44777-3.	1	DA	16.00
36	Lyes Saad Saoud, Reza Ghorbani, "Metacognitive Octonion-Valued Neural Networks as They Relate to Time Series Analysis", IEEE Transactions on Neural Networks and Learning Systems, volume 31, issue 2, 2020, pp. 539 - 548.	Călin-Adrian Popa, "Octonion-Valued Neural Networks", în Artificial Neural Networks and Machine Learning – ICANN 2016, 2016, Springer International Publishing Switzerland, pp. 435-443, ISBN 978-3-319-44777-3.	1	DA	16.00
37	Łukasz Błaszczyk, "A generalization of the octonion Fourier transform to 3-D octonion-valued signals: properties and possible applications to 3-D LTI partial differential systems", Multidimensional Systems and Signal Processing, volume 31, 2020, pp. 1227–	Călin-Adrian Popa, "Octonion-Valued Neural Networks", în Artificial Neural Networks and Machine Learning – ICANN 2016, 2016, Springer International Publishing Switzerland, pp. 435-443, ISBN 978-3-319-44777-3.	1	DA	16.00

38	Zhe-Cheng Fan, Tak-Shing T. Chan, Yi-Hsuan Yang, Jyh-Shing Roger Jang, "Backpropagation With N -D Vector-Valued Neurons Using Arbitrary Bilinear Products", <i>IEEE Transactions on Neural Networks and Learning Systems</i> , volume 31, issue 7, 2020, pp. 2638 - 2652.	<u>Călin-Adrian Popa</u> , "Octonion-Valued Neural Networks", în <i>Artificial Neural Networks and Machine Learning – ICANN 2016</i> , 2016, Springer International Publishing Switzerland, pp. 435-443, ISBN 978-3-319-44777-3.	1	DA	16.00
39	Łukasz Błaszczyk, "Discrete octonion Fourier transform and the analysis of discrete 3-D data", <i>Computational and Applied Mathematics</i> , volume 39, no. 4, 2020.	<u>Călin-Adrian Popa</u> , "Octonion-valued Neural Networks", în <i>Artificial Neural Networks and Machine Learning – ICANN 2016</i> , 2016, Springer International Publishing Switzerland, pp. 435-443, ISBN 978-3-319-44777-2.	1	DA	16.00
40	Hening Pram Pradityo, Lukman Rosyidi, Misbahuddin, Riri Fitri Sari, "Performance evaluation of RSS fingerprinting method to track ZigBee devices location using artificial neural networks", 2017 International Conference on Information and Communication Technology Convergence (ICTC), 2017, pp. 268-273.	<u>Călin-Adrian Popa</u> , "Levenberg-Marquardt Learning Algorithm for Quaternion-Valued Neural Networks", 18th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC), IEEE, Timișoara, Romania, Sep., 2016, pp. 272 - 279, ISBN 978-1-5090-5708-5.	1	NU	8.00
41	Masaki Kobayashi, "Bicomplex-valued twin-hyperbolic Hopfield neural networks", <i>Neurocomputing</i> , volume 434, 2021, pp. 203-210.	<u>Călin-Adrian Popa</u> , "Lie Algebra-Valued Bidirectional Associative Memories", în <i>ICSC-MENDEL 2016: Recent Advances in Soft Computing</i> , 2017, Springer International Publishing Switzerland, pp. 127-135, ISBN 978-3-319-58087-6.	1	DA	16.00
42	Masaki Kobayashi, "Complex-valued Hopfield neural networks with real weights in synchronous mode", <i>Neurocomputing</i> , volume 423, 2021, pp. 535-540.	<u>Călin-Adrian Popa</u> , "Octonion-Valued Bidirectional Associative Memories", International Joint Conference on Neural Networks (IJCNN), Anchorage, Alaska, SUA, May, 2017, pp. 783 - 787, ISBN 978-1-5090-6182-2.	1	DA	16.00
43	Masaki Kobayashi, "Bicomplex-valued twin-hyperbolic Hopfield neural networks", <i>Neurocomputing</i> , volume 434, 2021, pp. 203-210.	<u>Călin-Adrian Popa</u> , "Octonion-Valued Bidirectional Associative Memories", International Joint Conference on Neural Networks (IJCNN), Anchorage, Alaska, SUA, May, 2017, pp. 783 - 787, ISBN 978-1-5090-6182-2.	1	DA	16.00
44	Junming Zhang, Yan Wu, "Complex-valued unsupervised convolutional neural networks for sleep stage classification", <i>Computer Methods and Programs in Biomedicine</i> , volume 164, 2018, pp. 181-191.	<u>Călin-Adrian Popa</u> , "Complex-Valued Convolutional Neural Networks for Real-Valued Image Classification", International Joint Conference on Neural Networks (IJCNN), Anchorage, Alaska, SUA, May, 2017, pp. 816 - 822, ISBN 978-1-5090-6182-2.	1	DA	16.00
45	Jiasong Wu, Ling Xu, Fuzhi Wu, Youyong Kong, Lotfi Senhadji, Huazhong Shu, "Deep octonion networks", <i>Neurocomputing</i> , volume 397, 2020, pp. 179-191.	<u>Călin-Adrian Popa</u> , "Complex-Valued Convolutional Neural Networks for Real-Valued Image Classification", International Joint Conference on Neural Networks (IJCNN), Anchorage, Alaska, SUA, May, 2017, pp. 816 - 822, ISBN 978-1-5090-6182-2.	1	DA	16.00
46	Marcin Matlacz, Grzegorz Sarwas, "Crowd counting using complex convolutional neural network", 2018 Signal Processing: Algorithms, Architectures, Arrangements, and Applications (SPA), 2018, pp. 88-92.	<u>Călin-Adrian Popa</u> , "Complex-Valued Convolutional Neural Networks for Real-Valued Image Classification", International Joint Conference on Neural Networks (IJCNN), Anchorage, Alaska, SUA, May, 2017, pp. 816 - 822, ISBN 978-1-5090-6182-2.	1	NU	8.00
47	Shufang Zhang, He Huang, Ziyang Han, "A Levenberg-Marquardt Algorithm Based Incremental Scheme for Complex-Valued Neural Networks", 2019 IEEE Symposium Series on Computational Intelligence (SSCI), 2019, pp. 1479-1485.	<u>Călin-Adrian Popa</u> , "Complex-Valued Convolutional Neural Networks for Real-Valued Image Classification", International Joint Conference on Neural Networks (IJCNN), Anchorage, Alaska, SUA, May, 2017, pp. 816 - 822, ISBN 978-1-5090-6182-2.	1	NU	8.00
48	Lun Li, Guanghui Yu, Jin Xu, Liguang Li, "Channel Decoding Based on Complex-valued Convolutional Neural Networks", 2020 2nd 6G Wireless Summit (6G SUMMIT), 2020.	<u>Călin-Adrian Popa</u> , "Complex-Valued Convolutional Neural Networks for Real-Valued Image Classification", International Joint Conference on Neural Networks (IJCNN), Anchorage, Alaska, SUA, May, 2017, pp. 816 - 822, ISBN 978-1-5090-6182-2.	1	NU	8.00
49	Zeyang Yu, Shengxi Li, Danilo Mandic, "Widely Linear Complex-Valued Autoencoder: Dealing with Noncircularity in Generative-Discriminative Models", International Conference on Artificial Neural Networks (ICANN 2019), 2019, pp. 339-350.	<u>Călin-Adrian Popa</u> , "Complex-Valued Convolutional Neural Networks for Real-Valued Image Classification", International Joint Conference on Neural Networks (IJCNN), Anchorage, Alaska, SUA, May, 2017, pp. 816 - 822, ISBN 978-1-5090-6182-2.	1	NU	8.00
50	Licheng Jiao, Jin Zhao, "A Survey on the New Generation of Deep Learning in Image Processing", <i>IEEE Access</i> , volume 7, 2019, pp. 172231 - 172263.	<u>Călin-Adrian Popa</u> , "Complex-Valued Convolutional Neural Networks for Real-Valued Image Classification", International Joint Conference on Neural Networks (IJCNN), Anchorage, Alaska, SUA, May, 2017, pp. 816 - 822, ISBN 978-1-5090-6182-2.	1	DA	16.00

51	Yong-Liang Xiao, Sikun Li, Guohai Situ, Zhiheng You, "Unitary learning for diffractive deep neural network", Optics and Lasers in Engineering, volume 139, 2021, no. 106499.	<u>Călin-Adrian Popa</u> , "Complex-Valued Convolutional Neural Networks for Real-Valued Image Classification", International Joint Conference on Neural Networks (IJCNN), Anchorage, Alaska, SUA, May, 2017, pp. 816 - 822, ISBN 978-1-5090-6182-2.	1	DA	16.00
52	Yongkun Li, Jiali Qin, Bing Li, "Anti-periodic Solutions for Quaternion-Valued High-Order Hopfield Neural Networks with Time-Varying Delays", Neural Processing Letters, volume 49, 2019, pp. 1217-1237.	<u>Călin-Adrian Popa</u> , Eva Kaslik, "Multistability and multiperiodicity in hybrid impulsive quaternion-valued neural networks with mixed delays", Neural Networks, volume 99, Mar., 2018, pp. 1 - 18, ISSN 0893-6080.	2	DA	8.00
53	Zhengwen Tu, Xinsong Yang, Liangwei Wang, Nan Ding, "Stability and stabilization of quaternion-valued neural networks with uncertain time-delayed impulses: Direct quaternion method", Physica A: Statistical Mechanics and its Applications, volume 535, 2019, no. 122358.	<u>Călin-Adrian Popa</u> , Eva Kaslik, "Multistability and multiperiodicity in hybrid impulsive quaternion-valued neural networks with mixed delays", Neural Networks, volume 99, Mar., 2018, pp. 1 - 18, ISSN 0893-6080.	2	DA	8.00
54	Jianglian Xiang, Yongkun Li, "Pseudo almost automorphic solutions of quaternion-valued neural networks with infinitely distributed delays via a non-decomposing method", Advances in Difference Equations, volume 2019, 2019, no. 356.	<u>Călin-Adrian Popa</u> , Eva Kaslik, "Multistability and multiperiodicity in hybrid impulsive quaternion-valued neural networks with mixed delays", Neural Networks, volume 99, Mar., 2018, pp. 1 - 18, ISSN 0893-6080.	2	DA	8.00
55	Dingyuan Chen, Weiwei Zhang, Jinde Cao, Chuangxia Huang, "Fixed time synchronization of delayed quaternion-valued memristor-based neural networks", Advances in Difference Equations, volume 2020, 2020, no. 92.	<u>Călin-Adrian Popa</u> , Eva Kaslik, "Multistability and multiperiodicity in hybrid impulsive quaternion-valued neural networks with mixed delays", Neural Networks, volume 99, Mar., 2018, pp. 1 - 18, ISSN 0893-6080.	2	DA	8.00
56	Yongkun Li, Huimei Wang, "Almost periodic synchronization of quaternion-valued shunting inhibitory cellular neural networks with mixed delays via state-feedback control", Plos One, volume 13, issue 6, 2018, no. e0198297.	<u>Călin-Adrian Popa</u> , Eva Kaslik, "Multistability and multiperiodicity in hybrid impulsive quaternion-valued neural networks with mixed delays", Neural Networks, volume 99, Mar., 2018, pp. 1 - 18, ISSN 0893-6080.	2	DA	8.00
57	Nina Huo, Yongkun Li, "Antiperiodic Solutions for Quaternion-Valued Shunting Inhibitory Cellular Neural Networks with Distributed Delays and Impulses", Complexity, 2018, no. 6420256.	<u>Călin-Adrian Popa</u> , Eva Kaslik, "Multistability and multiperiodicity in hybrid impulsive quaternion-valued neural networks with mixed delays", Neural Networks, volume 99, Mar., 2018, pp. 1 - 18, ISSN 0893-6080.	2	DA	8.00
58	Yongkun Li, Yanchao Fang, Jiali Qin, "Anti-periodic Synchronization of Quaternion-valued Generalized Cellular Neural Networks with Time-varying Delays and Impulsive Effects", International Journal of Control, Automation and Systems, volume 17, 2019, pp. 1191-1208.	<u>Călin-Adrian Popa</u> , Eva Kaslik, "Multistability and multiperiodicity in hybrid impulsive quaternion-valued neural networks with mixed delays", Neural Networks, volume 99, Mar., 2018, pp. 1 - 18, ISSN 0893-6080.	2	DA	8.00
59	Xinrui Ji, Jianquan Lu, Jungang Lou, Jianlong Qiu, Kaibo Shi, "A unified criterion for global exponential stability of quaternion-valued neural networks with hybrid impulses", International Journal of Robust and Nonlinear Control, 2020.	<u>Călin-Adrian Popa</u> , Eva Kaslik, "Multistability and multiperiodicity in hybrid impulsive quaternion-valued neural networks with mixed delays", Neural Networks, volume 99, Mar., 2018, pp. 1 - 18, ISSN 0893-6080.	2	DA	8.00
60	Li Li, Weisheng Chen, "Exponential stability analysis of quaternion-valued neural networks with proportional delays and linear threshold neurons: Continuous-time and discrete-time cases", Neurocomputing, volume 381, 2020, pp. 152-166.	<u>Călin-Adrian Popa</u> , Eva Kaslik, "Multistability and multiperiodicity in hybrid impulsive quaternion-valued neural networks with mixed delays", Neural Networks, volume 99, Mar., 2018, pp. 1 - 18, ISSN 0893-6080.	2	DA	8.00
61	Sitian Qin, Qiang Ma, Jiqiang Feng, Chen Xu, "Multistability of Almost Periodic Solution for Memristive Cohen-Grossberg Neural Networks With Mixed Delays", IEEE Transactions on Neural Networks and Learning Systems, volume 31, issue 6, 2020, pp. 1914 - 1926.	<u>Călin-Adrian Popa</u> , Eva Kaslik, "Multistability and multiperiodicity in hybrid impulsive quaternion-valued neural networks with mixed delays", Neural Networks, volume 99, Mar., 2018, pp. 1 - 18, ISSN 0893-6080.	2	DA	8.00
62	Yongkun Li, Chun Wang, "Anti-periodic solutions for quaternion-valued inertial neural networks with time-varying delays", Journal of Intelligent & Fuzzy Systems, volume 37, issue 6, 2019, pp. 7797-7813.	<u>Călin-Adrian Popa</u> , Eva Kaslik, "Multistability and multiperiodicity in hybrid impulsive quaternion-valued neural networks with mixed delays", Neural Networks, volume 99, Mar., 2018, pp. 1 - 18, ISSN 0893-6080.	2	NU	4.00
63	Fanghai Zhang, Zhigang Zeng, "Multiple Mittag-Leffler Stability of Delayed Fractional-Order Cohen-Grossberg Neural Networks via Mixed Monotone Operator Pair", IEEE Transactions on Cybernetics, 2019.	<u>Călin-Adrian Popa</u> , Eva Kaslik, "Multistability and multiperiodicity in hybrid impulsive quaternion-valued neural networks with mixed delays", Neural Networks, volume 99, Mar., 2018, pp. 1 - 18, ISSN 0893-6080.	2	DA	8.00

64	Donghua Li, Zhengqiu Zhang, Xiaolan Zhang, "Periodic solutions of discrete-time Quaternion-valued BAM neural networks", Chaos, Solitons & Fractals, volume 138, 2020, no. 110144.	<u>Călin-Adrian Popa</u> , Eva Kaslik, "Multistability and multiperiodicity in hybrid impulsive quaternion-valued neural networks with mixed delays", Neural Networks, volume 99, Mar., 2018, pp. 1 - 18, ISSN 0893-6080.	2	DA	8.00
65	Huamin Wang, Guoliang Wei, Shiping Wen, Tingwen Huang, "Impulsive disturbance on stability analysis of delayed quaternion-valued neural networks", Applied Mathematics and Computation, volume 390, 2021, no. 125680.	<u>Călin-Adrian Popa</u> , Eva Kaslik, "Multistability and multiperiodicity in hybrid impulsive quaternion-valued neural networks with mixed delays", Neural Networks, volume 99, Mar., 2018, pp. 1 - 18, ISSN 0893-6080.	2	DA	8.00
66	Yongkun Li, Jianglian Xiang, "Existence and global exponential stability of almost periodic solution for quaternion-valued high-order Hopfield neural networks with delays via a direct method", Mathematical Methods in the Applied Sciences, volume 43, issue 10, 2020.	<u>Călin-Adrian Popa</u> , Eva Kaslik, "Multistability and multiperiodicity in hybrid impulsive quaternion-valued neural networks with mixed delays", Neural Networks, volume 99, Mar., 2018, pp. 1 - 18, ISSN 0893-6080.	2	DA	8.00
67	Chaouki Aouiti, Mayssa Bessifi, "Periodically intermittent control for finite-time synchronization of delayed quaternion-valued neural networks", Neural Computing and Applications, 2020.	<u>Călin-Adrian Popa</u> , Eva Kaslik, "Multistability and multiperiodicity in hybrid impulsive quaternion-valued neural networks with mixed delays", Neural Networks, volume 99, Mar., 2018, pp. 1 - 18, ISSN 0893-6080.	2	DA	8.00
68	Fanghai Zhang, Zhigang Zeng, "Multistability of Fractional-Order Neural Networks With Unbounded Time-Varying Delays", IEEE Transactions on Neural Networks and Learning Systems, 2020.	<u>Călin-Adrian Popa</u> , Eva Kaslik, "Multistability and multiperiodicity in hybrid impulsive quaternion-valued neural networks with mixed delays", Neural Networks, volume 99, Mar., 2018, pp. 1 - 18, ISSN 0893-6080.	2	DA	8.00
69	Huamin Wang, Shiping Wen, "Existence and Exponential Stability of Solutions for Quaternion-Valued Delayed Hopfield Neural Networks by $\xi$ -Norms", IEEE Access, volume 7, 2019, pp. 184509 - 184517.	<u>Călin-Adrian Popa</u> , Eva Kaslik, "Multistability and multiperiodicity in hybrid impulsive quaternion-valued neural networks with mixed delays", Neural Networks, volume 99, Mar., 2018, pp. 1 - 18, ISSN 0893-6080.	2	DA	8.00
70	Zengyun Wang, Jinde Cao, Zuowei Cai, Lihong Huang, "Periodicity and fixed-time periodic synchronization of discontinuous delayed quaternion neural networks", Journal of the Franklin Institute, volume 357, issue 7, 2020, pp. 4242-4271.	<u>Călin-Adrian Popa</u> , Eva Kaslik, "Multistability and multiperiodicity in hybrid impulsive quaternion-valued neural networks with mixed delays", Neural Networks, volume 99, Mar., 2018, pp. 1 - 18, ISSN 0893-6080.	2	DA	8.00
71	K. Udhayakumar, R. Rakkiyappan, Jin-de Cao, Xuegang Tan, "Mittag-Leffler stability analysis of multiple equilibrium points in impulsive fractional-order quaternion-valued neural networks", Frontiers of Information Technology & Electronic Engineering, volume 21, 2020, pp. 234-246.	<u>Călin-Adrian Popa</u> , Eva Kaslik, "Multistability and multiperiodicity in hybrid impulsive quaternion-valued neural networks with mixed delays", Neural Networks, volume 99, Mar., 2018, pp. 1 - 18, ISSN 0893-6080.	2	DA	8.00
72	Huamin Wang; Jie Tan; Shiping Wen, "Exponential Stability Analysis of Mixed Delayed Quaternion-Valued Neural Networks Via Decomposed Approach", IEEE Access, volume 8, 2020, pp. 91501 - 91509.	<u>Călin-Adrian Popa</u> , Eva Kaslik, "Multistability and multiperiodicity in hybrid impulsive quaternion-valued neural networks with mixed delays", Neural Networks, volume 99, Mar., 2018, pp. 1 - 18, ISSN 0893-6080.	2	DA	8.00
73	Changjin Xu, Peiluan Li, Maoxin Liao, Zixin Liu, Qimei Xiao, "Antiperiodic solutions to delayed inertial quaternion-valued neural networks", Mathematical Methods in the Applied Sciences, volume 43, issue 12, 2020.	<u>Călin-Adrian Popa</u> , Eva Kaslik, "Multistability and multiperiodicity in hybrid impulsive quaternion-valued neural networks with mixed delays", Neural Networks, volume 99, Mar., 2018, pp. 1 - 18, ISSN 0893-6080.	2	DA	8.00
74	Huiqin Li, "No eigenvalues outside the support of the limiting spectral distribution of quaternion sample covariance matrices", Random Matrices: Theory and Applications, volume 09, issue 04, 2020, no. 2150003.	<u>Călin-Adrian Popa</u> , Eva Kaslik, "Multistability and multiperiodicity in hybrid impulsive quaternion-valued neural networks with mixed delays", Neural Networks, volume 99, Mar., 2018, pp. 1 - 18, ISSN 0893-6080.	2	DA	8.00
75	Peng Liu, Jun Wang, Zhenyuan Guo, "Multiple and Complete Stability of Recurrent Neural Networks With Sinusoidal Activation Function", IEEE Transactions on Neural Networks and Learning Systems, 2020.	<u>Călin-Adrian Popa</u> , Eva Kaslik, "Multistability and multiperiodicity in hybrid impulsive quaternion-valued neural networks with mixed delays", Neural Networks, volume 99, Mar., 2018, pp. 1 - 18, ISSN 0893-6080.	2	DA	8.00
76	Weiwei Zhang, Hai Zhang, Jinde Cao, Hongmei Zhang, Fuad E. Alsaadi, Ahmed Alsaedi, "Global projective synchronization in fractional-order quaternion valued neural networks", Asian Journal of Control, 2020.	<u>Călin-Adrian Popa</u> , Eva Kaslik, "Multistability and multiperiodicity in hybrid impulsive quaternion-valued neural networks with mixed delays", Neural Networks, volume 99, Mar., 2018, pp. 1 - 18, ISSN 0893-6080.	2	DA	8.00
77	Zhenhua Duan, Changjin Xu, "Anti-periodic behavior for quaternion-valued delayed cellular neural networks", Advances in Difference Equations, volume 2021, 2021, no. 170.	<u>Călin-Adrian Popa</u> , Eva Kaslik, "Multistability and multiperiodicity in hybrid impulsive quaternion-valued neural networks with mixed delays", Neural Networks, volume 99, Mar., 2018, pp. 1 - 18, ISSN 0893-6080.	2	DA	8.00

78	Titouan Parcollet, Mohamed Mochid & Georges Linarès, "A survey of quaternion neural networks", Artificial Intelligence Review, volume 53, 2020, pp. 2957-2982.	<u>Călin-Adrian Popa</u> , "Learning Algorithms for Quaternion-Valued Neural Networks", Neural Processing Letters, volume 47, issue 3, Jun., 2018, pp. 949 - 973, ISSN 1370-4621.	1	DA	16.00
79	Jin Liu, Jigui Jian, "Global dissipativity of a class of quaternion-valued BAM neural networks with time delay", Neurocomputing, volume 349, 2019, pp. 123-132.	<u>Călin-Adrian Popa</u> , "Learning Algorithms for Quaternion-Valued Neural Networks", Neural Processing Letters, volume 47, issue 3, Jun., 2018, pp. 949 - 973, ISSN 1370-4621.	1	DA	16.00
80	Mostafa Borhani, "Corpus Analysis Using Relaxed Conjugate Gradient Neural Network Training Algorithm", Neural Processing Letters, volume 50, 2019, pp. 839-849.	<u>Călin-Adrian Popa</u> , "Learning Algorithms for Quaternion-Valued Neural Networks", Neural Processing Letters, volume 47, issue 3, Jun., 2018, pp. 949 - 973, ISSN 1370-4621.	1	DA	16.00
81	Aleksandr Cariow, Galina Cariowa, "Fast Algorithms for Quaternion-Valued Convolutional Neural Networks", IEEE Transactions on Neural Networks and Learning Systems, 2020.	<u>Călin-Adrian Popa</u> , "Learning Algorithms for Quaternion-Valued Neural Networks", Neural Processing Letters, volume 47, issue 3, Jun., 2018, pp. 949 - 973, ISSN 1370-4621.	1	DA	16.00
82	Malte Schilling, "Hierarchical Dual Quaternion-Based Recurrent Neural Network as a Flexible Internal Body Model", 2019 International Joint Conference on Neural Networks (IJCNN), 2019.	<u>Călin-Adrian Popa</u> , "Learning Algorithms for Quaternion-Valued Neural Networks", Neural Processing Letters, volume 47, issue 3, Jun., 2018, pp. 949 - 973, ISSN 1370-4621.	1	NU	8.00
83	Nam Tu Nguen, Shinji Sako, Bogdan Kwolek, "Deep CNN-Based Recognition of JSL Finger Spelling", International Conference on Hybrid Artificial Intelligence Systems (HAIS 2019), 2019, pp. 602-613.	<u>Călin-Adrian Popa</u> , "Learning Algorithms for Quaternion-Valued Neural Networks", Neural Processing Letters, volume 47, issue 3, Jun., 2018, pp. 949 - 973, ISSN 1370-4621.	1	NU	8.00
84	Baurzhan Muminov, Luat T. Vuong, "Fourier optical preprocessing in lieu of deep learning", Optica, volume 7, issue 9, 2020, pp. 1079-1088.	<u>Călin-Adrian Popa</u> , Cosmin Cernăzanu-Glăvan, "Fourier Transform-Based Image Classification Using Complex-Valued Convolutional Neural Networks", in ISNN 2018: Advances in Neural Networks – ISNN 2018, 2018, Springer International Publishing Switzerland, pp. 300-309, ISBN 978-3-319-92536-3.	2	DA	8.00
85	Lukas Pfeifenberger; Matthias Zöhrer; Franz Pernkopf, "Deep Complex-valued Neural Beamformers", ICASSP 2019 - 2019 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), 2019, pp. 2902-2906.	<u>Călin-Adrian Popa</u> , "Complex-Valued Stacked Denoising Autoencoders", in ISNN 2018: Advances in Neural Networks – ISNN 2018, 2018, Springer International Publishing Switzerland, pp. 64-71, ISBN 978-3-319-92536-3.	1	NU	8.00
86	Bin Yang, Yuehui Chen, Wei Zhang, Jiaguo Lv, Wenzheng Bao, De-Shuang Huang, "HSCVFNT: Inference of Time-Delayed Gene Regulatory Network Based on Complex-Valued Flexible Neural Tree Model", International Journal of Molecular Sciences, volume 19, issue 10, 2018, no. 3178.	<u>Călin-Adrian Popa</u> , "Complex-Valued Deep Belief Networks", in ISNN 2018: Advances in Neural Networks – ISNN 2018, 2018, Springer International Publishing Switzerland, pp. 72-78, ISBN 978-3-319-92536-3.	1	DA	16.00
87	Bin Yang, Wenzheng Bao, "Complex-Valued Ordinary Differential Equation Modeling for Time Series Identification", IEEE Access, volume 7, 2019, pp. 41033 - 41042.	<u>Călin-Adrian Popa</u> , "Complex-Valued Deep Belief Networks", in ISNN 2018: Advances in Neural Networks – ISNN 2018, 2018, Springer International Publishing Switzerland, pp. 72-78, ISBN 978-3-319-92536-3.	1	DA	16.00
88	Bin Yang, Yuehui Chen, "A New Complex-Valued Polynomial Model", Neural Processing Letters, volume 50, 2019, pp. 2609-2626.	<u>Călin-Adrian Popa</u> , "Complex-Valued Deep Belief Networks", in ISNN 2018: Advances in Neural Networks – ISNN 2018, 2018, Springer International Publishing Switzerland, pp. 72-78, ISBN 978-3-319-92536-3.	1	DA	16.00
89	Zhongying Dong, He Huang, "A training algorithm with selectable search direction for complex-valued feedforward neural networks", Neural Networks, volume 137, 2021, pp. 75-84.	<u>Călin-Adrian Popa</u> , "Deep Hybrid Real–Complex-Valued Convolutional Neural Networks for Image Classification", International Joint Conference on Neural Networks (IJCNN), Rio de Janeiro, Brazilia, Jul., 2018.	1	DA	16.00
90	Jiasong Wu, Ling Xu, Fuzhi Wu, Youyong Kong, Lotfi Senhadji, Huazhong Shu, "Deep octonion networks", Neurocomputing, volume 397, 2020, pp. 179-191.	<u>Călin-Adrian Popa</u> , "Global exponential stability of octonion-valued neural networks with leakage delay and mixed delays", Neural Networks, volume 105, Sep., 2018, pp. 277 - 293, ISSN 0893-6080.	1	DA	16.00
91	Chengdai Huang, Heng Liu, Xiangyun Shi, Xiaoping Chen, Min Xiao, Zhengxin Wang, Jinde Cao, "Bifurcations in a fractional-order neural network with multiple leakage delays", Neural Networks, volume 131, 2020, pp. 115-126.	<u>Călin-Adrian Popa</u> , "Global exponential stability of octonion-valued neural networks with leakage delay and mixed delays", Neural Networks, volume 105, Sep., 2018, pp. 277 - 293, ISSN 0893-6080.	1	DA	16.00

92	M. Yamni, H. Karmouni, M. Sayouri, H. Qjidaa, J. Flusser, "Novel Octonion Moments for color stereo image analysis", Digital Signal Processing, 2020, no. 102878.	<u>Călin-Adrian Popa</u> , "Global exponential stability of octonion-valued neural networks with leakage delay and mixed delays", Neural Networks, volume 105, Sep., 2018, pp. 277 - 293, ISSN 0893-6080.	1	DA	16.00
93	Udhayakumar Kandasamy, Rakkiyappan Rajan, "Hopf bifurcation of a fractional-order octonion-valued neural networks with time delays", Discrete and Continuous Dynamical Systems - Series S, volume 13, issue 9, 2020, pp. 2537-2559.	<u>Călin-Adrian Popa</u> , "Global exponential stability of octonion-valued neural networks with leakage delay and mixed delays", Neural Networks, volume 105, Sep., 2018, pp. 277 - 293, ISSN 0893-6080.	1	DA	16.00
94	Łukasz Błaszczyk, "A generalization of the octonion Fourier transform to 3-D octonion-valued signals: properties and possible applications to 3-D LTI partial differential systems", Multidimensional Systems and Signal Processing, volume 31, 2020, pp. 1227-1257.	<u>Călin-Adrian Popa</u> , "Global exponential stability of octonion-valued neural networks with leakage delay and mixed delays", Neural Networks, volume 105, Sep., 2018, pp. 277 - 293, ISSN 0893-6080.	1	DA	16.00
95	Zhouhong Li, Chengdai Huang, Yuan Zhang, "Comparative analysis on bifurcation of four-neuron fractional ring networks without or with leakage delays", Advances in Difference Equations, volume 2019, 2019, no. 179.	<u>Călin-Adrian Popa</u> , "Global exponential stability of octonion-valued neural networks with leakage delay and mixed delays", Neural Networks, volume 105, Sep., 2018, pp. 277 - 293, ISSN 0893-6080.	1	DA	16.00
96	Łukasz Błaszczyk, "Discrete octonion Fourier transform and the analysis of discrete 3-D data", Computational and Applied Mathematics, volume 39, no. 4, 2020.	<u>Călin-Adrian Popa</u> , "Global exponential stability of octonion-valued neural networks with leakage delay and mixed delays", Neural Networks, volume 105, Sep., 2018, pp. 277 - 293, ISSN 0893-6080.	1	DA	16.00
97	Jiasong Wu, Ling Xu, Fuzhi Wu, Youyong Kong, Lotfi Senhadji, Huazhong Shu, "Deep octonion networks", Neurocomputing, volume 397, 2020, pp. 179-191.	<u>Călin-Adrian Popa</u> , "Global exponential stability of neutral-type octonion-valued neural networks with time-varying delays", Neurocomputing, volume 309, Oct., 2018, pp. 117 - 133, ISSN 0925-2312.	1	DA	16.00
98	M. Yamni, H. Karmouni, M. Sayouri, H. Qjidaa, J. Flusser, "Novel Octonion Moments for color stereo image analysis", Digital Signal Processing, 2020, no. 102878.	<u>Călin-Adrian Popa</u> , "Global exponential stability of neutral-type octonion-valued neural networks with time-varying delays", Neurocomputing, volume 309, Oct., 2018, pp. 117 - 133, ISSN 0925-2312.	1	DA	16.00
99	Udhayakumar Kandasamy, Rakkiyappan Rajan, "Hopf bifurcation of a fractional-order octonion-valued neural networks with time delays", Discrete and Continuous Dynamical Systems - Series S, volume 13, issue 9, 2020, pp. 2537-2559.	<u>Călin-Adrian Popa</u> , "Global exponential stability of neutral-type octonion-valued neural networks with time-varying delays", Neurocomputing, volume 309, Oct., 2018, pp. 117 - 133, ISSN 0925-2312.	1	DA	16.00
100	Weiyi Wei, Yu Wang, "Color Image Retrieval Based on Quaternion and Deep Features", IEEE Access, Volume 7, 2019, pp. 126430 - 126438.	<u>Călin-Adrian Popa</u> , "Global exponential stability of neutral-type octonion-valued neural networks with time-varying delays", Neurocomputing, volume 309, Oct., 2018, pp. 117 - 133, ISSN 0925-2312.	1	DA	16.00
101	Houssem Achouri, Chaouki Aouiti, "Homoclinic and heteroclinic motions of delayed inertial neural networks", Neural Computing and Applications, 2020.	<u>Călin-Adrian Popa</u> , "Global exponential stability of neutral-type octonion-valued neural networks with time-varying delays", Neurocomputing, volume 309, Oct., 2018, pp. 117 - 133, ISSN 0925-2312.	1	DA	16.00
102	Yongkun Li, Shiping Shen, "Almost automorphic solutions for Clifford-valued neutral-type fuzzy cellular neural networks with leakage delays on time scales", Neurocomputing, volume 417, 2020, pp. 23-35.	<u>Călin-Adrian Popa</u> , "Global $\mu$ -stability of neutral-type impulsive complex-valued BAM neural networks with leakage delay and unbounded time-varying delays", Neurocomputing, volume 376, Feb., 2020, pp. 73 - 94, ISSN 0925-2312.	1	DA	16.00
103	Changjin Xu, Chaouki Aouiti, "Comparative analysis on Hopf bifurcation of integer-order and fractional-order two-neuron neural networks with delay", International Journal of Circuit Theory and Applications, volume 48, issue 9, 2020, pp. 1459-1475.	<u>Călin-Adrian Popa</u> , "Global $\mu$ -stability of neutral-type impulsive complex-valued BAM neural networks with leakage delay and unbounded time-varying delays", Neurocomputing, volume 376, Feb., 2020, pp. 73 - 94, ISSN 0925-2312.	1	NU	8.00
104	Gang Bao, Yue Peng, Xue Zhou, Shunqi Gong, "Region Stability and Stabilization of Recurrent Neural Network with Parameter Disturbances", Neural Processing Letters, 2020.	<u>Călin-Adrian Popa</u> , "Global $\mu$ -stability of neutral-type impulsive complex-valued BAM neural networks with leakage delay and unbounded time-varying delays", Neurocomputing, volume 376, Feb., 2020, pp. 73 - 94, ISSN 0925-2312.	1	DA	16.00
105	Kaizhong Guan, Ziwen Cai, "Impulsive mu-stabilization and mu-synchronization for delayed network systems with any time-varying delays", Neurocomputing, volume 411, 2020, pp. 498-509.	<u>Călin-Adrian Popa</u> , "Global $\mu$ -stability of neutral-type impulsive complex-valued BAM neural networks with leakage delay and unbounded time-varying delays", Neurocomputing, volume 376, Feb., 2020, pp. 73 - 94, ISSN 0925-2312.	1	DA	16.00

106	Xiaohui Xu, Jibin Yang, Quan Xu, Yanhai Xu, Shulei Sun, "Exponential stability for delayed complex-valued neural networks with reaction-diffusion terms", Advances in Difference Equations, volume 2021, 2021, no. 58.	<u>Călin-Adrian Popa</u> , "Global $\mu$ -stability of neutral-type impulsive complex-valued BAM neural networks with leakage delay and unbounded time-varying delays", Neurocomputing, volume 376, Feb., 2020, pp. 73 - 94, ISSN 0925-2312.	1	DA	16.00
107	Chaouki Aouiti, Hediene Jallouli, "New feedback control techniques of quaternion fuzzy neural networks with time-varying delay", International Journal of Robust and Nonlinear Control, 2021.	<u>Călin-Adrian Popa</u> , "Global $\mu$ -stability of neutral-type impulsive complex-valued BAM neural networks with leakage delay and unbounded time-varying delays", Neurocomputing, volume 376, Feb., 2020, pp. 73 - 94, ISSN 0925-2312.	1	DA	16.00
108	M. Iswarya, R. Raja, J. Cao, M. Niezabitowski, J. Alzabut, C. Maharanjan, "New results on exponential input-to-state stability analysis of memristor based complex-valued inertial neural networks with proportional and distributed delays", Mathematics and Computers in Simulation, 2021.	<u>Călin-Adrian Popa</u> , "Global $\mu$ -stability of neutral-type impulsive complex-valued BAM neural networks with leakage delay and unbounded time-varying delays", Neurocomputing, volume 376, Feb., 2020, pp. 73 - 94, ISSN 0925-2312.	1	DA	16.00
109	Chengdai Huang, Heng Liu, Xiangyun Shi, Xiaoping Chen, Min Xiao, Zhengxin Wang, Jinde Cao, "Bifurcations in a fractional-order neural network with multiple leakage delays", Neural Networks, volume 131, 2020, pp. 115-126.	<u>Călin-Adrian Popa</u> , "Dissipativity of impulsive matrix-valued neural networks with leakage delay and mixed delays", Neurocomputing, volume 405, Sep., 2020, pp. 85 - 95, ISSN 0925-2312.	1	DA	16.00
110	Liqun Zhou, "Global Exponential Dissipativity of Impulsive Recurrent Neural Networks with Multi-proportional Delays", Neural Processing Letters, 2021.	<u>Călin-Adrian Popa</u> , "Dissipativity of impulsive matrix-valued neural networks with leakage delay and mixed delays", Neurocomputing, volume 405, Sep., 2020, pp. 85 - 95, ISSN 0925-2312.	1	DA	16.00
111	Cristian Napole, Oscar Barambones, Mohamed Derbeli, Isidro Calvo, Mohammed Yousri Silaa, Javier Velasco, "High-Performance Tracking for Piezoelectric Actuators Using Super-Twisting Algorithm Based on Artificial Neural Networks", Mathematics, volume 9, issue 3, 2021, no. 224.	<u>Călin-Adrian Popa</u> , Eva Kaslik, "Finite-Time Mittag-Leffler Synchronization of Neutral-Type Fractional-Order Neural Networks with Leakage Delay and Time-Varying Delays", Mathematics, volume 8, Jul., 2020, pp. 1 - 17, ISSN 2227-7390.	2	DA	8.00
<b>TOTAL</b>					<b>1404.00</b>

Candidat,  
Conf. dr. ing. Călin-Adrian POPA

**Candidat: Conf. dr. ing. Călin-Adrian POPA****A3.1.2 - Citări în cărți, reviste și volume ale unor manifestări științifice indexate BDI**

Nr. crt.	Sursă citare	Baza de date	Lucrarea citată	Nr. autori lucrare citată	Indicator realizat
1	Janghyeon Lee, Hyeong Gwon Hong, Donggyu Joo, Junmo Kim, "Continual Learning With Extended Kronecker-Factored Approximate Curvature", Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2020, pp. 9001-9010.	Scopus	Călin-Adrian Popa, "Exact Hessian Matrix Calculation for Complex-Valued Neural Networks", în SOFA 2014: Soft Computing Applications, 2016, Springer International Publishing Switzerland, pp. 439-455, ISBN 978-3-319-18295-7.	1	4.00
2	S. Song, W. Xiang, X. Lin, "Improvement algorithm of an incremental extreme learning machine", Information and Control, Volume 45, Issue 6, 2016, pp. 735-741.	Scopus	Călin-Adrian Popa, "Enhanced Gradient Descent Algorithms for Complex-Valued Neural Networks", 16th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC), IEEE, Timișoara, Romania, Sep., 2014, pp. 272 - 279, ISBN 978-1-4799-8447-3.	1	4.00
3	Roy Nuary Singarimbun, Erna Budhiarti Nababan, Opim Salim Sitompul, "Adaptive Moment Estimation To Minimize Square Error In Backpropagation Algorithm", 2019 International Conference of Computer Science and Information Technology (ICoSNIKOM), 2019.	Scopus	Călin-Adrian Popa, "Enhanced Gradient Descent Algorithms for Complex-Valued Neural Networks", 16th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC), IEEE, Timișoara, Romania, Sep., 2014, pp. 272 - 279, ISBN 978-1-4799-8447-3.	1	4.00
4	V. Gowri, K. R. Valluvan, V. Vijaya Chamundeeswari, "Automated Detection and Classification of Microcalcification Clusters with Enhanced Preprocessing and Fractal Analysis", Asian Pacific Journal of Cancer Prevention, volume 19, issue 11, 2018, pp. 3093-3098.	Scopus	Călin-Adrian Popa, "Scaled Conjugate Gradient Learning for Complex-Valued Neural Networks", 21st International Conference on Soft Computing (MENDEL), Springer International Publishing Switzerland, Brno, Cehia, Jun., 2015, pp. 221 - 233, ISBN 978-3-319-19823-1.	1	4.00
5	Guilherme Vieira, Marcos Eduardo Valle, "Extreme Learning Machines on Cayley-Dickson Algebra Applied for Color Image Auto-Encoding", 2020 International Joint Conference on Neural Networks (IJCNN), 2020.	Scopus	Călin-Adrian Popa, "Scaled Conjugate Gradient Learning for Quaternion-Valued Neural Networks", în Neural Information Processing – ICONIP 2016, Part III, 2016, Springer International Publishing Switzerland, pp. 243-252, ISBN 978-3-319-46674-3.	1	4.00
6	S. Satoh, R. Nakano, "Performance of complex-valued multilayer perceptrons largely depends on learning methods", 9th International Joint Conference on Computational Intelligence (IJCCI), 2017, pp. 45-53.	Scopus	Călin-Adrian Popa, "Quasi-Newton Learning Methods for Complex-Valued Neural Networks", International Joint Conference on Neural Networks (IJCNN), Killarney, Irlanda, Jul., 2015, pp. 1142 - 1149, ISBN 978-1-4799-1959-8.	1	4.00
7	Ke Zhang, Shuai Zhu, Xue Wang, Huisheng Zhang, "The Octonion Extreme Learning Machine", International Conference on Extreme Learning Machine (ELM), 2019, pp. 61-68.	SpringerLink	Călin-Adrian Popa, "Octonion-Valued Neural Networks", în Artificial Neural Networks and Machine Learning – ICANN 2016, 2016, Springer International Publishing Switzerland, pp. 435-443, ISBN 978-3-319-44777-3.	1	4.00
8	Yasuaki Kuroe, Hitoshi Iima, Yutaka Maeda, "Four Models of Hopfield-Type Octonion Neural Networks and Their Existing Conditions of Energy Functions", 2020 International Joint Conference on Neural Networks (IJCNN), 2020.	Scopus	Călin-Adrian Popa, "Octonion-Valued Neural Networks", în Artificial Neural Networks and Machine Learning – ICANN 2016, 2016, Springer International Publishing Switzerland, pp. 435-443, ISBN 978-3-319-44777-3.	1	4.00

9	Dusan Gleich, Danijel Sipos, "Complex Valued Convolutional Neural Network for TerraSAR-X patch categorization", 12th European Conference on Synthetic Aperture Radar (EUSAR), 2018.	Scopus	<u>Călin-Adrian Popa</u> , "Complex-Valued Convolutional Neural Networks for Real-Valued Image Classification", International Joint Conference on Neural Networks (IJCNN), Anchorage, Alaska, SUA, May, 2017, pp. 816 - 822, ISBN 978-1-5090-6182-2.	1	4.00
10	Golara Javadi, Minh Nguyen Nhat To, Samareh Samadi, Sharareh Bayat, Samira Sojoudi, Antonio Hurtado, Silvia Chang, Peter Black, Parvin Mousavi, Purang Abolmaesumi, "Complex Cancer Detector: Complex Neural Networks on Non-stationary Time Series for Guiding Systematic Prostate Biopsy", International Conference on Medical Image Computing and Computer-Assisted Intervention (MICCAI), 2020.	Scopus	<u>Călin-Adrian Popa</u> , "Complex-Valued Convolutional Neural Networks for Real-Valued Image Classification", International Joint Conference on Neural Networks (IJCNN), Anchorage, Alaska, SUA, May, 2017, pp. 816 - 822, ISBN 978-1-5090-6182-2.	1	4.00
11	K. Anitha, R. Dhanalakshmi, K. Naresh, D. Rukmani Devi, "Hyperbolic Hopfield neural networks for image classification in content-based image retrieval", International Journal of Wavelets, Multiresolution and Information Processing, 2020.	Scopus	<u>Călin-Adrian Popa</u> , "Complex-Valued Convolutional Neural Networks for Real-Valued Image Classification", International Joint Conference on Neural Networks (IJCNN), Anchorage, Alaska, SUA, May, 2017, pp. 816 - 822, ISBN 978-1-5090-6182-2.	1	4.00
12	Dušan Gleich, "Vizualization of SAR Categories Using Complex Valued Deep Learning", 2020 IEEE International Geoscience and Remote Sensing Symposium (IGARSS), 2020.	Scopus	<u>Călin-Adrian Popa</u> , "Complex-Valued Convolutional Neural Networks for Real-Valued Image Classification", International Joint Conference on Neural Networks (IJCNN), Anchorage, Alaska, SUA, May, 2017, pp. 816 - 822, ISBN 978-1-5090-6182-2.	1	4.00
13	Li Li, Weisheng Chen, "Exponential Stability of Quaternion-Valued Neural Networks with Proportional Delays and Linear Threshold Neurons", 2019 IEEE 8th Data Driven Control and Learning Systems Conference (DDCLS), 2019.	Scopus	<u>Călin-Adrian Popa</u> , Eva Kaslik, "Multistability and multiperiodicity in hybrid impulsive quaternion-valued neural networks with mixed delays", Neural Networks, volume 99, Mar., 2018, pp. 1 - 18, ISSN 0893-6080.	2	2.00
14	Golara Javadi, Minh Nguyen Nhat To, Samareh Samadi, Sharareh Bayat, Samira Sojoudi, Antonio Hurtado, Silvia Chang, Peter Black, Parvin Mousavi, Purang Abolmaesumi, "Complex Cancer Detector: Complex Neural Networks on Non-stationary Time Series for Guiding Systematic Prostate Biopsy", International Conference on Medical Image Computing and Computer-Assisted Intervention (MICCAI), 2020.	Scopus	<u>Călin-Adrian Popa</u> , Cosmin Cernăzanu-Glăvan, "Fourier Transform-Based Image Classification Using Complex-Valued Convolutional Neural Networks", în ISNN 2018: Advances in Neural Networks – ISNN 2018, 2018, Springer International Publishing Switzerland, pp. 300-309, ISBN 978-3-319-92536-3.	2	2.00
15	Golara Javadi, Minh Nguyen Nhat To, Samareh Samadi, Sharareh Bayat, Samira Sojoudi, Antonio Hurtado, Silvia Chang, Peter Black, Parvin Mousavi, Purang Abolmaesumi, "Complex Cancer Detector: Complex Neural Networks on Non-stationary Time Series for Guiding Systematic Prostate Biopsy", International Conference on Medical Image Computing and Computer-Assisted Intervention (MICCAI), 2020.	Scopus	<u>Călin-Adrian Popa</u> , "Deep Hybrid Real–Complex Valued Convolutional Neural Networks for Image Classification", International Joint Conference on Neural Networks (IJCNN), Rio de Janeiro, Brazilia, Jul., 2018.	1	4.00
16	Łukasz Błaszczyk, "Hypercomplex Fourier Transforms in the Analysis of Multidimensional Linear Time-Invariant Systems", Progress in Industrial Mathematics at ECMI 2018, 2018, pp. 575-581.	SpringerLink	<u>Călin-Adrian Popa</u> , "Global exponential stability of octonion-valued neural networks with leakage delay and mixed delays", Neural Networks, volume 105, Sep., 2018, pp. 277 - 293, ISSN 0893-6080.	1	4.00
17	Yasuaki Kuroe, Hitoshi Iima, Yutaka Maeda, "Four Models of Hopfield-Type Octonion Neural Networks and Their Existing Conditions of Energy Functions", 2020 International Joint Conference on Neural Networks (IJCNN), 2020.	Scopus	<u>Călin-Adrian Popa</u> , "Global exponential stability of neutral-type octonion-valued neural networks with time-varying delays", Neurocomputing, volume 309, Oct., 2018, pp. 117 - 133, ISSN 0925-2312.	1	4.00
<b>TOTAL</b>				<b>64.00</b>	

Candidat,  
Conf. dr. ing. Călin-Adrian POPA

**Candidat: Conf. dr. ing. Călin-Adrian POPA**

**C2.2 - Impactul activității științifice**

<b>h-index Web of Knowledge</b>	<b>6</b>
<b>h-index Scopus</b>	<b>8</b>
<b>h-index Google Scholar</b>	<b>9</b>

<b>Total C2.2</b>	<b>7.2</b>
-------------------	------------

Candidat,  
Conf. dr. ing. Călin-Adrian POPA

**Candidat: Conf. dr. ing. Călin-Adrian POPA****C2.3 - Performanța activității științifice****Lucrări în Science sau Nature (10 puncte)**

Nr. crt.	Lucrarea publicată	Indicator realizat
<b>TOTAL</b>		<b>0</b>

**Lucrări în zona roșie (2 puncte)**

Nr. crt.	Lucrarea publicată	Indicator realizat
1	Călin-Adrian Popa, Eva Kaslik, "Multistability and multiperiodicity in hybrid impulsive quaternion-valued neural networks with mixed delays", Neural Networks, volume 99, Mar., 2018, pp. 1 - 18, ISSN 0893-6080.	2
2	Călin-Adrian Popa, "Global exponential stability of octonion-valued neural networks with leakage delay and mixed delays", Neural Networks, volume 105, Sep., 2018, pp. 277 - 293, ISSN 0893-6080.	2
3	Călin-Adrian Popa, "Global exponential stability of neutral-type octonion-valued neural networks with time-varying delays", Neurocomputing, volume 309, Oct., 2018, pp. 117 - 133, ISSN 0925-2312.	2
4	Călin-Adrian Popa, "Global $\mu$ -stability of neutral-type impulsive complex-valued BAM neural networks with leakage delay and unbounded time-varying delays", Neurocomputing, volume 376, Feb., 2020, pp. 73 - 94, ISSN 0925-2312.	2
5	Călin-Adrian Popa, "Dissipativity of impulsive matrix-valued neural networks with leakage delay and mixed delays", Neurocomputing, volume 405, Sep., 2020, pp. 85 - 95, ISSN 0925-2312.	2
6	Călin-Adrian Popa, Eva Kaslik, "Finite-Time Mittag-Leffler Synchronization of Neutral-Type Fractional-Order Neural Networks with Leakage Delay and Time-Varying Delays", Mathematics, volume 8, Jul., 2020, pp. 1 - 17, ISSN 2227-7390.	2
<b>TOTAL</b>		<b>12</b>

**Lucrări în zona galbenă (1 punct)**

Nr. crt.	Lucrarea publicată	Indicator realizat
1	Petre Birtea, Dan Comănescu, Călin-Adrian Popa, "Averaging on Manifolds by Embedding Algorithm", Journal of Mathematical Imaging and Vision, volume 49, issue 2, Jun., 2014, pp. 454 - 466, ISSN 0924-9907.	1
2	Călin-Adrian Popa, "Learning Algorithms for Quaternion-Valued Neural Networks", Neural Processing Letters, volume 47, issue 3, Jun., 2018, pp. 949 - 973, ISSN 1370-4621.	1
<b>TOTAL</b>		<b>2</b>

**Brevete triadice (10 puncte)**

Nr. crt.	Lucrarea publicată	Indicator realizat
<b>TOTAL</b>		<b>0</b>

**Brevete europene/internationale (2 puncte)**

Nr. crt.	Lucrarea publicată	Indicator realizat
<b>TOTAL</b>		<b>0</b>

**Brevete naționale (1 punct)**

Nr. crt.	Lucrarea publicată	Indicator realizat
<b>TOTAL</b>		

<b>TOTAL</b>	<b>0</b>
--------------	----------

<b>TOTAL C2.3</b>	<b>14</b>
-------------------	-----------

Candidat,  
Conf. dr. ing. Călin-Adrian POPA