

## Listă de lucrări CĂLIN-ADRIAN POPA

### Cele mai relevante 10 lucrări

1. Petre Birtea, Dan Comănescu, Călin-Adrian Popa, *Averaging on Manifolds by Embedding Algorithm*. **Journal of Mathematical Imaging and Vision**, Vol. 49, Nr. 2, pag. 454-466, 2014. (ISI Impact Factor 1.353, Q2)
2. Călin-Adrian Popa, *Learning Algorithms for Quaternion-Valued Neural Networks*. **Neural Processing Letters**, Vol. 47, Nr. 3, pag. 949–973, 2018. (ISI Impact Factor 2.891, Q2)
3. Călin-Adrian Popa, Eva Kaslik, *Multistability and multiperiodicity in impulsive hybrid quaternion-valued neural networks with mixed delays*. **Neural Networks**, Vol. 99, pag. 1-18, 2018. (ISI Impact Factor 5.535, Q1)
4. Călin-Adrian Popa, *Global exponential stability of octonion-valued neural networks with leakage delay and mixed delays*. **Neural Networks**, Vol. 105, pag. 277-293, 2018. (ISI Impact Factor 5.535, Q1)
5. Călin-Adrian Popa, *Global exponential stability of neutral-type octonion-valued neural networks with time-varying delays*. **Neurocomputing**, Vol. 309, pag. 117-133, 2018. (ISI Impact Factor 4.438, Q1)
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**, Vol. 376, pag. 73-94, 2020. (ISI Impact Factor 4.438, Q1)
7. Călin-Adrian Popa, *Dissipativity of impulsive matrix-valued neural networks with leakage delay and mixed delays*. **Neurocomputing**, Vol. 405, pag. 85-95, 2020. (ScienceDirect, ISI Impact factor 4.438, Q1)
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**, Vol. 8, No. 7, 2020. (MDPI, ISI Impact factor 1.747, Q1)
9. Călin-Adrian Popa, *Quasi-Newton Learning Methods for Complex-Valued Neural Networks*, 29th International Joint Conference on Neural Networks (IJCNN), 2015, Killarney, Ireland. (IEEE, ISI)
10. Călin-Adrian Popa, *Complex-Valued Convolutional Neural Networks for Real-Valued Image Classification*, 30th International Joint Conference on Neural Networks (IJCNN), pag. 816-822, 2017, Anchorage, Alaska, USA. (IEEE, ISI)

### Teza de doctorat

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.

### Cărți de autor sau capitole de specialitate la edituri cu ISBN

1. Călin-Adrian Popa, *Rețele neuronale de ordin fracționar*. 106 pag., Editura Politehnica, Timișoara, 2019, ISBN 978-606-35-0224-8.

### Material didactic / Lucrări didactice publicate la edituri cu ISBN

1. Călin-Adrian Popa, *Analiză matematică: exerciții rezolvate*. 106 pag., Editura Politehnica, Timișoara, 2019, ISBN 978-606-35-0225-5.

## Articole în reviste cotate ISI și lucrări în volumele unor manifestări științifice indexate ISI

1. Petre Birtea, Dan Comănescu, Călin-Adrian Popa, *Averaging on Manifolds by Embedding Algorithm*. **Journal of Mathematical Imaging and Vision**, Vol. 49, Nr. 2, pag. 454-466, 2014. (ISI Impact Factor 1.353, Q2)
2. Călin-Adrian Popa, *Enhanced Gradient Descent Algorithms for Complex-Valued Neural Networks*, 16th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC), pag. 272-279, 2014, Timișoara, România. (IEEE, ISI)
3. Călin-Adrian Popa, *Exact Hessian Matrix Calculation for Complex-Valued Neural Networks*, 6th International Workshop on Soft Computing Applications (SOFA), pag. 439-455, 2014, Timișoara, România. (SpringerLink, ISI)
4. Călin-Adrian Popa, *Scaled Conjugate Gradient Learning for Complex-Valued Neural Networks*, 21st International Conference on Soft Computing (MENDEL), pag. 221-233, 2015, Brno, Czech Republic. (SpringerLink, ISI)
5. Călin-Adrian Popa, *Matrix-Valued Neural Networks*, 21st International Conference on Soft Computing (MENDEL), pag. 245-255, 2015, Brno, Czech Republic. (SpringerLink, ISI)
6. Călin-Adrian Popa, *Quasi-Newton Learning Methods for Complex-Valued Neural Networks*, 29th International Joint Conference on Neural Networks (IJCNN), 2015, Killarney, Ireland. (IEEE, ISI)
7. Călin-Adrian Popa, *Lie Algebra-Valued Neural Networks*, 29th International Joint Conference on Neural Networks (IJCNN), 2015, Killarney, Ireland. (IEEE, ISI)
8. Călin-Adrian Popa, *Lie Algebra-Valued Hopfield Neural Networks*, 17th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC), pag. 212-215, 2015, Timișoara, România. (IEEE, ISI)
9. Călin-Adrian Popa, *Conjugate Gradient Algorithms for Complex-Valued Neural Networks*, 22nd International Conference on Neural Information Processing (ICONIP), pag. 412-422, 2015, Istanbul, Turkey. (SpringerLink, ISI)
10. Călin-Adrian Popa, *Matrix-Valued Hopfield Neural Networks*, 13th International Symposium on Neural Networks (ISNN), pag. 127-134, 2016, Sankt Petersburg, Russia. (SpringerLink, ISI)
11. Călin-Adrian Popa, *Matrix-Valued Bidirectional Associative Memories*, 7th International Workshop on Soft Computing Applications (SOFA), 2016, Arad, România. (SpringerLink, ISI)
12. Călin-Adrian Popa, *Enhanced Gradient Descent Algorithms for Quaternion-Valued Neural Networks*, 7th International Workshop on Soft Computing Applications (SOFA), 2016, Arad, România. (SpringerLink, ISI)
13. Călin-Adrian Popa, *Octonion-Valued Neural Networks*, 25th International Conference on Artificial Neural Networks (ICANN), pag. 435-443, 2016, Barcelona, Spain. (SpringerLink, ISI)
14. Călin-Adrian Popa. *Levenberg-Marquardt Learning Algorithm for Quaternion-Valued Neural Networks*, 18th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC), pag. 272-278, 2016, Timișoara, România. (IEEE, ISI)
15. Călin-Adrian Popa, *Scaled Conjugate Gradient Learning for Quaternion-Valued Neural Networks*, 23rd International Conference on Neural Information Processing (ICONIP), pag. 243-252, 2016, Kyoto, Japan. (SpringerLink, ISI)
16. Călin-Adrian Popa, *Octonion-Valued Bidirectional Associative Memories*, 30th International Joint Conference on Neural Networks (IJCNN), pag. 783-787, 2017,

- Anchorage, Alaska, USA. (IEEE, ISI)
17. Călin-Adrian Popa, *Complex-Valued Convolutional Neural Networks for Real-Valued Image Classification*, 30th International Joint Conference on Neural Networks (IJCNN), pag. 816-822, 2017, Anchorage, Alaska, USA. (IEEE, ISI)
  18. Călin-Adrian Popa, *Global Asymptotic Stability for Matrix-Valued Recurrent Neural Networks with Time Delays*, 30th International Joint Conference on Neural Networks (IJCNN), pag. 4474-4481, 2017, Anchorage, Alaska, USA. (IEEE, ISI)
  19. Călin-Adrian Popa, *Quasi-Newton Learning Methods for Quaternion-Valued Neural Networks*, 14th International Work-Conference on Artificial Neural Networks (IWANN), pag. 362-374, 2017, Cadiz, Spain. (SpringerLink, ISI)
  20. Călin-Adrian Popa, *Exponential Stability for Delayed Octonion-Valued Recurrent Neural Networks*. 14th International Work-Conference on Artificial Neural Networks (IWANN), pag. 375-385, 2017, Cadiz, Spain. (SpringerLink, ISI)
  21. Călin-Adrian Popa, *Global Exponential Stability for Matrix-Valued Neural Networks with Time Delay*. 14th International Symposium on Neural Networks (ISNN), pag. 429-438, 2017, Sapporo, Hokkaido, Japan. (SpringerLink, ISI)
  22. Călin-Adrian Popa, *Global Asymptotic Stability for Octonion-Valued Neural Networks with Delay*. 14th International Symposium on Neural Networks (ISNN), pag. 439-448, 2017, Sapporo, Hokkaido, Japan. (SpringerLink, ISI)
  23. Călin-Adrian Popa, *Exponential Stability of Matrix-Valued BAM Neural Networks with Time-Varying Delays*. 24th International Conference on Neural Information Processing (ICONIP), 2017, Guangzhou, China. (SpringerLink, ISI)
  24. Călin-Adrian Popa, *Asymptotic Stability of Delayed Octonion-Valued Neural Networks with Leakage Delay*. 24th International Conference on Neural Information Processing (ICONIP), 2017, Guangzhou, China. (SpringerLink, ISI)
  25. Călin-Adrian Popa, *Learning Algorithms for Quaternion-Valued Neural Networks*. **Neural Processing Letters**, Vol. 47, Nr. 3, pag. 949–973, 2018. (ISI Impact Factor 2.891, Q2)
  26. Călin-Adrian Popa, Eva Kaslik, *Multistability and multiperiodicity in impulsive hybrid quaternion-valued neural networks with mixed delays*. **Neural Networks**, Vol. 99, pag. 1-18, 2018. (ISI Impact Factor 5.535, Q1)
  27. Călin-Adrian Popa, Cosmin Cernăzanu-Glăvan, *Fourier Transform-Based Image Classification using Complex-Valued Convolutional Neural Networks*. 15th International Symposium on Neural Networks (ISNN), 2018, Minsk, Belarus. (SpringerLink, ISI)
  28. Călin-Adrian Popa, *Complex-Valued Stacked Denoising Autoencoders*. 15th International Symposium on Neural Networks (ISNN), 2018, Minsk, Belarus. (SpringerLink, ISI)
  29. Călin-Adrian Popa, *Complex-Valued Deep Belief Networks*. 15th International Symposium on Neural Networks (ISNN), 2018, Minsk, Belarus. (SpringerLink, ISI)
  30. Călin-Adrian Popa, *Deep Hybrid Real-Complex-Valued Convolutional Neural Networks for Image Classification*. 31st International Joint Conference on Neural Networks (IJCNN), 2018, Rio de Janeiro, Brazil. (IEEE, ISI)
  31. Călin-Adrian Popa, *Complex-Valued Deep Boltzmann Machines*. 31st International Joint Conference on Neural Networks (IJCNN), 2018, Rio de Janeiro, Brazil. (IEEE, ISI)
  32. Călin-Adrian Popa, *Global exponential stability of octonion-valued neural networks with leakage delay and mixed delays*. **Neural Networks**, Vol. 105, pag. 277-293, 2018. (ISI Impact Factor 5.535, Q1)
  33. Călin-Adrian Popa, *Global exponential stability of neutral-type octonion-valued neural*

*networks with time-varying delays. Neurocomputing*, Vol. 309, pag. 117-133, 2018. (ISI Impact Factor 4.438, Q1)

34. Călin-Adrian Popa, *Global  $\mu$ -stability of neutral-type impulsive complex-valued BAM neural networks with leakage delay and unbounded time-varying delays. Neurocomputing*, Vol. 376, pag. 73-94, 2020. (ISI Impact Factor 4.438, Q1)
35. Călin-Adrian Popa, *Dissipativity of impulsive matrix-valued neural networks with leakage delay and mixed delays. Neurocomputing*, Vol. 405, pag. 85-95, 2020. (ScienceDirect, ISI Impact factor 4.438, Q1)
36. 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*, Vol. 8, Nr. 7, 2020. (MDPI, ISI Impact factor 1.747, Q1)

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

1. Călin-Adrian Popa, *Lie Algebra-Valued Bidirectional Associative Memories*, 22nd International Conference on Soft Computing (MENDEL), pag. 127-135, 2016, Brno, Czech Republic. (SpringerLink)
2. Călin-Adrian Popa, *Conjugate Gradient Learning for Quaternion-Valued Neural Networks*, 22nd International Conference on Soft Computing (MENDEL), pag. 176-185, 2016, Brno, Czech Republic. (SpringerLink)

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

1. Proiect de cercetare PCD-TC-2017-41, Universitatea Politehnica Timișoara, Director proiect Călin-Adrian Popa, Buget 46500 RON (10000 EUR), Câștigat prin competiție.
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.