

**A N E X A 4 . 5**

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## **L I S T A lucrărilor științifice în domeniul disciplinelor din postul didactic**

### **A. Teza de doctorat**

*Probleme calitative în dinamica rețelelor neurale*, Universitatea din Craiova, Domeniul Automatică, Conducător științific: prof. dr. ing. Vladimir Răsvan, susținere publică în 01 martie 2003, Diplomă de doctor: Seria C, Nr. 0001636 / 61/ 5.05.2003, Ordinul M.Ed.C. nr. 3896/24.04.2003

### **B. Cărți și capitole în cărți publicate în ultimii 10 ani**

1. Răsvan V., **Danciu Daniela**, Popescu D. (2019). On Some Neutral Functional Differential Equations Occurring in Synchronization, In Valmorbida, G., Seuret, A., Boussaada, I., Sipahi, R. (Eds.): *Delays and Interconnections: Methodology, Algorithms and Applications*, Series: Advances in Delays and Dynamics, Vol. 10, Chapter 2, Springer Cham, pp. 19-32, ISBN 978-3-030-11554-8, ISSN: 2197-117X, DOI 10.1007/978-3-030-11554-8\_2. [SpringerLink]
2. **Daniela Danciu**, V. Răsvan (2014). Delays and Propagation: Control Liapunov Functionals and Computational Issues, In A. Seuret, H. Özbay, C. Bonnet, H. Mounier (Eds.) *Low-Complexity Controllers for Time-Delay Systems*, Series: Advances in Delays and Dynamics, Vol. 2, Part. II, Chapter 10, Springer, pp. 141-154, ISBN 978-3-319-05575-6. [SpringerLink]
3. **Daniela Danciu** (2010). *Rețele neuronale. Stabilitate, sincronizare, întârzieri.*, Editura Universitară, Craiova, ISBN 973-742-234-1.

### **C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani**

1. **Danciu Daniela**, Răsvan V. (2020). Controlling Co-generation: Conservation laws, Modeling and Lyapunov Synthesis, *International Journal of Control*, vol. 93, no. 2, pp. 336-345, ISSN: 0020-7179, Taylor & Francis, Published online: 06 Sep 2018, Available: <https://doi.org/10.1080/00207179.2018.1514126> [ISI Q2, WOS: 000513185600017, IF: 2.78]

2. **Danciu Daniela**, Răsvan V. Popescu D. (2019). Control of a Time Delay System Arising From Linearized Conservation Laws, *IEEE Access*, Volume: 7, Issue:1, pp. 48524-48542, ISSN: 2169-3536, Publisher: IEEE, Available: <https://ieeexplore.ieee.org/document/8684843> [ISI Q1, WOS:000466706400001, IF: 3.745]
3. **Danciu Daniela**, Popescu D., Bobasu E. (2018). Neural Networks-Based Computational Modeling of Bilinear Control Systems for Conservation Laws: Application to the Control of Cogeneration, *IEEE Transactions on Industry Applications*, Publisher: IEEE, Available: <https://ieeexplore.ieee.org/document/8410424/> [ISI Q1, WOS:000447827700089, IF\_2018: 3.488]
4. **Danciu Daniela** (2015). A CNN-based approach for a class of non-standard hyperbolic partial differential equations modeling distributed parameters (nonlinear) control systems, *Neurocomputing*, Vol. 164, pp. 56-70, ISSN: 0925-2312, Available: <https://www.sciencedirect.com/science/article/pii/S0925231215003008> [ISI Q1, WOS 000356987000006, IF: 4.438]
5. Răsvan V., **Danciu Daniela**, Popescu D. (2013). On absolute (robust) stability: slope restrictions and stability multipliers, *International Journal of Robust and Nonlinear Control IJRNC*, Vol. 23, No.1, pp. 77-103, Wiley Online Library, ISSN 1049-8923, Available: <https://onlinelibrary.wiley.com/doi/full/10.1002/rnc.1821> [ISI Q1, WOS:000312888500006, IF: 3.503].
6. **Danciu Daniela**, Popescu D., Răsvan V. (2019). Water Hammer Stability in a Hydroelectric Plant with Surge Tank and Throttling, *IFAC PapersOnLine*, ELSEVIER, Volume: 52 Issue: 18 Pages: 144-149, ISSN: 2405-8963, DOI: 10.1016/j.ifacol.2019.12.221 [ISI Proc., WOS:000504412200026]
7. Stîngă F., **Danciu Daniela** (2019). A Disturbance Observer-Based Control of Drilling Vibrations, Proc. 20th IEEE International Carpathian Control Conference ICCC 2019, 26-29 May 2019, Krakow-Wieliczka, Polonia, , pp. 833-838, Publisher: IEEE. [ISI Proc., WOS: 000490570500156]
8. Răsvan V., **Danciu Daniela**, Popescu D. (2018). On the stabilization of a system of neutral type occurring in co-generation, *IFAC 2018 Workshop Time Delay Systems*, Budapest, June28-July 1, in *IFAC-PapersOnLine*, vol. 51, no. 14, pp. 106-111, Elsevier [ISI Proc., WOS: 000443033900020]
9. **Daniela Danciu**, Boussaada I., Stîngă F. (2018). Computational modeling and oscillations damping of axial vibrations in a drilling system, In *Proc. 2018 IEEE International Conference on Systems Theory, Control and Computing*, Sinaia, Romania, October 10-12, 2018, pp. 105-110, ISBN 978-1-5386-4444-7 [ISI Proc., WOS: 000465109800017]
10. Răsvan V., **Danciu Daniela**, Popescu D. (2018). Qualitative properties of a model of coupled drilling oscillations, In *Proc. 2018 IEEE International Conference on Systems Theory, Control and Computing*, Sinaia, Romania, October 10-12, 2018, pp. 99-104, ISBN 978-1-5386-4444-7 [ISI Proc., WOS: 000465109800016]
11. **Danciu Daniela**, Răsvan V. (2017). Neutral functional differential equations and systems of conservation laws, *IFAC World Congress 2017, Toulouse, France, July 9-15, 2017*, IFAC-PapersOnLine, vol. 50, issue 1, pp. 13336-13341. [ISI Proc., WOS:000423965200214]
12. **Danciu Daniela** (2017). Feedback Control of a Nonlinear Propagation System: Numerical Modeling and Implementation, *Proc. of 21<sup>th</sup> IEEE International Conference on Systems Theory, Control and Computing*, Sinaia, Romania, October 2017, pp. 429-434, ISBN 978-1-5386-3842-2 [ISI Proc., WOS: 000427419900069]

13. Răsvan V., **Danciu Daniela**, Popescu D. (2017). Time delay and wave propagation in controlling systems of conservation laws, *Proc. of 21<sup>th</sup> IEEE International Conference on Systems Theory, Control and Computing*, Sinaia, Romania, October 2017, pp. 424-428, ISBN 978-1-5386-3842-2. [ISI Proc., WOS: 000427419900068]
14. Răsvan V., **Danciu Daniela**, Popescu D. (2017). On Huygens synchronization. Application to Van der Pol oscillators with distributed couplings, *Proc. 18th IEEE International Carpathian Control Conference ICCC 2017*, pp. 521 – 526, May 2017, Sinaia, Romania, ISBN: 978-1-4799-7369-9 [ISI Proc., WOS: 000426954400097]
15. **Danciu Daniela**, Răsvan V. (2017). On Designing New Structures with Emergent Computing Properties, *Proc. 14th International Symposium on Neural Networks ISNN 2017, Advances in Neural Networks*, Part I, LNCS 10261, pp. 51-59, Sapporo, Japan, June 2017, Springer Cham, ISBN 978-3-319-59072-1. [ISI Proc., WOS: 000439963900007]
16. **Danciu Daniela**, Răsvan V. (2016). Delays. Nonlinearity. Synchronization, *13<sup>th</sup> IFAC Workshop on Time Delays systems (TDS)*, *IFAC-PapersOnLine*, Volume 49, Issue 10, 2016, Pages 200-205, ISSN: 2405-8963, Elsevier. [ISI Proc., WOS:000383463500035]
17. **Danciu Daniela** (2016). Computational and analog modeling of parabolic transport equations using Cellular Neural Networks, *Proc. of 20th IEEE International Conference on Systems Theory, Control and Computing ICSTCC 2016*, ISBN 978-1-5090-2720-0, pp. 681-686, Sinaia, Romania. [ISI Proc., WOS:000391609900115]
18. Răsvan V., Popescu D., **Danciu Daniela** (2016). Controller synthesis for a system of conservation laws, In: *Proc. of 20th IEEE International Conference on Systems Theory, Control and Computing ICSTCC*, ISBN 978-1-5090-2720-0, pp. 744–748, Sinaia, Romania. [ISI Proc., WOS:000391609900126]
19. Răsvan V., Bobașu E., **Danciu Daniela**, Popescu D. (2016). Control and stabilization of a linearized system of conservation laws, *Proc. 17th IEEE International Carpathian Control Conference ICCC*, pp. 618 - 623, Tatranska Lomnica, Slovakia. [ISI Proc., WOS:000389829000115]
20. **Danciu Daniela**, Răsvan V. (2015). On Structures with Emergent Computing Properties. A Connectionist versus Control Engineering Approach, *Proc. 13th Int. Work Conf. on Artificial Neural Networks IWANN*, Part I, Lectures Notes in Computer Science, Vol. 9094, pp. 415–429, Springer, ISBN 978-3-319-19257-4. [ISI Proc., WOS:000363763800035]
21. **Danciu Daniela**, Popescu D., Bobașu E. (2015). Computational issues based on neural networks for a class of systems of conservation laws, *Proc. 16th IEEE International Carpathian Control Conference ICCC*, ISBN: 978-1-4799-7369-9, Szilvasvarad, Hungary. [ISI Proc., WOS:000380488000020]
22. Bobașu E., **Danciu Daniela**, Popescu D., Răsvan V. (2015). On the dynamics of oilwell drillstrings with asynchronous motor drive, *Proc. 16th IEEE International Carpathian Control Conference ICCC*, pp. 41–45, ISBN: 978-1-4799-7369-9, Szilvasvarad, Hungary [ISI Proc., WOS:000380488000008]
23. **Daniela Danciu** (2013). A CNN Based Approach for Solving a Hyperbolic PDE Arising from a System of Conservation Laws - the Case of the Overhead Crane, *Advances in Computational Intelligence*, Lecture Notes in Computer Science, Vol. 7903, 2013, pp 365-374, 2013, Springer-Verlag Berlin Heidelberg. DOI: 10.1007/978-3-642-38682-4\_39 [ISI Proc., WOS:000324899200039]
24. **Danciu Daniela** (2011). Bio-inspired Systems. Several Equilibria. Qualitative Behavior, *11th International Work-Conference on Artificial Neural Networks, IWANN 2011*, Torremolinos-Málaga,

- Spain, June 8-10, 2011, Part II, Lecture Notes in Computer Science 6692/2011, pp. 573-580, DOI: 10.1007/978-3-642-21498-1\_72, Springer-Verlag [ISI Proc., WOS: 000353419100072].
25. **Daniel Danciu**, Răsvan V. (2011). Systems with Slope Restricted Nonlinearities and Neural Networks Dynamics, *11th International Work-Conference on Artificial Neural Networks, IWANN 2011*, Torremolinos-Málaga, Spain, June 8-10, 2011, Part II, Lecture Notes in Computer Science 6692/2011, pp. 565-572, DOI: 10.1007/978-3-642-21498-1\_71, Springer-Verlag, [ISI Proc., WOS: 000353419100071].
  26. **Danciu Daniela**, Răsvan V. (2020). Stability by the first approximation of a water hammer model, 21th IFAC World Congress, 1st Virtual IFAC World Congress (IFAC-V 2020), Berlin, Germany, July 11-14, 2020, [ScienceDirect] (to appear)
  27. **Danciu Daniela**, Popescu D., Răsvan V. (2020). Stability and boundary control for conservation laws - an application, 21th IFAC World Congress, 1st Virtual IFAC World Congress (IFAC-V 2020), Berlin, Germany, July 11-14, 2020 [ScienceDirect] (to appear)
  28. **Danciu Daniela**, Popescu D., Răsvan V. (2020). Stability of Surge Tanks in the Hydroelectric Power Plants - Structures and Problems, *2020 24rd International Conference on System Theory, Control and Computing (ICSTCC)*, 8-10 Oct. 2020, pp. 398-403, ISSN: 2372-1618, DOI: 10.1109/ICSTCC50638.2020.9259788 [IEEE Xplore]
  29. **Danciu Daniela**, Popescu D., Răsvan V. (2020). Stability and Control Problems in Hydropower Plants, *2020 21th International Carpathian Control Conference (ICCC)*, 27-29 October, 2020, High Tatras, Slovakia, 2020, pp. 1-5, DOI: 10.1109/ICCC49264.2020.9257294, Electronic ISBN:978-1-7281-1951-9 [IEEE Xplore]
  30. **Daniel Danciu** (2014). Distributed parameter system from Contact Mechanics: modelling and computational issues based on Cellular Neural Networks paradigm, In *ICSTCC 2014 – Proc. 18<sup>th</sup> International conference on Systems theory, Control and Computing*, ISBN 978-1-4799-4602-0, pp. 347-352, Sinaia, Romania, October 17-19, 2014 DOI: [10.1109/ICSTCC.2014.6982440](https://doi.org/10.1109/ICSTCC.2014.6982440). [IEEE Xplore]
  31. **Danciu Daniela** (2013). Numerics for hyperbolic partial differential equations (PDE) via Cellular Neural Networks (CNN), *2nd IEEE International Conference on Systems and Computer Science (ICSCS)*, pp. 183-188 DOI: [10.1109/IcConSCS.2013.6632044](https://doi.org/10.1109/IcConSCS.2013.6632044) [IEEE Xplore]
  32. **Danciu Daniela**, Răsvan V., Popescu D. (2012). On the absolute stability for recurrent neural networks with time delays, *13th IEEE International Carpathian Control Conference, ICCC 2012*, pp. 97–102, DOI: [10.1109/CarpathianCC.2012.6228623](https://doi.org/10.1109/CarpathianCC.2012.6228623), ISBN: 978-1-4577-1867-0 [IEEE Xplore]
  33. E.Bobasu, **Danciu Daniela**, Popescu D., Răsvan V. (2012). On dynamics and control for a system of conservation laws - the case of the overhead crane, *13th IEEE International Carpathian Control Conference, ICCC 2012*, pp. 52 – 57, DOI: [10.1109/CarpathianCC.2012.6228615](https://doi.org/10.1109/CarpathianCC.2012.6228615), ISBN: 978-1-4577-1867-0. [IEEE Xplore]

#### **D. Lucrări publicate în ultimii 10 ani în reviste și volume de conferințe cu referență (neindexate)**

##### **- Reviste**

1. Răsvan V., **Danciu Daniela** (2011). Theoretical background for PIO II analysis. *Scientific Bulletin of "Politehnica" University of Timisoara, Romania, Transactions on Automatic Control and Computer Science*, Vol. 56(70), No. 1, March 2011, pp. 5-10, “Politehnica” Publ. House, ISSN 1224-600X, [GoogleScholar, IndexCopernicus]

2. Danciu Daniela (2017). Two Lessons on Recurrent Neural Networks. Basic Features and Architectures, *Annals of the University of Craiova*, Series Automation, Computers, Electronics and Mechatronics, Vol. 14(41), no. 1, 2017, pp. 1-7. [GoogleScholar, INSPEC, IndexCopernicus]

**- Selectie cu maximum 20 lucrări în volume de conferințe**

3. Daniela Danciu, Andaluzia Cristina Matei, Sorin Micu, Ionel Roventa (2014). Nonlinear Feedback Control and Artificial Intelligence Computational Methods applied to a Dissipative Dynamic Contact Problem, In *ICINCO 2014 – Proc. 11th International Conference on Informatics in Control, Automation and Robotics*, vol 1, ISBN: 978-989-758-039-0, pp. 528-539, DOI: 10.5220/0005055005280539. [SciTePress Digital Library]
4. Daniela Danciu, D. Popescu and V. Răsvan (2014). On the Stabilization of the Flexible Manipulator. Liapunov based Design. Robustness. In *ICINCO 2014 – Proc. 11th International Conference on Informatics in Control, Automation and Robotics*, vol 1, ISBN: 978-989-758-039-0, pp. 508-518, DOI: 10.5220/0005051705080518 [SciTePress Digital Library]

**E. Brevete obținute în întreaga activitate**

**Data:** 30.09.2020

**Semnătura:**