Fişa de verificare privind îndeplinirea standardelor minimale naţionale pentru profesor universitar

Domeniul Matematică

Conf. Dr. Gheorghe Ţigan

Punctaj standarde naţionale: I_total = 13.531, I_recent=7.412, C=62

Tabel 1: Articole publicate în Jurnale ISI cu factor de impact *fi > 0.5*

Nr. crt	Articol, referinţa bibliografică	Publicat in ultimii 7 ani?	fi	ni	fi/ni
1	G. Tigan, Degenerate with respect to parameters fold-Hopf bifurcations, Discrete and Continuous Dynamical Systems-Series A, 37 (4), 2115-2140, 2017.	X	1.127	1	1.127
2	G. Tigan, Using Melnikov functions of any order for studying limit cycles, Journal of Mathematical Analysis and Applications 448, 409-420, 2017.	X	1.014	1	1.014
3	G. Tigan, D. Constantinescu, Bifurcations in a family of Hamiltonian systems and associated nontwist cubic maps, Chaos, Solitons and Fractals 91, 128–135, 2016.	X	1.611	2	0.805
4	G. Tigan, J. Llibre, Heteroclinic, homoclinic and closed orbits in the Chen system, IJBC, 26(4), 1-6, 2016.	X	1.355	2	0.677
5	G. Tigan, Analysis of a two-dimensional nonsmooth Poincaré-like map, Nonlinear Dynamics, 75(4), 643-651, 2014.	X	3.000	1	3.000
6	G. Tigan, D. Turaev, Analytical search for homoclinic bifurcations in the Shimizu-Morioka model, Physica D 240, 985–989, 2011.	X	1.579	2	0.789
7	G.Tigan, D.Constantinescu, Heteroclinic orbits in the T and the Lu systems, Chaos, Soliton and Fractals (C,S&F), 42(1), 20-23, 2009.		1.611	2	0.805
8	G.Tigan, D.Opriş, Analysis of a 3D dynamical system, C,S&F, 36(5), 1315-1319, 2008.		1.611	2	0.805
9	G.Tigan, Thirteen limit cycles for a class of Hamiltonians,C,S&F, 31, 480-488, 2007.		1.611	1	1.611
10	G.Tigan, On the scenario of reconnection in non-twist cubic maps, C,S&F, 30, 1260-1264, 2006.		1.611	1	1.611
11	G.Tigan, A.Astolfi, A note on a piecewise-linear Duffing-type system, IJBC, 17(12), 4425-4429, 2007.		1.355	2	0.677
12	G. Tigan, Controlling chaos of a dynamical system with feedback control, Carpathian J. Math., 22, No. 1 - 2, 153 – 161, 2006.		0.610	1	0.610
		I_total=			**13.531**
		I_recent=			**7.412**

fi=factorul de impact al lucrarii „i“; ni=numarul de autori ai lucrarii „i“.
Condiţii minimale profesor universitar: **I_recent ≥ 2.5; I_total ≥ 5.**

Tabel 2: Articole publicate în Jurnale ISI cu factor de impact *fi > 0.5* care citează articolele candidatului

Nr. crt.	Articlolul citat	Revista si articolul in care a fost citat	fi
1.	**G.Tigan, D.Opriş, Analysis of a 3D dynamical system, CSF, 36(5), 1315-1319, 2008.**	**1. Chaos, Soliton & Fractals (CSF),** 42(3), 1812-1819, 2009. Yue Wu et. al., Chaos synchronization of a new 3D chaotic system.	1.6
		2. Nonlinear Analysis: Real World Applications, 10(4), 2357-2368, 2009. Xian-Feng Li et al., Nonlinear dynamics and circuit realization of a new chaotic flow: A variant of Lorenz, Chen, Lu.	2.2
		3. CSF, 41(5), 2360-2370, 2009. Xian-Feng Li et al., Nonlinear dynamics and circuit implementation for a new Lorenz-like attractor.	1.6
		4. Nonlinear Dynamics, 63, 263-275, 2011. Xian-Feng Li et al., Complete (anti-) synchronization of chaotic systems with fully uncertain parameters by adaptive control.	3
		5. Physics Letters A, 374(30), 3021-3024, 2010. Wenguang Yu, Finite-time stabilization of three-dimensional chaotic systems based on CLF.	1.6
		6. Physics Letters A, 374(13-14), 1488-1492, 2010. Wenguang Yu, Stabilization of three-dimensional chaotic systems via single state feedback controller.	1.6
		7. Physics Letters A, 375(24), 2322-2326, 2011. U.E. Vicent, R. Guo, Finite-time synchronization for a class of chaotic and hyperchaotic systems via adaptive feedback controller.	1.6
		8. Communications in Theoretical Physics, 49(4), 2008. Chen Yong and Yan Zhen-Ya, Chaos Control in a New Three-Dimensional Chaotic T System.	0.9
		9. Physics Letters A, 357(2), 119-124, 2010. R. Guo and U.E. Vicent, Finite time stabilization of chaotic systems via single input.	1.6
		10. Computers & Mathematics with Applications, 62(12), 4783-4795, 2011. N. Jia and T. Wang, Chaos control and hybrid projective synchronization for a class of new chaotic systems	1.3
		11. Applied Mathematics and Computation, 218(13), 7231-7240, 2012. T. Wang and N. Jia, Chaos control and hybrid projective synchronization of several new chaotic systems	1.3
		12. IJBC, 20(11), 3785-3793, 2010. R.A. Van Gorder and S. Roy Choudhury, Classification of chaotic regimes in the T system by use of competitive modes.	1.3
		13. Nonlinear Analysis: Real World Applications, 11(1), 522-527, 2010. B. Jiang, Hopf bifurcation analysis in the T system.	2.2
		14. Math. Problems in Engineering, Article ID 452671, 2011. T. Wang et al., Chaos control and hybrid projective synchronization of a novel chaotic system.	0.6
		15. Applied Mathematics and Computation, 217(14), 6490-6497, 2011. C-C Yang, Exponential synchronization of a new Lorenz-like attractor with uncertain parameters via single input.	1.3
		16. Nonlinear Dynamics, 67(2), 987-996, 2012. Chunlai Mu et al., On the boundedness of solutions to the Lorenz-like family of chaotic systems.	3
		17. Communications in Theoretical Physics, 55(4), 2011. Robert A. Van Gorder and S. Roy Choudhury, Analytical Hopf Bifurcation and Stability Analysis of T System.	0.9
		18. Communications in Nonlinear Science and Numerical Simulation, 17(1), 2012, 255–262. R. Guo, Finite-time stabilization of a class of chaotic systems via adaptive control method.	2.8
		19. International Journal of Systems Science, 43(4), 2012. X. Jian, Projective synchronisation of a new chaotic system via small-gain theorem.	1.9

		20. Nonlinear Dynamics, 75(3), 2014, 589-602. Xiaojun Liu, Ling Hong, Lixin Yang, Fractional-order complex T system: bifurcations, chaos control, and synchronization.	3
		21. Nonlinear Dynamics, 73(1-2), 2013, 1111-1123. Sifeu Takougang Kingni et al., Dissipative chaos, Shilnikov chaos and bursting oscillations in a three-dimensional autonomous system: theory and electronic implementation.	3
		22. Nonlinear Dynamics, 73(3), 2013, 1769-1782. S. Roy Choudhury, G. Gambino, Convergent analytic solutions for homoclinic orbits in reversible and non-reversible systems.	3
		23. Nonlinear Dynamics, 72(3), 2013, 629-641. R. Zhang, Bifurcation analysis for T system with delayed feedback and its application to control of chaos.	3
		24. Applied Mathematics and Computation, 236(1), 2014, 184-194. T. Harko et al., Exact analytical solutions of the Susceptible-Infected-Recovered (SIR) epidemic model.	1.3
		25. Nonlinear Dynamics, 75(3), 2014, 589-602. Xiaojun Liu et al., Fractional-order complex T system: bifurcations, chaos control, and synchronization.	3
		26. The European Physical Journal Special Topics, 223(8), 2014, 1519-1529. S. Vaidyanathan et al., Analysis and adaptive synchronization of eight-term 3-D polynomial chaotic systems	1.4
		27. The European Physical Journal Special Topics, 224(8), 2015, 1575-1592S. Vaidyanathan et al., A 5-D hyperchaotic Rikitake dynamo system with hidden attractors	1.4
2	**G. Tigan, Analysis of a dynamical system derived from the Lorenz system, Scientific Bulletin of the UPT, Transactions on Mathematics and Physics, 50(64), 1, 61-72, 2005.**	**1. Chaos, Soliton & Fractals (CSF),** 42(3), 1812-1819, 2009. Yue Wu et. al., Chaos synchronization of a new 3D chaotic system.	1.6
		2. CSF, 41(5), 2360-2370, 2009. Xian-Feng Li et al., Nonlinear dynamics and circuit implementation for a new Lorenz-like attractor.	1.6
		3. Nonlinear Dynamics, 60(3), 2010, 369-373. Z. Wang, Existence of attractor and control of a 3D differential system, Nonlinear Dynamics.	3
		4. IJBC, 20(11), 3785-3793, 2010. R.A. Van Gorder and S. Roy Choudhury, Classification of chaotic regimes in the T system by use of competitive modes.	1.3
		5. Nonlinear Analysis: Real World Applications, 11(1), 522-527, 2010. B. Jiang, Hopf bifurcation analysis in the T system.	2.5
		6. Communications in Theoretical Physics, 55(4), 2011. Robert A. Van Gorder and S. Roy Choudhury, Analytical Hopf Bifurcation and Stability Analysis of T System.	0.9
		7. International Journal of Systems Science, 43(4), 2012. X. Jian, Projective synchronisation of a new chaotic system via small-gain theorem.	1.9
		8. Nonlinear Dynamics, 72(3), 2013, 629-641. R. Zhang, Bifurcation analysis for T system with delayed feedback and its application to control of chaos.	3
3	**G. Tigan, Bifurcation and stability in a system derived from the Lorenz system, Proceedings of The 3-rd International Colloquium, MENP, October 7-9 , 2004, Bucharest, Romania, 265-272.**	**1. CSF,** 41(5), 2360-2370, 2009. Xian-Feng Li et al., Nonlinear dynamics and circuit implementation for a new Lorenz-like attractor.	1.6
		2. CSF, 42(3), 1812-1819, 2009. Yue Wu et. al., Chaos synchronization of a new 3D chaotic system.	1.6
		3. Nonlinear Dynamics, 60(3), 2010, 369-373. Z. Wang, Existence of attractor and control of a 3D differential system, Nonlinear Dynamics.	3
		4. IJBC, 20(11), 3785-3793, 2010. R.A. Van Gorder and S. Roy Choudhury, Classification of chaotic regimes in the T system by use of competitive modes.	1.3
		5. Nonlinear Analysis: Real World Applications, 11(1), 522-527, 2010. B. Jiang, Hopf bifurcation analysis in the T system.	2.2
4	**G.Tigan, D.Constantinesc, Heteroclinic orbits in the T and the Lu systems, CSF, 42(1),**	**1. Nonlinear Analysis: Real World Applications,** 11(4), 2563-2572, 2010. Y. Liu et al., Dynamics of a new Lorenz-like chaotic system.	2.2
		2. Nonlinear Dynamics, 65(3), 2011, 255-270. X. Li et al., Dynamical properties and simulation of a new Lorenz-like chaotic system.	3
		3. IJBC, 20(11), 3785-3793, 2010. R.A. Van Gorder and S. Roy Choudhury,	1.3

	20-23, 2009.	Classification of chaotic regimes in the T system by use of competitive modes.	
		4. Physics Letters A, 377, 39(22), 2013, 2771–2776. A. Algaba et al., The Lü system is a particular case of the Lorenz system.	1.6
		5. Nonlinear Dynamics, 67(2), 2012, 1595-1611. Y. Liu, W. Pang, Dynamics of the general Lorenz family.	3
		6. Nonlinear Dynamics, 67(2), 987-996, 2012. Chunlai Mu et al., On the boundedness of solutions to the Lorenz-like family of chaotic systems.	3
		7. Communications in Theoretical Physics, 55(4), 2011. Robert A. Van Gorder and S. Roy Choudhury, Analytical Hopf Bifurcation and Stability Analysis of T System.	0.9
		8. IJBC, 21(9), 2695-2712, 2011. X. Li and H. Wang, Homoclinic and heteroclinic orbits and bifurcations of a new Lorenz-like system.	1.3
		9. Nonlinear Dynamics, 73(1-2), 2013, 1111-23. S. T. Kingni et al., Dissipative chaos, Shilnikov chaos and bursting oscillations in a three-dimensional autonomous system: theory and electronic implementation.	3
		10. Nonlinear Dynamics, 73(1-2), 2013, 621-632. Xianyi Li, Peng Wang, Hopf bifurcation and heteroclinic orbit in a 3D autonomous chaotic system.	3
		11. Nonlinear Dynamics, 75(3), 2014, 589-602. Xiaojun Liu et al., Fractional-order complex T system: bifurcations, chaos control, and synchronization.	3
		12. Nonlinear Dynamics, 77(3), 2014, 569-581. Y. Chen et al., Dynamics of a hyperchaotic Lorenz-type system.	3
		13. Applied Mathematics and Computation, 243, 2014, 283-297. M.M. El-Dessoky et al., Bifurcation analysis and chaos control in Shimizu–Morioka chaotic system with delayed.	1.3
		14. IJBC, 24, 2014, 1-29. H. Wang, X. Li, More dynamical properties revealed from a 3D Lorenz-like system.	1.3
5	**G.Tigan, Thirteen limit cycles for a class of Hamiltonian systems, CSF, 31, 480-488, 2007.**	**1. Applied Math. and Computation,**190(1),490-499, 2007. H. Zhou et al., On the number of limit cycles of a cubic polynomials Hamiltonian system under quintic perturbation.	1.3
		2. Applied Math. and Computation, 204(2), 905-913, 2008. H. Zhou and W. Xu, Thirteen limit cycles for a class of cubic Hamiltonian system with higher-order perturbed terms.	1.3
6	**G. Tigan, D. Turaev, Analytical search for homoclinic bifurcations in the Shimizu-Morioka model, Physica D 240, 985–989, 2011.**	**1. Mathematical Modelling of Natural Phenomena,** 8(5), 2013, 71-83. SV Gonchenko, II Ovsyannikov, On Global Bifurcations of Three-dimensional Diffeomorphisms Leading to Lorenz-like Attractors.	0.8
		2. Nonlinear Dynamics, 73(1-2), 2013, 1111-1123. Sifeu Takougang Kingni et al., Dissipative chaos, Shilnikov chaos and bursting oscillations in a three-dimensional autonomous system: theory and electronic implementation.	3
		3. Nonlinear Dynamics, 69(1-2), 2012, 577-587. M. Messias et al., Dynamics at infinity and other global dynamical aspects of Shimizu–Morioka equations.	3
		4. Nonlinearity, 30(1), 2016, 115-137. I I Ovsyannikov, D V Turaev, Analytic proof of the existence of the Lorenz attractor in the extended Lorenz model.	1.2
7	**G.Tigan, A.Astolfi, A note on a piecewise-linear Duffing-type system, IJBC,17(12), 4425-4429, 2007.**	**1. SIAM J. on Applied Dyn. Systems,** 11(3), 2012, 801–830. A. Granados, S. J. Hogan, and T. M. Seara, The Melnikov Method and Subharmonic Orbits in a Piecewise-Smooth System.	1.8
		2. International Journal of Systems Science, 44(1), 2013. Yu Zhang et al., Stability of impulsive piecewise linear systems.	1.9
		Total: C=62	