

# Anton V Proskurnikov

## List of Publications by Year in Descending Order

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**Version:** 2024-04-10

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

91 papers	1,226 citations	14 h-index	33 g-index
111 ext. papers	1,630 ext. citations	3.6 avg, IF	5.56 L-index

#	Paper	IF	Citations
91	The sunflower equation: novel stability criteria. <i>IFAC-PapersOnLine</i> , <b>2021</b> , 54, 135-140	0.7	
90	Self-synchronization of unbalanced rotors and the swing equation. <i>IFAC-PapersOnLine</i> , <b>2021</b> , 54, 71-76	0.7	1
89	The development of Lyapunov direct method in application to synchronization systems. <i>Journal of Physics: Conference Series</i> , <b>2021</b> , 1864, 012065	0.3	1
88	Group dynamics on multidimensional object threat appraisals. <i>Social Networks</i> , <b>2021</b> , 65, 157-167	3.9	1
87	Macroscopic Noisy Bounded Confidence Models With Distributed Radical Opinions. <i>IEEE Transactions on Automatic Control</i> , <b>2021</b> , 66, 1174-1189	5.9	1
86	Structural Balance via Gradient Flows Over Signed Graphs. <i>IEEE Transactions on Automatic Control</i> , <b>2021</b> , 66, 3169-3183	5.9	4
85	Robust Output Regulation: Optimization-Based Synthesis and Event-Triggered Implementation. <i>IEEE Transactions on Automatic Control</i> , <b>2021</b> , 1-1	5.9	0
84	. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , <b>2021</b> , 11, 1355-1368	1.7	0
83	Learning Hidden Influences in Large-Scale Dynamical Social Networks: A Data-Driven Sparsity-Based Approach, in Memory of Roberto Tempo. <i>IEEE Control Systems</i> , <b>2021</b> , 41, 61-103	2.9	2
82	. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , <b>2020</b> , 67, 2064-2077	3.9	3
81	Optimal universal controllers for roll stabilization. <i>Ocean Engineering</i> , <b>2020</b> , 197, 106911	3.9	1
80	Recurrent averaging inequalities in multi-agent control and social dynamics modeling. <i>Annual Reviews in Control</i> , <b>2020</b> , 49, 95-112	10.3	2
79	Leonov's nonlocal reduction technique for nonlinear integro-differential equations. <i>IFAC-PapersOnLine</i> , <b>2020</b> , 53, 6398-6403	0.7	
78	Dynamical Networks of Social Influence: Modern Trends and Perspectives. <i>IFAC-PapersOnLine</i> , <b>2020</b> , 53, 17616-17627	0.7	2
77	Does sample-time emulation preserve exponential stability? <b>2020</b> ,		1
76	Consensus-based Distributed Algorithm for Multisensor-Multitarget Tracking under Unknown But Bounded Disturbances. <i>IFAC-PapersOnLine</i> , <b>2020</b> , 53, 3589-3595	0.7	1
75	Constructive Estimates of the Pull-In Range for Synchronization Circuit Described by Integro-Differential Equations <b>2020</b> ,		1

74	Lyapunov Event-Triggered Stabilization With a Known Convergence Rate. <i>IEEE Transactions on Automatic Control</i> , <b>2020</b> , 65, 507-521	5.9	13
73	Positive contagion and the macrostructures of generalized balance. <i>Network Science</i> , <b>2019</b> , 7, 445-458	2.9	3
72	Impulsive model of endocrine regulation with a local continuous feedback. <i>Mathematical Biosciences</i> , <b>2019</b> , 310, 128-135	3.9	4
71	Mathematical Structures in Group Decision-Making on Resource Allocation Distributions. <i>Scientific Reports</i> , <b>2019</b> , 9, 1377	4.9	7
70	Volterra Equations with Periodic Nonlinearities: Multistability, Oscillations and Cycle Slipping. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , <b>2019</b> , 29, 1950068	2	7
69	Comprehending Complexity: Data-Rate Constraints in Large-Scale Networks. <i>IEEE Transactions on Automatic Control</i> , <b>2019</b> , 64, 4252-4259	5.9	4
68	New results on cycle-slipping in pendulum-like systems. <i>Cybernetics and Physics</i> , <b>2019</b> , 167-175	0.6	
67	Stability of systems with periodic nonlinearities: a method of periodic Lyapunov functionals <b>2019</b> ,		1
66	Dynamics and structure of social networks from a systems and control viewpoint: A survey of Roberto Tempo's contributions. <i>Online Social Networks and Media</i> , <b>2018</b> , 7, 45-59	3.3	3
65	A tutorial on modeling and analysis of dynamic social networks. Part II. <i>Annual Reviews in Control</i> , <b>2018</b> , 45, 166-190	10.3	111
64	A Guiding Vector-Field Algorithm for Path-Following Control of Nonholonomic Mobile Robots. <i>IEEE Transactions on Control Systems Technology</i> , <b>2018</b> , 26, 1372-1385	4.8	37
63	Evolution of clusters in large-scale dynamical networks. <i>Cybernetics and Physics</i> , <b>2018</b> , 102-129	0.6	5
62	Forced Solutions of Disturbed Pendulum-Like Lur'e Systems <b>2018</b> ,		2
61	Synchronization of networked oscillators under nonlinear integral coupling. <i>IFAC-PapersOnLine</i> , <b>2018</b> , 51, 56-61	0.7	2
60	Mathematical modeling of endocrine regulation subject to circadian rhythm. <i>Annual Reviews in Control</i> , <b>2018</b> , 46, 148-164	10.3	6
59	Lyapunov Design for Event-Triggered Exponential Stabilization <b>2018</b> ,		3
58	Local and global analysis of endocrine regulation as a non-cyclic feedback system. <i>Automatica</i> , <b>2018</b> , 91, 190-196	5.7	4
57	Synchronization of Goodwin's Oscillators under Boundedness and Nonnegativeness Constraints for Solutions. <i>IEEE Transactions on Automatic Control</i> , <b>2017</b> , 62, 372-378	5.9	14

56	A tutorial on modeling and analysis of dynamic social networks. Part I. <i>Annual Reviews in Control</i> , <b>2017</b> , 43, 65-79	10.3	183
55	Synchronization of Pulse-Coupled Oscillators and Clocks Under Minimal Connectivity Assumptions. <i>IEEE Transactions on Automatic Control</i> , <b>2017</b> , 62, 5873-5879	5.9	25
54	Differential inequalities in multi-agent coordination and opinion dynamics modeling. <i>Automatica</i> , <b>2017</b> , 85, 202-210	5.7	9
53	Novel Multidimensional Models of Opinion Dynamics in Social Networks. <i>IEEE Transactions on Automatic Control</i> , <b>2017</b> , 62, 2270-2285	5.9	134
52	Guiding vector field algorithm for a moving path following problem * *The work was supported in part by the European Research Council (ERC-StG-307207), the Netherlands Organization for Scientific Research (NWO-vidi-14134) and RFBR, grants 17-08-01728, 17-08-00715 and 17-08-01266. <i>IFAC-PapersOnLine</i> , <b>2017</b> , 50, 6983-6988	0.7	7
51	Opinion evolution in time-varying social influence networks with prejudiced agents. <i>IFAC-PapersOnLine</i> , <b>2017</b> , 50, 11896-11901	0.7	17
50	Simple synchronization protocols for heterogeneous networks: beyond passivity. <i>IFAC-PapersOnLine</i> , <b>2017</b> , 50, 9426-9431	0.7	11
49	An impulsive model of endocrine regulation with two negative feedback loops. <i>IFAC-PapersOnLine</i> , <b>2017</b> , 50, 14717-14722	0.7	4
48	Singular Perturbations of Volterra Equations with Periodic Nonlinearities. Stability and Oscillatory Properties. <i>IFAC-PapersOnLine</i> , <b>2017</b> , 50, 8454-8459	0.7	
47	Modulus consensus in discrete-time signed networks and properties of special recurrent inequalities <b>2017</b> ,		4
46	Opinion Dynamics in Social Networks With Hostile Camps: Consensus vs. Polarization. <i>IEEE Transactions on Automatic Control</i> , <b>2016</b> , 61, 1524-1536	5.9	196
45	Stability properties of the Goodwin-Smith oscillator model with additional feedback**The work was supported in part by the European Research Council (ERC-StG-307207), RFBR, grant 14-08-01015 and St. Petersburg State University, grant 6.38.230.2015. Theorem 2 was obtained under sole support of Russian Science Foundation (RSF), grant 14-22-00142, at Institute for Problems in Mechanical Engineering RAS. <i>IFAC-PapersOnLine</i> , <b>2016</b> , 49, 131-133	0.7	4
44	A novel homogenous protocol for multi-agent clustering over directed graphs <b>2016</b> ,		1
43	Consensus in Multi-Agent Systems <b>2016</b> , 1-16		1
42	Pagerank and opinion dynamics: missing links and extensions <b>2016</b> ,		4
41	Network science on belief system dynamics under logic constraints. <i>Science</i> , <b>2016</b> , 354, 321-326	33.3	164
40	Delay Robustness of Nonlinear Consensus Protocols: Analytic Criteria. <i>Advances in Delays and Dynamics</i> , <b>2016</b> , 125-146	0.3	2
39	Dichotomic differential inequalities and multi-agent coordination <b>2016</b> ,		2

38	Phase locking, oscillations and cycle slipping in synchronization systems <b>2016</b> ,		3
37	Optimal controllers for rudder roll damping with an autopilot in the loop. <i>IFAC-PapersOnLine</i> , <b>2016</b> , 49, 562-567	0.7	1
36	Polarization in cooperative networks of heterogeneous nonlinear agents <b>2016</b> ,		7
35	Consensus robustness against inner delays. <i>Electronic Notes in Discrete Mathematics</i> , <b>2016</b> , 51, 7-14	0.3	3
34	On Periodic Solutions of Singularly Perturbed Integro-differential Volterra Equations with Periodic Nonlinearities**The work was partly supported by RFBR (14-08-01015) and St. Petersburg State University, grant 6.38.230.2015. Theorem 1 is obtained under sole support of Russian Science Foundation grant 16-19-00057 at Institute for Problems of Mechanical Engineering RAS.	0.7	2
33	A New Randomized Algorithm for Community Detection in Large Networks**The results of the paper have been obtained at IPME RAS under support of Russian Foundation for Basic Research (RFBR) grant 16-07-00890. <i>IFAC-PapersOnLine</i> , <b>2016</b> , 49, 31-35	0.7	4
32	Cycle slipping in nonlinear circuits under periodic nonlinearities and time delays <b>2015</b> ,		2
31	Event-based synchronization in biology: Dynamics of pulse coupled oscillators <b>2015</b> ,		3
30	A general criterion for synchronization of incrementally dissipative nonlinearly coupled agents <b>2015</b> ,		7
29	Popov-Type Criterion for Consensus in Nonlinearly Coupled Networks. <i>IEEE Transactions on Cybernetics</i> , <b>2015</b> , 45, 1537-48	10.2	16
28	Universal controllers of V.A. Yakubovich: a systematic approach to LQR problems with uncertain external signals**The paper was partially supported by RFBR, grants 13-08-01014 and 14-08-01015, and St. Petersburg State University, grant 6.38.230.2015. Theorems 6 and 13 are obtained at Institute for Problems of Mechanical Engineering RAS and supported solely by Russian Scientific Foundation (RSF), grant 14-29-00142. <i>IFAC-PapersOnLine</i> , <b>2015</b> , 48, 567-567	0.7	1
27	A new extension of the infinite-dimensional KYP lemma in the coercive case**The paper was partially supported by RFBR, grants 13-0801014 and 14-08-01015, and St. Petersburg State University, grant 6.38.230.2015. Theorem 10 in Section 4 is supported solely by Russian Scientific Foundation (RSF), grant 14-29-00142. <i>IFAC-PapersOnLine</i> , <b>2015</b> , 48, 241-251	0.7	2
26	The Yakubovich quadratic criterion, F-stability and multi-agent consensus.. <i>IFAC-PapersOnLine</i> , <b>2015</b> , 48, 414-419	0.7	
25	A new model of opinion dynamics for social actors with multiple interdependent attitudes and prejudices <b>2015</b> ,		9
24	Asymptotic Properties of Nonlinear Singularly Perturbed Volterra Equations**Supported by St. Petersburg State University, grant 6.38.230.2015. <i>IFAC-PapersOnLine</i> , <b>2015</b> , 48, 604-609	0.7	1
23	Average consensus for nonlinearly coupled agents: quadratic criteria <b>2014</b> ,		2
22	Nonlinear Consensus Algorithms with Uncertain Couplings. <i>Asian Journal of Control</i> , <b>2014</b> , 16, 1277-1288.	1.7	15
21	Consensus and polarization in Altafini's model with bidirectional time-varying network topologies <b>2014</b> ,		11

20	Problem of cycle-slipping for infinite dimensional systems with MIMO nonlinearities <b>2014</b> ,		2
19	Opinion dynamics using Altafini's model with a time-varying directed graph <b>2014</b> ,		8
18	Asymptotic estimates for gradient-like distributed parameter systems with periodic nonlinearities <b>2014</b> ,		4
17	Average consensus in networks with nonlinearly delayed couplings and switching topology. <i>Automatica</i> , <b>2013</b> , 49, 2928-2932	5.7	3 <sup>1</sup>
16	Consensus in switching networks with sectorial nonlinear couplings: Absolute stability approach. <i>Automatica</i> , <b>2013</b> , 49, 488-495	5.7	28
15	Consensus in switching symmetric networks of first-order agents with delayed relative measurements <b>2013</b> ,		2
14	Average consensus in switching nonlinearly coupled networks with time-varying delays.* *The paper was partially supported by RFBR, grants 11-08-01218 and 12-01-00808. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>2013</b> , 46, 457-461		3
13	The Circle Criterion for Synchronization in Nonlinearly Coupled Networks.. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>2013</b> , 46, 737-742		1
12	The Popov Criterion For Consensus Between Delayed Agents. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>2013</b> , 46, 693-698		1
11	Stability of continuous-time consensus algorithms for switching networks with bidirectional interaction <b>2013</b> ,		8
10	DP Systems for Track Control of Dredging Vessels. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>2012</b> , 45, 453-458		2
9	Thrust Ability Diagrams for Multi-Thruster Marine Vessels. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>2012</b> , 45, 152-157		1
8	Consensus in symmetric multi-agent networks with sector nonlinear couplings*. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>2011</b> , 44, 1237-1242		3
7	Consensus in Networks of Integrators With Fixed Topology and Delayed Nonlinear Couplings. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>2011</b> , 44, 8945-8950		4
6	Signal invariance and trajectory steering problem for an autonomous wheeled robot <b>2011</b> ,		3
5	Consensus in networks of integrators with unknown nonlinear couplings and communication delays.. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>2010</b> , 43, 330-335		
4	Speed gradient control of qubit state*. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>2010</b> , 43, 81-85		1
3	Convergence of Symmetric Nonlinear Consensus Protocols with Quadratically Constrained Couplings. *. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>2010</b> , 43, 1400-1405		1

- 2 Thrust Ability Diagrams of DP Vessels: Computational Aspects. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2010**, 43, 144-148
- 1 Dissipativity of T-Periodic Linear Systems. *IEEE Transactions on Automatic Control*, **2007**, 52, 1039-1047 5,9 16