List of Publications by Year in descending order

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ALEXANDER ERADKOV

#	Article	IF	CITATIONS
1	Control of chaos: Methods and applications in engineering. Annual Reviews in Control, 2005, 29, 33-56.	7.9	301
2	Nonlinear and Adaptive Control of Complex Systems. , 1999, , .		300
3	On self-synchronization and controlled synchronization. Systems and Control Letters, 1997, 31, 299-305.	2.3	246
4	Control of Chaos: Methods and Applications. I. Methods. Automation and Remote Control, 2003, 64, 673-713.	0.8	179
5	Exponential Feedback Passivity and Stabilizability of Nonlinear Systems. Automatica, 1998, 34, 697-703.	5.0	152
6	Control of Chaos: Methods and Applications. II. Applications. Automation and Remote Control, 2004, 65, 505-533.	0.8	134
7	Swinging control of nonlinear oscillations. International Journal of Control, 1996, 64, 1189-1202.	1.9	126
8	ADAPTIVE OBSERVER-BASED SYNCHRONIZATION FOR COMMUNICATION. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2000, 10, 2807-2813.	1.7	116
9	Self-synchronization and controlled synchronization: general definition and example design. Mathematics and Computers in Simulation, 2002, 58, 367-384.	4.4	111
10	Time domain interpretations of frequency domain inequalities on (semi)finite ranges. Systems and Control Letters, 2005, 54, 681-691.	2.3	106
11	Adaptive synchronization of chaotic systems based on speed gradient method and passification. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 1997, 44, 905-912.	0.1	104
12	Adaptive synchronization in delay-coupled networks of Stuart-Landau oscillators. Physical Review E, 2012, 85, 016201.	2.1	98
13	Quadratic Lyapunov functions in the adaptive stability problem of a linear dynamic target. Siberian Mathematical Journal, 1976, 17, 341-348.	0.6	97
14	Approximate Consensus in Stochastic Networks With Application to Load Balancing. IEEE Transactions on Information Theory, 2015, 61, 1739-1752.	2.4	90
15	Speed gradient control of chaotic continuous-time systems. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 1996, 43, 907-913.	0.1	83
16	Method of passification in adaptive control, estimation, and synchronization. Automation and Remote Control, 2006, 67, 1699-1731.	0.8	80
17	Nonlinear adaptive control of feedback passive systems. Automatica, 1995, 31, 1053-1060.	5.0	78
18	Passification of Non-square Linear Systems and Feedback Yakubovich-Kalman-Popov Lemma. European Journal of Control, 2003, 9, 577-586.	2.6	75

#	Article	IF	CITATIONS
19	Control and estimation under information constraints: Toward a unified theory of control, computation and communications. Automation and Remote Control, 2010, 71, 572-633.	0.8	72
20	Synchronization and phase relations in the motion of two-pendulum system. International Journal of Non-Linear Mechanics, 2007, 42, 895-901.	2.6	69
21	A passification approach to adaptive nonlinear stabilization. Systems and Control Letters, 1996, 28, 73-84.	2.3	60
22	Early History of Machine Learning. IFAC-PapersOnLine, 2020, 53, 1385-1390.	0.9	59
23	VSS-version of energy-based control for swinging up a pendulum. Systems and Control Letters, 2001, 44, 45-56.	2.3	58
24	Stabilization of invariant sets for nonlinear non-affine systems. Automatica, 2000, 36, 1709-1715.	5.0	57
25	Chaotic observer-based synchronization under information constraints. Physical Review E, 2006, 73, 066209.	2.1	57
26	Adaptive Control of 3DOF Motion for LAAS Helicopter Benchmark: Design and Experiments. Proceedings of the American Control Conference, 2007, , .	0.0	57
27	Control of chaos: methods and applications in mechanics. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2006, 364, 2279-2307.	3.4	55
28	Application of cybernetic methods in physics. Physics-Uspekhi, 2005, 48, 103-127.	2.2	54
29	Adaptive Observer-Based Synchronization of Chaotic Systems With First-Order Coder in the Presence of Information Constraints. IEEE Transactions on Circuits and Systems I: Regular Papers, 2008, 55, 1685-1694.	5.4	51
30	Exploring nonlinearity by feedback. Physica D: Nonlinear Phenomena, 1999, 128, 159-168.	2.8	50
31	Estimation and Control Under Information Constraints for LAAS Helicopter Benchmark. IEEE Transactions on Control Systems Technology, 2010, 18, 1180-1187.	5.2	49
32	Controlling cluster synchronization by adapting the topology. Physical Review E, 2014, 90, 042914.	2.1	47
33	Synchronization of Passifiable Lurie Systems Via Limited-Capacity Communication Channel. IEEE Transactions on Circuits and Systems I: Regular Papers, 2009, 56, 430-439.	5.4	44
34	Passification-based decentralized adaptive synchronization of dynamical networks with time-varying delays. Journal of the Franklin Institute, 2015, 352, 52-72.	3.4	44
35	A historical perspective of adaptive control and learning. Annual Reviews in Control, 2021, 52, 18-41.	7.9	44
36	Combined Adaptive Controller for UAV Guidance. European Journal of Control, 2005, 11, 71-79.	2.6	43

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37	Robust adaptive -gain control of polytopic MIMO LTI systems — LMI results. Systems and Control Letters, 2008, 57, 881-887.	2.3	43
38	Synchronization in networks of linear agents with output feedbacks. Automation and Remote Control, 2011, 72, 1615-1626.	0.8	43
39	Design of impulsive adaptive observers for improvement of persistency of excitation. International Journal of Adaptive Control and Signal Processing, 2015, 29, 765-782.	4.1	43
40	Robust synchronization of linear dynamical networks with compensation of disturbances. International Journal of Robust and Nonlinear Control, 2014, 24, 2774-2784.	3.7	42
41	Control of the coupled double pendulums system. Mechatronics, 2005, 15, 1289-1303.	3.3	39
42	Adaptive tuning of feedback gain in time-delayed feedback control. Chaos, 2011, 21, 043111.	2.5	39
43	Stabilization of invariant sets for nonlinear systems with applications to control of oscillations. International Journal of Robust and Nonlinear Control, 2001, 11, 215-240.	3.7	38
44	Controlled synchronization under information constraints. Physical Review E, 2008, 78, 036210.	2.1	38
45	Oscillatority of Nonlinear Systems with Static Feedback. SIAM Journal on Control and Optimization, 2009, 48, 618-640.	2.1	38
46	Semi-adaptive control of convexly parametrized systems with application to temperature regulation of chemical reactors. International Journal of Adaptive Control and Signal Processing, 2001, 15, 415-426.	4.1	37
47	CONTROL OF CHAOS: SURVEY 1997-2000. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 131-142.	0.4	35
48	Tracking control of the boost converter. IET Control Theory and Applications, 2004, 151, 218-224.	1.7	35
49	Disturbance Compensation With Finite Spectrum Assignment for Plants With Input Delay. IEEE Transactions on Automatic Control, 2018, 63, 298-305.	5.7	35
50	Synchronization of nonlinear systems under information constraints. Chaos, 2008, 18, 037109.	2.5	33
51	Passification based synchronization of nonlinear systems under communication constraints and bounded disturbances. Automatica, 2015, 55, 287-293.	5.0	33
52	Adaptive control of passifiable linear systems with quantized measurements and bounded disturbances. Systems and Control Letters, 2016, 88, 62-67.	2.3	33
53	Duality theorems for certain nonconvex extremal problems. Siberian Mathematical Journal, 1973, 14, 247-264.	0.6	32
54	Problems and methods of network control. Automation and Remote Control, 2016, 77, 1711-1740.	0.8	30

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55	Adaptive tuning to bifurcation for time-varying nonlinear systems. Automatica, 2006, 42, 417-425.	5.0	28
56	Approximate consensus in the dynamic stochastic network with incomplete information and measurement delays. Automation and Remote Control, 2012, 73, 1765-1783.	0.8	28
57	Compensation of disturbances for MIMO systems with quantized output. Automatica, 2015, 60, 239-244.	5.0	28
58	Asymptotic stability of a class of adaptive systems. International Journal of Adaptive Control and Signal Processing, 1993, 7, 255-260.	4.1	27
59	On synchronization in heterogeneous FitzHugh–Nagumo networks. Chaos, Solitons and Fractals, 2019, 121, 85-91.	5.1	26
60	Horizons of cybernetical physics. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2017, 375, 20160223.	3.4	26
61	Control of oscillations in Hamiltonian systems. , 1997, , .		25
62	Trajectory-approximation-based adaptive control for nonlinear systems under matching conditions. Automatica, 1998, 34, 287-299.	5.0	25
63	FEEDBACK RESONANCE IN SINGLE AND COUPLED 1-DOF OSCILLATORS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 1999, 09, 2047-2057.	1.7	25
64	Adaptive synchronization of a network of interconnected nonlinear Lur'e systems. Automation and Remote Control, 2009, 70, 1190-1205.	0.8	25
65	Synchronization in heterogeneous FitzHugh-Nagumo networks with hierarchical architecture. Physical Review E, 2016, 94, 012203.	2.1	25
66	Complex partial synchronization patterns in networks of delay-coupled neurons. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2019, 377, 20180128.	3.4	25
67	Speed-gradient Entropy Principle for Nonstationary Processes. Entropy, 2008, 10, 757-764.	2.2	24
68	Passification-based robust flight control design. Automatica, 2011, 47, 2743-2748.	5.0	24
69	Passification-based adaptive control: Uncertain input and output delays. Automatica, 2015, 54, 107-113.	5.0	23
70	Adaptive Control of Synchronization in Delay-Coupled Heterogeneous Networks of FitzHugh–Nagumo Nodes. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2016, 26, 1650058.	1.7	23
71	Controlled passage through resonance in mechanical systems. Journal of Sound and Vibration, 2011, 330, 1065-1073.	3.9	22
72	Robust control for a network of electric power generators. Automation and Remote Control, 2013, 74, 1851-1862.	0.8	22

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73	Dissipativity of T-Periodic Linear Systems. IEEE Transactions on Automatic Control, 2007, 52, 1039-1047.	5.7	21
74	Teaching Robotics in Secondary School. IFAC-PapersOnLine, 2017, 50, 12155-12160.	0.9	21
75	Adaptive time-delayed stabilization of steady states and periodic orbits. Physical Review E, 2015, 91, 012906.	2.1	19
76	Robust control of electric generator in the case of time-dependent mechanical power. Journal of Computer and Systems Sciences International, 2013, 52, 750-758.	0.6	18
77	Speed Gradient and MaxEnt Principles for Shannon and Tsallis Entropies. Entropy, 2015, 17, 1090-1102.	2.2	18
78	Speed Gradient Method and Its Applications. Automation and Remote Control, 2021, 82, 1463-1518.	0.8	18
79	Control of the Observables in the Finite-Level Quantum Systems. Automation and Remote Control, 2005, 66, 734-745.	0.8	17
80	ADAPTIVE PASSIFICATION-BASED FAULT-TOLERANT FLIGHT CONTROL. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 715-720.	0.4	17
81	State estimation and synchronization of pendula systems over digital communication channels. European Physical Journal: Special Topics, 2014, 223, 773-793.	2.6	17
82	Feedback control for some solutions of the sine-Gordon equation. Applied Mathematics and Computation, 2015, 269, 17-22.	2.2	17
83	Dynamics and control of oscillations in a complex crystalline lattice. Physics Letters, Section A: General, Atomic and Solid State Physics, 2006, 353, 24-29.	2.1	16
84	Passificationâ€based adaptive control of linear systems: Robustness issues. International Journal of Adaptive Control and Signal Processing, 2008, 22, 590-608.	4.1	16
85	Yakubovich's oscillatority of circadian oscillations models. Mathematical Biosciences, 2008, 216, 187-191.	1.9	16
86	Control of oscillatory behavior of multispecies populations. Ecological Modelling, 2012, 227, 1-6.	2.5	16
87	Energy control of distributed parameter systems via speed-gradient method: case study of string and sine-Gordon benchmark models. International Journal of Control, 2017, 90, 2554-2566.	1.9	16
88	Delayed and Switched Control of Formations on a Line Segment: Delays and Switches Do Not Matter. IEEE Transactions on Automatic Control, 2020, 65, 794-800.	5.7	16
89	Adaptive Control Design and Experiments for LAAS "Helicopter―Benchmark. European Journal of Control, 2008, 14, 329-339.	2.6	15
90	Adaptive synchronization in the complex heterogeneous networks of Hindmarsh–Rose neurons. Chaos, Solitons and Fractals, 2021, 150, 111170.	5.1	15

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91	Speed gradient adaptive control algorithms for mechanical systems. International Journal of Adaptive Control and Signal Processing, 1992, 6, 211-220.	4.1	14
92	CONTROL OF SYNCHRONIZATION IN DELAY-COUPLED NETWORKS. International Journal of Modern Physics B, 2012, 26, 1246007.	2.0	14
93	Multipendulum mechatronic setup: Design and experiments. Mechatronics, 2012, 22, 76-82.	3.3	14
94	Feedback resonance in nonlinear oscillators. , 1999, , .		13
95	Control of oscillations in vibration machines: Start up and passage through resonance. Chaos, 2016, 26, 116310.	2.5	13
96	Energy control of a pendulum with quantized feedback. Automatica, 2016, 67, 171-177.	5.0	13
97	Output Feedback Energy Control of the Sine-Gordon PDE Model Using Collocated Spatially Sampled Sensing and Actuation. IEEE Transactions on Automatic Control, 2020, 65, 1484-1498.	5.7	13
98	ROBUST PASSIFICATION VIA STATIC OUTPUT FEEDBACK – LMI RESULTS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 820-825.	0.4	12
99	Robust control of multi-machine power systems with compensation of disturbances. International Journal of Electrical Power and Energy Systems, 2015, 73, 584-590.	5.5	12
100	Robust nonlinear sampledâ€data system analysis based on Fridman's method and Sâ€procedure. International Journal of Robust and Nonlinear Control, 2016, 26, 201-217.	3.7	12
101	Control of Phase Shift in Two-Rotor Vibration Units. IEEE Transactions on Control Systems Technology, 2021, 29, 1316-1323.	5.2	12
102	Exciting multi-DOF systems by feedback resonance. Automatica, 2013, 49, 1782-1789.	5.0	11
103	Feedback control of the sine–Gordon antikink. Wave Motion, 2016, 65, 147-155.	2.0	11
104	Dynamics of non-stationary processes that follow the maximum of the Rényi entropy principle. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2016, 472, 20150324.	2.1	11
105	Control using new passivity property with differentiation at both ports. , 2017, , .		11
106	Nonsmooth and discontinuous speed-gradient algorithms. Nonlinear Analysis: Hybrid Systems, 2017, 25, 99-113.	3.5	11
107	On adaptive observer-based synchronization for communication. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1999, 32, 2029-2034.	0.4	10
108	STATE ESTIMATION OVER THE LIMITED-BAND COMMUNICATION CHANNEL FOR PITCH MOTION CONTROL OF LAAS HELICOPTER BENCHMARK1. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 407-412.	0.4	10

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109	Approximate consensus in multi-agent stochastic systems with switched topology and noise. , 2012, , .		10
110	Approximate consensus in multi-agent nonlinear stochastic systems. , 2014, , .		10
111	Control of localized non-linear strain waves in complex crystalline lattices. International Journal of Non-Linear Mechanics, 2016, 86, 174-184.	2.6	10
112	Observer-based boundary control of the sine–Gordon model energy. Automatica, 2020, 113, 108682.	5.0	10
113	Robustness of Pecora–Carroll synchronization under communication constraints. Systems and Control Letters, 2018, 111, 27-33.	2.3	10
114	Adaptive control of oscillatory and chaotic systems based on linearization of Poincar $ ilde{A}$ © map. , 1997, , .		9
115	Energy control of one-degree-of-freedom oscillators in presence of bounded force disturbances. , 1999, , .		9
116	ADAPTIVE CONTROL OF RECURRENT TRAJECTORIES BASED ON LINEARIZATION OF POINCARÉ MAP. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2000, 10, 621-637.	1.7	9
117	Restricted frequency inequality is equivalent to restricted dissipativity. , 2004, , .		9
118	Control of passage through a resonance area during the start of a two-rotor vibration machine. Journal of Machinery Manufacture and Reliability, 2007, 36, 380-385.	0.5	9
119	Decentralized adaptive controller for synchronization of dynamical networks with delays and bounded disturbances. , 2011, , .		9
120	Decentralized adaptive control of synchronization of dynamic system networks at bounded disturbances. Automation and Remote Control, 2013, 74, 829-844.	0.8	9
121	Dynamics of non-stationary nonlinear processes that follow the maximum of differential entropy principle. Communications in Nonlinear Science and Numerical Simulation, 2015, 29, 488-498.	3.3	9
122	Education and research mechatronic complex for studying vibration devices and processes. Journal of Machinery Manufacture and Reliability, 2016, 45, 369-374.	0.5	9
123	Boundary Energy Control of the Sine-Gordon Equation**This work was performed in IPME RAS, supported by RSF (grant 14-29-00142) IFAC-PapersOnLine, 2016, 49, 148-153.	0.9	9
124	Event-Triggered Control of Sampled-Data Nonlinear Systems**This work was supported by Saint Petersburg State University, (grant 6.38.230.2015) and by Government of Russian Federation, Grant 074-U01. The Lyapunov-Krasovskii functional based analysis of closed-loop switched system was performed in IPME RAS under support of Russian Science Foundation (grant 14-29-00142). IFAC-PapersOnline, 2016, 49, 12-17	0.9	9
125	Localization of the sine-Gordon equation solutions. Communications in Nonlinear Science and Numerical Simulation, 2016, 39, 29-37.	3.3	9
126	Robust Control with Compensation of Disturbances for Systems with Quantized Output1. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 730-735.	0.4	9

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127	Gradient Control of Hènon Map Dynamics. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 1997, 07, 701-705.	1.7	8
128	Adaptive observer-based synchronization of the nonlinear nonpassifiable systems. Automation and Remote Control, 2007, 68, 1186-1200.	0.8	8
129	Inputâ€toâ€output stabilization of nonlinear systems via backstepping. International Journal of Robust and Nonlinear Control, 2009, 19, 613-633.	3.7	8
130	Cyber-physical laboratory based on LEGO Mindstorms NXT - first steps. , 2009, , .		8
131	Robust Synchronization of Linear Networks with Compensation of Disturbances1. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 1255-1260.	0.4	8
132	Speed-gradient principle for description of transient dynamics in systems obeying maximum entropy principle. AIP Conference Proceedings, 2011, , .	0.4	8
133	Multiple Controlled Synchronization for 3-Rotor Vibration Unit with Varying Payload. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 5-10.	0.4	8
134	Sampled-Data Control of Nonlinear Oscillations Based on LMIs and Fridman's Method. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 95-100.	0.4	8
135	Cybernetic model of the shock induced wave evolution in solids. Procedia Structural Integrity, 2016, 2, 994-1001.	0.8	8
136	Controlled synchronization in two hybrid FitzHugh-Nagumo systems. IFAC-PapersOnLine, 2016, 49, 137-141.	0.9	8
137	Speed-Gradient Control of the Brockett Integrator. SIAM Journal on Control and Optimization, 2016, 54, 2116-2131.	2.1	8
138	Boundary energy control of a system governed by the nonlinear Klein–Gordon equation. Mathematics of Control, Signals, and Systems, 2018, 30, 1.	2.3	8
139	Angular Velocity and Phase Shift Control of Mechatronic Vibrational Setup. IFAC-PapersOnLine, 2019, 52, 436-441.	0.9	8
140	Passification of nonsquare linear systems. , 2001, , .		8
141	Necessary and Sufficient Conditions for the Passivicability of Linear Distributed Systems. Automation and Remote Control, 2003, 64, 517-530.	0.8	7
142	Excitation of oscillations in nonlinear systems under static feedback. , 2004, , .		7
143	Singular perturbations of systems controlled by energy-speed-gradient method. , 2004, , .		7
144	Passification-Based Adaptive Control with Implicit Reference Model*. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 342-350.	0.4	7

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145	Adaptive Identification of Angular Motion Model Parameters for LAAS Helicopter Benchmark. Control Applications (CCA), Proceedings of the IEEE International Conference on, 2007, , .	0.0	7
146	Passification of linear systems with respect to given output. , 2008, , .		7
147	Control of a noise-induced transition in a nonlinear dynamical system. Physical Review E, 2008, 77, 026201.	2.1	7
148	Control of wave motion in the chain of pendulums. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 3136-3141.	0.4	7
149	State estimation of passifiable lurie systems via limited-capacity communication channel. , 2009, , .		7
150	Decentralized adaptive controller for synchronization of nonlinear dynamical heterogeneous networks. International Journal of Adaptive Control and Signal Processing, 2013, 27, 729-740.	4.1	7
151	Linear matrix inequality-based analysis of the discrete-continuous nonlinear multivariable systems. Automation and Remote Control, 2015, 76, 989-1004.	0.8	7
152	Equivalence of MIMO Circle Criterion to Existence of Quadratic Lyapunov Function. IEEE Transactions on Automatic Control, 2016, 61, 1895-1899.	5.7	7
153	Simple adaptive control of quadrotor attitude. Algorithms and experimental results. , 2017, , .		7
154	Sliding Mode-based Speed-gradient Control of the String Energy * *The work was supported in part by the Government of the Russian Federation under Grant 074-U01. Stability analysis (Section 3.1) is performed in IPME under support of Russian Science Foundation (grant 14-29-00142) IFAC-PapersOnLine, 2017, 50, 8484-8489.	0.9	7
155	Adaptive and Robust Control in the USSR. IFAC-PapersOnLine, 2020, 53, 1373-1378.	0.9	7
156	Robust and Adaptive Observer-Based Partial Stabilization for a Class of Nonlinear Systems. IEEE Transactions on Automatic Control, 2009, 54, 1591-1595.	5.7	6
157	Teaching of robotics and control jointly in the University and in the high school based on LEGO Mindstorms NXT. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 9824-9829.	0.4	6
158	Synchronization of linear object networks by output feedback. , 2011, , .		6
159	Adaptive coding for maneuvering UAV tracking over the digital communication channel. , 2014, , .		6
160	Adaptive synchronization of two coupled non-identical Hindmarsh-Rose systems by the Speed Gradient method. IFAC-PapersOnLine, 2018, 51, 12-14.	0.9	6
161	Formation control of a group of unmanned aerial vehicles with data exchange over a packet erasure channel. , 2018, , .		6
162	Frequency-domain estimates of the sampling interval in multirate nonlinear systems by time-delay approach. International Journal of Control, 2019, 92, 1985-1992.	1.9	6

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163	Strict Quasipassivity and Ultimate Boundedness for Nonlinear Control Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1998, 31, 505-510.	0.4	5
164	Stabilization of Invariant Manifolds for Nonlinear Nonaffine Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1998, 31, 213-218.	0.4	5
165	Shunting Method for Control of Homing Missiles with Uncertain Parameters. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 593-598.	0.4	5
166	Vladimir Andreevich Yakubovich. Automation and Remote Control, 2006, 67, 1530-1546.	0.8	5
167	Observer-based synchronization of discrete-time chaotic systems under communication constraints. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 3719-3724.	0.4	5
168	Decentralized adaptive synchronization in nonlinear dynamical networks with nonidentical nodes. , 2009, , .		5
169	Adaptive-based methods for information transmission by means of chaotic signal source modulation. Automation and Remote Control, 2011, 72, 1967-1980.	0.8	5
170	Synchronization of nonlinear systems over intranet: Cart-pendulum case study. , 2014, , .		5
171	Simple and robust adaptive control. International Journal of Adaptive Control and Signal Processing, 2014, 28, 563-566.	4.1	5
172	Sampled-Data Control of Nonlinear Systems Based on Fridman's Analysis and Passification Designâ^—â^—The work is supported by Saint Petersburg State University, (grant 6.38.230.2015). The procedure and conditions for controller design were obtained in IPME RAS under support of Russian Scientic Foundation (grant 14-29-00142). IFAC-PapersOnLine, 2015, 48, 685-690.	0.9	5
173	Adaptive Coding For Data Exchange Between Quadrotors In The Formation**The work was performed in the IPME RAS and supported by the Russian Science Foundation (grant 14-29-00142) IFAC-PapersOnLine, 2016, 49, 275-280.	0.9	5
174	Mechatronic Laboratory Setup For Study Of Controlled Nonlinear Vibrations* *The work was performed in the IPME RAS and supported by the Russian Science Foundation (grant 14-29-00142). The sample-data control system analysis (Sec. 5.2) is supported by SPbSU (grant 6.38.230.2015). IFAC-PapersOnLine, 2016, 49, 1-6.	0.9	5
175	Data Exchange with Adaptive Coding between Quadrotors in a Formation. Automation and Remote Control, 2019, 80, 150-163.	0.8	5
176	Control of Two Satellites Relative Motion over the Packet Erasure Communication Channel with Limited Transmission Rate Based on Adaptive Coder. Electronics (Switzerland), 2020, 9, 2032.	3.1	5
177	On General Definitions of Synchronization. Series on Stability, Vibration and Control of Systems - Series A, 2004, , 179-188.	0.0	5
178	Synchronization of nonlinearly coupled networks based on circle criterion. Chaos, 2021, 31, 103110.	2.5	5
179	Artificial intelligence based neurofeedback. Cybernetics and Physics, 2019, , 287-291.	0.3	5
180	NUMERICAL AND EXPERIMENTAL EXCITABILITY ANALYSIS OF MULTI-PENDULUM MECHATRONICS SYSTEM. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 55-60.	0.4	4

#	Article	IF	CITATIONS
181	How to Publish a Good Article and to Reject a Bad One. Notes of a Reviewer. Automation and Remote Control, 2003, 64, 1643-1650.	0.8	4
182	PASSIFICATION-BASED ADAPTIVE CONTROL : ROBUSTNESS ISSUES 1. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 273-278.	0.4	4
183	ADAPTIVE OBSERVER-BASED SYNCHRONISATION OF CHAOTIC SYSTEMS IN PRESENCE OF INFORMATION CONSTRAINTS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 269-274.	0.4	4
184	Control and observation via communication channels with limited bandwidth. Gyroscopy and Navigation, 2010, 1, 126-133.	1.3	4
185	Controlled Passage through Resonance for Flexible Vibration Units. Mathematical Problems in Engineering, 2015, 2015, 1-8.	1.1	4
186	Bifurcation and synchronization analysis of neural mass model subpopulations. IFAC-PapersOnLine, 2017, 50, 14741-14745.	0.9	4
187	Petersburg State University, (grant 6.38.230.2015) and by Government of Russian Federation, Grant 074-U01. The proof of avoidance of Zeno phenomenon in continuous event-trigger was performed in IPME RAS under support of Russian Science Foundation (grant 14-29-00142). The results for event-trigger with a constant threshold (Proposition 2) was performed under support of the Russian	0.9	4
188	Foundation for Basic Research, Gran. IFAC-PapersOnLine, 2017, 50, 15295-15300. Event-triggered adaptive control of minimum-phase systems. IFAC-PapersOnLine, 2017, 50, 4276-4281.	0.9	4
189	Desynchronization control of FitzHugh-Nagumo networks with random topology. IFAC-PapersOnLine, 2019, 52, 640-645.	0.9	4
190	Adaptive Partial Observers with Application to Time-Varying Chaotic Systems. , 2005, , 27-35.		4
191	Adaptive control of time-varying non-linear plants by speed-gradient algorithms. Informatsionno-Upravliaiushchie Sistemy, 2019, , 37-44.	0.4	4
192	Speed-gradient control for passage of unbalanced rotor through resonance in plane motion. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 1087-1092.	0.4	3
193	SPEED-GRADIENT ALGORITHMS FOR UNDERACTUATED NONLINEAR SYSTEMS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 842-847.	0.4	3
194	Oscillation conditions of nonlinear systems with static feedback. Automation and Remote Control, 2005, 66, 249-264.	0.8	3
195	43rd International Conference on Decision and Control (IEEE CDC 2004). Automation and Remote Control, 2005, 66, 1357-1361.	0.8	3
196	TEXT AND IMAGE TRANSMISSION BASED ON ADAPTIVE SYNCHRONIZATION OF NONLINEAR NONPASSIFIABLE CHAOTIC SYSTEMS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 329-334.	0.4	3
197	Robust and Adaptive Partial Stabilization for a Class of Nonlinearly Parameterized Systems. , 2006, , .		3
198	Adaptive inputâ€toâ€output stabilization of nonlinear systems. International Journal of Adaptive Control and Signal Processing, 2008, 22, 949-967.	4.1	3

#	Article	IF	CITATIONS
199	Hybrid quantised observer for multi-input-multi-output nonlinear systems. , 2008, , .		3
200	Behavior analysis of harmonically forced chain of pendulums. , 2009, , .		3
201	Adaptive coding for position estimation in formation flight control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 72-76.	0.4	3
202	Speed gradient control of qubit state*. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 81-85.	0.4	3
203	Control Engineering At School: Learning By Examples. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 118-123.	0.4	3
204	Vladimir Andreevich Yakubovich [Obituary]. IEEE Control Systems, 2013, 33, 89-91.	0.8	3
205	Rainbow Runner glider as a testbed for robust and adaptive control methods*. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 270-275.	0.4	3
206	Robust Control of Aircraft Lateral Movement 1. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 5199-5204.	0.4	3
207	About the necessity of Popov criterion for a special Lyapunov function existence for the systems with multiple nonlinearities. Automation and Remote Control, 2015, 76, 801-808.	0.8	3
208	Time-varying observer of the supporting body velocity for vibration units. IFAC-PapersOnLine, 2016, 49, 18-23.	0.9	3
209	Scientific School of Vladimir Yakubovich in the 20th century. IFAC-PapersOnLine, 2017, 50, 5231-5237.	0.9	3
210	Energy Synchronization of Pendulum Mechanisms. , 2018, , .		3
211	In-domain energy control of the sine-Gordon model. , 2018, , .		3
212	The Speed-Gradient Algorithm in the Inverse Stoker Problem for a Synchronous Electric Machine. Vestnik St Petersburg University: Mathematics, 2018, 51, 82-86.	0.4	3
213	The Method of Averaged Models for Discrete-Time Adaptive Systems. Automation and Remote Control, 2019, 80, 1755-1782.	0.8	3
214	Discrete-time Deployment of Agents on a Line Segment: Delays and Switches Do Not Matter. Automation and Remote Control, 2020, 81, 637-648.	0.8	3
215	Multipendulum Mechatronic Setup for Studying Control and Synchronization. World Scientific Series on Nonlinear Science, Series B, 2010, , 211-222.	0.2	3
216	Control Engineering at High Schools and Universities. Advances in Educational Technologies and Instructional Design Book Series, 2016, , 141-170.	0.2	3

#	Article	IF	CITATIONS
217	Dynamics and control of thin film growth process from a multicomponent gas. Journal Physics D: Applied Physics, 1997, 30, 2794-2797.	2.8	2
218	High-temperature annealing of bulk GaN layers. Technical Physics Letters, 2002, 28, 994-996.	0.7	2
219	Speed-gradient control of energy in singularly perturbed systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 979-984.	0.4	2
220	SPEED-GRADIENT CONTROL OF PASSING THROUGH RESONANCE IN ONE- AND TWO-DIMENSIONAL MOTION. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 848-853.	0.4	2
221	Singular Perturbation Analysis of Energy Control Systems. JVC/Journal of Vibration and Control, 2006, 12, 331-353.	2.6	2
222	Synchronization of passifiable Lurie systems via limited capacity communication channel. , 2008, , .		2
223	Application of passification method to controlled synchronization of tree networks under information constraints. , 2009, , .		2
224	IMPULSIVE ADAPTIVE OBSERVERS: IMPROVING PERSISTENCY OF EXCITATION. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 2326-2331.	0.4	2
225	Passification Based Synchronization of Nonlinear Systems Under Communication Constraintsâ(†. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 6561-6566.	0.4	2
226	International conferences in control systems: Traditions and trends. Automation and Remote Control, 2011, 72, 160-163.	0.8	2
227	On finite time resonance entrainment in multi-DOF systems. , 2012, , .		2
228	Adaptive control of systems with fast varying unknown delay in measurements. , 2013, , .		2
229	Structured adaptive control for solving LMIs. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 426-431.	0.4	2
230	Combined Speed-gradient Controlled Synchronization of Multimachine Power Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 59-63.	0.4	2
231	Compensation of disturbances in multi-machine power systems caused by perturbation of mechanical input power. , 2015, , .		2
232	Nonsmooth Speed-Gradient algorithms. , 2015, , .		2
233	Dynamics of the f-divergence minimization processes based on the speed-gradient principle. , 2016, , .		2
234	Horizons of cybernetical physics. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2017, 375, 20160439.	3.4	2

#	Article	lF	CITATIONS
235	Robust observers and Pecora-Carroll synchronization with limited information. , 2017, , .		2
236	Adaptive stabilisation of discrete LTI plant with bounded disturbances via finite capacity channel. International Journal of Control, 2018, 91, 2451-2459.	1.9	2
237	GENERIC and Speed-Gradient Principle. IFAC-PapersOnLine, 2018, 51, 121-126.	0.9	2
238	Energy Tracking for the Sine-Gordon Equation with Dissipation via Boundary Control*. , 2018, , .		2
239	Output Feedback Energy Control of String PDE Model. IFAC-PapersOnLine, 2019, 52, 138-143.	0.9	2
240	Finite-Differential Nonsmooth Speed-Gradient Control: Stability, Passivity, Robustness. SIAM Journal on Control and Optimization, 2021, 59, 1370-1392.	2.1	2
241	Robotics Education in Saint Petersburg Secondary School. Advances in Intelligent Systems and Computing, 2018, , 38-49.	0.6	2
242	Modelling, simulation and experiment with double pendulum chaotic toy. , 1999, , .		2
243	Hybrid Quantised Observer for Multi-input-multi-output Nonlinear Systems. World Scientific Series on Nonlinear Science, Series B, 2010, , 89-102.	0.2	2
244	Adaptive time-delayed feedback control. IEICE Proceeding Series, 2014, 1, 674-677.	0.0	2
245	Adaptive control of synchronization for the heterogeneous Hindmarsh-Rose network. IFAC-PapersOnLine, 2020, 53, 146-151.	0.9	2
246	Parameter Estimation for Hindmarsh–Rose Neurons. Electronics (Switzerland), 2022, 11, 885.	3.1	2
247	Adaptive Multiple Synchronization and Phase Shift Control for Mechatronic Vibrational Setup. , 2022, , .		2
248	A comparison of adaptive and nonadaptive feedback for discrete-time plants with dead time. IEEE Transactions on Automatic Control, 1993, 38, 492-495.	5.7	1
249	"RUSYCONâ€â€"Portal of Scientific Information. Automation and Remote Control, 2003, 64, 1820-1825.	0.8	1
250	Energy Speed-Gradient Control of Satellite Oscillations. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 417-422.	0.4	1
251	ANALYSIS OF A CHAOTIC SYNCHRONISATION SYSTEM UNDER INFORMATION CONSTRAINTS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 142-147.	0.4	1

#	ARTICLE	IF	CITATIONS
253	Finite time practical stabilization of nonlinear detectable systems by uniting control. , 2007, , .		1
254	ConicS-procedure and constrained dissipativity for linear systems. International Journal of Robust and Nonlinear Control, 2007, 17, 405-413.	3.7	1
255	9th IFAC Workshop "Adaptation and Learning in Control and Signal Processing―(ALCOSP 2007) and 3rd IFAC Workshop "Periodic Control Systems―(PSYCO 2007). Automation and Remote Control, 2008, 69, 733-736.	0.8	1
256	Adaptive control of linear systems with coordinatewise-parametric perturbations of white noise type. Vestnik St Petersburg University: Mathematics, 2009, 42, 204-211.	0.4	1
257	Wave control in the lattices of linear oscillators. , 2010, , .		1
258	Adaptive synchronization of nonlinear networks with delayed couplings under incomplete control and incomplete measurements*. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 1249-1254.	0.4	1
259	Natural wave control in lattices of linear oscillators. Systems and Control Letters, 2012, 61, 887-893.	2.3	1
260	State estimation of complex oscillatory system with uniform quantization under data rate constraints. , 2012, , .		1
261	Robust and Adaptive Passification Based Consensus Control of Dynamical Networks. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 707-711.	0.4	1
262	Passification-based adaptive control with quantized measurements. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 1477-1482.	0.4	1
263	Quadrocopters Formation Control Over the Limited-band Communication Networkâ^—â^—This work was performed in the IPME RAS and supported by the Russian Scientific Foundation (project 14-29-00142) IFAC-PapersOnLine, 2015, 48, 85-90.	0.9	1
264	Passification of MIMO linear systems with respect to given output. , 2016, , .		1
265	Adaptive Stabilization of Linear Systems Through a Two-Way Channel with Limited Capacity. IFAC-PapersOnLine, 2016, 49, 164-168.	0.9	1
266	Speed-gradient entropy maximization in networks. , 2016, , .		1
267	Adaptively Controlled Synchronization of Delay-Coupled Networks. Understanding Complex Systems, 2016, , 47-63.	0.6	1
268	Popov-like criterion for the complex-variable systems 1 1The work was supported by the SPbSU grant 6.38.230.2015. The Lyapunov function existence criterion (Section 4.1) was obtained in IPME RAS under sole support of RSF, grant 14-29-00142 IFAC-PapersOnLine, 2017, 50, 8157-8162. The results of	0.9	1
269	Section 3 were developed under support of RSF (grant 14-29-00142) in IPME RAS. The results of Section 4 were developed under support of Russian Federation President Grant (No. 14.W01.16.6325-MD) Tj ETQq1 1 Basic Research No. 17-08-01266. 17-08-01728 and Government of Russian Federation. Grant 074-1101	0.784314 r 0.9	gBŢ /Overloo
270	IFAC-PapersOnLine, 2017, 50, 9619-9624. Teaching Robotics in Secondary School: Examples and Outcomes. IFAC-PapersOnLine, 2017, 50, 12167-12172.	0.9	1

#	Article	IF	CITATIONS
271	Control of nonlinear shock waves propagation for isothermal Euler equations. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2018, 98, 448-453.	1.6	1
272	Dynamics of an escort probability-based systems which tend to maximize its Tsallis entropy. IFAC-PapersOnLine, 2018, 51, 180-185.	0.9	1
273	On Synchronization in FitzHugh-Nagumo Networks with Small Delays. , 2018, , .		1
274	Control Of Isomerization In Ensembles Of Nonrigid Molecules based on Classical and Quantum-mechanical Models, LiCN. , 2006, , .		1
275	Adaptive stabilization of minimum-phase systems under quantized measurements. IFAC-PapersOnLine, 2020, 53, 3761-3766.	0.9	1
276	Desynchronization in Oscillatory Networks Based on Yakubovich Oscillatority. IFAC-PapersOnLine, 2020, 53, 1037-1042.	0.9	1
277	Machine Learning and Artificial Intelligence in the Works of V.A. Yakubovich. Vestnik St Petersburg University: Mathematics, 2021, 54, 381-383.	0.4	1
278	Self-excited oscillatory regimes in the growth of thin films from a multicomponent vapor: Dynamics and control. Technical Physics, 1997, 42, 1027-1030.	0.7	0
279	Adaptive control synthesis for a chua circuit by the velocity gradient method. Cybernetics and Systems Analysis, 1997, 33, 251-258.	0.7	0
280	Stabilization of Invariant Sets in Nonlinear Systems: Chetaev's Bundles and Speed-Gradient. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2000, 33, 45-50.	0.4	0
281	A controlled closing theorem. Differential Equations, 2000, 36, 813-818.	0.7	0
282	Radiationless recombination mechanisms in GaN surface layers determined from photoluminescence. Physica Status Solidi A, 2003, 195, 106-111.	1.7	0
283	Control applications in physics: From control of chaos to quantum control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2003, 36, 5-6.	0.4	0
284	Determining parameters of ferroelectric crystals by method of optimization. Technical Physics Letters, 2004, 30, 1013-1016.	0.7	0
285	The Second International Conference "Physics and Control― Automation and Remote Control, 2005, 66, 2033-2034.	0.8	0
286	CONIC S-PROCEDURE AND CONSTRAINED DISSIPATIVITY FOR LINEAR SYSTEMS 1. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 279-284.	0.4	0
287	Information Transmission by Means of Chaos-Based Frequency Modulation and Adaptive Identification. Control Applications (CCA), Proceedings of the IEEE International Conference on, 2007, , .	0.0	0

Nonlinear and Adaptive Control of Chaos. , 0, , 129-157.

#	Article	IF	CITATIONS
289	The optimality of the velocity-gradient method in the problem of controlling the escape from a potential well. Prikladnaya Matematika I Mekhanika, 2007, 71, 809-818.	0.4	0
290	Control algorithm design for passing through resonance of two-rotor vibration unit. , 2008, , .		0
291	Passification-based robust flight control system design. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 66-71.	0.4	0
292	Decentralized Adaptive Controller for Sychronization of Nonlinear Dynamical Heterogeneous Networks. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 324-329.	0.4	0
293	Call for Papers: Special Issue of International Journal of Adaptive Control and Signal Processing on â€~Simple and Robust Adaptive Control'. International Journal of Adaptive Control and Signal Processing, 2012, 26, 556-556.	4.1	0
294	Passification Based Controlled Synchronization of Complex Networks. Springer Proceedings in Complexity, 2013, , 993-996.	0.3	0
295	9th IFAC Symposium on Advances in Control Education (ACE 2012) [Conference Reports]. IEEE Control Systems, 2013, 33, 71-76.	0.8	0
296	Analysis of nonlinear local voting protocol for stochastic dynamical networks. , 2014, , .		0
297	Dynamics of differential entropy maximization process via the Speed Gradient principle. , 2015, , .		0
298	My Teacher. IFAC-PapersOnLine, 2015, 48, 1033-1036.	0.9	0
299	Simulation of MEPP via speed-gradient principle. , 2015, , .		0
300	Synchronization of passifiable linear networks by output feedback. , 2015, , .		0
301	Control of antikinks of the Sine Gordon equation. AIP Conference Proceedings, 2016, , . Robust Control of Multi-Machine Power Systems Caused by Perturbation of Mechanical Input Power	0.4	0
302	and Variable Unknown Communication Time-Delay**The proof of control algorithms was proposed in Appendix A is supported solely by the grant from the Russian Science Foundation (project No.) Tj ETQq0 0 0 rgBT	- /Qverlock	10 Tf 50 22
303	The other researches were p. IFAC-PapersOnLine, 2016, 49, 24-29. Feedback control of monotonic shocks. Journal of Physics: Conference Series, 2017, 788, 012030.	0.4	0
304	Further progress in control of localized nonlinear waves. Journal of Physics: Conference Series, 2017, 937, 012043.	0.4	0
305	Analysis of Two-layer Network of FitzHugh-Nagumo Oscillators with Different Layer Topology. IFAC-PapersOnLine, 2018, 51, 235-240.	0.9	0
306	Information Transmission Over the Limited-rate Communication Channel by Chaotic Signal Modulation and Non-linear Observer IFAC-PapersOnLine, 2018, 51, 91-96.	0.9	0

#	Article	IF	CITATIONS
307	On robust stability of multistable passive systems. , 2019, , .		Ο
308	Two-point Output Feedback Boundary Control for Semilinear Hyperbolic Systems. IFAC-PapersOnLine, 2019, 52, 54-59.	0.9	0
309	Energy control of the pendulum without measuring its angular velocity. , 2020, , .		0
310	On robustness against disturbances of passive systems with multiple invariant sets. International Journal of Control, 2020, , 1-13.	1.9	0
311	Feedback design of control algorithms for dissociation of diatomic molecules. , 2003, , .		0
312	Control over Internet of Oscillations for Group of Pendulums. , 2017, , 205-213.		0
313	Projected Dynamics of Constrained Hamiltonian Systems. , 2018, , .		0
314	A team of soccer robots for RoboCup competitions in SSL league: system and algorithms. Informatsionno-Upravliaiushchie Sistemy, 2019, , 19-25.	0.4	0
315	Selective excitation of identical conservative port-Hamiltonian systems by a single control. , 2019, , .		Ο