Sergey Dashkovskiy

List of Publications by Year
in descending order

93 papers	2,075 citations	361413 20 h-index	243625 44 g-index
96 all docs	96 docs citations	96 times ranked	955 citing authors

#	Article	IF	Citations
1	An ISS small gain theorem for general networks. Mathematics of Control, Signals, and Systems, 2007, 19, 93-122.	2.3	314
2	Input-to-State Stability of Nonlinear Impulsive Systems. SIAM Journal on Control and Optimization, 2013, 51, 1962-1987.	2.1	204
3	Input-to-state stability of infinite-dimensional control systems. Mathematics of Control, Signals, and Systems, 2013, 25, 1-35.	2.3	158
4	Input to state stability and allied system properties. Automation and Remote Control, 2011, 72, 1579-1614.	0.8	140
5	Stability of interconnected impulsive systems with and without time delays, using Lyapunov methods. Nonlinear Analysis: Hybrid Systems, 2012, 6, 899-915.	3.5	123
6	Input-to-state stability of impulsive systems and their networks. Nonlinear Analysis: Hybrid Systems, 2017, 26, 190-200.	3.5	110
7	Local Capacity H_{infty} Control for Production Networks of Autonomous Work Systems With Time-Varying Delays. IEEE Transactions on Automation Science and Engineering, 2010, 7, 849-857.	5.2	90
8	On a Small Gain Theorem for ISS Networks in Dissipative Lyapunov Form. European Journal of Control, 2011, 17, 357-365.	2.6	84
9	A small gain framework for networked cooperative force-reflecting teleoperation. Automatica, 2013, 49, 338-348.	5.0	69
10	Input-to-state stability of interconnected hybrid systems. Automatica, 2013, 49, 1068-1074.	5.0	55
11	Capability and limitation of max- and sum-type construction of Lyapunov functions for networks of iISS systems. Automatica, 2012, 48, 1197-1204.	5.0	50
12	Local ISS of large-scale interconnections and estimates for stability regions. Systems and Control Letters, 2010, 59, 241-247.	2.3	44
13	A Small-Gain Condition for Interconnections of ISS Systems With Mixed ISS Characterizations. IEEE Transactions on Automatic Control, 2011, 56, 1247-1258.	5.7	39
14	Global uniform input-to-state stabilization of large-scale interconnections of MIMO generalized triangular form switched systems. Mathematics of Control, Signals, and Systems, 2012, 24, 135-168.	2.3	37
15	Stability conditions for infinite networks of nonlinear systems and their application for stabilization. Automatica, 2020, 112, 108643.	5.0	35
16	Asymptotic properties of Zeno solutions. Nonlinear Analysis: Hybrid Systems, 2018, 30, 256-265.	3.5	30
17	Nacre properties in the elastic range: Influence of matrix incompressibility. Computational Materials Science, 2007, 41, 96-106.	3.0	25
18	Finite thermoplasticity with phase changes based on isomorphisms. International Journal of Plasticity, 2004, 20, 323-334.	8.8	24

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19	Input-to-state Stability of Impulsive Systems with Different Jump Maps**This work was supported by the German Federal Ministry of Education and Research (BMBF) as a part of the research project "LadeRamProdukt".. IFAC-PapersOnLine, 2016, 49, 1073-1078.	0.9	24
20	Exponential Stability for Extremum Seeking Control Systems. IFAC-PapersOnLine, 2017, 50, 15464-15470.	0.9	24
21	A small-gain type stability criterion for large scale networks of ISS systems. , 0, , .		20
22	A Lyapunovâ€"Razumikhin approach for stability analysis of logistics networks with time-delays. International Journal of Systems Science, 2012, 43, 845-853.	5.5	20
23	Invariance and stability of global attractors for multi-valued impulsive dynamical systems. Journal of Mathematical Analysis and Applications, 2018, 458, 193-218.	1.0	20
24	Stability conditions for impulsive dynamical systems. Mathematics of Control, Signals, and Systems, 2022, 34, 95-128.	2.3	20
25	On the uniform input-to-state stability of reaction-diffusion systems. , 2010, , .		18
26	Stability analysis of autonomously controlled production networks. International Journal of Production Research, 2011, 49, 4857-4877.	7.5	18
27	On a small gain theorem for networks of iISS systems. , 2009, , .		15
28	Global attractors of impulsive parabolic inclusions. Discrete and Continuous Dynamical Systems - Series B, 2017, 22, 1875-1886.	0.9	15
29	Stability analysis of logistics networks with time-delays. Production Planning and Control, 2013, 24, 567-574.	8.8	14
30	Stability of infinitely many interconnected systems. IFAC-PapersOnLine, 2019, 52, 550-555.	0.9	12
31	ISDS small-gain theorem and construction of ISDS Lyapunov functions for interconnected systems. Systems and Control Letters, 2010, 59, 299-304.	2.3	11
32	Modeling and stability analysis of autonomously controlled production networks. Logistics Research, 2011, 3, 145-157.	1.6	11
33	Stability of networks of hybrid ISS systems. , 2009, , .		10
34	Local ISS of Reaction-Diffusion Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 11018-11023.	0.4	10
35	Modeling, Optimization and Solving Strategies for Matching Problems in Cooperative Full Truckload Networksâ€”â€”This work is supported by the German Federal Ministry of Education and Research (BMBF) as a part of the research project â€¥En-twicklung und Erprobung produktivitats- und effizienzsteigernder Losungen zur intelligenten Vernetzung nationaler Ladungsverkehre (iLAN)â€¥.. IFAC-PapersOnLine, 2016, 49, 16-23.	0.9	10
36	Constructive Design of Adaptive Controllers for Nonlinear MIMO Systems With Arbitrary Switchings. IEEE Transactions on Automatic Control, 2016, 61, 2001-2007.	5.7	9

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37	Prolongation and stability of Zeno solutions to hybrid dynamical systems * *This work was supported by the German Federal Ministry of Education and Research (BMBF) as a part of the research project â€œLadeRamProduktâ€•. IFAC-PapersOnLine, 2017, 50, 3429-3434.	0.9	9
38	A local input-to-state stability result w.r.t.Âattractors of nonlinear reactionâ€"diffusion equations. Mathematics of Control, Signals, and Systems, 2020, 32, 309-326.	2.3	9
39	Quasi-ISS/ISDS observers for interconnected systems and applications. Systems and Control Letters, 2015, 77, 11-21.	2.3	8
40	Integrator backstepping for uncertain nonlinear systems with non-smooth dynamics. European Journal of Control, 2018, 40, 68-79.	2.6	8
41	Practical examples of ISS systems. IFAC-PapersOnLine, 2019, 52, 1-6.	0.9	7
42	Stability of uniform attractors of impulsive multi-valued semiflows. Nonlinear Analysis: Hybrid Systems, 2021, 40, 101025.	3.5	7
43	A comparison of mathematical modelling approaches for stability analysis of supply chains. International Journal of Logistics Systems and Management, 2011, 10, 208.	0.2	6
44	Autonomous control methods in logistics â€" A mathematical perspective. Applied Mathematical Modelling, 2012, 36, 2947-2960.	4.2	6
45	Uniform bounded input bounded output stability of fractionalâ€order delay nonlinear systems with input. International Journal of Robust and Nonlinear Control, 2021, 31, 225-249.	3.7	6
46	Uniform asymptotic stabilization of nonlinear switched systems with arbitrary switchings and with dynamic uncertainties by means of small gain theorems. , 2013, , .		5
47	Zeno phenomenon in hybrid dynamical systems. Proceedings in Applied Mathematics and Mechanics, 2017, 17, 789-790.	0.2	5
48	Well-posedness of non-autonomous semilinear systems. IFAC-PapersOnLine, 2019, 52, 216-220.	0.9	5
49	Existence and Invariance of Global Attractors for Impulsive Parabolic System Without Uniqueness. Understanding Complex Systems, 2019, , 57-78.	0.6	5
50	Mathematical Models of Autonomous Logistic Processes. , 2007, , 121-138.		5
51	On a small gain theorem for ISS networks in dissipative Lyapunov form. , 2009, , .		5
52	THERMAL PLASMA CUTTING. PART I: MODIFIED MATHEMATICAL MODEL. Mathematical Modelling and Analysis, 2007, 12, 441-458.	1.5	4
53	Application of the LISS Lyapunov-Krasovskii small-gain theorem to autonomously controlled production networks with time-delays. , 2010, , .		4
54	Behavior of solutions to systems with maximum. IFAC-PapersOnLine, 2017, 50, 12925-12930.	0.9	4

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55	Some Remarks on Stability and Robustness of Production Networks Based on Fluid Models. , 2011, , 27-35.		4
56	Robustness and averaging properties of a large-amplitude, high-frequency extremum seeking control scheme. Automatica, 2022, 136, 110020.	5.0	4
57	Structure-preserving model reduction of large-scale logistics networks. European Physical Journal B, 2011, 84, 501-520.	1.5	3
58	Input-to-state stability for model predictive control of single systems and networks with time-delays. , 2012, , .		3
59	Alternative stability conditions for hybrid systems. , 2013, , .		3
60	Decentralized Stabilization of Infinite Networks of Systems with Nonlinear Dynamics and Uncontrollable Linearization. IFAC-PapersOnLine, 2017, 50, 1692-1698.	0.9	3
61	Trajectory–based small gain theorems for ISpS and ISS of large–scale networks of switched systems with arbitrary switchings. IET Control Theory and Applications, 2017, 11, 757-765.	2.1	3
62	Asymptotic gain results for attractors of semilinear systems. Mathematical Control and Related Fields, 2022, 12, 763.	1.1	3
63	What to do when hybrid systems â€œfreezeâ€•due to an interconnection?. , 2013, , .		3
64	Attractors for Multivalued Impulsive Systems: Existence and Applications to Reaction-Diffusion System. Mathematical Problems in Engineering, 2021, 2021, 1-7.	1.1	3
65	ISS of interconnected impulsive systems with and without time-delays. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 831-836.	0.4	2
66	Special issue on robust stability and control of large-scale nonlinear systems. Mathematics of Control, Signals, and Systems, 2012, 24, 1-2.	2.3	2
67	Approximation of Solutions to the Optimal Control Problems for Systems with Maximum. Journal of Mathematical Sciences, 2019, 243, 192-203.	0.4	2
68	Reduction of the small gain condition for large–scale interconnections. International Journal of Robust and Nonlinear Control, 2015, 25, 842-864.	3.7	1
69	Reduction of Waiting Time in Logistics Centers by Trailer Yards. IFAC-PapersOnLine, 2017, 50, 7959-7963.	0.9	1
70	An Approach to Model Reduction of Logistic Networks Based on Ranking. , 2011, , 91-103.		1
71	Input-to-state stability results w.r.t. global attractors of semi-linear reaction-diffusion equations. IFAC-PapersOnLine, 2020, 53, 3186-3191.	0.9	1
72	Autonomous and Central Control of Production Networks. , 2011, , 27-43.		1

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73	Robust stability of a perturbed nonlinear wave equation. IFAC-PapersOnLine, 2020, 53, 3168-3173.	0.9	1
74	Dynamic Optimization Model for Planning of Multi-echelon Logistic System Activity. Lecture Notes in Logistics, 2020, , 331-340.	0.8	1
75	Application of Small Gain Type Theorems in Logistics of Autonomous Processes. , 2008, , 359-366.		1
76	Exponential synchronization of master-slave neural networks with time-delays. , 2009, , .		0
77	Backstepping for nonsmooth MIMO nonlinear Volterra systems with noninvertible input-output maps *. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 1158-1162.	0.4	0
78	Quasi-ISS/ISDS reduced-order observers and quantized output feedback for interconnected systems. , 2010, , .		0
79	Final Comments by the Authors. European Journal of Control, 2011, 17, 369.	2.6	0
80	Design of adaptive controllers for nonlinear switched systems with arbitrary switchings. , 2012, , .		0
81	Constructions of ISS-Lyapunov functions for interconnected impulsive systems. , 2012, , .		0
82	Reduction of the small gain condition. , 2012, , .		0
83	MPC Schemes Guaranteeing ISDS and ISS for Nonlinear (Time-Delay) Systems. Mathematical Problems in Engineering, 2012, 2012, 1-28.	1.1	0
84	On the Relation between Dwell-Time and Small-Gain Conditions for Interconnected Impulsive Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 229-234.	0.4	0
85	Stability of nonlinear infinite dimensional impulsive systems and their interconnections. , 2014, , .		0
86	Application of Lyapunov Functions to Teleoperator Networks with Communication Delays. IFAC-PapersOnLine, 2016, 49, 7-12.	0.9	0
87	Almost ISS property for feedback connected systems. Automatica, 2017, 79, 231-234.	5.0	0
88	Cycles as a Solving Strategy for Matching Problems in Cooperative Full Truckload Networks. IFAC-PapersOnLine, 2017, 50, 7941-7946.	0.9	0
89	Robustness of global attractors: Abstract framework and application to dissipative wave equations. Evolution Equations and Control Theory, 2021, .	1.3	0
90	A small gain condition for interconnections of ISS systems with mixed ISS characterizations. , 2009, , .		0

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91	Stability Analysis Scheme for Autonomously Controlled Production Networks with Transportations. Lecture Notes in Logistics, 2013, , 453-463.	0.8	0
92	Stability of Uniformly Attracting Sets for Impulsive-Perturbed Multi-Valued Semiflows. IFAC-PapersOnLine, 2020, 53, 3180-3185.	0.9	0
93	The ISS property for a feedback connection of an ODE with a parabolic PDE. IFAC-PapersOnLine, 2020, 53, 3174-3179.	0.9	0