Nikhil Chopra

List of Publications by Year
in descending order

66 papers	2,538 citations	687220 13 h-index	713332 21 g-index
68 all docs	68 docs citations	68 times ranked	1778 citing authors

#	Article	IF	Citations
1	On Exponential Synchronization of Kuramoto Oscillators. IEEE Transactions on Automatic Control, 2009, 54, 353-357.	3.6	334
2	Synchronization of bilateral teleoperators with time delay. Automatica, 2008, 44, 2142-2148.	3.0	311
3	On Event Triggered Tracking for Nonlinear Systems. IEEE Transactions on Automatic Control, 2013, 58, 2343-2348.	3.6	280
4	Controlled Synchronization of Heterogeneous Robotic Manipulators in the Task Space. IEEE Transactions on Robotics, 2012, 28, 268-275.	7.3	181
5	Decentralized connectivity maintenance for cooperative control of mobile robotic systems. International Journal of Robotics Research, 2013, 32, 1411-1423.	5.8	135
6	Output Synchronization on Strongly Connected Graphs. IEEE Transactions on Automatic Control, 2012, 57, 2896-2901.	3.6	126
7	Distributed Control of Multirobot Systems With Global Connectivity Maintenance. IEEE Transactions on Robotics, 2013, 29, 1326-1332.	7.3	123
8	Output Synchronization of Nonlinear Systems with Time Delay in Communication. , 2006, , .		111
9	Decentralized Event-Triggering for Control of Nonlinear Systems. IEEE Transactions on Automatic Control, 2014, 59, 3312-3324.	3.6	103
10	Control of semi-autonomous teleoperation system with time delays. Automatica, 2013, 49, 1553-1565.	3.0	99
11	Event-triggered dynamic output feedback control for LTI systems. , 2012, , .		84
12	Passivity-Based Distributed Optimization With Communication Delays Using PI Consensus Algorithm. IEEE Transactions on Automatic Control, 2018, 63, 4421-4428.	3.6	81
13	On synchronization and collision avoidance for mechanical systems. , 2008, , .		42
14	On decentralized connectivity maintenance for mobile robotic systems. , 2011, , .		39
15	Control of Robotic Manipulators Under Input/Output Communication Delays: Theory and Experiments. IEEE Transactions on Robotics, 2012, 28, 742-751.	7.3	34
16	Synchronization of networked robotic systems on strongly connected graphs. , 2010, , .		32
17	On event triggered trajectory tracking for control affine nonlinear systems. , 2011, , .		30
18	Passivity-based bilateral human-swarm-interactions for cooperative robotic networks and human passivity analysis. , 2015, , .		27

#	Article	IF	Citations
19	Privacy in Distributed Average Consensus * *This work was supported by the Naval Air Warfare Center Aircraft Division - Pax River, MD under contract N00421132M022.. IFAC-PapersOnLine, 2017, 50, 9515-9520.	0.5	27
20	False Data Injection Attacks in Bilateral Teleoperation Systems. IEEE Transactions on Control Systems Technology, 2020, 28, 1168-1176.	3.2	21
21	Passivity results for interconnected systems with time delay. , 2008, , .		18
22	Optimal actuator placement for linear systems with limited number of actuators. , 2017, , .		17
23	Delay-independent stability for interconnected nonlinear systems with finite L<inf>2</inf> gain. , 2007, , .		16
24	Semi-autonomous teleoperation in task space with redundant slave robot under communication delays. , 2011, , .		16
25	Event-triggered dynamic output feedback control of LTI systems over Sensor-Controller-Actuator Networks. , 2013, , .		16
26	Control of robotic manipulators with input/output delays. , 2009, , .		15
27	Distributed control of multi-robot systems with global connectivity maintenance. , 2011, , .		15
28	Decentralized connectivity maintenance for networked Lagrangian dynamical systems. , 2012, , .		15
29	Decentralized event-triggering for control of LTI systems. , 2013, , .		15
30	Decentralized control for maintenance of strong connectivity for directed graphs. , 2013, , .		15
31	Gravity-Compensation-Driven Position Regulation for Robotic Systems Under Input/Output Delays. IEEE Transactions on Control Systems Technology, 2014, 22, 995-1005.	3.2	13
32	Motion synchronization for semi-autonomous robotic swarm with a passivity-short human operator. International Journal of Intelligent Robotics and Applications, 2018, 2, 235-251.	1.6	13
33	Passivity-based control of robots: Historical perspective and contemporary issues. , 2015, , .		12
34	Statistical Privacy in Distributed Average Consensus on Bounded Real Inputs. , 2019, , .		11
35	Control of robotic manipulators under time-varying sensing-control delays. , 2010, , .		10
36	Confidentiality in distributed average information consensus. , 2016, , .		9

#	Article	IF	Citations
37	Passivity-based control of human-robotic networks with inter-robot communication delays and experimental verification. , 2017, , .		9
38	Passivity-Based Bilateral Tele-Driving System With Parametric Uncertainty and Communication Delays. , 2019, 3, 350-355.		9
39	Content modification attacks on consensus seeking multi-agent system with double-integrator dynamics. Chaos, 2016, 26, 116305.	1.0	7
40	Robotic Parasitic Array Optimization in Outdoor Environments. , 2019, , .		7
41	Iterative Pre-Conditioning to Expedite the Gradient-Descent Method. , 2020, , .		7
42	On Co-design of event trigger and quantizer for emulation based control. , 2012, , .		6
43	Bilateral Teleoperation of Soft Robots under Piecewise Constant Curvature Hypothesis: An Experimental Investigation. , 2020, , .		6
44	Passivity-Based Control of Robots: Theory and Examples from the Literature. IEEE Control Systems, 2022, 42, 63-73.	1.0	6
45	On content modification attacks in bilateral teleoperation systems. , 2016, , .		5
46	Optimal structured static output feedback design using generalized benders decomposition. , 2017, , .		4
47	Decentralized Multisubsystem Co-Design Optimization Using Direct Collocation and Decomposition-Based Methods. Journal of Mechanical Design, Transactions of the ASME, 2020, 142, .	1.7	4
48	Communication Maintenance of Robotic Parasitic Antenna Arrays. IEEE Robotics and Automation Letters, 2020, 5, 6475-6482.	3.3	3
49	Iterative pre-conditioning for expediting the distributed gradient-descent method: The case of linear least-squares problem. Automatica, 2022, 137, 110095.	3.0	3
50	Robust controlled synchronization of interconnected robotic systems. , 2010, , .		2
51	A new formulation for co-design of linear systems with system matrices having affine design variables. , 2016, , .		2
52	Observability-based secure state encryption design for cyberphysical systems. , 2018, , .		2
53	Preserving Statistical Privacy in Distributed Optimization. , 2021, 5, 779-784.		2
54	Stability analysis of a two-channel feedback networked control system. , 2016, , .		1

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55	Robustness of distributive double-integrator consensus to loss of graph connectivity. , 2017, , .		1
56	Model-Based Encryption: Privacy of States in Networked Control Systems. , 2018, , .		1
57	Robustness of Iteratively Pre-Conditioned Gradient-Descent Method: The Case of Distributed Linear Regression Problem. , 2021, 5, 2180-2185.		1
58	Differential flatness of a front-steered vehicle with tire force control. , 2011, , .		1
59	Laparoscopic management of hydatid cysts with biliary communication: clips may rescue when suture fails - report of three cases. Turkish Journal of Surgery, 2019, 35, 227-230.	0.1	1
60	Robotic Parasitic Array Control for Increased RSS in Non-Line-of-Sight. IEEE Robotics and Automation Letters, 2022, 7, 9167-9174.	3.3	1
61	On ultimate boundedness of delay synchronization algorithms for semi-passive systems. , 2010, , .		0
62	Position regulation of flexible-joint robots with input/output constant delays. , 2013, , .		0
63	A passivity-based perspective for distributed optimization and integration of communication delays. , 2017, , .		0
64	On Distributed Solution of Ill-Conditioned System of Linear Equations under Communication Delays. , 2019, , .		0
65	On Preconditioning of Decentralized Gradient-Descent When Solving a System of Linear Equations. IEEE Transactions on Control of Network Systems, 2022, 9, 811-822.	2.4	0
66	Laparoscopic management of hydatid cysts with biliary communication: Clips may rescue when suture fails-report of 3 cases. Turkish Journal of Surgery, 2018, , 1-3.	0.1	0