John Baillieul

List of Publications by Year
in descending order

53 papers	3,000 citations	471509 17 h-index	526287 27 g-index
56 all docs	56 docs citations	56 times ranked	1567 citing authors

#	Article	IF	Citations
1	Information-Based Multi-agent Systems. , 2021, , 1012-1016.		0
2	Neuromimetic Control â€" A Linear Model Paradigm. , 2021, , .		2
3	Perceptual Control with Large Feature and Actuator Networks. , 2019, , .		5
4	Paradigm and Paradox in Topology Control of Power Grids. , 2018, , .		0
5	Reflections on the Future of Research Curation and Research Reproducibility [Point of View]. Proceedings of the IEEE, 2018, 106, 779-783.	21.3	2
6	Introduction to the Special Issue on Approaches to Control Biological and Biologically Inspired Networks. IEEE Transactions on Control of Network Systems, 2018, 5, 690-693.	3.7	2
7	Control and Communication Protocols Based on Packetized Direct Load Control in Smart Building Microgrids. Proceedings of the IEEE, 2016, 104, 837-857.	21.3	27
8	Perceptual Modalities Guiding Bat Flight in a Native Habitat. Scientific Reports, 2016, 6, 27252.	3.3	15
9	The Kirchhoff-Braess paradox and its implications for smart microgrids. , 2015, , .		7
10	Algorithmic approaches to artistic movement. , 2014, , .		3
11	Saliency based control in random feature networks. , 2014, , .		6
12	Information-Based Multi-Agent Systems. , 2014, , 1-5.		0
13	Optimal price-controlled demand response with explicit modeling of consumer preference dynamics. , 2014, , .		11
14	Dancing Robots: The Control Theory of Communication Through Movement. , 2014, , 51-72.		6
15	Perception and Steering Control in Paired Bat Flight. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 5276-5282.	0.4	4
16	Communication and Control Protocols for Load Networks in the Smart Grid. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 11250-11256.	0.4	4
17	A two level feedback system design to provide regulation reserve. , 2013, , .		6
18	A novel packet switching framework with binary information in demand side management. , 2013, , .		14

#	Article	IF	Citations
19	Optical flow sensing and the inverse perception problem for flying bats. , 2013, , .		8
20	Control Communication Complexity of Distributed Actions. IEEE Transactions on Automatic Control, 2012, 57, 2731-2745.	5.7	17
21	A packetized direct load control mechanism for demand side management. , 2012, , .		25
22	Decision Making for Rapid Information Acquisition in the Reconnaissance of Random Fields. Proceedings of the IEEE, 2012, 100, 776-801.	21.3	6
23	Interaction Dynamics: The Interface of Humans and Smart Machines [Scanning the Issue]. Proceedings of the IEEE, 2012, 100, 567-570.	21.3	16
24	A Motion Description Language for Robotic Reconnaissance of Unknown Fields. European Journal of Control, 2011, 17, 512-525.	2.6	10
25	Topology guided search of potential fields. , 2010, , .		0
26	Search decisions in a game of polynomial root counting. , 2010, , .		0
27	CDC/CCC 2009 [Conference Reports]. IEEE Control Systems, 2010, 30, 114-121.	0.8	0
28	Exploiting information content in relative motion. , 2009, , .		10
29	Motion based communication channels between mobile robots - A novel paradigm for low bandwidth information exchange. , 2009, , .		11
30	CDC/CCC 2009--A Shanghai Journey [CDC Preview]. IEEE Control Systems, 2009, 29, 119-130.	0.8	1
31	Welcome from the General Co-Chairs. , 2009, , .		0
32	Control Communication Complexity of Nonlinear Systems. Communications in Information and Systems, 2009, 9, 103-140.	0.5	17
33	Search decisions for teams of automata. , 2008, , .		8
34	Autonomous vehicle control for ascending/descending along a potential field with two applications. , 2008, , .		32
35	Reactive exploration through following isolines in a potential field. Proceedings of the American Control Conference, 2007, , .	0.0	29
36	Control and Communication Challenges in Networked Real-Time Systems. Proceedings of the IEEE, 2007, 95, 9-28.	21.3	734

#	Article	IF	Citations
37	Special Issue on Technology of Networked Control Systems. Proceedings of the IEEE, 2007, 95, 5-8.	21.3	521
38	Tracking a nanosize magnetic particle using a magnetic force microscope. , 2007, , .		4
39	Open Loop Vibrational Control for Cantilevered Electromagnetic Actuators. , 2006, , .		3
40	Robust Quantization for Digital Finite Communication Bandwidth (DFCB) Control. IEEE Transactions on Automatic Control, 2004, 49, 1573-1584.	5.7	131
41	Guest Editorial Special Issue on Networked Control Systems. IEEE Transactions on Automatic Control, 2004, 49, 1421-1423.	5.7	378
42	Control problems in super-articulated mechanical systems. IEEE Transactions on Automatic Control, 1994, 39, 2442-2453.	5.7	80
43	Adaptive control of nonlinear systems with a triangular structure. IEEE Transactions on Automatic Control, 1994, 39, 1411-1428.	5.7	324
44	Stabilizability and stabilization of a rotating body-beam system with torque control. IEEE Transactions on Automatic Control, 1993, 38, 1754-1765.	5.7	77
45	Equilibrium mechanics of rotating systems. , 1987, , .		11
46	Rotational elastic dynamics. Physica D: Nonlinear Phenomena, 1987, 27, 43-62.	2.8	80
47	Design of kinematically redundant mechanisms. , 1985, , .		8
48	Geometric critical point analysis of lossless power system models. IEEE Transactions on Circuits and Systems, 1982, 29, 724-737.	0.9	74
49	Controllability and observability of polynomial dynamical systems. Nonlinear Analysis: Theory, Methods & Applications, 1981, 5, 543-552.	1.1	60
50	The geometry of homogeneous polynomial dynamical systems. Nonlinear Analysis: Theory, Methods & Applications, 1980, 4, 879-900.	1.1	48
51	Chaotic motion in nonlinear feedback systems. IEEE Transactions on Circuits and Systems, 1980, 27, 990-997.	0.9	75
52	Geometric methods for nonlinear optimal control problems. Journal of Optimization Theory and Applications, 1978, 25, 519-548.	1.5	82
53	Green's relations in finite function semigroups. Aequationes Mathematicae, 1971, 7, 22-27.	0.8	6