

# Steve Brunton

## List of Publications by Year in Descending Order

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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.

176  
papers

8,698  
citations

42  
h-index

91  
g-index

204  
ext. papers

13,099  
ext. citations

4.1  
avg. IF

7.29  
L-index

#	Paper	IF	Citations
176	Parsimony as the ultimate regularizer for physics-informed machine learning. <i>Nonlinear Dynamics</i> , <b>2022</b> , 107, 1801	5	1
175	Principal component trajectories for modeling spectrally continuous dynamics as forced linear systems.. <i>Physical Review E</i> , <b>2022</b> , 105, 015312	2.4	1
174	PySINDy: A comprehensive Python package for robust sparse system identification. <i>Journal of Open Source Software</i> , <b>2022</b> , 7, 3994	5.2	6
173	Finite-horizon, energy-efficient trajectories in unsteady flows.. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , <b>2022</b> , 478, 20210255	2.4	1
172	Gust mitigation through closed-loop control. I. Trailing-edge flap response. <i>Physical Review Fluids</i> , <b>2022</b> , 7,	2.8	2
171	Gust mitigation through closed-loop control. II. Feedforward and feedback control. <i>Physical Review Fluids</i> , <b>2022</b> , 7,	2.8	1
170	Data-driven modeling of two-dimensional detonation wave fronts. <i>Wave Motion</i> , <b>2022</b> , 102879	1.8	0
169	Automatic differentiation to simultaneously identify nonlinear dynamics and extract noise probability distributions from data. <i>Machine Learning: Science and Technology</i> , <b>2022</b> , 3, 015031	5.1	1
168	Projection-tree reduced-order modeling for fast N-body computations. <i>Journal of Computational Physics</i> , <b>2022</b> , 459, 111141	4.1	1
167	Kernel learning for robust dynamic mode decomposition: linear and nonlinear disambiguation optimization.. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , <b>2022</b> , 478, 20210830	2.4	3
166	Ensemble-SINDy: Robust sparse model discovery in the low-data, high-noise limit, with active learning and control.. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , <b>2022</b> , 478, 20210904	2.4	2
165	Modern Koopman Theory for Dynamical Systems. <i>SIAM Review</i> , <b>2022</b> , 64, 229-340	7.4	7
164	An empirical mean-field model of symmetry-breaking in a turbulent wake.. <i>Science Advances</i> , <b>2022</b> , 8, eabm4786	14.3	2
163	Swarm Modelling with Dynamic Mode Decomposition. <i>IEEE Access</i> , <b>2022</b> , 1-1	3.5	0
162	DeepGreen: deep learning of Green's functions for nonlinear boundary value problems. <i>Scientific Reports</i> , <b>2021</b> , 11, 21614	4.9	4
161	Structured time-delay models for dynamical systems with connections to Frenet-Serret frame.. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , <b>2021</b> , 477, 20210097	2.4	4
160	Bilinear dynamic mode decomposition for quantum control. <i>New Journal of Physics</i> , <b>2021</b> , 23, 033035	2.9	3

159	Data-driven resolvent analysis. <i>Journal of Fluid Mechanics</i> , <b>2021</b> , 918,	3.7	12
158	Data-driven modeling of rotating detonation waves. <i>Physical Review Fluids</i> , <b>2021</b> , 6,	2.8	4
157	Data-driven discovery of Koopman eigenfunctions for control. <i>Machine Learning: Science and Technology</i> , <b>2021</b> , 2, 035023	5.1	15
156	SINDy-BVP: Sparse identification of nonlinear dynamics for boundary value problems. <i>Physical Review Research</i> , <b>2021</b> , 3,	3.9	4
155	Nonlinear stochastic modelling with Langevin regression.. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , <b>2021</b> , 477, 20210092	2.4	11
154	Physics-constrained, low-dimensional models for magnetohydrodynamics: First-principles and data-driven approaches. <i>Physical Review E</i> , <b>2021</b> , 104, 015206	2.4	12
153	Deep learning models for global coordinate transformations that linearise PDEs. <i>European Journal of Applied Mathematics</i> , <b>2021</b> , 32, 515-539	1	11
152	Bracketing brackets with bras and kets. <i>Journal of Manufacturing Systems</i> , <b>2021</b> , 58, 384-391	9.1	0
151	Extraction of Instantaneous Frequencies and Amplitudes in Nonstationary Time-Series Data. <i>IEEE Access</i> , <b>2021</b> , 9, 83453-83466	3.5	1
150	Optimal Sensor and Actuator Selection using Balanced Model Reduction. <i>IEEE Transactions on Automatic Control</i> , <b>2021</b> , 1-1	5.9	6
149	Deep Learning to Accelerate Scatterer-to-Field Mapping for Inverse Design of Dielectric Metasurfaces. <i>ACS Photonics</i> , <b>2021</b> , 8, 481-488	6.3	20
148	PySensors: A Python package for sparse sensor placement. <i>Journal of Open Source Software</i> , <b>2021</b> , 6, 2828	5.2	2
147	Learning dominant physical processes with data-driven balance models. <i>Nature Communications</i> , <b>2021</b> , 12, 1016	17.4	14
146	Go with the FLOW: visualizing spatiotemporal dynamics in optical widefield calcium imaging. <i>Journal of the Royal Society Interface</i> , <b>2021</b> , 18, 20210523	4.1	3
145	Sparse nonlinear models of chaotic electroconvection. <i>Royal Society Open Science</i> , <b>2021</b> , 8, 202367	3.3	7
144	Hybrid Learning Approach to Sensor Fault Detection with Flight Test Data. <i>AIAA Journal</i> , <b>2021</b> , 59, 3490-3503		5
143	Promoting global stability in data-driven models of quadratic nonlinear dynamics. <i>Physical Review Fluids</i> , <b>2021</b> , 6,	2.8	10
142	Intensity-Mosaic: automatic panorama mosaicking of disordered images with insufficient features. <i>Journal of Medical Imaging</i> , <b>2021</b> , 8, 054002	2.6	1

141	Data-driven stochastic modeling of coarse-grained dynamics with finite-size effects using Langevin regression. <i>Physica D: Nonlinear Phenomena</i> , <b>2021</b> , 427, 133004	3.3	1
140	Deep learning of conjugate mappings. <i>Physica D: Nonlinear Phenomena</i> , <b>2021</b> , 427, 133008	3.3	1
139	Data-Driven Stabilization of Periodic Orbits. <i>IEEE Access</i> , <b>2021</b> , 9, 43504-43521	3.5	2
138	Machine Learning of Dynamics with Applications to Flow Control and Aerodynamic Optimization. <i>Notes on Numerical Fluid Mechanics and Multidisciplinary Design</i> , <b>2021</b> , 327-335	0.3	0
137	Challenges in dynamic mode decomposition.. <i>Journal of the Royal Society Interface</i> , <b>2021</b> , 18, 20210686	4.1	4
136	Dimensionality reduction and reduced-order modeling for traveling wave physics. <i>Theoretical and Computational Fluid Dynamics</i> , <b>2020</b> , 34, 385-400	2.3	15
135	Sparse Principal Component Analysis via Variable Projection. <i>SIAM Journal on Applied Mathematics</i> , <b>2020</b> , 80, 977-1002	1.8	33
134	Time-Delay Observables for Koopman: Theory and Applications. <i>SIAM Journal on Applied Dynamical Systems</i> , <b>2020</b> , 19, 886-917	2.8	23
133	Sensor Selection With Cost Constraints for Dynamically Relevant Bases. <i>IEEE Sensors Journal</i> , <b>2020</b> , 20, 11674-11687	4	6
132	Shallow neural networks for fluid flow reconstruction with limited sensors. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , <b>2020</b> , 476, 20200097	2.4	29
131	Discovery of Physics From Data: Universal Laws and Discrepancies. <i>Frontiers in Artificial Intelligence</i> , <b>2020</b> , 3, 25	3	15
130	Characterizing magnetized plasmas with dynamic mode decomposition. <i>Physics of Plasmas</i> , <b>2020</b> , 27, 032108	2.1	19
129	Deep model predictive flow control with limited sensor data and online learning. <i>Theoretical and Computational Fluid Dynamics</i> , <b>2020</b> , 34, 577-591	2.3	15
128	Learning Precisely Timed Feedforward Control of the Sensor-Denied Inverted Pendulum <b>2020</b> , 4, 731-736		1
127	Robust principal component analysis for modal decomposition of corrupt fluid flows. <i>Physical Review Fluids</i> , <b>2020</b> , 5,	2.8	23
126	Phase-consistent dynamic mode decomposition from multiple overlapping spatial domains. <i>Physical Review Fluids</i> , <b>2020</b> , 5,	2.8	7
125	Geometric and control optimization of a two cross-flow turbine array. <i>Journal of Renewable and Sustainable Energy</i> , <b>2020</b> , 12, 064501	2.5	2
124	PySINDy: A Python package for the sparse identification of nonlinear dynamical systems from data. <i>Journal of Open Source Software</i> , <b>2020</b> , 5, 2104	5.2	33

123	Data-Driven Approximations of Dynamical Systems Operators for Control. <i>Lecture Notes in Control and Information Sciences</i> , <b>2020</b> , 197-234	0.5	7
122	Randomized CP tensor decomposition. <i>Machine Learning: Science and Technology</i> , <b>2020</b> , 1, 025012	5.1	8
121	Deep reinforcement learning for optical systems: A case study of mode-locked lasers. <i>Machine Learning: Science and Technology</i> , <b>2020</b> , 1, 045013	5.1	5
120	Modeling synchronization in forced turbulent oscillator flows. <i>Communications Physics</i> , <b>2020</b> , 3,	5.4	7
119	Multi-Fidelity Sensor Selection: Greedy Algorithms to Place Cheap and Expensive Sensors With Cost Constraints. <i>IEEE Sensors Journal</i> , <b>2020</b> , 1-1	4	9
118	SINDy-PI: a robust algorithm for parallel implicit sparse identification of nonlinear dynamics. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , <b>2020</b> , 476, 20200279 <sup>2.4</sup>	2.4	22
117	Data-driven nonlinear aeroelastic models of morphing wings for control. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , <b>2020</b> , 476, 20200079	2.4	6
116	A Unified Sparse Optimization Framework to Learn Parsimonious Physics-Informed Models From Data. <i>IEEE Access</i> , <b>2020</b> , 8, 169259-169271	3.5	18
115	Correction: Modal Analysis of Fluid Flows: An Overview. <i>AIAA Journal</i> , <b>2020</b> , 58, AU9-AU9	2.1	4
114	Machine Learning for Fluid Mechanics. <i>Annual Review of Fluid Mechanics</i> , <b>2020</b> , 52, 477-508	2.2	523
113	Modal Analysis of Fluid Flows: Applications and Outlook. <i>AIAA Journal</i> , <b>2020</b> , 58, 998-1022	2.1	124
112	Dynamic Mode Decomposition for Compressive System Identification. <i>AIAA Journal</i> , <b>2020</b> , 58, 561-574	2.1	22
111	Discovering time-varying aerodynamics of a prototype bridge by sparse identification of nonlinear dynamical systems. <i>Physical Review E</i> , <b>2019</b> , 100, 022220	2.4	15
110	RetinaMatch: Efficient Template Matching of Retina Images for Teleophthalmology. <i>IEEE Transactions on Medical Imaging</i> , <b>2019</b> , 38, 1993-2004	11.7	5
109	Methods for data-driven multiscale model discovery for materials. <i>JPhys Materials</i> , <b>2019</b> , 2, 044002	4.2	17
108	Data-Driven Identification of Parametric Partial Differential Equations. <i>SIAM Journal on Applied Dynamical Systems</i> , <b>2019</b> , 18, 643-660	2.8	73
107	Model selection for hybrid dynamical systems via sparse regression. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , <b>2019</b> , 475, 20180534	2.4	21
106	Discovery of Nonlinear Multiscale Systems: Sampling Strategies and Embeddings. <i>SIAM Journal on Applied Dynamical Systems</i> , <b>2019</b> , 18, 312-333	2.8	54

105	Data-Driven Dynamical Systems <b>2019</b> , 229-275		1
104	Linear Control Theory <b>2019</b> , 276-320		1
103	Balanced Models for Control <b>2019</b> , 321-344		
102	Data-Driven Control <b>2019</b> , 345-372		0
101	Reduced Order Models (ROMs) <b>2019</b> , 375-402		0
100	Interpolation for Parametric ROMs <b>2019</b> , 403-435		
99	Optimized Sampling for Multiscale Dynamics. <i>Multiscale Modeling and Simulation</i> , <b>2019</b> , 17, 117-136	1.8	9
98	. <i>IEEE Access</i> , <b>2019</b> , 7, 1404-1423	3.5	42
97	Deep learning of dynamics and signal-noise decomposition with time-stepping constraints. <i>Journal of Computational Physics</i> , <b>2019</b> , 396, 483-506	4.1	46
96	Cluster-based feedback control of turbulent post-stall separated flows. <i>Journal of Fluid Mechanics</i> , <b>2019</b> , 875, 345-375	3.7	26
95	Smoothing and parameter estimation by soft-adherence to governing equations. <i>Journal of Computational Physics</i> , <b>2019</b> , 398, 108860	4.1	3
94	Data-driven discovery of coordinates and governing equations. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2019</b> , 116, 22445-22451	11.5	135
93	Robust flow reconstruction from limited measurements via sparse representation. <i>Physical Review Fluids</i> , <b>2019</b> , 4,	2.8	34
92	Randomized Matrix Decompositions Using R. <i>Journal of Statistical Software</i> , <b>2019</b> , 89,	7.3	24
91	Data-Driven Science and Engineering: Machine Learning, Dynamical Systems, and Control <b>2019</b> ,		247
90	Singular Value Decomposition (SVD) <b>2019</b> , 3-46		2
89	Fourier and Wavelet Transforms <b>2019</b> , 47-83		0
88	Sparsity and Compressed Sensing <b>2019</b> , 84-114		1

87	Regression and Model Selection <b>2019</b> , 117-153		0
86	Clustering and Classification <b>2019</b> , 154-194		
85	Neural Networks and Deep Learning <b>2019</b> , 195-226		
84	Randomized Dynamic Mode Decomposition. <i>SIAM Journal on Applied Dynamical Systems</i> , <b>2019</b> , 18, 1867-1891	3.7	34
83	Randomized methods to characterize large-scale vortical flow networks. <i>PLoS ONE</i> , <b>2019</b> , 14, e0225265	3.7	4
82	Greedy Sensor Placement With Cost Constraints. <i>IEEE Sensors Journal</i> , <b>2019</b> , 19, 2642-2656	4	22
81	Prevention of lean flame blowout using a predictive chemical reactor network control. <i>Fuel</i> , <b>2019</b> , 236, 583-588	7.1	12
80	Compressed dynamic mode decomposition for background modeling. <i>Journal of Real-Time Image Processing</i> , <b>2019</b> , 16, 1479-1492	1.9	49
79	Predicting shim gaps in aircraft assembly with machine learning and sparse sensing. <i>Journal of Manufacturing Systems</i> , <b>2018</b> , 48, 87-95	9.1	29
78	Sparse reduced-order modelling: sensor-based dynamics to full-state estimation. <i>Journal of Fluid Mechanics</i> , <b>2018</b> , 844, 459-490	3.7	86
77	Constrained sparse Galerkin regression. <i>Journal of Fluid Mechanics</i> , <b>2018</b> , 838, 42-67	3.7	122
76	Generalizing Koopman Theory to Allow for Inputs and Control. <i>SIAM Journal on Applied Dynamical Systems</i> , <b>2018</b> , 17, 909-930	2.8	64
75	Online Interpolation Point Refinement for Reduced-Order Models using a Genetic Algorithm. <i>SIAM Journal of Scientific Computing</i> , <b>2018</b> , 40, B283-B304	2.6	2
74	Sparsity enabled cluster reduced-order models for control. <i>Journal of Computational Physics</i> , <b>2018</b> , 352, 388-409	4.1	16
73	Deep learning and model predictive control for self-tuning mode-locked lasers. <i>Journal of the Optical Society of America B: Optical Physics</i> , <b>2018</b> , 35, 617	1.7	54
72	Sparse-TDA: Sparse Realization of Topological Data Analysis for Multi-Way Classification. <i>IEEE Transactions on Knowledge and Data Engineering</i> , <b>2018</b> , 30, 1403-1408	4.2	15
71	Data-Driven Sparse Sensor Placement for Reconstruction: Demonstrating the Benefits of Exploiting Known Patterns. <i>IEEE Control Systems</i> , <b>2018</b> , 38, 63-86	2.9	123
70	Networked-oscillator-based modeling and control of unsteady wake flows. <i>Physical Review E</i> , <b>2018</b> , 97, 063107	2.4	13

69	Advanced control methods for cross-flow turbines. <i>International Marine Energy Journal</i> , <b>2018</b> , 1, 129-138		3
68	Discovering Conservation Laws from Data for Control <b>2018</b> ,		14
67	Development and validation of warning system of ventricular tachyarrhythmia in patients with heart failure with heart rate variability data. <i>PLoS ONE</i> , <b>2018</b> , 13, e0207215	3.7	17
66	Deep learning for universal linear embeddings of nonlinear dynamics. <i>Nature Communications</i> , <b>2018</b> , 9, 4950	17.4	258
65	Sparse identification of nonlinear dynamics for model predictive control in the low-data limit. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , <b>2018</b> , 474, 20180335	2.4	109
64	Applied Koopman Theory for Partial Differential Equations and Data-Driven Modeling of Spatio-Temporal Systems. <i>Complexity</i> , <b>2018</b> , 2018, 1-16	1.6	21
63	Feedback through graph motifs relates structure and function in complex networks. <i>Physical Review E</i> , <b>2018</b> , 98,	2.4	5
62	Neural-inspired sensors enable sparse, efficient classification of spatiotemporal data. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, 10564-10569	11.5	23
61	SINDy analysis of disturbance and plant model superposition on a rolling delta wing <b>2018</b> ,		1
60	Sparse identification of nonlinear dynamics for rapid model recovery. <i>Chaos</i> , <b>2018</b> , 28, 063116	3.3	50
59	Environment identification in flight using sparse approximation of wing strain. <i>Journal of Fluids and Structures</i> , <b>2017</b> , 70, 162-180	3.1	28
58	Data-driven discovery of partial differential equations. <i>Science Advances</i> , <b>2017</b> , 3, e1602614	14.3	439
57	Leveraging Sparsity and Compressive Sensing for Reduced Order Modeling. <i>Modeling, Simulation and Applications</i> , <b>2017</b> , 301-315	1.1	
56	Chaos as an intermittently forced linear system. <i>Nature Communications</i> , <b>2017</b> , 8, 19	17.4	170
55	Modal Analysis of Fluid Flows: An Overview. <i>AIAA Journal</i> , <b>2017</b> , 55, 4013-4041	2.1	508
54	Model selection for dynamical systems via sparse regression and information criteria. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , <b>2017</b> , 473, 20170009	2.4	90
53	Intracycle angular velocity control of cross-flow turbines. <i>Nature Energy</i> , <b>2017</b> , 2,	62.3	27
52	Machine Learning Control Taming Nonlinear Dynamics and Turbulence. <i>Fluid Mechanics and Its Applications</i> , <b>2017</b> ,	0.2	72



51	Machine Learning Control (MLC). <i>Fluid Mechanics and Its Applications</i> , <b>2017</b> , 11-48	0.2	2
50	Taming Nonlinear Dynamics with MLC. <i>Fluid Mechanics and Its Applications</i> , <b>2017</b> , 93-120	0.2	2
49	Data-Driven Methods in Fluid Dynamics: Sparse Classification from Experimental Data <b>2017</b> , 323-342		20
48	Compressed Singular Value Decomposition for Image and Video Processing <b>2017</b> ,		7
47	Data-Driven discovery of governing physical laws and their parametric dependencies in engineering, physics and biology <b>2017</b> ,		3
46	Dynamic Mode Decomposition for Background Modeling <b>2017</b> ,		2
45	Spatiotemporal Feedback and Network Structure Drive and Encode <i>Caenorhabditis elegans</i> Locomotion. <i>PLoS Computational Biology</i> , <b>2017</b> , 13, e1005303	5	20
44	Lagrangian coherent structures and inertial particle dynamics. <i>Physical Review E</i> , <b>2016</b> , 93, 033108	2.4	19
43	Sparse Sensor Placement Optimization for Classification. <i>SIAM Journal on Applied Mathematics</i> , <b>2016</b> , 76, 2099-2122	1.8	51
42	Dynamic Mode Decomposition for Robust PCA with Applications to Foreground/Background Subtraction in Video Streams and Multi-Resolution Analysis <b>2016</b> , 441-456		4
41	Self-tuning fiber lasers <b>2016</b> ,		1
40	Extremum-seeking control of the beam pattern of a reconfigurable holographic metamaterial antenna. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , <b>2016</b> , 33, 59-68 <sup>1.8</sup>		35
39	Dynamic Mode Decomposition <b>2016</b> ,		342
38	Koopman Invariant Subspaces and Finite Linear Representations of Nonlinear Dynamical Systems for Control. <i>PLoS ONE</i> , <b>2016</b> , 11, e0150171	3.7	160
37	Frequency selection by feedback control in a turbulent shear flow. <i>Journal of Fluid Mechanics</i> , <b>2016</b> , 797, 247-283	3.7	20
36	Including inputs and control within equation-free architectures for complex systems. <i>European Physical Journal: Special Topics</i> , <b>2016</b> , 225, 2413-2434	2.3	4
35	Sparse Identification of Nonlinear Dynamics with Control (SINDYc)**SLB acknowledges support from the U.S. Air Force Center of Excellence on Nature Inspired Flight Technologies and Ideas (FA9550-14-1-0398). JLP thanks Bill and Melinda Gates for their active support of the Institute of Disease Modeling and their sponsorship through the Global Good Fund. JNK acknowledges support from the U.S. Air Force Office of Scientific Research (FA9550-09-0174). <i>JFAC-PapersOnLine</i> , <b>2016</b> ,	0.7	43
34	<i>IEEE Transactions on Molecular, Biological, and Multi-Scale Communications</i> , <b>2016</b> , 2, 52-63, 45, 710-715	2.3	144

33	Dynamic Mode Decomposition with Control. <i>SIAM Journal on Applied Dynamical Systems</i> , <b>2016</b> , 15, 142-168	28.4
32	Discovering governing equations from data by sparse identification of nonlinear dynamical systems. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, 3932-7	11.5 1026
31	Network structure of two-dimensional decaying isotropic turbulence. <i>Journal of Fluid Mechanics</i> , <b>2016</b> , 795,	3.7 60
30	Multiresolution Dynamic Mode Decomposition. <i>SIAM Journal on Applied Dynamical Systems</i> , <b>2016</b> , 15, 713-735	2.8 146
29	Mixing Layer Manipulation Experiment. <i>Flow, Turbulence and Combustion</i> , <b>2015</b> , 94, 155-173	2.5 40
28	Multi-resolution Dynamic Mode Decomposition for Foreground/Background Separation and Object Tracking <b>2015</b> ,	13
27	Data Methods and Computational Tools for Characterizing Complex Cavity Dynamics <b>2015</b> , 395-418	
26	Nonlinear model reduction for dynamical systems using sparse sensor locations from learned libraries. <i>Physical Review E</i> , <b>2015</b> , 92, 033304	2.4 39
25	Intelligent Systems for Stabilizing Mode-Locked Lasers and Frequency Combs: Machine Learning and Equation-Free Control Paradigms for Self-Tuning Optics. <i>Nanophotonics</i> , <b>2015</b> , 4, 459-471	6.3 15
24	An extremum-seeking controller for dynamic metamaterial antenna operation <b>2015</b> ,	3
23	Closed-Loop Turbulence Control: Progress and Challenges. <i>Applied Mechanics Reviews</i> , <b>2015</b> , 67,	8.6 241
22	Sidelobe Canceling for Reconfigurable Holographic Metamaterial Antenna. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2015</b> , 63, 1881-1886	4.9 81
21	Compressed sensing and dynamic mode decomposition. <i>Journal of Computational Dynamics</i> , <b>2015</b> , 2, 165-191	2.6 81
20	Sidelobe canceling on a reconfigurable holographic metamaterial antenna <b>2014</b> ,	6
19	State-space model identification and feedback control of unsteady aerodynamic forces. <i>Journal of Fluids and Structures</i> , <b>2014</b> , 50, 253-270	3.1 43
18	Long-time uncertainty propagation using generalized polynomial chaos and flow map composition. <i>Journal of Computational Physics</i> , <b>2014</b> , 274, 783-802	4.1 19
17	Self-Tuning Fiber Lasers. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , <b>2014</b> , 20, 464-471	3.8 42
16	Closed-loop control of experimental shear flows using machine learning <b>2014</b> ,	24

15	Compressive Sensing and Low-Rank Libraries for Classification of Bifurcation Regimes in Nonlinear Dynamical Systems. <i>SIAM Journal on Applied Dynamical Systems</i> , <b>2014</b> , 13, 1716-1732	2.8	71
14	Classification of birefringence in mode-locked fiber lasers using machine learning and sparse representation. <i>Optics Express</i> , <b>2014</b> , 22, 8585-97	3.3	39
13	Exploiting sparsity and equation-free architectures in complex systems. <i>European Physical Journal: Special Topics</i> , <b>2014</b> , 223, 2665-2684	2.3	41
12	On dynamic mode decomposition: Theory and applications. <i>Journal of Computational Dynamics</i> , <b>2014</b> , 1, 391-421	2.6	587
11	Empirical state-space representations for Theodorsen's lift model. <i>Journal of Fluids and Structures</i> , <b>2013</b> , 38, 174-186	3.1	51
10	Reduced-order unsteady aerodynamic models at low Reynolds numbers. <i>Journal of Fluid Mechanics</i> , <b>2013</b> , 724, 203-233	3.7	68
9	Extremum-Seeking Control of a Mode-Locked Laser. <i>IEEE Journal of Quantum Electronics</i> , <b>2013</b> , 49, 852-861		41
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