

# John R Singler

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4988610/publications.pdf>

Version: 2024-02-01

63  
papers

522  
citations

758635

12  
h-index

794141

19  
g-index

63  
all docs

63  
docs citations

63  
times ranked

298  
citing authors

#	ARTICLE	IF	CITATIONS
1	New POD Error Expressions, Error Bounds, and Asymptotic Results for Reduced Order Models of Parabolic PDEs. SIAM Journal on Numerical Analysis, 2014, 52, 852-876.	1.1	57
2	Mathematical modeling and simulation of biologically inspired hair receptor arrays in laminar unsteady flow separation. Journal of Fluids and Structures, 2012, 29, 1-17.	1.5	32
3	An HDG method for distributed control of convection diffusion PDEs. Journal of Computational and Applied Mathematics, 2018, 343, 643-661.	1.1	24
4	A New HDG Method for Dirichlet Boundary Control of Convection Diffusion PDEs II: Low Regularity. SIAM Journal on Numerical Analysis, 2018, 56, 2262-2287.	1.1	22
5	Boundary Control of Linear Uncertain 1-D Parabolic PDE Using Approximate Dynamic Programming. IEEE Transactions on Neural Networks and Learning Systems, 2018, 29, 1213-1225.	7.2	21
6	Interpolatory HDG Method for Parabolic Semilinear PDEs. Journal of Scientific Computing, 2019, 79, 1777-1800.	1.1	20
7	Incremental proper orthogonal decomposition for PDE simulation data. Computers and Mathematics With Applications, 2018, 75, 1942-1960.	1.4	18
8	Convergent snapshot algorithms for infinite-dimensional Lyapunov equations. IMA Journal of Numerical Analysis, 2011, 31, 1468-1496.	1.5	17
9	The Detection of Unsteady Flow Separation with Bioinspired Hair Cell Sensors. , 2008, , .		16
10	A proper orthogonal decomposition approach to approximate balanced truncation of infinite dimensional linear systems. International Journal of Computer Mathematics, 2009, 86, 355-371.	1.0	16
11	Balanced POD for model reduction of linear PDE systems: convergence theory. Numerische Mathematik, 2012, 121, 127-164.	0.9	16
12	Finite-time distributed control with time transformation. International Journal of Robust and Nonlinear Control, 2021, 31, 107-130.	2.1	16
13	Approximate low rank solutions of Lyapunov equations via proper orthogonal decomposition. , 2008, , .		14
14	HDG-POD reduced order model of the heat equation. Journal of Computational and Applied Mathematics, 2019, 362, 663-679.	1.1	14
15	Feedback Control of Low Dimensional Models of Transition to Turbulence. , 0, , .		12
16	On Optimal Pointwise in Time Error Bounds and Difference Quotients for the Proper Orthogonal Decomposition. SIAM Journal on Numerical Analysis, 2021, 59, 2163-2196.	1.1	12
17	Modeling of Bioinspired Sensors for Flow Separation Detection in Micro Air Vehicles. , 2006, , .		11
18	An HDG Method for Dirichlet Boundary Control of Convection Dominated Diffusion PDEs. SIAM Journal on Numerical Analysis, 2019, 57, 1919-1946.	1.1	11

#	ARTICLE	IF	CITATIONS
19	A superconvergent hybridizable discontinuous Galerkin method for Dirichlet boundary control of elliptic PDEs. <i>Numerische Mathematik</i> , 2020, 144, 375-411.	0.9	11
20	A Superconvergent HDG Method for Distributed Control of Convection Diffusion PDEs. <i>Journal of Scientific Computing</i> , 2018, 76, 1436-1457.	1.1	9
21	Output Feedback-Based Boundary Control of Uncertain Coupled Semilinear Parabolic PDE Using Neurodynamic Programming. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2018, 29, 1263-1274.	7.2	9
22	Transition to turbulence, small disturbances, and sensitivity analysis I: A motivating problem. <i>Journal of Mathematical Analysis and Applications</i> , 2008, 337, 1425-1441.	0.5	8
23	Robustness of Finite-Time Distributed Control Algorithm with Time Transformation. , 2019, , .		8
24	Optimality of Balanced Proper Orthogonal Decomposition for Data Reconstruction. <i>Numerical Functional Analysis and Optimization</i> , 2010, 31, 852-869.	0.6	7
25	Towards transient growth analysis and design in iterative learning control. <i>International Journal of Control</i> , 2011, 84, 1234-1245.	1.2	7
26	Analysis of a hybridizable discontinuous Galerkin scheme for the tangential control of the Stokes system. <i>ESAIM: Mathematical Modelling and Numerical Analysis</i> , 2020, 54, 2229-2264.	0.8	7
27	A comparison of balanced truncation methods for closed loop systems. , 2009, , .		6
28	A note on incremental POD algorithms for continuous time data. <i>Applied Numerical Mathematics</i> , 2019, 144, 223-233.	1.2	6
29	Superconvergent Interpolatory HDG Methods for Reaction Diffusion Equations I: An HDG $_{k}$ Method. <i>Journal of Scientific Computing</i> , 2019, 81, 2188-2212.	1.1	6
30	New Proper Orthogonal Decomposition Approximation Theory for PDE Solution Data. <i>SIAM Journal on Numerical Analysis</i> , 2020, 58, 3251-3285.	1.1	6
31	Transition to turbulence, small disturbances, and sensitivity analysis II: The Navier-Stokes equations. <i>Journal of Mathematical Analysis and Applications</i> , 2008, 337, 1442-1456.	0.5	5
32	A Snapshot Algorithm for Linear Feedback Flow Control Design. , 2009, , .		5
33	A Class of Embedded DG Methods for Dirichlet Boundary Control of Convection Diffusion PDEs. <i>Journal of Scientific Computing</i> , 2019, 81, 623-648.	1.1	5
34	Feedback control of a bioinspired plate-beam system. , 2010, , .		4
35	Robustness analysis of slow learning in Iterative Learning Control systems. , 2011, , .		4
36	Further Results on Finite-Time Distributed Control of Multiagent Systems With Time Transformation. , 2018, , .		4

#	ARTICLE	IF	CITATIONS
37	Error analysis of an incremental proper orthogonal decomposition algorithm for PDE simulation data. Journal of Computational and Applied Mathematics, 2020, 368, 112525.	1.1	4
38	A POD projection method for large-scale algebraic Riccati equations. Numerical Algebra, Control and Optimization, 2016, 6, 413-435.	1.0	4
39	Analysis and Approximations of Dirichlet Boundary Control of Stokes Flows in the Energy Space. SIAM Journal on Numerical Analysis, 2022, 60, 450-474.	1.1	4
40	Differentiability with respect to parameters of weak solutions of linear parabolic equations. Mathematical and Computer Modelling, 2008, 47, 422-430.	2.0	3
41	Balanced POD for linear PDE robust control computations. Computational Optimization and Applications, 2012, 53, 227-248.	0.9	3
42	Model reduction of linear PDE systems: A continuous time Eigensystem Realization Algorithm. , 2012, , .		3
43	Distributed Load Estimation From Noisy Structural Measurements. Journal of Applied Mechanics, Transactions ASME, 2013, 80, .	1.1	3
44	Optimality of balanced proper orthogonal decomposition for data reconstruction II: Further approximation results. Journal of Mathematical Analysis and Applications, 2015, 421, 1006-1020.	0.5	3
45	Feedback Control of a Thermal Fluid Based on a Reduced Order Observer**W. Hu was supported in part by a USC Zumberge Individual Research Grant.J. Singler and Y. Zhang were supported in part by National Science Foundation grant DMS-1217122.. IFAC-PapersOnLine, 2016, 49, 116-121.	0.5	3
46	Global attractor for a low order ODE model problem for transition to turbulence. Mathematical Methods in the Applied Sciences, 2017, 40, 2896-2906.	1.2	3
47	Boundary Control of 2-D Burgersâ€™ PDE: An Adaptive Dynamic Programming Approach. IEEE Transactions on Neural Networks and Learning Systems, 2018, 29, 3669-3681.	7.2	3
48	On the Long Time Behavior of Approximating Dynamical Systems. , 2003, , 73-86.		3
49	A model based feedback controller for wing-twist via piezoceramic actuation. , 2011, , .		2
50	Computational Issues in Sensitivity Analysis for 1D Interface Problems. Journal of Computational Mathematics, 2011, 29, 108-130.	0.2	2
51	Variation of the balanced POD algorithm for model reduction of linear systems. , 2013, , .		2
52	Boundary control of linear one-dimensional parabolic PDE using neuro-dynamic programming. , 2015, , .		2
53	Boundary control of two dimensional burgers PDE using approximate dynamic programming. , 2016, , .		2
54	Finite Element Formulation for Static Shape Control of a Thin Euler-Bernoulli Beam Using Piezoelectric Actuators. , 2004, , .		2

#	ARTICLE	IF	CITATIONS
55	MODELING TRANSITION: NEW SCENARIOS, SYSTEM SENSITIVITY AND FEEDBACK CONTROL. Lecture Notes Series, Institute for Mathematical Sciences, 2005, , 1-37.	0.2	2
56	Balanced POD algorithm for robust control design for linear distributed parameter systems. , 2010, , .		1
57	Reduced order controllers for an anisotropic composite plate with smart actuation and sensing. , 2013, , .		1
58	Adaptive dynamic programming boundary control of uncertain coupled semi-linear parabolic PDE. , 2015, , .		1
59	A modified balanced POD model reduction algorithm for parabolic PDEs with unbounded inputs. , 2014, , .		0
60	Superconvergent Interpolatory HDG Methods for Reaction Diffusion Equations II: HHO-Inspired Methods. Communications on Applied Mathematics and Computation, 0, , 1.	0.7	0
61	Balanced truncation model reduction of a nonlinear cable-mass PDE system with interior damping. Discrete and Continuous Dynamical Systems - Series B, 2019, 24, 83-107.	0.5	0
62	Finite-time distributed control with time transformation. International Journal of Robust and Nonlinear Control, 2021, 31, 1436-1436.	2.1	0
63	A Note on Global Attractors for a Transition to Turbulence ODE Model Problem. Differential Equations and Dynamical Systems, 0, , 1.	0.5	0