Gregery T Buzzard

List of Publications by Year
in descending order

85	1,522	394421	345221
papers	citations	19 h-index	36 g-index

85	85	85	1398
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Plug-and-Play Priors for Bright Field Electron Tomography and Sparse Interpolation. IEEE Transactions on Computational Imaging, 2016, , 1-1.	4.4	158
2	Plug-and-Play Methods for Magnetic Resonance Imaging: Using Denoisers for Image Recovery. IEEE Signal Processing Magazine, 2020, 37, 105-116.	5.6	144
3	Plug-and-Play Unplugged: Optimization-Free Reconstruction Using Consensus Equilibrium. SIAM Journal on Imaging Sciences, 2018, 11, 2001-2020.	2.2	112
4	State and Unknown Input Observers for Nonlinear Systems With Bounded Exogenous Inputs. IEEE Transactions on Automatic Control, 2017, 62, 5497-5510.	5.7	72
5	Global sensitivity analysis using sparse grid interpolation and polynomial chaos. Reliability Engineering and System Safety, 2012, 107, 82-89.	8.9	67
6	Modeling Mitochondrial Bioenergetics with Integrated Volume Dynamics. PLoS Computational Biology, 2010, 6, e1000632.	3.2	62
7	Support Vector Machine Informed Explicit Nonlinear Model Predictive Control Using Low-Discrepancy Sequences. IEEE Transactions on Automatic Control, 2017, 62, 135-148.	5.7	53
8	Variance-Based Global Sensitivity Analysis via Sparse-Grid Interpolation and Cubature. Communications in Computational Physics, 2011, 9, 542-567.	1.7	45
9	Photon level chemical classification using digital compressive detection. Analytica Chimica Acta, 2012, 755, 17-27.	5.4	43
10	Modelâ€based design of experiments for cellular processes. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2013, 5, 181-203.	6.6	39
11	State and unknown input observers for nonlinear systems with delayed measurements. Automatica, 2018, 95, 246-253.	5.0	34
12	Algebraic surfaces holomorphically dominable by â„‚2. Inventiones Mathematicae, 2000, 139, 617-659.	2.5	33
13	Digital compressive chemical quantitation and hyperspectral imaging. Analyst, The, 2013, 138, 4982.	3.5	33
14	Infinitely Many Periodic Attractors for Holomorphic Maps of 2 Variables. Annals of Mathematics, 1997, 145, 389.	4.2	25
15	Model-Based Analysis for Qualitative Data: An Application in Drosophila Germline Stem Cell Regulation. PLoS Computational Biology, 2014, 10, e1003498.	3.2	25
16	Dynamic Sparse Sampling for Confocal Raman Microscopy. Analytical Chemistry, 2018, 90, 4461-4469.	6.5	25
17	A Framework for Dynamic Image Sampling Based on Supervised Learning. IEEE Transactions on Computational Imaging, 2018, 4, 1-16.	4.4	25
18	An embedding of ? in ?2 with hyperbolic complement. Mathematische Annalen, 1996, 306, 539-546.	1.4	22

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19	Binary Complementary Filters for Compressive Raman Spectroscopy. Applied Spectroscopy, 2018, 72, 69-78.	2.2	21
20	A Supervised Learning Approach for Dynamic Sampling. IS&T International Symposium on Electronic Imaging, 2016, 28, 1-8.	0.4	19
21	Dynamic X-ray diffraction sampling for protein crystal positioning. Journal of Synchrotron Radiation, 2017, 24, 188-195.	2.4	19
22	Identification of I Kr Kinetics and Drug Binding in Native Myocytes. Annals of Biomedical Engineering, 2009, 37, 1294-1309.	2.5	17
23	A bioenergetic model of the mitochondrial population undergoing permeability transition. Journal of Theoretical Biology, 2010, 265, 672-690.	1.7	17
24	Maximally informative next experiments for nonlinear models. Mathematical Biosciences, 2018, 302, 1-8.	1.9	17
25	Secreted, receptor-associated bone morphogenetic protein regulators reduce stochastic noise intrinsic to many extracellular morphogen distributions. Journal of the Royal Society Interface, 2012, 9, 1073-1083.	3.4	16
26	Embedding Approximate Nonlinear Model Predictive Control at Ultrahigh Speed and Extremely Low Power. IEEE Transactions on Control Systems Technology, 2020, 28, 1092-1099.	5.2	16
27	A global tolerance approach to sensitivity analysis in linear programming. European Journal of Operational Research, 2018, 267, 321-337.	5.7	15
28	DEEP BACK PROJECTION FOR SPARSE-VIEW CT RECONSTRUCTION. , 2018, , .		15
29	Kupka-Smale theorem for automorphisms of â„‚n. Duke Mathematical Journal, 1998, 93, 487.	1.5	14
30	Kupka-Smale theorem for polynomial automorphisms of â„‚2 and persistence of heteroclinic intersections. Inventiones Mathematicae, 2005, 161, 45-89.	2.5	14
31	4D X-Ray CT Reconstruction using Multi-Slice Fusion. , 2019, , .		14
32	Distributed Iterative CT Reconstruction Using Multi-Agent Consensus Equilibrium. IEEE Transactions on Computational Imaging, 2020, 6, 1153-1166.	4.4	14
33	A Carleman type theorem for proper holomorphic embeddings. Arkiv for Matematik, 1997, 35, 157-169.	0.5	13
34	An interpolation theorem for holomorphic automorphisms ofC n. Journal of Geometric Analysis, 2000, 10, 101-108.	1.0	13
35	Robust explicit nonlinear model predictive control with integral sliding mode. , 2014, , .		13
36	Fluorescence modeling for optimized-binary compressive detection Raman spectroscopy. Optics Express, 2015, 23, 23935.	3.4	13

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37	A Fatou-Bieberbach domain avoiding a neighborhood of a variety of codimension 2. Mathematische Annalen, 2000, 316, 699-702.	1.4	12
38	Safe Approximate Dynamic Programming via Kernelized Lipschitz Estimation. IEEE Transactions on Neural Networks and Learning Systems, 2021, 32, 405-419.	11.3	12
39	Sharp Interface and Voltage Conservation in the Phase Field Method: Application to Cardiac Electrophysiology. SIAM Journal of Scientific Computing, 2008, 30, 837-854.	2.8	11
40	Unknown Input Estimation for Nonlinear Systems Using Sliding Mode Observers and Smooth Window Functions. SIAM Journal on Control and Optimization, 2018, 56, 3619-3641.	2.1	11
41	Multi-Resolution Data Fusion for Super Resolution Imaging. IEEE Transactions on Computational Imaging, 2022, 8, 81-95.	4.4	11
42	Optimal filters for high-speed compressive detection in spectroscopy. Proceedings of SPIE, 2013, , .	0.8	10
43	Resolving Early Signaling Events in T-Cell Activation Leading to IL-2 and FOXP3 Transcription. Processes, 2014, 2, 867-900.	2.8	10
44	Multi-Slice Fusion for Sparse-View and Limited-Angle 4D CT Reconstruction. IEEE Transactions on Computational Imaging, 2021, 7, 448-462.	4.4	10
45	Hyperbolic automorphisms and holomorphic motions in C2. Michigan Mathematical Journal, 2001, 49, .	0.4	9
46	Tame sets, dominating maps, and complex tori. Transactions of the American Mathematical Society, 2002, 355, 2557-2568.	0.9	8
47	Efficient Basis Change for Sparse-Grid Interpolating Polynomials with Application to T-Cell Sensitivity Analysis. Computational Biology Journal, 2013, 2013, 1-10.	0.6	8
48	Efficient Optimization of Stimuli for Model-Based Design of Experiments to Resolve Dynamical Uncertainty. PLoS Computational Biology, 2015, 11, e1004488.	3.2	8
49	Multiple Model-Informed Open-Loop Control of Uncertain Intracellular Signaling Dynamics. PLoS Computational Biology, 2014, 10, e1003546.	3.2	7
50	Distributed unknown input observers for interconnected nonlinear systems. , 2016, , .		7
51	Separable Models for cone-beam MBIR Reconstruction. IS&T International Symposium on Electronic Imaging, 2018, 30, 181-1-1817.	0.4	7
52	Experimental Design for Dynamics Identification of Cellular Processes. Bulletin of Mathematical Biology, 2014, 76, 597-626.	1.9	6
53	Computationally Efficient Strategy for Modeling the Effect of Ion Current Modifiers. IEEE Transactions on Biomedical Engineering, 2008, 55, 3-13.	4.2	5
54	Robust parameter identification with adaptive sparse grid-based optimization for nonlinear systems biology models. , 2009, , .		5

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55	Consensus equilibrium framework for super-resolution and extreme-scale CT reconstruction. , 2019, , .		5
56	Efficient calculation of steady state probability distribution for stochastic biochemical reaction network. BMC Genomics, 2012, 13, S10.	2.8	4
57	Sparse-Grid-Based Adaptive Model Predictive Control of HL60 Cellular Differentiation. IEEE Transactions on Biomedical Engineering, 2012, 59, 456-463.	4.2	4
58	Correcting hypothalamic-pituitary-adrenal axis dysfunction using observer-based explicit nonlinear model predictive control. , 2014, 2014, 3426-9.		4
59	Sampling-based explicit nonlinear model predictive control for output tracking. , 2016, , .		4
60	Unknown input estimation via observers for nonlinear systems with measurement delays. , 2016, , .		4
61	Convergence of Griddy Gibbs sampling and other perturbed Markov chains. Journal of Statistical Computation and Simulation, 2017, 87, 1379-1400.	1.2	4
62	A Model Based Neuron Detection Approach using Sparse Location Priors. IS&T International Symposium on Electronic Imaging, 2017, 29, 10-17.	0.4	4
63	Distributed Framework for Fast Iterative CT Reconstruction from View-subsets. IS&T International Symposium on Electronic Imaging, 2018, 2018, 102-1-1027.	0.4	4
64	Nondensity of stability for polynomial automorphisms of C^2. Indiana University Mathematics Journal, 1999, 48, 0-0.	0.9	3
65	Double sections, dominating maps, and the Jacobian fibration. American Journal of Mathematics, 2000, 122, 1061-1084.	1.1	3
66	Maps conjugating holomorphic maps in C^n. Indiana University Mathematics Journal, 2003, 52, 1135-1146.	0.9	3
67	EFFECTIVE SAMPLING SCHEMES FOR BEHAVIOR DISCRIMINATION IN NONLINEAR SYSTEMS. , 2014, 4, 535-554.		3
68	Pointwise Besov Space Smoothing of Images. Journal of Mathematical Imaging and Vision, 2019, 61, 1-20.	1.3	3
69	Specifying informative experiment stimulation conditions for resolving dynamical uncertainty in biological systems. , 2014, 2014, 298-301.		2
70	A model-based framework for fast dynamic image sampling. , 2014, , .		2
71	A Computational Study of the Effects of Syk Activity on B Cell Receptor Signaling Dynamics. Processes, 2015, 3, 75-97.	2.8	2
72	Robust state and unknown input estimation for nonlinear systems characterized by incremental multiplier matrices. , 2017, , .		2

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73	Ultrafast embedded explicit model predictive control for nonlinear systems. , 2017, , .		2
74	Synchrotron X-Ray Diffraction Dynamic Sampling for Protein Crystal Centering. IS&T International Symposium on Electronic Imaging, 2017, 29, 6-9.	0.4	2
75	Extensions of HÃ©non maps to the closed 4-ball. Ergodic Theory and Dynamical Systems, 2000, 20, 1319-1334.	0.6	1
76	Steady state probability approximation applied to stochastic model of biological network. , 2011, , .		1
77	Feasible parameter space characterization with adaptive sparse grids for nonlinear systems biology models. , 2011, , .		1
78	Projected Multi-Agent Consensus Equilibrium for Ptychographic Image Reconstruction. , 2021, , .		1
79	Applications of sparse grid interpolation: sensitivity analysis and experiment design. Procedia, Social and Behavioral Sciences, 2010, 2, 7623-7624.	0.5	0
80	Systematically manipulating T-cell signaling dynamics via multiple model informed open-loop controller design. , 2012, , .		0
81	Optimal Parameter Estimation for Long-Term Prediction in the Presence of Model Mismatch. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2012, 134, .	1.6	0
82	Model-based Experiment Design, Initiation. , 2013, , 1407-1413.		0
83	A Supervised Learning Approach for Dynamic Sampling (SLADS) in Raman Hyperspectral Imaging. IS&T International Symposium on Electronic Imaging, 2018, 30, 132-1-1323.	0.4	0
84	Multiagent Consensus Equilibrium in Molecular Structure Determination. Journal of Physical Chemistry A, 2020, 124, 9105-9112.	2.5	0
85	Sparse-View CT Reconstruction using Recurrent Stacked Back Projection. , 2021, , .		0