

Andrea Bertozzi

List of Publications by Year in descending order

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271
papers

12,218
citations

26630

56
h-index

39675

94
g-index

279
all docs

279
docs citations

279
times ranked

6808
citing authors

#	ARTICLE	IF	CITATIONS
1	A martingale formulation for stochastic compartmental susceptible-infected-recovered (SIR) models to analyze finite size effects in COVID-19 case studies. <i>Networks and Heterogeneous Media</i> , 2022, .	1.1	0
2	Dynamics of Small Particle Inertial Migration in Curved Square Ducts. <i>SIAM Journal on Applied Dynamical Systems</i> , 2022, 21, 714-734.	1.6	5
3	Suspendable Hydrogel Nanovials for Massively Parallel Single-Cell Functional Analysis and Sorting. <i>ACS Nano</i> , 2022, 16, 7242-7257.	14.6	35
4	Extraction of Hidden Science from Nanoscale Images. <i>Journal of Physical Chemistry C</i> , 2022, 126, 3-13.	3.1	0
5	Surface energy minimizing configurations for axisymmetric microparticles. <i>Journal of Engineering Mathematics</i> , 2022, 134, 1.	1.2	2
6	Scheduled Restart Momentum for Accelerated Stochastic Gradient Descent. <i>SIAM Journal on Imaging Sciences</i> , 2022, 15, 738-761.	2.2	10
7	Neural ODE Control for Trajectory Approximation of Continuity Equation. , 2022, 6, 3152-3157.		1
8	A stochastic-statistical residential burglary model with independent Poisson clocks. <i>European Journal of Applied Mathematics</i> , 2021, 32, 32-58.	2.9	4
9	A Graph-Based Approach for Data Fusion and Segmentation of Multimodal Images. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2021, 59, 4419-4429.	6.3	10
10	Blind Hyperspectral Unmixing Based on Graph Total Variation Regularization. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2021, 59, 3338-3351.	6.3	18
11	Fast estimation of multivariate spatiotemporal Hawkes processes and network reconstruction. <i>Annals of the Institute of Statistical Mathematics</i> , 2021, 73, 1127-1152.	0.8	4
12	Investigating Clustering and Violence Interruption in Gang-Related Violent Crime Data Using Spatial-Temporal Point Processes With Covariates. <i>Journal of the American Statistical Association</i> , 2021, 116, 1674-1687.	3.1	18
13	Subgraph Matching on Multiplex Networks. <i>IEEE Transactions on Network Science and Engineering</i> , 2021, 8, 1367-1384.	6.4	7
14	Thermally-driven coalescence in thin liquid film flowing down a fibre. <i>Journal of Fluid Mechanics</i> , 2021, 916, .	3.4	11
15	Modeling illegal logging in Brazil. <i>Research in Mathematical Sciences</i> , 2021, 8, 1.	1.0	6
16	Experimental study of a string-based counterflow wet electrostatic precipitator for collection of fine and ultrafine particles. <i>Journal of the Air and Waste Management Association</i> , 2021, 71, 851-865.	1.9	19
17	Statistical energy minimization theory for systems of drop-carrier particles. <i>Physical Review E</i> , 2021, 104, 015109.	2.1	3
18	Posterior consistency of semi-supervised regression on graphs. <i>Inverse Problems</i> , 2021, 37, 105011.	2.0	3

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19	Capillary-Driven Rise of Well-Wetting Liquid on the Outer Surface of Cylindrical Nozzles. <i>Langmuir</i> , 2021, 37, 10413-10423.	3.5	4
20	PDEs on graphs for semi-supervised learning applied to first-person activity recognition in body-worn video. <i>Discrete and Continuous Dynamical Systems</i> , 2021, 41, 4351.	0.9	1
21	Adversarial defense via the data-dependent activation, total variation minimization, and adversarial training. <i>Inverse Problems and Imaging</i> , 2021, 15, 129-145.	1.1	2
22	Mitral Valve Segmentation Using Robust Nonnegative Matrix Factorization. <i>Journal of Imaging</i> , 2021, 7, 213.	3.0	3
23	A multilayer network model of the coevolution of the spread of a disease and competing opinions. <i>Mathematical Models and Methods in Applied Sciences</i> , 2021, 31, 2455-2494.	3.3	27
24	An Analysis of COVID-19 Knowledge Graph Construction and Applications. , 2021, , .		8
25	Active Learning for the Subgraph Matching Problem. , 2021, , .		2
26	Segmentation of scanning tunneling microscopy images using variational methods and empirical wavelets. <i>Pattern Analysis and Applications</i> , 2020, 23, 625-651.	4.6	9
27	Stochastic Block Models are a Discrete Surface Tension. <i>Journal of Nonlinear Science</i> , 2020, 30, 2429-2462.	2.1	3
28	Modelling film flows down a fibre influenced by nozzle geometry. <i>Journal of Fluid Mechanics</i> , 2020, 901, .	3.4	13
29	Qualitative features of a nonlinear, nonlocal, agent-based PDE model with applications to homelessness. <i>Mathematical Models and Methods in Applied Sciences</i> , 2020, 30, 1863-1891.	3.3	5
30	A Model for Optimal Human Navigation with Stochastic Effects. <i>SIAM Journal on Applied Mathematics</i> , 2020, 80, 1862-1881.	1.8	5
31	Monodisperse drops templated by 3D-structured microparticles. <i>Science Advances</i> , 2020, 6, .	10.3	28
32	Impact of social distancing during COVID-19 pandemic on crime in Los Angeles and Indianapolis. <i>Journal of Criminal Justice</i> , 2020, 68, 101692.	2.3	288
33	The challenges of modeling and forecasting the spread of COVID-19. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 16732-16738.	7.1	406
34	A Study on Graph-Structured Recurrent Neural Networks and Sparsification with Application to Epidemic Forecasting. <i>Advances in Intelligent Systems and Computing</i> , 2020, , 730-739.	0.6	6
35	Sparsity Meets Robustness: Channel Pruning for the Feynman-Kac Formalism Principled Robust Deep Neural Nets. <i>Lecture Notes in Computer Science</i> , 2020, , 362-381.	1.3	7
36	Theory for undercompressive shocks in tears of wine. <i>Physical Review Fluids</i> , 2020, 5, .	2.5	10

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37	A Hamilton-Jacobi Formulation for Time-Optimal Paths of Rectangular Nonholonomic Vehicles. , 2020, ,		5
38	Quantifying Robotic Swarm Coverage. Lecture Notes in Electrical Engineering, 2020, , 276-301.	0.4	1
39	Who killed Lilly Kane? A case study in applying knowledge graphs to crime fiction. , 2020, ,		1
40	Emotion Classification and Textual Clustering Techniques for Gang Intervention Data. , 2020, ,		0
41	Analyzing Effectiveness of Gang Interventions using Koopman Operator Theory. , 2020, ,		2
42	Inexact Attributed Subgraph Matching. , 2020, ,		5
43	SOS-EW: System for Overdose Spike Early Warning Using Drug Mover's Distance-Based Hawkes Processes. Communications in Computer and Information Science, 2020, , 538-554.	0.5	3
44	Zero Shot Learning with the Isoperimetric Loss. Proceedings of the AAAI Conference on Artificial Intelligence, 2020, 34, 10704-10712.	4.9	1
45	Effect of inertial lift on a spherical particle suspended in flow through a curved duct. Journal of Fluid Mechanics, 2019, 875, 1-43.	3.4	21
46	Multivariate Spatiotemporal Hawkes Processes and Network Reconstruction. SIAM Journal on Mathematics of Data Science, 2019, 1, 356-382.	1.8	26
47	Learning to Predict Human Stress Level with Incomplete Sensor Data from Wearable Devices. , 2019, ,		10
48	Consistent Dynamic Mode Decomposition. SIAM Journal on Applied Dynamical Systems, 2019, 18, 1565-1585.	1.6	25
49	Fast equilibration dynamics of viscous particle-laden flow in an inclined channel. Journal of Fluid Mechanics, 2019, 879, 28-53.	3.4	4
50	Modeling Environmental Crime in Protected Areas Using the Level Set Method. SIAM Journal on Applied Mathematics, 2019, 79, 802-821.	1.8	5
51	Hyperspectral Image Unmixing With Endmember Bundles and Group Sparsity Inducing Mixed Norms. IEEE Transactions on Image Processing, 2019, 28, 3435-3450.	9.8	68
52	Graph-based optimization approaches for machine learning, uncertainty quantification and networks. Handbook of Numerical Analysis, 2019, 20, 503-531.	1.8	7
53	Water vapor capturing using an array of traveling liquid beads for desalination and water treatment. Science Advances, 2019, 5, eaav7662.	10.3	38
54	Dynamics of thin liquid films on vertical cylindrical fibres. Journal of Fluid Mechanics, 2019, 865, 303-327.	3.4	33

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55	Noisy Subgraph Isomorphisms on Multiplex Networks. , 2019, , .		4
56	Applications of Structural Equivalence to Subgraph Isomorphism on Multichannel Multigraphs. , 2019, , .		6
57	Uncertainty quantification for semi-supervised multi-class classification in image processing and ego-motion analysis of body-worn videos. IS&T International Symposium on Electronic Imaging, 2019, 31, 264-1-264-7.	0.4	5
58	Deep Learning for Real-Time Crime Forecasting and Its Ternarization. Chinese Annals of Mathematics Series B, 2019, 40, 949-966.	0.4	45
59	Fast Blind Hyperspectral Unmixing Based On Graph Laplacian. , 2019, , .		6
60	A year in Madrid as described through the analysis of geotagged Twitter data. Environment and Planning B: Urban Analytics and City Science, 2019, 46, 1724-1740.	2.0	4
61	A Stochastic-Statistical Residential Burglary Model with Finite Size Effects. Modeling and Simulation in Science, Engineering and Technology, 2019, , 245-274.	0.6	4
62	Optimal human navigation in steep terrain: a Hamiltonâ€“Jacobiâ€“Bellman approach. Communications in Mathematical Sciences, 2019, 17, 227-242.	1.0	5
63	GRAPHICAL MODELS IN MACHINE LEARNING, NETWORKS AND UNCERTAINTY QUANTIFICATION. , 2019, , .		0
64	Investigation of Constant Volume and Constant Flux Initial Conditions on Bidensity Particle-Laden Slurries on an Incline. American Journal of Undergraduate Research, 2019, 16, 42-57.	0.1	0
65	Low-Rank Decomposition and Total Variation Regularization of Hyperspectral Video Sequences. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 1680-1694.	6.3	36
66	Using insurance claims to predict and improve hospitalizations and biologics use in members with inflammatory bowel diseases. Journal of Biomedical Informatics, 2018, 81, 93-101.	4.3	6
67	Uncertainty Quantification in Graph-Based Classification of High Dimensional Data. SIAM-ASA Journal on Uncertainty Quantification, 2018, 6, 568-595.	2.0	40
68	Performance Bounds on Spatial Coverage Tasks by Stochastic Robotic Swarms. IEEE Transactions on Automatic Control, 2018, 63, 1563-1578.	5.7	11
69	Gas Plume Detection in Hyperspectral Video Sequence Using Tensor Nuclear Norm. , 2018, , .		1
70	A Novel Highly Parallel Algorithm For The Detection And Tracking Of Chemical Gas Plumes Using Hyperspectral Video Sequences. , 2018, , .		0
71	Filtering Methods for Subgraph Matching on Multiplex Networks. , 2018, , .		19
72	GPU Parallel Implementation of Gas Plume Detection in Hyperspectral Video Sequences. , 2018, , .		4

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73	Simplified Energy Landscape for Modularity Using Total Variation. SIAM Journal on Applied Mathematics, 2018, 78, 2439-2464.	1.8	8
74	Unsupervised record matching with noisy and incomplete data. International Journal of Data Science and Analytics, 2018, 6, 109-129.	4.1	13
75	Crime modeling with truncated Lévy flights for residential burglary models. Mathematical Models and Methods in Applied Sciences, 2018, 28, 1857-1880.	3.3	19
76	Surface tension effects for particle settling and resuspension in viscous thin films. Nonlinearity, 2018, 31, 3151-3173.	1.4	3
77	Ego-Motion Classification for Body-Worn Videos. Mathematics and Visualization, 2018, , 221-239.	0.6	2
78	Automatic valve segmentation in cardiac ultrasound time series data. , 2018, , .		1
79	A semi-supervised heat kernel pagerank MBO algorithm for data classification. Communications in Mathematical Sciences, 2018, 16, 1241-1265.	1.0	7
80	Quantitative Assessment of Robotic Swarm Coverage. , 2018, , .		1
81	Quantitative Assessment of Robotic Swarm Coverage. , 2018, , .		0
82	Ideal Scan Path for High-Speed Atomic Force Microscopy. IEEE/ASME Transactions on Mechatronics, 2017, 22, 381-391.	5.8	38
83	Efficient numerical methods for multiscale crowd dynamics with emotional contagion. Mathematical Models and Methods in Applied Sciences, 2017, 27, 205-230.	3.3	48
84	Unsupervised Classification in Hyperspectral Imagery With Nonlocal Total Variation and Primal-Dual Hybrid Gradient Algorithm. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 2786-2798.	6.3	41
85	Two-Dimensional Compact Variational Mode Decomposition. Journal of Mathematical Imaging and Vision, 2017, 58, 294-320.	1.3	45
86	Object Tracking by Hierarchical Decomposition of Hyperspectral Video Sequences: Application to Chemical Gas Plume Tracking. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 4567-4585.	6.3	31
87	Machine learning for cardiac ultrasound time series data. , 2017, , .		1
88	Convergence of the Graph Allen-Cahn Scheme. Journal of Statistical Physics, 2017, 167, 934-958.	1.2	18
89	Modified Cheeger and ratio cut methods using the Ginzburg-Landau functional for classification of high-dimensional data. Inverse Problems, 2017, 33, 074003.	2.0	7
90	Pre-processing and classification of hyperspectral imagery via selective inpainting. , 2017, , .		1

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91	Decentralized stochastic control of robotic swarm density: Theory, simulation, and experiment. , 2017, , .		18
92	A graph-based approach for feature extraction and segmentation of multimodal images. , 2017, , .		8
93	Crime topic modeling. Crime Science, 2017, 6, .	2.8	45
94	Image segmentation with dynamic artifacts detection and bias correction. Inverse Problems and Imaging, 2017, 11, 577-600.	1.1	21
95	The Regularity of the Boundary of a Multidimensional Aggregation Patch. SIAM Journal on Mathematical Analysis, 2016, 48, 3789-3819.	1.9	12
96	GAS plume detection in hyperspectral video sequence using low rank representation. , 2016, , .		4
97	Diffuse Interface Models on Graphs for Classification of High Dimensional Data. SIAM Review, 2016, 58, 293-328.	9.5	32
98	Point-process models of social network interactions: Parameter estimation and missing data recovery. European Journal of Applied Mathematics, 2016, 27, 502-529.	2.9	46
99	Mathematical modelling of crime and security: Special Issue of EJAM. European Journal of Applied Mathematics, 2016, 27, 311-316.	2.9	11
100	Mapping Buried Hydrogen-Bonding Networks. ACS Nano, 2016, 10, 5446-5451.	14.6	21
101	Designer shocks for carving out microscale surface morphologies. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 11384-11386.	7.1	1
102	Growth and containment of a hierarchical criminal network. Physical Review E, 2016, 93, 022308.	2.1	7
103	Topic time series analysis of microblogs. IMA Journal of Applied Mathematics, 2016, 81, 409-431.	1.6	21
104	Hyperspectral unmixing with material variability using social sparsity. , 2016, , .		9
105	A conservation law model for bidensity suspensions on an incline. Physica D: Nonlinear Phenomena, 2016, 330, 47-57.	2.8	3
106	Pheeno, A Versatile Swarm Robotic Research and Education Platform. IEEE Robotics and Automation Letters, 2016, 1, 884-891.	5.1	54
107	Modeling E-mail Networks and Inferring Leadership Using Self-Exciting Point Processes. Journal of the American Statistical Association, 2016, 111, 564-584.	3.1	60
108	OpenMP Parallelization and Optimization of Graph-Based Machine Learning Algorithms. Lecture Notes in Computer Science, 2016, , 17-31.	1.3	7

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109	A blob method for the aggregation equation. <i>Mathematics of Computation</i> , 2015, 85, 1681-1717.	2.1	41
110	Randomized Controlled Field Trials of Predictive Policing. <i>Journal of the American Statistical Association</i> , 2015, 110, 1399-1411.	3.1	220
111	Rarefaction-singular shock dynamics for conserved volume gravity driven particle-laden thin film. <i>Physics of Fluids</i> , 2015, 27, 033301.	4.0	4
112	Global Binary Optimization on Graphs for Classification of High-Dimensional Data. <i>Journal of Mathematical Imaging and Vision</i> , 2015, 52, 414-435.	1.3	27
113	Multi-Material ALE with AMR for Modeling Hot Plasmas and Cold Fragmenting Materials. <i>Plasma Science and Technology</i> , 2015, 17, 117-128.	1.5	7
114	Detecting plumes in LWIR using robust nonnegative matrix factorization with graph-based initialization. , 2015, , .		2
115	Swarming on Random Graphs II. <i>Journal of Statistical Physics</i> , 2015, 158, 699-734.	1.2	3
116	Contagion Shocks in One Dimension. <i>Journal of Statistical Physics</i> , 2015, 158, 647-664.	1.2	41
117	Multi-class Graph Mumford-Shah Model for Plume Detection Using the MBO scheme. <i>Lecture Notes in Computer Science</i> , 2015, , 209-222.	1.3	19
118	Equilibrium Theory of Bidensity Particle-Laden Flows on an Incline. <i>The Reacting Atmosphere</i> , 2015, , 85-97.	0.8	2
119	Ring patterns and their bifurcations in a nonlocal model of biological swarms. <i>Communications in Mathematical Sciences</i> , 2015, 13, 955-985.	1.0	54
120	Simultaneous spectral analysis of multiple video sequence data for LWIR gas plumes. , 2014, , .		1
121	Graph MBO method for multiclass segmentation of hyperspectral stand-off detection video. , 2014, , .		21
122	Shock Solutions for High Concentration Particle-Laden Thin Films. <i>SIAM Journal on Applied Mathematics</i> , 2014, 74, 322-344.	1.8	18
123	Spatiotemporal chemotactic model for ant foraging. <i>Modern Physics Letters B</i> , 2014, 28, 1450238.	1.9	6
124	Non-local crime density estimation incorporating housing information. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2014, 372, 20130403.	3.4	15
125	A Linear Systems Approach to Imaging Through Turbulence. <i>Journal of Mathematical Imaging and Vision</i> , 2014, 48, 185-201.	1.3	29
126	Experimental investigation of bidensity slurries on an incline. <i>Granular Matter</i> , 2014, 16, 269-274.	2.2	10

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127	Diffuse interface methods for multiclass segmentation of high-dimensional data. Applied Mathematics Letters, 2014, 33, 29-34.	2.7	31
128	Behavior of a particle-laden flow in a spiral channel. Physics of Fluids, 2014, 26, 043302.	4.0	23
129	Multiclass Data Segmentation Using Diffuse Interface Methods on Graphs. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2014, 36, 1600-1613.	13.9	78
130	Mean Curvature, Threshold Dynamics, and Phase Field Theory on Finite Graphs. Milan Journal of Mathematics, 2014, 82, 3-65.	1.1	59
131	Hyperbolic systems of conservation laws in gravity-driven, particle-laden thin-film flows. Journal of Engineering Mathematics, 2014, 88, 29-48.	1.2	20
132	Height drift correction in non-raster atomic force microscopy. Ultramicroscopy, 2014, 137, 48-54.	1.9	22
133	Gas plume detection and tracking in hyperspectral video sequences using Binary Partition Trees. , 2014, , .		8
134	Two-species particle aggregation and stability of co-dimension one solutions. Discrete and Continuous Dynamical Systems - Series B, 2014, 19, 1411-1436.	0.9	12
135	Cops on the dots in a mathematical model of urban crime and police response. Discrete and Continuous Dynamical Systems - Series B, 2014, 19, 1479-1506.	0.9	37
136	Preface to special issue on mathematics of social systems. Discrete and Continuous Dynamical Systems - Series B, 2014, 19, i-v.	0.9	0
137	An "Estimate & Score Algorithm" for simultaneous parameter estimation and reconstruction of incomplete data on social networks. Security Informatics, 2013, 2, .	2.5	15
138	Swarming on Random Graphs. Journal of Statistical Physics, 2013, 151, 150-173.	1.2	14
139	Well-Posedness Theory for Aggregation Sheets. Communications in Mathematical Physics, 2013, 319, 451-477.	2.2	3
140	Spiral Scanning and Encased Cantilevers for High Spatial and Temporal Resolution in Atomic Force Microscopy. Biophysical Journal, 2013, 104, 512a.	0.5	0
141	Community Detection Using Spectral Clustering on Sparse Geosocial Data. SIAM Journal on Applied Mathematics, 2013, 73, 67-83.	1.8	64
142	Detection and tracking of gas plumes in LWIR hyperspectral video sequence data. Proceedings of SPIE, 2013, , .	0.8	21
143	Analysis of the Wavelet Ginzburg-Landau Energy in Image Applications with Edges. SIAM Journal on Imaging Sciences, 2013, 6, 698-729.	2.2	13
144	Statistical Density Estimation Using Threshold Dynamics for Geometric Motion. Journal of Scientific Computing, 2013, 54, 513-530.	2.3	3

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145	Blow-up dynamics for the aggregation equation with degenerate diffusion. <i>Physica D: Nonlinear Phenomena</i> , 2013, 260, 77-89.	2.8	15
146	Dynamics of particle settling and resuspension in viscous liquid films. <i>Journal of Fluid Mechanics</i> , 2013, 717, 203-231.	3.4	33
147	Improved accuracy and speed in scanning probe microscopy by image reconstruction from non-gridded position sensor data. <i>Nanotechnology</i> , 2013, 24, 335703.	2.6	26
148	An MBO Scheme on Graphs for Classification and Image Processing. <i>SIAM Journal on Imaging Sciences</i> , 2013, 6, 1903-1930.	2.2	82
149	A Method Based on Total Variation for Network Modularity Optimization Using the MBO Scheme. <i>SIAM Journal on Applied Mathematics</i> , 2013, 73, 2224-2246.	1.8	29
150	Modeling warm dense matter experiments using the 3D ALE-AMR code and the move toward exascale computing. <i>EPJ Web of Conferences</i> , 2013, 59, 09006.	0.3	2
151	Video stabilization of atmospheric turbulence distortion. <i>Inverse Problems and Imaging</i> , 2013, 7, 839-861.	1.1	47
152	An Economical Testbed for Cooperative Control and Sensing Strategies of Robotic Micro-vehicles. <i>Lecture Notes in Electrical Engineering</i> , 2013, , 65-75.	0.4	3
153	PREDICTING PATTERN FORMATION IN PARTICLE INTERACTIONS. <i>Mathematical Models and Methods in Applied Sciences</i> , 2012, 22, .	3.3	58
154	Self-exciting point process models of civilian deaths in Iraq. <i>Security Journal</i> , 2012, 25, 244-264.	1.7	85
155	A Variational Approach for Sharpening High Dimensional Images. <i>SIAM Journal on Imaging Sciences</i> , 2012, 5, 150-178.	2.2	75
156	Robot swarming over the Internet. , 2012, , .		4
157	Cooperative search with autonomous vehicles in a 3D aquatic testbed. , 2012, , .		16
158	Multislice Modularity Optimization in Community Detection and Image Segmentation. , 2012, , .		5
159	Development of knife-edge ridges on ion-bombarded surfaces. <i>Applied Physics Letters</i> , 2012, 101, .	3.3	12
160	Stability and clustering of self-similar solutions of aggregation equations. <i>Journal of Mathematical Physics</i> , 2012, 53, 115610.	1.1	22
161	A Generalized Birkhoffâ€“Rott Equation for Two-dimensional Active Scalar Problems. <i>SIAM Journal on Applied Mathematics</i> , 2012, 72, 382-404.	1.8	10
162	Characterization of Radially Symmetric Finite Time Blowup in Multidimensional Aggregation Equations. <i>SIAM Journal on Mathematical Analysis</i> , 2012, 44, 651-681.	1.9	31

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163	Adaptation of an ecological territorial model to street gang spatial patterns in Los Angeles. <i>Discrete and Continuous Dynamical Systems</i> , 2012, 32, 3223-3244.	0.9	27
164	Anomalous exponents of self-similar blow-up solutions to an aggregation equation in odd dimensions. <i>Applied Mathematics Letters</i> , 2012, 25, 2317-2321.	2.7	6
165	Diffuse Interface Models on Graphs for Classification of High Dimensional Data. <i>Multiscale Modeling and Simulation</i> , 2012, 10, 1090-1118.	1.6	116
166	Encased Cantilevers and Alternative Scan Algorithms for Ultra-Gentle High Speed Atomic Force Microscopy. <i>Biophysical Journal</i> , 2012, 102, 586a.	0.5	0
167	AGGREGATION AND SPREADING VIA THE NEWTONIAN POTENTIAL: THE DYNAMICS OF PATCH SOLUTIONS. <i>Mathematical Models and Methods in Applied Sciences</i> , 2012, 22, 1140005.	3.3	58
168	Asymptotics of blowup solutions for the aggregation equation. <i>Discrete and Continuous Dynamical Systems - Series B</i> , 2012, 17, 1309-1331.	0.9	14
169	Diffuse interface surface tension models in an expanding flow. <i>Communications in Mathematical Sciences</i> , 2012, 10, 387-418.	1.0	23
170	Fast TV Regularization for 2D Maximum Penalized Likelihood Estimation. <i>Journal of Computational and Graphical Statistics</i> , 2011, 20, 479-491.	1.7	15
171	A biharmonic-modified forward time stepping method for fourth order nonlinear diffusion equations. <i>Discrete and Continuous Dynamical Systems</i> , 2011, 29, 1367-1391.	0.9	31
172	Local and global well-posedness for aggregation equations and Patlak-Keller-Segel models with degenerate diffusion. <i>Nonlinearity</i> , 2011, 24, 1683-1714.	1.4	98
173	Level Set Based Multispectral Segmentation with Corners. <i>SIAM Journal on Imaging Sciences</i> , 2011, 4, 597-617.	2.2	7
174	Efficient Boundary Tracking Through Sampling. <i>Applied Mathematics Research Express</i> , 2011, 2011, 182-214.	1.0	7
175	Geographical influences of an emerging network of gang rivalries. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2011, 390, 3894-3914.	2.6	29
176	Particle-laden viscous thin-film flows on an incline: Experiments compared with a theory based on shear-induced migration and particle settling. <i>Physica D: Nonlinear Phenomena</i> , 2011, 240, 1661-1673.	2.8	24
177	Direct Sparse Deblurring. <i>Journal of Mathematical Imaging and Vision</i> , 2011, 39, 1-12.	1.3	54
178	L^p theory for the multidimensional aggregation equation. <i>Communications on Pure and Applied Mathematics</i> , 2011, 64, 45-83.	3.1	109
179	A numerical scheme for particle-laden thin film flow in two dimensions. <i>Journal of Computational Physics</i> , 2011, 230, 6334-6353.	3.8	11
180	Stability of ring patterns arising from two-dimensional particle interactions. <i>Physical Review E</i> , 2011, 84, 015203.	2.1	93

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181	Reconstruction of missing data in social networks based on temporal patterns of interactions. <i>Inverse Problems</i> , 2011, 27, 115013.	2.0	60
182	Unconditionally stable schemes for higher order inpainting. <i>Communications in Mathematical Sciences</i> , 2011, 9, 413-457.	1.0	81
183	Improving Density Estimation by Incorporating Spatial Information. <i>Eurasip Journal on Advances in Signal Processing</i> , 2010, 2010, .	1.7	9
184	Assessment and mitigation of radiation, EMP, debris & shrapnel impacts at megajoule-class laser facilities. <i>Journal of Physics: Conference Series</i> , 2010, 244, 032018.	0.4	10
185	Image Recovery via Nonlocal Operators. <i>Journal of Scientific Computing</i> , 2010, 42, 185-197.	2.3	262
186	Self-similarity in particle-laden flows at constant volume. <i>Journal of Engineering Mathematics</i> , 2010, 66, 53-63.	1.2	6
187	Wavelet analogue of the Ginzburg-Landau energy and its Γ -convergence. <i>Interfaces and Free Boundaries</i> , 2010, , 497-525.	0.8	15
188	Nonlinear Patterns in Urban Crime: Hotspots, Bifurcations, and Suppression. <i>SIAM Journal on Applied Dynamical Systems</i> , 2010, 9, 462-483.	1.6	110
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