Andrea Bertozzi

List of Publications by Year
in descending order

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	Navier-stokes, fluid dynamics, and image and video inpainting. , 0, , .		525
2	Self-Propelled Particles with Soft-Core Interactions: Patterns, Stability, and Collapse. Physical Review Letters, 2006, 96, 104302.	7.8	428
3	The challenges of modeling and forecasting the spread of COVID-19. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 16732-16738.	7.1	406
4	Swarming Patterns in a Two-Dimensional Kinematic Model for Biological Groups. SIAM Journal on Applied Mathematics, 2004, 65, 152-174.	1.8	384
5	A Nonlocal Continuum Model for Biological Aggregation. Bulletin of Mathematical Biology, 2006, 68, 1601-1623.	1.9	340
6	A STATISTICAL MODEL OF CRIMINAL BEHAVIOR. Mathematical Models and Methods in Applied Sciences, 2008, 18, 1249-1267.	3.3	291
7	Impact of social distancing during COVID-19 pandemic on crime in Los Angeles and Indianapolis. Journal of Criminal Justice, 2020, 68, 101692.	2.3	288
8	Inpainting of Binary Images Using the Cahnâ€"Hilliard Equation. IEEE Transactions on Image Processing, 2007, 16, 285-291.	9.8	287
9	Image Recovery via Nonlocal Operators. Journal of Scientific Computing, 2010, 42, 185-197.	2.3	262
10	Randomized Controlled Field Trials of Predictive Policing. Journal of the American Statistical Association, 2015, 110, 1399-1411.	3.1	220
11	Linear stability and transient growth in driven contact lines. Physics of Fluids, 1997, 9, 530-539.	4.0	217
12	State transitions and the continuum limit for a 2D interacting, self-propelled particle system. Physica D: Nonlinear Phenomena, 2007, 232, 33-47.	2.8	214
13	The lubrication approximation for thin viscous films: Regularity and long-time behavior of weak solutions. Communications on Pure and Applied Mathematics, 1996, 49, 85-123.	3.1	210
14	Dissipation and displacement of hotspots in reaction-diffusion models of crime. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 3961-3965.	7.1	183
15	Global regularity for vortex patches. Communications in Mathematical Physics, 1993, 152, 19-28.	2.2	171
16	Blow-up in multidimensional aggregation equations with mildly singular interaction kernels. Nonlinearity, 2009, 22, 683-710.	1.4	162
17	Undercompressive shocks in thin film flows. Physica D: Nonlinear Phenomena, 1999, 134, 431-464.	2.8	154
18	Long-wave instabilities and saturation in thin film equations. Communications on Pure and Applied Mathematics, 1998, 51, 625-661.	3.1	134

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19	Positivity-Preserving Numerical Schemes for Lubrication-Type Equations. SIAM Journal on Numerical Analysis, 1999, 37, 523-555.	2.3	128
20	Diffuse Interface Models on Graphs for Classification of High Dimensional Data. Multiscale Modeling and Simulation, 2012, 10, 1090-1118.	1.6	116
21	A Wavelet-Laplace Variational Technique for Image Deconvolution and Inpainting. IEEE Transactions on Image Processing, 2008, 17, 657-663.	9.8	113
22	Nonlinear Patterns in Urban Crime: Hotspots, Bifurcations, and Suppression. SIAM Journal on Applied Dynamical Systems, 2010, 9, 462-483.	1.6	110
23	Axisymmetric Surface Diffusion: Dynamics and Stability of Self-Similar Pinchoff. Journal of Statistical Physics, 1998, 93, 725-776.	1.2	109
24	Fourth order partial differential equations on general geometries. Journal of Computational Physics, 2006, 216, 216-246.	3.8	109
25	L^p theory for the multidimensional aggregation equation. Communications on Pure and Applied Mathematics, 2011, 64, 45-83.	3.1	109
26	Local and global well-posedness for aggregation equations and Patlak–Keller–Segel models with degenerate diffusion. Nonlinearity, 2011, 24, 1683-1714.	1.4	98
27	Contact Line Stability and "Undercompressive Shocks" in Driven Thin Film Flow. Physical Review Letters, 1998, 81, 5169-5172.	7.8	97
28	Dewetting films: bifurcations and concentrations. Nonlinearity, 2001, 14, 1569-1592.	1.4	97
29	Stability of ring patterns arising from two-dimensional particle interactions. Physical Review E, 2011, 84, 015203.	2.1	93
30	Analysis of a Two-Scale Cahn–Hilliard Model for Binary Image Inpainting. Multiscale Modeling and Simulation, 2007, 6, 913-936.	1.6	89
31	Multi-Vehicle Flocking: Scalability of Cooperative Control Algorithms using Pairwise Potentials. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	89
32	Global models for moving contact lines. Physical Review E, 2000, 63, 011208.	2.1	88
33	Finite-Time Blow-up of Solutions of an Aggregation Equation in R n. Communications in Mathematical Physics, 2007, 274, 717-735.	2.2	88
34	Self-exciting point process models of civilian deaths in Iraq. Security Journal, 2012, 25, 244-264.	1.7	85
35	An MBO Scheme on Graphs for Classification and Image Processing. SIAM Journal on Imaging Sciences, 2013, 6, 1903-1930.	2.2	82
36	Unconditionally stable schemes for higher order inpainting. Communications in Mathematical Sciences, 2011, 9, 413-457.	1.0	81

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37	The lubrication approximation for thin viscous films: the moving contact line with a 'porous media' cut-off of van der Waals interactions. Nonlinearity, 1994, 7, 1535-1564.	1.4	80
38	Singularities and Similarities in Interface Flows. Applied Mathematical Sciences (Switzerland), 1994, , 155-208.	0.8	80
39	Multiclass Data Segmentation Using Diffuse Interface Methods on Graphs. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2014, 36, 1600-1613.	13.9	78
40	Finite-time blow-up of solutions of some long-wave unstable thin film equations. Indiana University Mathematics Journal, 2000, 49, 0-0.	0.9	76
41	Singularities in a modified Kuramoto-Sivashinsky equation describing interface motion for phase transition. Physica D: Nonlinear Phenomena, 1995, 85, 375-404.	2.8	75
42	Traveling Wave Solutions of Fourth Order PDEs for Image Processing. SIAM Journal on Mathematical Analysis, 2004, 36, 38-68.	1.9	75
43	A Variational Approach for Sharpening High Dimensional Images. SIAM Journal on Imaging Sciences, 2012, 5, 150-178.	2.2	75
44	A diffuse-interface model for electrowetting drops in a Hele-Shaw cell. Journal of Fluid Mechanics, 2007, 590, 411-435.	3.4	72
45	A study of EWOD-driven droplets by PIV investigation. Lab on A Chip, 2008, 8, 456.	6.0	72
46	Hyperspectral Image Unmixing With Endmember Bundles and Group Sparsity Inducing Mixed Norms. IEEE Transactions on Image Processing, 2019, 28, 3435-3450.	9.8	68
47	Existence of Undercompressive Traveling Waves in Thin Film Equations. SIAM Journal on Mathematical Analysis, 2000, 32, 194-213.	1.9	67
48	Theory for Shock Dynamics in Particle-Laden Thin Films. Physical Review Letters, 2005, 94, 117803.	7.8	67
49	The porous media model for the hydraulic system of a conifer tree: Linking sap flux data to transpiration rate. Ecological Modelling, 2006, 191, 447-468.	2.5	67
50	Symmetric Singularity Formation in Lubrication-Type Equations for Interface Motion. SIAM Journal on Applied Mathematics, 1996, 56, 681-714.	1.8	65
51	LOCAL EXISTENCE AND UNIQUENESS OF SOLUTIONS TO A PDE MODEL FOR CRIMINAL BEHAVIOR. Mathematical Models and Methods in Applied Sciences, 2010, 20, 1425-1457.	3.3	64
52	Community Detection Using Spectral Clustering on Sparse Geosocial Data. SIAM Journal on Applied Mathematics, 2013, 73, 67-83.	1.8	64
53	Existence and uniqueness of solutions to an aggregation equation with degenerate diffusion. Communications on Pure and Applied Analysis, 2010, 9, 1617-1637.	0.8	62
54	Reconstruction of missing data in social networks based on temporal patterns of interactions. Inverse Problems, 2011, 27, 115013.	2.0	60

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55	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
56	Mean Curvature, Threshold Dynamics, and Phase Field Theory on Finite Graphs. Milan Journal of Mathematics, 2014, 82, 3-65.	1.1	59
57	PREDICTING PATTERN FORMATION IN PARTICLE INTERACTIONS. Mathematical Models and Methods in Applied Sciences, 2012, 22, .	3.3	58
58	AGGREGATION AND SPREADING VIA THE NEWTONIAN POTENTIAL: THE DYNAMICS OF PATCH SOLUTIONS. Mathematical Models and Methods in Applied Sciences, 2012, 22, 1140005.	3.3	58
59	Spreading of droplets on a solid surface. Physical Review Letters, 1993, 71, 593-596.	7.8	56
60	Stable and unstable singularities in the unforced Heleâ€Shaw cell. Physics of Fluids, 1996, 8, 1356-1370.	4.0	54
61	Direct Sparse Deblurring. Journal of Mathematical Imaging and Vision, 2011, 39, 1-12.	1.3	54
62	Pheeno, A Versatile Swarm Robotic Research and Education Platform. IEEE Robotics and Automation Letters, 2016, 1, 884-891.	5.1	54
63	Ring patterns and their bifurcations in a nonlocal model of biological swarms. Communications in Mathematical Sciences, 2015, 13, 955-985.	1.0	54
64	Stability of compressive and undercompressive thin film travelling waves. European Journal of Applied Mathematics, 2001, 12, 253-291.	2.9	53
65	Determining Environmental Boundaries: Asynchronous Communication and Physical Scales. Lecture Notes in Control and Information Sciences, 0, , 25-42.	1.0	53
66	Experimental validation of cooperative environmental boundary tracking with on-board sensors. , 2009, , .		52
67	Heteroclinic Orbits and Chaotic Dynamics in Planar Fluid Flows. SIAM Journal on Mathematical Analysis, 1988, 19, 1271-1294.	1.9	50
68	Blowup and dissipation in a critical-case unstable thin film equation. European Journal of Applied Mathematics, 2004, 15, 223-256.	2.9	50
69	Low-curvature image simplifiers: Global regularity of smooth solutions and Laplacian limiting schemes. Communications on Pure and Applied Mathematics, 2004, 57, 764-790.	3.1	48
70	Multi-UUV perimeter surveillance. , 2004, , .		48
71	Efficient numerical methods for multiscale crowd dynamics with emotional contagion. Mathematical Models and Methods in Applied Sciences, 2017, 27, 205-230.	3.3	48
72	Finite-time blow-up of Lâˆž-weak solutions of an aggregation equation. Communications in Mathematical Sciences, 2010, 8, 45-65.	1.0	48

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73	Video stabilization of atmospheric turbulence distortion. Inverse Problems and Imaging, 2013, 7, 839-861.	1.1	47
74	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
75	Two-Dimensional Compact Variational Mode Decomposition. Journal of Mathematical Imaging and Vision, 2017, 58, 294-320.	1.3	45
76	Crime topic modeling. Crime Science, 2017, 6, .	2.8	45
77	Deep Learning for Real-Time Crime Forecasting and Its Ternarization. Chinese Annals of Mathematics Series B, 2019, 40, 949-966.	0.4	45
78	A variational approach to hyperspectral image fusion. Proceedings of SPIE, 2009, , .	0.8	44
79	Experimental validation of an algorithm for cooperative boundary tracking. , 0, , .		43
80	Shock Solutions for Particle-Laden Thin Films. SIAM Journal on Applied Mathematics, 2008, 68, 760-783.	1.8	43
81	Self-Similar Blowup Solutions to an Aggregation Equation in R^n. SIAM Journal on Applied Mathematics, 2010, 70, 2582-2603.	1.8	42
82	A blob method for the aggregation equation. Mathematics of Computation, 2015, 85, 1681-1717.	2.1	41
83	Contagion Shocks in One Dimension. Journal of Statistical Physics, 2015, 158, 647-664.	1.2	41
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	Tracking Environmental Level Sets with Autonomous Vehicles. Cooperative Systems, 2004, , 317-332.	0.3	41
86	Environmental boundary tracking and estimation using multiple autonomous vehicles. , 2007, , .		40
87	Uncertainty Quantification in Graph-Based Classification of High Dimensional Data. SIAM-ASA Journal on Uncertainty Quantification, 2018, 6, 568-595.	2.0	40
88	Ideal Scan Path for High-Speed Atomic Force Microscopy. IEEE/ASME Transactions on Mechatronics, 2017, 22, 381-391.	5.8	38
89	Water vapor capturing using an array of traveling liquid beads for desalination and water treatment. Science Advances, 2019, 5, eaav7662.	10.3	38
90	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

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91	Reverse Undercompressive Shock Structures in Driven Thin Film Flow. Physical Review Letters, 2003, 90, 126105.	7.8	36
92	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
93	Multidimensional Residues, Generating Functions, and Their Application to Queueing Networks. SIAM Review, 1993, 35, 239-268.	9.5	35
94	Suspendable Hydrogel Nanovials for Massively Parallel Single-Cell Functional Analysis and Sorting. ACS Nano, 2022, 16, 7242-7257.	14.6	35
95	Dynamics of particle settling and resuspension in viscous liquid films. Journal of Fluid Mechanics, 2013, 717, 203-231.	3.4	33
96	Dynamics of thin liquid films on vertical cylindrical fibres. Journal of Fluid Mechanics, 2019, 865, 303-327.	3.4	33
97	Experimental study of gravitation effects in the flow of a particle-laden thin film on an inclined plane. Physics of Fluids, 2009, 21, .	4.0	32
98	Diffuse Interface Models on Graphs for Classification of High Dimensional Data. SIAM Review, 2016, 58, 293-328.	9.5	32
99	A biharmonic-modified forward time stepping method for fourth order nonlinear diffusion equations. Discrete and Continuous Dynamical Systems, 2011, 29, 1367-1391.	0.9	31
100	Characterization of Radially Symmetric Finite Time Blowup in Multidimensional Aggregation Equations. SIAM Journal on Mathematical Analysis, 2012, 44, 651-681.	1.9	31
101	Diffuse interface methods for multiclass segmentation of high-dimensional data. Applied Mathematics Letters, 2014, 33, 29-34.	2.7	31
102	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
103	Thin Film Traveling Waves and the Navier Slip Condition. SIAM Journal on Applied Mathematics, 2003, 63, 722-744.	1.8	30
104	Stability of a second order consensus algorithm with time delay. , 2008, , .		30
105	Geographical influences of an emerging network of gang rivalries. Physica A: Statistical Mechanics and Its Applications, 2011, 390, 3894-3914.	2.6	29
106	A Method Based on Total Variation for Network Modularity Optimization Using the MBO Scheme. SIAM Journal on Applied Mathematics, 2013, 73, 2224-2246.	1.8	29
107	A Linear Systems Approach to Imaging Through Turbulence. Journal of Mathematical Imaging and Vision, 2014, 48, 185-201.	1.3	29
108	Monodisperse drops templated by 3D-structured microparticles. Science Advances, 2020, 6, .	10.3	28

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109	Adaptation of an ecological territorial model to street gang spatial patterns in Los Angeles. Discrete and Continuous Dynamical Systems, 2012, 32, 3223-3244.	0.9	27
110	Global Binary Optimization on Graphs for Classification of High-Dimensional Data. Journal of Mathematical Imaging and Vision, 2015, 52, 414-435.	1.3	27
111	A multilayer network model of the coevolution of the spread of a disease and competing opinions. Mathematical Models and Methods in Applied Sciences, 2021, 31, 2455-2494.	3.3	27
112	Improved accuracy and speed in scanning probe microscopy by image reconstruction from non-gridded position sensor data. Nanotechnology, 2013, 24, 335703.	2.6	26
113	Multivariate Spatiotemporal Hawkes Processes and Network Reconstruction. SIAM Journal on Mathematics of Data Science, 2019, 1, 356-382.	1.8	26
114	Consistent Dynamic Mode Decomposition. SIAM Journal on Applied Dynamical Systems, 2019, 18, 1565-1585.	1.6	25
115	Particle-laden viscous thin-film flows on an incline: Experiments compared with a theory based on shear-induced migration and particle settling. Physica D: Nonlinear Phenomena, 2011, 240, 1661-1673.	2.8	24
116	Hyperspectral Image Classification Using Graph Clustering Methods. Image Processing on Line, 0, 7, 218-245.	0.0	24
117	Behavior of a particle-laden flow in a spiral channel. Physics of Fluids, 2014, 26, 043302.	4.0	23
118	Diffuse interface surface tension models in an expanding flow. Communications in Mathematical Sciences, 2012, 10, 387-418.	1.0	23
119	Rarefaction–undercompressive fronts in driven films. Physics of Fluids, 1999, 11, 2812-2814.	4.0	22
120	Nonlinear dynamics and transient growth of driven contact lines. Physics of Fluids, 1999, 11, 3560-3562.	4.0	22
121	Stability and clustering of self-similar solutions of aggregation equations. Journal of Mathematical Physics, 2012, 53, 115610.	1.1	22
122	Height drift correction in non-raster atomic force microscopy. Ultramicroscopy, 2014, 137, 48-54.	1.9	22
123	Detection and tracking of gas plumes in LWIR hyperspectral video sequence data. Proceedings of SPIE, 2013, , .	0.8	21
124	Graph MBO method for multiclass segmentation of hyperspectral stand-off detection video. , 2014, , .		21
125	Mapping Buried Hydrogen-Bonding Networks. ACS Nano, 2016, 10, 5446-5451.	14.6	21
126	Topic time series analysis of microblogs. IMA Journal of Applied Mathematics, 2016, 81, 409-431.	1.6	21

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127	Image segmentation with dynamic artifacts detection and bias correction. Inverse Problems and Imaging, 2017, 11, 577-600.	1.1	21
128	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
129	The lubrication approximation for thin viscous films: Regularity and longâ€time behavior of weak solutions. Communications on Pure and Applied Mathematics, 1996, 49, 85-123.	3.1	21
130	Nonlocal Similarity Image Filtering. Lecture Notes in Computer Science, 2009, , 62-71.	1.3	21
131	Nonlinear dynamics of two-dimensional undercompressive shocks. Physica D: Nonlinear Phenomena, 2005, 209, 36-48.	2.8	20
132	Hyperbolic systems of conservation laws in gravity-driven, particle-laden thin-film flows. Journal of Engineering Mathematics, 2014, 88, 29-48.	1.2	20
133	Cancellation exponents and fractal scaling. Physical Review E, 1994, 49, 4716-4719.	2.1	19
134	Filtering Methods for Subgraph Matching on Multiplex Networks. , 2018, , .		19
135	Crime modeling with truncated LÃ©vy flights for residential burglary models. Mathematical Models and Methods in Applied Sciences, 2018, 28, 1857-1880.	3.3	19
136	Experimental study of a string-based counterflow wet electrostatic precipitator for collection of fine and ultrafine particles. Journal of the Air and Waste Management Association, 2021, 71, 851-865.	1.9	19
137	Multi-class Graph Mumford-Shah Model for Plume Detection Using the MBO scheme. Lecture Notes in Computer Science, 2015, , 209-222.	1.3	19
138	Virtual attractive-repulsive potentials for cooperative control of second order dynamic vehicles on the caltech MVWT. , 0, , .		18
139	Shock Solutions for High Concentration Particle-Laden Thin Films. SIAM Journal on Applied Mathematics, 2014, 74, 322-344.	1.8	18
140	Convergence of the Graph Allenâ€"Cahn Scheme. Journal of Statistical Physics, 2017, 167, 934-958.	1.2	18
141	Decentralized stochastic control of robotic swarm density: Theory, simulation, and experiment. , 2017, , .		18
142	Blind Hyperspectral Unmixing Based on Graph Total Variation Regularization. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 3338-3351.	6.3	18
143	Investigating Clustering and Violence Interruption in Gang-Related Violent Crime Data Using Spatialâ€"Temporal Point Processes With Covariates. Journal of the American Statistical Association, 2021, 116, 1674-1687.	3.1	18
144	The behavior of solutions of multidimensional aggregation equations with mildly singular interaction kernels. Chinese Annals of Mathematics Series B, 2009, 30, 463-482.	0.4	17

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145	Cooperative search with autonomous vehicles in a 3D aquatic testbed. , 2012, , .		16
146	Wavelet analogue of the Ginzburg–Landau energy and its Î“-convergence. Interfaces and Free Boundaries, 2010, , 497-525.	0.8	15
147	Fast TV Regularization for 2D Maximum Penalized Likelihood Estimation. Journal of Computational and Graphical Statistics, 2011, 20, 479-491.	1.7	15
148	An â€œEstimate & Score Algorithmâ€•for simultaneous parameter estimation and reconstruction of incomplete data on social networks. Security Informatics, 2013, 2, .	2.5	15
149	Blow-up dynamics for the aggregation equation with degenerate diffusion. Physica D: Nonlinear Phenomena, 2013, 260, 77-89.	2.8	15
150	Non-local crime density estimation incorporating housing information. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2014, 372, 20130403.	3.4	15
151	Swarming on Random Graphs. Journal of Statistical Physics, 2013, 151, 150-173.	1.2	14
152	Asymptotics of blowup solutions for the aggregation equation. Discrete and Continuous Dynamical Systems - Series B, 2012, 17, 1309-1331.	0.9	14
153	Analysis of the Wavelet Ginzburg--Landau Energy in Image Applications with Edges. SIAM Journal on Imaging Sciences, 2013, 6, 698-729.	2.2	13
154	Unsupervised record matching with noisy and incomplete data. International Journal of Data Science and Analytics, 2018, 6, 109-129.	4.1	13
155	Modelling film flows down a fibre influenced by nozzle geometry. Journal of Fluid Mechanics, 2020, 901, .	3.4	13
156	A second generation micro-vehicle testbed for cooperative control and sensing strategies. Proceedings of the American Control Conference, 2007, , .	0.0	12
157	Development of knife-edge ridges on ion-bombarded surfaces. Applied Physics Letters, 2012, 101, .	3.3	12
158	The Regularity of the Boundary of a Multidimensional Aggregation Patch. SIAM Journal on Mathematical Analysis, 2016, 48, 3789-3819.	1.9	12
159	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
160	Higher-Order Feature-Preserving Geometric Regularization. SIAM Journal on Imaging Sciences, 2010, 3, 21-51.	2.2	11
161	A numerical scheme for particle-laden thin film flow in two dimensions. Journal of Computational Physics, 2011, 230, 6334-6353.	3.8	11
162	Mathematical modelling of crime and security: Special Issue of EJAM. European Journal of Applied Mathematics, 2016, 27, 311-316.	2.9	11

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163	Performance Bounds on Spatial Coverage Tasks by Stochastic Robotic Swarms. IEEE Transactions on Automatic Control, 2018, 63, 1563-1578.	5.7	11
164	Thermally-driven coalescence in thin liquid film flowing down a fibre. Journal of Fluid Mechanics, 2021, 916, .	3.4	11
165	An economical micro-car testbed for validation of cooperative control strategies. , 2006, , .		10
166	Robotic Path Planning and Visibility with Limited Sensor Data. Proceedings of the American Control Conference, 2007, , .	0.0	10
167	Assessment and mitigation of radiation, EMP, debris & shrapnel impacts at megajoule-class laser facilities. Journal of Physics: Conference Series, 2010, 244, 032018.	0.4	10
168	A Generalized Birkhoffâ€"Rott Equation for Two-dimensional Active Scalar Problems. SIAM Journal on Applied Mathematics, 2012, 72, 382-404.	1.8	10
169	Experimental investigation of bidensity slurries on an incline. Granular Matter, 2014, 16, 269-274.	2.2	10
170	Learning to Predict Human Stress Level with Incomplete Sensor Data from Wearable Devices. , 2019, , .		10
171	A Graph-Based Approach for Data Fusion and Segmentation of Multimodal Images. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 4419-4429.	6.3	10
172	Theory for undercompressive shocks in tears of wine. Physical Review Fluids, 2020, 5, .	2.5	10
173	Scheduled Restart Momentum for Accelerated Stochastic Gradient Descent. SIAM Journal on Imaging Sciences, 2022, 15, 738-761.	2.2	10
174	Improving Density Estimation by Incorporating Spatial Information. Eurasip Journal on Advances in Signal Processing, 2010, 2010, .	1.7	9
175	Hyperspectral unmixing with material variability using social sparsity. , 2016, , .		9
176	Segmentation of scanning tunneling microscopy images using variational methods and empirical wavelets. Pattern Analysis and Applications, 2020, 23, 625-651.	4.6	9
177	Linear stability of particle-laden thin films. European Physical Journal: Special Topics, 2009, 166, 77-81.	2.6	8
178	Gas plume detection and tracking in hyperspectral video sequences using Binary Partition Trees. , 2014, , .		8
179	A graph-based approach for feature extraction and segmentation of multimodal images. , 2017, , .		8
180	Simplified Energy Landscape for Modularity Using Total Variation. SIAM Journal on Applied Mathematics, 2018, 78, 2439-2464.	1.8	8

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181	An Analysis of COVID-19 Knowledge Graph Construction and Applications. , 2021, , .		8
182	Level Set Based Multispectral Segmentation with Corners. SIAM Journal on Imaging Sciences, 2011, 4, 597-617.	2.2	7
183	Efficient Boundary Tracking Through Sampling. Applied Mathematics Research EXpress, 2011, 2011, 182-214.	1.0	7
184	Multi-Material ALE with AMR for Modeling Hot Plasmas and Cold Fragmenting Materials. Plasma Science and Technology, 2015, 17, 117-128.	1.5	7
185	Growth and containment of a hierarchical criminal network. Physical Review E, 2016, 93, 022308.	2.1	7
186	Modified Cheeger and ratio cut methods using the Ginzburgâ€"Landau functional for classification of high-dimensional data. Inverse Problems, 2017, 33, 074003.	2.0	7
187	Graph-based optimization approaches for machine learning, uncertainty quantification and networks. Handbook of Numerical Analysis, 2019, 20, 503-531.	1.8	7
188	Subgraph Matching on Multiplex Networks. IEEE Transactions on Network Science and Engineering, 2021, 8, 1367-1384.	6.4	7
189	Sparsity Meets Robustness: Channel Pruning for the Feynman-Kac Formalism Principled Robust Deep Neural Nets. Lecture Notes in Computer Science, 2020, , 362-381.	1.3	7
190	OpenMP Parallelization and Optimization of Graph-Based Machine Learning Algorithms. Lecture Notes in Computer Science, 2016, , 17-31.	1.3	7
191	A semi-supervised heat kernel pagerank MBO algorithm for data classification. Communications in Mathematical Sciences, 2018, 16, 1241-1265.	1.0	7
192	Self-similarity in particle-laden flows at constant volume. Journal of Engineering Mathematics, 2010, 66, 53-63.	1.2	6
193	Anomalous exponents of self-similar blow-up solutions to an aggregation equation in odd dimensions. Applied Mathematics Letters, 2012, 25, 2317-2321.	2.7	6
194	Spatiotemporal chemotactic model for ant foraging. Modern Physics Letters B, 2014, 28, 1450238.	1.9	6
195	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
196	Applications of Structural Equivalence to Subgraph Isomorphism on Multichannel Multigraphs. , 2019, , .		6
197	Fast Blind Hyperspectral Unmixing Based On Graph Laplacian. , 2019, , .		6
198	Modeling illegal logging in Brazil. Research in Mathematical Sciences, 2021, 8, 1.	1.0	6

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199	A Study on Graph-Structured Recurrent Neural Networks and Sparsification with Application to Epidemic Forecasting. Advances in Intelligent Systems and Computing, 2020, , 730-739.	0.6	6
200	ICIAM/GAMM 95 Applied Analysis. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 1996, 76, 373-419.	1.6	5
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