Brian C Lovell

List of Publications by Year
in descending order

87	2,251	394421 19	330143 37
papers	citations	h-index	g-index

88	88	88	1894
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Shadow detection: A survey and comparative evaluation of recent methods. Pattern Recognition, 2012, 45, 1684-1695.	8.1	313
2	Graph embedding discriminant analysis on Grassmannian manifolds for improved image set matching. , 2011, , .		202
3	Spatio-temporal covariance descriptors for action and gesture recognition. , 2013, , .		118
4	Domain Adaptation on the Statistical Manifold. , 2014, , .		98
5	Sparse Coding and Dictionary Learning for Symmetric Positive Definite Matrices: A Kernel Approach. Lecture Notes in Computer Science, 2012, , 216-229.	1.3	86
6	Improved Shadow Removal for Robust Person Tracking in Surveillance Scenarios. , 2010, , .		85
7	Fisher tensors for classifying human epithelial cells. Pattern Recognition, 2014, 47, 2348-2359.	8.1	79
8	Automatic classification of Human Epithelial type 2 cell Indirect Immunofluorescence images using Cell Pyramid Matching. Pattern Recognition, 2014, 47, 2315-2324.	8.1	75
9	Kernel analysis over Riemannian manifolds for visual recognition of actions, pedestrians and textures. , 2012, , .		68
10	Corner detection based on gradient correlation matrices of planar curves. Pattern Recognition, 2010, 43, 1207-1223.	8.1	64
11	Benchmarking human epithelial type 2 interphase cells classification methods on a very large dataset. Artificial Intelligence in Medicine, 2015, 65, 239-250.	6.5	60
12	Improved Foreground Detection via Block-Based Classifier Cascade With Probabilistic Decision Integration. IEEE Transactions on Circuits and Systems for Video Technology, 2013, 23, 83-93.	8.3	59
13	Faster ILOD: Incremental learning for object detectors based on faster RCNN. Pattern Recognition Letters, 2020, 140, 109-115.	4.2	56
14	A Low-Complexity Algorithm for Static Background Estimation from Cluttered Image Sequences in Surveillance Contexts. Eurasip Journal on Image and Video Processing, 2011, 2011, 1-14.	2.6	55
15	Classification of Human Epithelial type 2 cell indirect immunofluoresence images via codebook based descriptors. , 2013, , .		54
16	Robust image corner detection based on scale evolution difference of planar curves. Pattern Recognition Letters, 2009, 30, 449-455.	4.2	51
17	Kernel analysis on Grassmann manifolds for action recognition. Pattern Recognition Letters, 2013, 34, 1906-1915.	4.2	48
18	Investigating the relationships among the South Atlantic Magnetic Anomaly, southern nighttime midlatitude trough, and nighttime Weddell Sea Anomaly during southern summer. Journal of Geophysical Research, 2009, 114, .	3.3	37

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19	Discriminative Non-Linear Stationary Subspace Analysis for Video Classification. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2014, 36, 2353-2366.	13.9	37
20	Computer Aided Diagnosis for Anti-Nuclear Antibodies HEp-2 images: Progress and challenges. Pattern Recognition Letters, 2016, 82, 3-11.	4.2	36
21	Multi-Modal Joint Clustering With Application for Unsupervised Attribute Discovery. IEEE Transactions on Image Processing, 2018, 27, 4345-4356.	9.8	31
22	Clustering on Grassmann manifolds via kernel embedding with application to action analysis. , 2012, , .		30
23	HEp-2 staining pattern recognition at cell and specimen levels: Datasets, algorithms and results. Pattern Recognition Letters, 2016, 82, 12-22.	4.2	29
24	An investigation of the northern hemisphere midlatitude nighttime plasma density enhancements and their relations to the midlatitude nighttime trough during summer. Journal of Geophysical Research, 2009, 114, .	3.3	26
25	Distinctive plasma density features of the topside ionosphere and their electrodynamics investigated during southern winter. Journal of Geophysical Research, 2009, 114, .	3.3	20
26	Adaptive Patch-Based Background Modelling for Improved Foreground Object Segmentation and Tracking. , 2010, , .		19
27	Efficient clustering on Riemannian manifolds: A kernelised random projection approach. Pattern Recognition, 2016, 51, 333-345.	8.1	19
28	What is the best way for extracting meaningful attributes from pictures?. Pattern Recognition, 2017, 64, 314-326.	8.1	18
29	Formation and evolution of the ionospheric plasma density shoulder and its relationship to the superfountain effects investigated during the 6 November 2001 great storm. Journal of Geophysical Research, 2008, 113, .	3.3	17
30	Largeâ€scale traveling ionospheric disturbances impacting equatorial ionization anomaly development in the local morning hours of the Halloween Superstorms on 29â€“30 October 2003. Journal of Geophysical Research, 2010, 115, .	3.3	17
31	Role of Spatiotemporal Oriented Energy Features for Robust Visual Tracking in Video Surveillance. , 2012, , .		17
32	Classifying Anti-nuclear Antibodies HEp-2 Images: A Benchmarking Platform. , 2014, , .		17
33	Visual learning and classification of human epithelial type 2 cell images through spontaneous activity patterns. Pattern Recognition, 2014, 47, 2325-2337.	8.1	17
34	Discovering discriminative cell attributes for HEp-2 specimen image classification. , 2014, , .		15
35	On robust biometric identity verification via sparse encoding of faces: Holistic vs local approaches. , 2012, , .		14
36	Positive and negative ionospheric storms occurring during the 15 May 2005 geomagnetic superstorm. Journal of Geophysical Research: Space Physics, 2015, 120, 7822-7837.	2.4	14

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37	Dynamic Amelioration of Resolution Mismatches for Local Feature Based Identity Inference. , 2010, , .		13
38	Investigating the Coupled Magnetosphereâ€Ionosphereâ€Thermosphere (Mâ€Iâ€T) System's Responses to the 20 November 2003 Superstorm. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029215.	2.4	13
39	EBIT: Weakly-supervised image translation with edge and boundary enhancement. Pattern Recognition Letters, 2020, 138, 534-539.	4.2	12
40	Object tracking via non-Euclidean geometry: A Grassmann approach. , 2014, , .		11
41	Investigating the development of doubleâ€peak subauroral ion drift (DSAID). Journal of Geophysical Research: Space Physics, 2017, 122, 4526-4542.	2.4	11
42	SID: Incremental learning for anchor-free object detection via Selective and Inter-related Distillation. Computer Vision and Image Understanding, 2021, 210, 103229.	4.7	11
43	Stormâ€enhanced plasma density and polar tongue of ionization development during the 15 May 2005 superstorm. Journal of Geophysical Research: Space Physics, 2015, 120, 5101-5116.	2.4	10
44	Stormâ€enhanced plasma density features, daytime polar cap plasma enhancements, and their underlying plasma flows investigated during superstorms. Journal of Geophysical Research, 2009, 114, .	3.3	9
45	A Benchmarking Platform for Mitotic Cell Classification of ANA IIF HEp-2 Images. , 2015, , .		9
46	A multiple covariance approach for cell detection of Gram-stained smears images. , 2015, , .		9
47	Investigating the southern daytime midlatitude trough's relation with the daytime Weddell Sea Anomaly during equinoxes. Journal of Geophysical Research, 2010, 115, .	3.3	8
48	Structured subauroral polarization streams and related auroral undulations occurring on the storm day of 21 January 2005. Journal of Geophysical Research: Space Physics, 2016, 121, 1680-1695.	2.4	8
49	Investigating the Development of Abnormal Subauroral Ion Drift (ASAID) and Abnormal Subauroral Polarization Stream (ASAPS) During the Magnetically Active Times of September 2003. Journal of Geophysical Research: Space Physics, 2018, 123, 1566-1582.	2.4	8
50	Stormâ€enhanced plasma density features investigated during the Bastille Day Superstorm. Journal of Geophysical Research, 2010, 115, .	3.3	7
51	Random projections on manifolds of Symmetric Positive Definite matrices for image classification. , 2014, , .		7
52	A bag of cells approach for antinuclear antibodies HEpâ€2 image classification. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2015, 87, 549-557.	1.5	7
53	Investigating the Development of Abnormal Subauroral Ion Drifts (ASAID) During the Magnetically Quiet Times of October 2003. Journal of Geophysical Research: Space Physics, 2019, 124, 715-733.	2.4	7
54	Novelty detection in human tracking based on spatiotemporal oriented energies. Pattern Recognition, 2015, 48, 812-826.	8.1	6

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55	International Contest on Pattern Recognition techniques for indirect immunofluorescence images analysis. , 2016, , .		6
56	Abnormal Subauroral Ion Drifts (ASAID) and Pi2s During Crossâ€Tail Current Disruptions Observed by Polar on the Magnetically Quiet Days of October 2003. Journal of Geophysical Research: Space Physics, 2019, 124, 6097-6116.	2.4	6
57	Investigating stormâ€enhanced density and polar tongue of ionization development during the 22 October 1999 great storm. Journal of Geophysical Research: Space Physics, 2015, 120, 1428-1444.	2.4	5
58	To face or not to face: Towards reducing false positive of face detection. , 2016, , .		5
59	Polar tongue of ionization (TOI) and associated Joule heating intensification investigated during the magnetically disturbed period of 1â€“2 October 2001. Journal of Geophysical Research: Space Physics, 2016, 121, 5897-5913.	2.4	4
60	Determining the best attributes for surveillance video keywords generation. , 2016, , .		4
61	DGDI: A Dataset for Detecting Glomeruli on Renal Direct Immunofluorescence. , 2018, , .		4
62	Complex Subâ€Auroral Flow Channel Structure Formed by Doubleâ€Peak Subâ€Auroral Ion Drifts (DSAID) and Abnormal Subâ€Auroral Ion Drifts (ASAID). Journal of Geophysical Research: Space Physics, 2021, 126, .	2.4	4
63	Magnetosphereâ€Ionosphereâ€Thermosphere (Mâ€Iâ€T) Coupling Leading to Equatorial Upward and Westward Drifting Supersonic Plasma Bubble Development and Amplified Subauroral Polarization Streams (SAPS) During the January 21, 2005 Moderate Storm. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028548.	2.4	4
64	An Automatic Image Based Single Dilution Method for End Point Titre Quantitation of Antinuclear Antibodies Tests Using HEp-2 Cells. , 2011, , .		3
65	Storm-enhanced plasma density (SED) features, auroral and polar plasma enhancements, and rising topside bubbles of the 31 March 2001 superstorm. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	3
66	Equatorial westward electrojet impacting equatorial ionization anomaly development during the 6 April 2000 superstorm. Journal of Geophysical Research: Space Physics, 2013, 118, 7398-7409.	2.4	3
67	An Optimization Approach to Scanning Skin Direct Immunofluorescence Specimens. , 2015, , .		3
68	Investigating the polar ionosphere during the development of neutral density enhancements on 24â€“25 September 2000. Journal of Geophysical Research: Space Physics, 2017, 122, 4600-4616.	2.4	3
69	Subauroral Flow Channel Structures and Auroral Undulations Triggered by Kelvinâ€Helmholtz Waves. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029144.	2.4	3
70	Traveling ionospheric disturbances and their relations to stormâ€enhanced density features and plasma density irregularities in the local evening and nighttime hours of the Halloween superstorms of 29â€“31 October 2003. Journal of Geophysical Research, 2010, 115, .	3.3	2
71	Perturbation electric fields and disturbance currents investigated during the 25 September 1998 great storm. Journal of Geophysical Research: Space Physics, 2014, 119, 8483-8498.	2.4	2
72	Large plasma density enhancements occurring in the northern polar region during the 6 April 2000 superstorm. Journal of Geophysical Research: Space Physics, 2014, 119, 4805-4818.	2.4	2

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73	Explicit discriminative representation for improved classification of manifold features. Pattern Recognition Letters, 2016, 80, 121-128.	4.2	2
74	Highâ€Latitude Neutral Density Structures Investigated by Utilizing Multiâ€Instrument Satellite Data and NRLMSISEâ€00 Simulations. Journal of Geophysical Research: Space Physics, 2018, 123, 1663-1677.	2.4	2
75	Exploring Inter-Instance Relationships within the Query Set for Robust Image Set Matching. Sensors, 2019, 19, 5051.	3.8	2
76	Investigating Magnetosphereâ€Ionosphereâ€Thermosphere (Mâ€Iâ€T) Coupling Occurring During the 7â€“8 November 2004 Superstorm. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027484.	2.4	2
77	Manifold convex hull (MACH): Satisfying a need for SPD. , 2016, , .		1
78	Landmark manifold: Revisiting the Riemannian manifold approach for facial emotion recognition. , 2016, , .		1
79	Polar Cap Energy Deposition Events During the 5â€“6 August 2011 Magnetic Storm. Journal of Geophysical Research: Space Physics, 2018, 123, 2351-2369.	2.4	1
80	Polar Ion Temperature Variations During the 22 January 2012 Magnetic Storm. Journal of Geophysical Research: Space Physics, 2018, 123, 7806-7824.	2.4	1
81	Investigating Highâ€Latitude Energy Deposition Events Occurring During the 17 January 2005 Geomagnetic Storm. Journal of Geophysical Research: Space Physics, 2018, 123, 6760-6775.	2.4	1
82	Investigating the Development of Distinctive Subauroral Flow Channels During the November 7â€“8, 2004 Superstorm. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA027821.	2.4	1
83	HIDDEN MARKOV MODELS FOR SPATIO-TEMPORAL PATTERN RECOGNITION. , 2005, , 25-40.		1
84	Ion temperature intensification in southern convection flow channels during the 1 October 2001 geomagnetic storm recovery phase. Journal of Geophysical Research: Space Physics, 2016, 121, 8871-8886.	2.4	0
85	Solving Classification Problems on Human Epithelial Type 2 Cells for Anti-Nuclear Antibodies Test: Traditional versus Contemporary Approaches. , 2017, , 605-632.		0
86	Investigating the Development of Localized Neutral Density Increases During the 24 August 2005 Geomagnetic Storm. Journal of Geophysical Research: Space Physics, 2017, 122, 11,765.	2.4	0
87	Early Experience of Depth Estimation on Intricate Objects using Generative Adversarial Networks. , 2018, , .		0