Luis GÃ³mez-Chova

List of Publications by Year
in descending order

117 papers	5,328 citations	101543 36 h-index	114465 63 g-index
121 all docs	121 docs citations	121 times ranked	4863 citing authors

#	Article	IF	Citations
1	Cloud Mask Intercomparison eXercise (CMIX): An evaluation of cloud masking algorithms for Landsat 8 and Sentinel-2. Remote Sensing of Environment, 2022, 274, 112990.	11.0	64
2	Cross-Sensor Adversarial Domain Adaptation of Landsat-8 and Proba-V Images for Cloud Detection. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 747-761.	4.9	15
3	Benchmarking Deep Learning Models for Cloud Detection in Landsat-8 and Sentinel-2 Images. Remote Sensing, 2021, 13, 992.	4.0	30
4	Towards a novel approach for Sentinel-3 synergistic OLCI/SLSTR cloud and cloud shadow detection based on stereo cloud-top height estimation. ISPRS Journal of Photogrammetry and Remote Sensing, 2021, 181, 238-253.	11.1	15
5	The Reprocessed Proba-V Collection 2: Product Validation. , 2021, , .		1
6	Estimating and understanding crop yields with explainable deep learning in the Indian Wheat Belt. Environmental Research Letters, 2020, 15, 024019.	5.2	104
7	Transferring deep learning models for cloud detection between Landsat-8 and Proba-V. ISPRS Journal of Photogrammetry and Remote Sensing, 2020, 160, 1-17.	11.1	47
8	Statistical biophysical parameter retrieval and emulation with Gaussian processes. Data Handling in Science and Technology, 2020, 32, 333-368.	3.1	0
9	Estimating crop primary productivity with Sentinel-2 and Landsat 8 using machine learning methods trained with radiative transfer simulations. Remote Sensing of Environment, 2019, 225, 441-457.	11.0	112
10	Domain Adaptation of Landsat-8 and Proba-V Data Using Generative Adversarial Networks for Cloud Detection. , 2019, , .		4
11	Convolutional Long Short-Term Memory Network for Multitemporal Cloud Detection Over Landmarks. , 2019, , .		3
12	Optimizing Kernel Ridge Regression for Remote Sensing Problems. , 2018, , .		4
13	Convolutional Neural Networks for Cloud Screening: Transfer Learning from Landsat-8 to Proba-V. , 2018, , .		5
14	Multitemporal Cloud Masking in the Google Earth Engine. Remote Sensing, 2018, 10, 1079.	4.0	84
15	Pattern Recognition Scheme for Large-Scale Cloud Detection Over Landmarks. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2018, 11, 3977-3987.	4.9	5
16	Signal-to-noise ratio in reproducing kernel Hilbert spaces. Pattern Recognition Letters, 2018, 112, 75-82.	4.2	5
17	Optimized Kernel Entropy Components. IEEE Transactions on Neural Networks and Learning Systems, 2017, 28, 1466-1472.	11.3	19
18	Cloud masking and removal in remote sensing image time series. Journal of Applied Remote Sensing, 2017, 11, 015005.	1.3	37

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19	Randomized kernels for large scale Earth observation applications. Remote Sensing of Environment, 2017, 202, 54-63.	11.0	18
20	A Cloud masking algorithm for the XBAER aerosol retrieval using MERIS data. Remote Sensing of Environment, 2017, 197, 141-160.	11.0	42
21	Cloud detection on the Google Earth engine platform. , 2017, , .		3
22	HyperLabelMe : A Web Platform for Benchmarking Remote-Sensing Image Classifiers. IEEE Geoscience and Remote Sensing Magazine, 2017, 5, 79-85.	9.6	8
23	Cloud detection machine learning algorithms for PROBA-V. , 2017, , .		12
24	Diurnal Cycle Relationships between Passive Fluorescence, PRI and NPQ of Vegetation in a Controlled Stress Experiment. Remote Sensing, 2017, 9, 770.	4.0	67
25	Convolutional neural networks for multispectral image cloud masking. , 2017, , .		17
26	Nonlinear statistical retrieval of surface emissivity from IASI data. , 2017, , .		4
27	Fair Kernel Learning. Lecture Notes in Computer Science, 2017, , 339-355.	1.3	26
28	Operational cloud screening service for Sentinel-2 image time series. , 2015, , .		1
29	Multimodal Classification of Remote Sensing Images: A Review and Future Directions. Proceedings of the IEEE, 2015, 103, 1560-1584.	21.3	310
30	Spectral clustering with the probabilistic cluster kernel. Neurocomputing, 2015, 149, 1299-1304.	5.9	17
31	Cloud masking of multitemporal remote sensing images. , 2014, , .		3
32	Semisupervised Kernel Feature Extraction for Remote Sensing Image Analysis. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 5567-5578.	6.3	30
33	Multitemporal fusion of Landsat/TM and ENVISAT/MERIS for crop monitoring. International Journal of Applied Earth Observation and Geoinformation, 2013, 23, 132-141.	2.8	125
34	Graph Matching for Adaptation in Remote Sensing. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 329-341.	6.3	81
35	Spectro-temporal reflectance surfaces: a new conceptual framework for the integration of remote-sensing data from multiple different sensors. International Journal of Remote Sensing, 2013, 34, 3699-3715.	2.9	10
36	A kernel regression approach to cloud and shadow detection in multitemporal images. , 2013, , .		2

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37	Multiset Kernel CCA for multitemporal image classification. , 2013, , .		3
38	Multitask Remote Sensing Data Classification. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 151-161.	6.3	45
39	Encoding Invariances in Remote Sensing Image Classification With SVM. IEEE Geoscience and Remote Sensing Letters, 2013, 10, 981-985.	3.1	46
40	Advances in synergy of AATSR-MERIS sensors for cloud detection. , 2013, , .		2
41	Kernel change discriminant analysis for multitemporal cloud masking. , 2013, , .		2
42	Including invariances in SVM remote sensing image classification. , 2012, , .		3
43	Semisupervised nonlinear feature extraction for image classification. , 2012, , .		4
44	Nonlinear Statistical Retrieval of Atmospheric Profiles From MetOp-IASI and MTG-IRS Infrared Sounding Data. IEEE Transactions on Geoscience and Remote Sensing, 2012, 50, 1759-1769.	6.3	50
45	Semisupervised kernel orthonormalized partial least squares. , 2012, , .		3
46	Learning with the kernel signal to noise ratio. , 2012, , .		5
47	Kernel Entropy Component Analysis for Remote Sensing Image Clustering. IEEE Geoscience and Remote Sensing Letters, 2012, 9, 312-316.	3.1	41
48	Multitemporal Unmixing of Medium-Spatial-Resolution Satellite Images: A Case Study Using MERIS Images for Land-Cover Mapping. IEEE Transactions on Geoscience and Remote Sensing, 2011, 49, 4308-4317.	6.3	45
49	Explicit signal to noise ratio in reproducing kernel Hilbert spaces. , 2011, , .		18
50	Design of a configurable multispectral imaging system based on an AOTF. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2011, 58, 259-262.	3.0	6
51	A Review of Kernel Methods in Remote Sensing Data Analysis. , 2011, , 171-206.		22
52	Kernel entropy component analysis in remote sensing data clustering. , 2011, , .		4
53	Regularized Multiresolution Spatial Unmixing for ENVISAT/MERIS and Landsat/TM Image Fusion. IEEE Geoscience and Remote Sensing Letters, 2011, 8, 844-848.	3.1	35
54	Gridding Artifacts on Medium-Resolution Satellite Image Time Series: MERIS Case Study. IEEE Transactions on Geoscience and Remote Sensing, 2011, 49, 2601-2611.	6.3	21

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55	Remote Sensing Image Processing. Synthesis Lectures on Image, Video, and Multimedia Processing, 2011, 5, 1-192.	0.9	54
56	Land cover classification of VHR airborne images for citrus grove identification. ISPRS Journal of Photogrammetry and Remote Sensing, 2011, 66, 115-123.	11.1	26
57	Multitemporal fusion of Landsat and MERIS images. , 2011, , .		2
58	Kernel-based retrieval of atmospheric profiles from IASI data. , 2011, , .		5
59	Nonlinear retrieval of atmospheric profiles from MetOp-IASI and MTG-IRS data. , 2010, , .		2
60	Semisupervised One-Class Support Vector Machines for Classification of Remote Sensing Data. IEEE Transactions on Geoscience and Remote Sensing, 2010, 48, 3188-3197.	6.3	211
61	Analysis of acousto-optic tunable filter performance for imaging applications. Optical Engineering, 2010, 49, 113203.	1.0	14
62	Improving the performance of acousto-optic tunable filters in imaging applications. Journal of Electronic Imaging, 2010, 19, 043022.	0.9	11
63	Multi-resolution spatial unmixing for MERIS and Landsat image fusion. , 2010, , .		5
64	Multitask SVM learning for remote sensing data classification. Proceedings of SPIE, 2010, , .	0.8	2
65	Developments for vegetation fluorescence retrieval from spaceborne highâ€resolution spectrometry in the O₂â€A and O₂â€B absorption bands. Journal of Geophysical Research, 2010, 115, .	3.3	92
66	Adaptive kernel ridge regression for image denoising. , 2010, , .		2
67	Mean Map Kernel Methods for Semisupervised Cloud Classification. IEEE Transactions on Geoscience and Remote Sensing, 2010, 48, 207-220.	6.3	103
68	CHRIS/Proba Toolbox for hyperspectral and multiangular data exploitations. , 2009, , .		6
69	Cloud screening with combined MERIS and AATSR images. , 2009, , .		6
70	Biophysical Parameter Estimation With a Semisupervised Support Vector Machine. IEEE Geoscience and Remote Sensing Letters, 2009, 6, 248-252.	3.1	55
71	Biophysical parameter estimation with adaptive Gaussian Processes. , 2009, , .		12
72	Automatic correction of the effects of the light source on spherical objects. An application to the analysis of hyperspectral images of citrus fruits. Journal of Food Engineering, 2008, 85, 191-200.	5.2	117

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73	Coupled retrieval of aerosol optical thickness, columnar water vapor and surface reflectance maps from ENVISAT/MERIS data over land. Remote Sensing of Environment, 2008, 112, 2898-2913.	11.0	60
74	Hyperspectral system for early detection of rottenness caused by Penicillium digitatum in mandarins. Journal of Food Engineering, 2008, 89, 80-86.	5.2	131
75	Kernel-Based Framework for Multitemporal and Multisource Remote Sensing Data Classification and Change Detection. IEEE Transactions on Geoscience and Remote Sensing, 2008, 46, 1822-1835.	6.3	315
76	Improved Fraunhofer Line Discrimination Method for Vegetation Fluorescence Quantification. IEEE Geoscience and Remote Sensing Letters, 2008, 5, 620-624.	3.1	158
77	Correction of systematic spatial noise in push-broom hyperspectral sensors: application to CHRIS/PROBA images. Applied Optics, 2008, 47, F46.	2.1	78
78	Semisupervised Image Classification With Laplacian Support Vector Machines. IEEE Geoscience and Remote Sensing Letters, 2008, 5, 336-340.	3.1	237
79	Semi-Supervised Remote Sensing Image Classification based on Clustering and the Mean Map Kernel. , 2008, , .		10
80	Evaluation of remote sensing of vegetation fluorescence by the analysis of diurnal cycles. International Journal of Remote Sensing, 2008, 29, 5423-5436.	2.9	59
81	Image classification with semi-supervised one-class support vector machine. Proceedings of SPIE, 2008, , .	0.8	7
82	Semi-Supervised Support Vector Biophysical Parameter Estimation. , 2008, , .		3
83	Methodology for the Retrieval of Vegetation Chlorophyll Fluorescence from Space in the Frame of the Flex Mission Preparatory Activities. , 2008, , .		0
84	Multi-stage robust scheme for citrus identification from high resolution airborne images. Proceedings of SPIE, 2008, , .	0.8	0
85	Segmentation of Hyperspectral Images for the Detection of Rotten Mandarins. Lecture Notes in Computer Science, 2008, , 1071-1080.	1.3	6
86	Configurable Passband Imaging Spectrometer Based on Acousto-optic Tunable Filter. Lecture Notes in Computer Science, 2008, , 206-217.	1.3	2
87	Sensitivity analysis of the fraunhofer line discrimination method for the measurement of chlorophyll fluorescence using a field spectroradiometer. , 2007, , .		15
88	Semi-supervised cloud screening with Laplacian SVM. , 2007, , .		10
89	Remote sensing of chlorophyll fluorescence for estimation of stress in vegetation. recommendations for future missions. , 2007, , .		3
90	Combination of one-class remote sensing image classifiers. , 2007, , .		5

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91	Hyperspectral image classification with mahalanobis relevance vector machines. , 2007, , .		11
92	Cloud-Screening Algorithm for ENVISAT/MERIS Multispectral Images. IEEE Transactions on Geoscience and Remote Sensing, 2007, 45, 4105-4118.	6.3	125
93	Estimation of solar-induced vegetation fluorescence from space measurements. Geophysical Research Letters, 2007, 34, .	4.0	118
94	Weekly milk prediction on dairy goats using neural networks. Neural Computing and Applications, 2007, 16, 373-381.	5.6	21
95	Hyperspectral Image Classification with Kernels. , 2007, , 374-398.		1
96	Solar induced fluorescence measurements using a field spectroradiometer. AIP Conference Proceedings, 2006, , .	0.4	20
97	Composite Kernels for Hyperspectral Image Classification. IEEE Geoscience and Remote Sensing Letters, 2006, 3, 93-97.	3.1	956
98	Study of the diurnal cycle of stressed vegetation for the improvement of fluorescence remote sensing. , 2006, 6359, 156.		7
99	Modelling spatial and spectral systematic noise patterns on CHRIS/PROBA hyperspectral data. , 2006, , .		2
100	Retrieval of oceanic chlorophyll concentration with relevance vector machines. Remote Sensing of Environment, 2006, 105, 23-33.	11.0	89
101	Urban monitoring using multi-temporal SAR and multi-spectral data. Pattern Recognition Letters, 2006, 27, 234-243.	4.2	68
102	Enhancing decision-based neural networks through local competition. Neurocomputing, 2006, 69, 905-908.	5.9	0
103	Multitemporal image classification and change detection with kernels. , 2006, 6365, 136.		6
104	400â€“ to 1000â€“nm imaging spectrometer based on acousto-optic tunable filters. Journal of Electronic Imaging, 2006, 15, 023001.	0.9	23
105	Configurable-bandwidth imaging spectrometer based on an acousto-optic tunable filter. Review of Scientific Instruments, 2006, 77, 073108.	1.3	23
106	New Cloud Detection Algorithm for Multispectral and Hyperspectral Images: Application to ENVISAT/MERIS and PROBA/CHRIS Sensors. , 2006, , .		14
107	Configurable bandwidth imaging spectrometer based on acousto-optic tunable filter. , 2005, 5953, 216.		4
108	SmartSpectra: Applying multispectral imaging to industrial environments. Real Time Imaging, 2005, 11, 85-98.	1.6	25

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109	Cloud detection for CHRIS/Proba hyperspectral images. , 2005, , .		9
110	Relevance vector machines for sparse learning of biophysical parameters. , 2005, , .		4
111	Robust automatic classification method for hyperspectral imagery. , 2004, 5238, 398.		1
112	400- to 1000-nm imaging spectrometer based on acousto-optic tunable filters. , 2004, 5570, 460.		2
113	Robust support vector method for hyperspectral data classification and knowledge discovery. IEEE Transactions on Geoscience and Remote Sensing, 2004, 42, 1530-1542.	6.3	236
114	Kernel methods for HyMap imagery knowledge discovery. , 2004, , .		3
115	Partially supervised hierarchical clustering of SAR and multispectral imagery for urban areas monitoring. , 2004, , .		3
116	A low-complexity fuzzy activation function for artificial neural networks. IEEE Transactions on Neural Networks, 2003, 14, 1576-1579.	4.2	38
117	High-speed weighing system based on DSP. , 0, , .		4