Luis GÃ³mez-Chova

List of Publications by Year
in descending order

117 papers	5,328 citations	101384 36 h-index	114278 63 g-index
121 all docs	121 docs citations	121 times ranked	4863 citing authors

#	Article	IF	Citations
1	Composite Kernels for Hyperspectral Image Classification. IEEE Geoscience and Remote Sensing Letters, 2006, 3, 93-97.	1.4	956
2	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.	2.7	315
3	Multimodal Classification of Remote Sensing Images: A Review and Future Directions. Proceedings of the IEEE, 2015, 103, 1560-1584.	16.4	310
4	Semisupervised Image Classification With Laplacian Support Vector Machines. IEEE Geoscience and Remote Sensing Letters, 2008, 5, 336-340.	1.4	237
5	Robust support vector method for hyperspectral data classification and knowledge discovery. IEEE Transactions on Geoscience and Remote Sensing, 2004, 42, 1530-1542.	2.7	236
6	Semisupervised One-Class Support Vector Machines for Classification of Remote Sensing Data. IEEE Transactions on Geoscience and Remote Sensing, 2010, 48, 3188-3197.	2.7	211
7	Improved Fraunhofer Line Discrimination Method for Vegetation Fluorescence Quantification. IEEE Geoscience and Remote Sensing Letters, 2008, 5, 620-624.	1.4	158
8	Hyperspectral system for early detection of rottenness caused by Penicillium digitatum in mandarins. Journal of Food Engineering, 2008, 89, 80-86.	2.7	131
9	Cloud-Screening Algorithm for ENVISAT/MERIS Multispectral Images. IEEE Transactions on Geoscience and Remote Sensing, 2007, 45, 4105-4118.	2.7	125
10	Multitemporal fusion of Landsat/TM and ENVISAT/MERIS for crop monitoring. International Journal of Applied Earth Observation and Geoinformation, 2013, 23, 132-141.	1.4	125
11	Estimation of solar-induced vegetation fluorescence from space measurements. Geophysical Research Letters, 2007, 34, .	1.5	118
12	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.	2.7	117
13	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.	4.6	112
14	Estimating and understanding crop yields with explainable deep learning in the Indian Wheat Belt. Environmental Research Letters, 2020, 15, 024019.	2.2	104
15	Mean Map Kernel Methods for Semisupervised Cloud Classification. IEEE Transactions on Geoscience and Remote Sensing, 2010, 48, 207-220.	2.7	103
16	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
17	Retrieval of oceanic chlorophyll concentration with relevance vector machines. Remote Sensing of Environment, 2006, 105, 23-33.	4.6	89
18	Multitemporal Cloud Masking in the Google Earth Engine. Remote Sensing, 2018, 10, 1079.	1.8	84

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19	Graph Matching for Adaptation in Remote Sensing. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 329-341.	2.7	81
20	Correction of systematic spatial noise in push-broom hyperspectral sensors: application to CHRIS/PROBA images. Applied Optics, 2008, 47, F46.	2.1	78
21	Urban monitoring using multi-temporal SAR and multi-spectral data. Pattern Recognition Letters, 2006, 27, 234-243.	2.6	68
22	Diurnal Cycle Relationships between Passive Fluorescence, PRI and NPQ of Vegetation in a Controlled Stress Experiment. Remote Sensing, 2017, 9, 770.	1.8	67
23	Cloud Mask Intercomparison eXercise (CMIX): An evaluation of cloud masking algorithms for Landsat 8 and Sentinel-2. Remote Sensing of Environment, 2022, 274, 112990.	4.6	64
24	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.	4.6	60
25	Evaluation of remote sensing of vegetation fluorescence by the analysis of diurnal cycles. International Journal of Remote Sensing, 2008, 29, 5423-5436.	1.3	59
26	Biophysical Parameter Estimation With a Semisupervised Support Vector Machine. IEEE Geoscience and Remote Sensing Letters, 2009, 6, 248-252.	1.4	55
27	Remote Sensing Image Processing. Synthesis Lectures on Image, Video, and Multimedia Processing, 2011, 5, 1-192.	0.9	54
28	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.	2.7	50
29	Transferring deep learning models for cloud detection between Landsat-8 and Proba-V. ISPRS Journal of Photogrammetry and Remote Sensing, 2020, 160, 1-17.	4.9	47
30	Encoding Invariances in Remote Sensing Image Classification With SVM. IEEE Geoscience and Remote Sensing Letters, 2013, 10, 981-985.	1.4	46
31	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.	2.7	45
32	Multitask Remote Sensing Data Classification. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 151-161.	2.7	45
33	A Cloud masking algorithm for the XBAER aerosol retrieval using MERIS data. Remote Sensing of Environment, 2017, 197, 141-160.	4.6	42
34	Kernel Entropy Component Analysis for Remote Sensing Image Clustering. IEEE Geoscience and Remote Sensing Letters, 2012, 9, 312-316.	1.4	41
35	A low-complexity fuzzy activation function for artificial neural networks. IEEE Transactions on Neural Networks, 2003, 14, 1576-1579.	4.8	38
36	Cloud masking and removal in remote sensing image time series. Journal of Applied Remote Sensing, 2017, 11, 015005.	0.6	37

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37	Regularized Multiresolution Spatial Unmixing for ENVISAT/MERIS and Landsat/TM Image Fusion. IEEE Geoscience and Remote Sensing Letters, 2011, 8, 844-848.	1.4	35
38	Semisupervised Kernel Feature Extraction for Remote Sensing Image Analysis. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 5567-5578.	2.7	30
39	Benchmarking Deep Learning Models for Cloud Detection in Landsat-8 and Sentinel-2 Images. Remote Sensing, 2021, 13, 992.	1.8	30
40	Land cover classification of VHR airborne images for citrus grove identification. ISPRS Journal of Photogrammetry and Remote Sensing, 2011, 66, 115-123.	4.9	26
41	Fair Kernel Learning. Lecture Notes in Computer Science, 2017, , 339-355.	1.0	26
42	SmartSpectra: Applying multispectral imaging to industrial environments. Real Time Imaging, 2005, 11, 85-98.	1.6	25
43	400â€“ to 1000â€“nm imaging spectrometer based on acousto-optic tunable filters. Journal of Electronic Imaging, 2006, 15, 023001.	0.5	23
44	Configurable-bandwidth imaging spectrometer based on an acousto-optic tunable filter. Review of Scientific Instruments, 2006, 77, 073108.	0.6	23
45	A Review of Kernel Methods in Remote Sensing Data Analysis. , 2011, , 171-206.		22
46	Weekly milk prediction on dairy goats using neural networks. Neural Computing and Applications, 2007, 16, 373-381.	3.2	21
47	Gridding Artifacts on Medium-Resolution Satellite Image Time Series: MERIS Case Study. IEEE Transactions on Geoscience and Remote Sensing, 2011, 49, 2601-2611.	2.7	21
48	Solar induced fluorescence measurements using a field spectroradiometer. AIP Conference Proceedings, 2006, , .	0.3	20
49	Optimized Kernel Entropy Components. IEEE Transactions on Neural Networks and Learning Systems, 2017, 28, 1466-1472.	7.2	19
50	Explicit signal to noise ratio in reproducing kernel Hilbert spaces. , 2011, , .		18
51	Randomized kernels for large scale Earth observation applications. Remote Sensing of Environment, 2017, 202, 54-63.	4.6	18
52	Spectral clustering with the probabilistic cluster kernel. Neurocomputing, 2015, 149, 1299-1304.	3.5	17
53	Convolutional neural networks for multispectral image cloud masking. , 2017, , .		17
54	Sensitivity analysis of the fraunhofer line discrimination method for the measurement of chlorophyll fluorescence using a field spectroradiometer. , 2007, , .		15

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55	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.	2.3	15
56	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.	4.9	15
57	New Cloud Detection Algorithm for Multispectral and Hyperspectral Images: Application to ENVISAT/MERIS and PROBA/CHRIS Sensors. , 2006, , .		14
58	Analysis of acousto-optic tunable filter performance for imaging applications. Optical Engineering, 2010, 49, 113203.	0.5	14
59	Biophysical parameter estimation with adaptive Gaussian Processes. , 2009, , .		12
60	Cloud detection machine learning algorithms for PROBA-V. , 2017, , .		12
61	Hyperspectral image classification with mahalanobis relevance vector machines. , 2007, , .		11
62	Improving the performance of acousto-optic tunable filters in imaging applications. Journal of Electronic Imaging, 2010, 19, 043022.	0.5	11
63	Semi-supervised cloud screening with Laplacian SVM. , 2007, , .		10
64	Semi-Supervised Remote Sensing Image Classification based on Clustering and the Mean Map Kernel. , 2008, , .		10
65	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.	1.3	10
66	Cloud detection for CHRIS/Proba hyperspectral images. , 2005, , .		9
67	HyperLabelMe : A Web Platform for Benchmarking Remote-Sensing Image Classifiers. IEEE Geoscience and Remote Sensing Magazine, 2017, 5, 79-85.	4.9	8
68	Study of the diurnal cycle of stressed vegetation for the improvement of fluorescence remote sensing. , 2006, 6359, 156.		7
69	Image classification with semi-supervised one-class support vector machine. Proceedings of SPIE, 2008, , .	0.8	7
70	Multitemporal image classification and change detection with kernels. , 2006, 6365, 136.		6
71	CHRIS/Proba Toolbox for hyperspectral and multiangular data exploitations. , 2009, , .		6
72	Cloud screening with combined MERIS and AATSR images. , 2009, , .		6

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73	Design of a configurable multispectral imaging system based on an AOTF. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2011, 58, 259-262.	1.7	6
74	Segmentation of Hyperspectral Images for the Detection of Rotten Mandarins. Lecture Notes in Computer Science, 2008, , 1071-1080.	1.0	6
75	Combination of one-class remote sensing image classifiers. , 2007, , .		5
76	Multi-resolution spatial unmixing for MERIS and Landsat image fusion. , 2010, , .		5
77	Kernel-based retrieval of atmospheric profiles from IASI data. , 2011, , .		5
78	Learning with the kernel signal to noise ratio. , 2012, , .		5
79	Convolutional Neural Networks for Cloud Screening: Transfer Learning from Landsat-8 to Proba-V. , 2018, , .		5
80	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.	2.3	5
81	Signal-to-noise ratio in reproducing kernel Hilbert spaces. Pattern Recognition Letters, 2018, 112, 75-82.	2.6	5
82	High-speed weighing system based on DSP. , 0, , .		4
83	Configurable bandwidth imaging spectrometer based on acousto-optic tunable filter. , 2005, 5953, 216.		4
84	Kernel entropy component analysis in remote sensing data clustering. , 2011, , .		4
85	Semisupervised nonlinear feature extraction for image classification. , 2012, , .		4
86	Nonlinear statistical retrieval of surface emissivity from IASI data. , 2017, , .		4
87	Optimizing Kernel Ridge Regression for Remote Sensing Problems. , 2018, , .		4
88	Domain Adaptation of Landsat-8 and Proba-V Data Using Generative Adversarial Networks for Cloud Detection. , 2019, , .		4
89	Relevance vector machines for sparse learning of biophysical parameters. , 2005, , .		4
90	Kernel methods for HyMap imagery knowledge discovery. , 2004, , .		3

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91	Remote sensing of chlorophyll fluorescence for estimation of stress in vegetation. recommendations for future missions. , 2007, , .		3
92	Semi-Supervised Support Vector Biophysical Parameter Estimation. , 2008, , .		3
93	Including invariances in SVM remote sensing image classification. , 2012, , .		3
94	Semisupervised kernel orthonormalized partial least squares. , 2012, , .		3
95	Multiset Kernel CCA for multitemporal image classification. , 2013, , .		3
96	Cloud masking of multitemporal remote sensing images. , 2014, , .		3
97	Cloud detection on the Google Earth engine platform. , 2017, , .		3
98	Convolutional Long Short-Term Memory Network for Multitemporal Cloud Detection Over Landmarks. , 2019, , .		3
99	Partially supervised hierarchical clustering of SAR and multispectral imagery for urban areas monitoring. , 2004, , .		3
100	400- to 1000-nm imaging spectrometer based on acousto-optic tunable filters. , 2004, 5570, 460.		2
101	Modelling spatial and spectral systematic noise patterns on CHRIS/PROBA hyperspectral data. , 2006, , .		2
102	Nonlinear retrieval of atmospheric profiles from MetOp-IASI and MTG-IRS data. , 2010, , .		2
103	Multitask SVM learning for remote sensing data classification. Proceedings of SPIE, 2010, , .	0.8	2
104	Adaptive kernel ridge regression for image denoising. , 2010, , .		2
105	Multitemporal fusion of Landsat and MERIS images. , 2011, , .		2
106	A kernel regression approach to cloud and shadow detection in multitemporal images. , 2013, , .		2
107	Advances in synergy of AATSR-MERIS sensors for cloud detection. , 2013, , .		2
108	Kernel change discriminant analysis for multitemporal cloud masking. , 2013, , .		2

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109	Configurable Passband Imaging Spectrometer Based on Acousto-optic Tunable Filter. Lecture Notes in Computer Science, 2008, , 206-217.	1.0	2
110	Robust automatic classification method for hyperspectral imagery. , 2004, 5238, 398.		1
111	Operational cloud screening service for Sentinel-2 image time series. , 2015, , .		1
112	The Reprocessed Proba-V Collection 2: Product Validation. , 2021, , .		1
113	Hyperspectral Image Classification with Kernels. , 2007, , 374-398.		1
114	Enhancing decision-based neural networks through local competition. Neurocomputing, 2006, 69, 905-908.	3.5	0
115	Methodology for the Retrieval of Vegetation Chlorophyll Fluorescence from Space in the Frame of the Flex Mission Preparatory Activities. , 2008, , .		0
116	Multi-stage robust scheme for citrus identification from high resolution airborne images. Proceedings of SPIE, 2008, , .	0.8	0
117	Statistical biophysical parameter retrieval and emulation with Gaussian processes. Data Handling in Science and Technology, 2020, 32, 333-368.	3.1	0