

Gustau Camps-Valls

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/7986698/gustau-camps-valls-publications-by-year.pdf>

Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

343
papers

17,545
citations

61
h-index

128
g-index

411
ext. papers

21,537
ext. citations

6.8
avg, IF

7.09
L-index

#	Paper	IF	Citations
343	Deep Learning and Earth Observation to Support the Sustainable Development Goals: Current Approaches, Open Challenges, and Future Opportunities. <i>IEEE Geoscience and Remote Sensing Magazine</i> , 2022 , 2-30	8.9	8
342	Inferring causal relations from observational long-term carbon and water fluxes records.. <i>Scientific Reports</i> , 2022 , 12, 1610	4.9	0
341	Graph Embedding via High Dimensional Model Representation for Hyperspectral Images. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2021 , 1-1	8.1	2
340	Unsupervised Anomaly and Change Detection With Multivariate Gaussianization. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2021 , 1-10	8.1	0
339	Learning main drivers of crop progress and failure in Europe with interpretable machine learning. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2021 , 104, 102574	7.3	2
338	Long-term persistence, invariant time scales and on-off intermittency of fog events. <i>Atmospheric Research</i> , 2021 , 252, 105456	5.4	3
337	Predicting regional coastal sea level changes with machine learning. <i>Scientific Reports</i> , 2021 , 11, 7650	4.9	2
336	Toward a Collective Agenda on AI for Earth Science Data Analysis. <i>IEEE Geoscience and Remote Sensing Magazine</i> , 2021 , 9, 88-104	8.9	6
335	Crop specific algorithms trained over ground measurements provide the best performance for GAI and fAPAR estimates from Landsat-8 observations. <i>Remote Sensing of Environment</i> , 2021 , 260, 112453	13.2	7
334	Efficient Nonlinear RX Anomaly Detectors. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2021 , 18, 231-235	4.1	7
333	Toward operational validation systems for global satellite-based terrestrial essential climate variables. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2021 , 95, 102240	7.3	10
332	. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2021 , 1-17	8.1	4
331	Learning Relevant Features of Optical Water Types. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2021 , 1-5	4.1	
330	Integrating Domain Knowledge in Data-Driven Earth Observation With Process Convolutions. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2021 , 1-15	8.1	2
329	Gaussianizing the Earth: Multidimensional Information Measures for Earth Data Analysis. <i>IEEE Geoscience and Remote Sensing Magazine</i> , 2021 , 2-19	8.9	1
328	A unified vegetation index for quantifying the terrestrial biosphere. <i>Science Advances</i> , 2021 , 7,	14.3	35
327	Emergent vulnerability to climate-driven disturbances in European forests. <i>Nature Communications</i> , 2021 , 12, 1081	17.4	35

326	Spatial homogeneity from temporal stability: Exploiting the combined hyper-frequent revisit of Terra and Aqua to guide Earth System Science. <i>Remote Sensing of Environment</i> , 2021 , 261, 112496	13.2	1
325	Fiducial Reference Measurements for Vegetation Bio-Geophysical Variables: An End-to-End Uncertainty Evaluation Framework. <i>Remote Sensing</i> , 2021 , 13, 3194	5	4
324	Deep importance sampling based on regression for model inversion and emulation 2021 , 116, 103104		3
323	Quality Assessment of PROBA-V LAI, fAPAR and fCOVER Collection 300 m Products of Copernicus Global Land Service. <i>Remote Sensing</i> , 2020 , 12, 1017	5	40
322	Partitioning net carbon dioxide fluxes into photosynthesis and respiration using neural networks. <i>Global Change Biology</i> , 2020 , 26, 5235-5253	11.4	18
321	Retrieval of aboveground crop nitrogen content with a hybrid machine learning method. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2020 , 92, 102174	7.3	45
320	Deep Gaussian processes for biogeophysical parameter retrieval and model inversion. <i>ISPRS Journal of Photogrammetry and Remote Sensing</i> , 2020 , 166, 68-81	11.8	16
319	The Low Dimensionality of Development. <i>Social Indicators Research</i> , 2020 , 150, 999-1020	2.7	5
318	Multispectral high resolution sensor fusion for smoothing and gap-filling in the cloud. <i>Remote Sensing of Environment</i> , 2020 , 247, 111901	13.2	35
317	Machine learning information fusion in Earth observation: A comprehensive review of methods, applications and data sources. <i>Information Fusion</i> , 2020 , 63, 256-272	16.7	37
316	A global canopy water content product from AVHRR/Metop. <i>ISPRS Journal of Photogrammetry and Remote Sensing</i> , 2020 , 162, 77-93	11.8	7
315	. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2020 , 58, 5752-5763	8.1	8
314	Statistical biophysical parameter retrieval and emulation with Gaussian processes. <i>Data Handling in Science and Technology</i> , 2020 , 32, 333-368	2.7	
313	Scaling carbon fluxes from eddy covariance sites to globe: synthesis and evaluation of the FLUXCOM approach. <i>Biogeosciences</i> , 2020 , 17, 1343-1365	4.6	134
312	Kernel methods and their derivatives: Concept and perspectives for the earth system sciences. <i>PLoS ONE</i> , 2020 , 15, e0235885	3.7	2
311	Interpretability of Recurrent Neural Networks in Remote Sensing 2020 ,		1
310	Manifold Learning with High Dimensional Model Representations 2020 ,		2
309	Discovering Differential Equations from Earth Observation Data 2020 ,		1

308	Summarizing the state of the terrestrial biosphere in few dimensions. <i>Biogeosciences</i> , 2020 , 17, 2397-2424	4.6	9
307	ADVANCING DEEP LEARNING FOR EARTH SCIENCES: FROM HYBRID MODELING TO INTERPRETABILITY 2020 ,		2
306	Machine Learning Methods for Spatial and Temporal Parameter Estimation. <i>Advances in Computer Vision and Pattern Recognition</i> , 2020 , 5-35	1.1	1
305	Estimating and understanding crop yields with explainable deep learning in the Indian Wheat Belt. <i>Environmental Research Letters</i> , 2020 , 15, 024019	6.2	41
304	Active emulation of computer codes with Gaussian processes Application to remote sensing. <i>Pattern Recognition</i> , 2020 , 100, 107103	7.7	26
303	Constraining Uncertainty in Projected Gross Primary Production With Machine Learning. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2020 , 125, e2019JG005619	3.7	10
302	Gaussian processes retrieval of LAI from Sentinel-2 top-of-atmosphere radiance data. <i>ISPRS Journal of Photogrammetry and Remote Sensing</i> , 2020 , 167, 289-304	11.8	23
301	Adaptive Sequential Interpolator Using Active Learning for Efficient Emulation of Complex Systems 2020 ,		1
300	Understanding deep learning in land use classification based on Sentinel-2 time series. <i>Scientific Reports</i> , 2020 , 10, 17188	4.9	34
299	Efficient Kernel Cook's Distance for Remote Sensing Anomalous Change Detection. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2020 , 13, 5480-5488	4.7	1
298	Crop Yield Estimation and Interpretability With Gaussian Processes. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2020 , 1-5	4.1	4
297	Explicit Granger causality in kernel Hilbert spaces. <i>Physical Review E</i> , 2020 , 102, 062201	2.4	1
296	Accounting for Input Noise in Gaussian Process Parameter Retrieval. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2020 , 17, 391-395	4.1	6
295	Earth system data cubes unravel global multivariate dynamics. <i>Earth System Dynamics</i> , 2020 , 11, 201-234	4.8	17
294	Kernel methods and their derivatives: Concept and perspectives for the earth system sciences 2020 , 15, e0235885		
293	Kernel methods and their derivatives: Concept and perspectives for the earth system sciences 2020 , 15, e0235885		
292	Kernel methods and their derivatives: Concept and perspectives for the earth system sciences 2020 , 15, e0235885		
291	Kernel methods and their derivatives: Concept and perspectives for the earth system sciences 2020 , 15, e0235885		

290	Kernel methods and their derivatives: Concept and perspectives for the earth system sciences 2020 , 15, e0235885		
289	Activities of the IEEE GRSS Spain Chapter [Chapters]. <i>IEEE Geoscience and Remote Sensing Magazine</i> , 2019 , 7, 177-180	8.9	
288	Nonlinear Distribution Regression for Remote Sensing Applications. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2019 , 57, 10025-10035	8.1	6
287	Climate Data Records of Vegetation Variables from Geostationary SEVIRI/MSG Data: Products, Algorithms and Applications. <i>Remote Sensing</i> , 2019 , 11, 2103	5	8
286	Satellite Observations of the Contrasting Response of Trees and Grasses to Variations in Water Availability. <i>Geophysical Research Letters</i> , 2019 , 46, 1429-1440	4.9	28
285	Inferring causation from time series in Earth system sciences. <i>Nature Communications</i> , 2019 , 10, 2553	17.4	153
284	The FLUXCOM ensemble of global land-atmosphere energy fluxes. <i>Scientific Data</i> , 2019 , 6, 74	8.2	152
283	Kernel Anomalous Change Detection for Remote Sensing Imagery. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2019 , 57, 7743-7755	8.1	6
282	A carbon sink-driven approach to estimate gross primary production from microwave satellite observations. <i>Remote Sensing of Environment</i> , 2019 , 229, 100-113	13.2	21
281	Estimating crop primary productivity with Sentinel-2 and Landsat 8 using machine learning methods trained with radiative transfer simulations. <i>Remote Sensing of Environment</i> , 2019 , 225, 441-457	13.2	63
280	. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2019 , 57, 5651-5668	8.1	5
279	Quantifying Vegetation Biophysical Variables from Imaging Spectroscopy Data: A Review on Retrieval Methods. <i>Surveys in Geophysics</i> , 2019 , 40, 589-629	7.6	146
278	Fusing optical and SAR time series for LAI gap filling with multioutput Gaussian processes. <i>Remote Sensing of Environment</i> , 2019 , 235, 111452	13.2	37
277	A perspective on Gaussian processes for Earth observation. <i>National Science Review</i> , 2019 , 6, 616-618	10.8	28
276	Synergistic integration of optical and microwave satellite data for crop yield estimation. <i>Remote Sensing of Environment</i> , 2019 , 234, 111460	13.2	33
275	Deep learning and process understanding for data-driven Earth system science. <i>Nature</i> , 2019 , 566, 195-204	30.4	974
274	Statistical retrieval of atmospheric profiles with deep convolutional neural networks. <i>ISPRS Journal of Photogrammetry and Remote Sensing</i> , 2019 , 158, 231-240	11.8	6
273	. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2019 , 57, 1040-1048	8.1	13

272	Causal Inference in Geoscience and Remote Sensing From Observational Data. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2019 , 57, 1502-1513	8.1	6
271	Joint Gaussian Processes for Biophysical Parameter Retrieval. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2018 , 56, 1718-1727	8.1	26
270	From Signal Processing to Machine Learning 2018 , 1-11		0
269	Support Vector Machine and Kernel Classification Algorithms 2018 , 433-502		3
268	Clustering and Anomaly Detection with Kernels 2018 , 503-542		
267	Kernel Feature Extraction in Signal Processing 2018 , 543-588		
266	Introduction to Digital Signal Processing 2018 , 13-95		
265	Signal Processing Models 2018 , 97-164		
264	Kernel Functions and Reproducing Kernel Hilbert Spaces 2018 , 165-207		1
263	A Support Vector Machine Signal Estimation Framework 2018 , 209-239		
262	Reproducing Kernel Hilbert Space Models for Signal Processing 2018 , 241-279		
261	Dual Signal Models for Signal Processing 2018 , 281-332		
260	Advances in Kernel Regression and Function Approximation 2018 , 333-385		0
259	Adaptive Kernel Learning for Signal Processing 2018 , 387-431		2
258	Derivation of global vegetation biophysical parameters from EUMETSAT Polar System. <i>ISPRS Journal of Photogrammetry and Remote Sensing</i> , 2018 , 139, 57-74	11.8	50
257	Physics-aware Gaussian processes in remote sensing. <i>Applied Soft Computing Journal</i> , 2018 , 68, 69-82	7.5	42
256	Sensitivity maps of the Hilbert-Schmidt independence criterion. <i>Applied Soft Computing Journal</i> , 2018 , 70, 1054-1063	7.5	6
255	Remote Sensing Image Classification With Large-Scale Gaussian Processes. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2018 , 56, 1103-1114	8.1	17

254	Multitemporal Cloud Masking in the Google Earth Engine. <i>Remote Sensing</i> , 2018 , 10, 1079	5	48
253	Warped Gaussian Processes in Remote Sensing Parameter Estimation and Causal Inference. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2018 , 15, 1647-1651	4.1	10
252	Global Estimation of Biophysical Variables from Google Earth Engine Platform. <i>Remote Sensing</i> , 2018 , 10, 1167	5	45
251	A Critical Comparison of Remote Sensing Leaf Area Index Estimates over Rice-Cultivated Areas: From Sentinel-2 and Landsat-7/8 to MODIS, GEOV1 and EUMETSAT Polar System. <i>Remote Sensing</i> , 2018 , 10, 763	5	30
250	Machine Learning Regression Approaches for Colored Dissolved Organic Matter (CDOM) Retrieval with S2-MSI and S3-OLCI Simulated Data. <i>Remote Sensing</i> , 2018 , 10, 786	5	31
249	Pattern Recognition Scheme for Large-Scale Cloud Detection Over Landmarks. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2018 , 11, 3977-3987	4.7	4
248	Group Importance Sampling for particle filtering and MCMC 2018 , 82, 133-151		39
247	Signal-to-noise ratio in reproducing kernel Hilbert spaces. <i>Pattern Recognition Letters</i> , 2018 , 112, 75-82	4.7	4
246	Advances in Kernel Machines for Image Classification and Biophysical Parameter Retrieval. <i>Signals and Communication Technology</i> , 2018 , 399-441	0.5	1
245	The Recycling Gibbs sampler for efficient learning 2018 , 74, 1-13		18
244	Assessing the relationship between microwave vegetation optical depth and gross primary production. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2018 , 65, 79-91	7.3	31
243	2018 ,		22
242	Nonlinear Complex PCA for Spatio-Temporal Analysis of Global Soil Moisture 2018 ,		2
241	Gap Filling of Biophysical Parameter Time Series with Multi-Output Gaussian Processes 2018 ,		6
240	Nonlinear Cook Distance for Anomalous Change Detection 2018 ,		3
239	Deep Gaussian Processes for Geophysical Parameter Retrieval 2018 ,		1
238	Interpolation and Gap Filling of Landsat Reflectance Time Series 2018 ,		1
237	Retrieval of Case 2 Water Quality Parameters with Machine Learning 2018 ,		2

236	A Deep Network Approach to Multitemporal Cloud Detection 2018 ,		5
235	Randomized RX for Target Detection 2018 ,		1
234	Advanced Feature Extraction for Earth Observation Data Processing 2018 , 108-133		1
233	Global Estimation of Soil Moisture Persistence with L and C-Band Microwave Sensors 2018 ,		5
232	A methodology to derive global maps of leaf traits using remote sensing and climate data. <i>Remote Sensing of Environment</i> , 2018 , 218, 69-88	13.2	58
231	Distributed Particle Metropolis-Hastings Schemes 2018 ,		2
230	Satellite Leaf Area Index: Global Scale Analysis of the Tendencies Per Vegetation Type Over the Last 17 Years. <i>Remote Sensing</i> , 2018 , 10, 424	5	22
229	. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2018 , 11, 4918-4931	4.7	19
228	Optimized Kernel Entropy Components. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2017 , 28, 1466-1472	10.3	12
227	Statistical Atmospheric Parameter Retrieval Largely Benefits From Spatial Spectral Image Compression. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2017 , 55, 2213-2224	8.1	8
226	Gaussian Process Sensitivity Analysis for Oceanic Chlorophyll Estimation. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2017 , 10, 1265-1277	4.7	16
225	Cloud masking and removal in remote sensing image time series. <i>Journal of Applied Remote Sensing</i> , 2017 , 11, 015005	1.4	24
224	Compensatory water effects link yearly global land CO sink changes to temperature. <i>Nature</i> , 2017 , 541, 516-520	50.4	341
223	Nonlinear Time-Series Adaptation for Land Cover Classification. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2017 , 14, 896-900	4.1	9
222	Global distribution of groundwater-vegetation spatial covariation. <i>Geophysical Research Letters</i> , 2017 , 44, 4134-4142	4.9	46
221	Randomized kernels for large scale Earth observation applications. <i>Remote Sensing of Environment</i> , 2017 , 202, 54-63	13.2	15
220	Automatic emulator and optimized look-up table generation for radiative transfer models 2017 ,		7
219	Spatial noise-aware temperature retrieval from infrared sounder data 2017 ,		1

218	Convolutional neural networks for multispectral image cloud masking 2017 ,		10
217	Nonlinear statistical retrieval of surface emissivity from IASI data 2017 ,		2
216	Joint Gaussian processes for inverse modeling 2017 ,		1
215	Hyperspectral dimensionality reduction for biophysical variable statistical retrieval. <i>ISPRS Journal of Photogrammetry and Remote Sensing</i> , 2017 , 132, 88-101	11.8	60
214	Efficient remote sensing image classification with Gaussian processes and Fourier features 2017 ,		1
213	HyperLabelMe : A Web Platform for Benchmarking Remote-Sensing Image Classifiers. <i>IEEE Geoscience and Remote Sensing Magazine</i> , 2017 , 5, 79-85	8.9	8
212	Remote sensing of vegetation dynamics in agro-ecosystems using smap vegetation optical depth and optical vegetation indices 2017 ,		7
211	Passive millimeter wave image classification with large scale Gaussian processes 2017 ,		1
210	Cloud detection machine learning algorithms for PROBA-V 2017 ,		7
209	Recycling Gibbs sampling 2017 ,		3
208	Probabilistic cross-validation estimators for Gaussian process regression 2017 ,		2
207	Validation of PROBA-V GEOV1 and MODIS C5 & C6 fAPAR Products in a Deciduous Beech Forest Site in Italy. <i>Remote Sensing</i> , 2017 , 9, 126	5	14
206	Exploitation of SAR and Optical Sentinel Data to Detect Rice Crop and Estimate Seasonal Dynamics of Leaf Area Index. <i>Remote Sensing</i> , 2017 , 9, 248	5	48
205	SCOPE-Based Emulators for Fast Generation of Synthetic Canopy Reflectance and Sun-Induced Fluorescence Spectra. <i>Remote Sensing</i> , 2017 , 9, 927	5	28
204	Clasificaci3n de usos del suelo a partir de im3genes Sentinel-2. <i>Revista De Teledeteccion</i> , 2017 , 55	0.7	11
203	Automatic Emulation by Adaptive Relevance Vector Machines. <i>Lecture Notes in Computer Science</i> , 2017 , 443-454	0.9	3
202	Physics-Aware Gaussian Processes for Earth Observation. <i>Lecture Notes in Computer Science</i> , 2017 , 205-213		3
201	Fair Kernel Learning. <i>Lecture Notes in Computer Science</i> , 2017 , 339-355	0.9	13

200	Unsupervised Deep Feature Extraction for Remote Sensing Image Classification. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2016 , 54, 1349-1362	8.1	446
199	Multi-temporal and multi-source remote sensing image classification by nonlinear relative normalization. <i>ISPRS Journal of Photogrammetry and Remote Sensing</i> , 2016 , 120, 1-12	11.8	40
198	Processing of Extremely High-Resolution LiDAR and RGB Data: Outcome of the 2015 IEEE GRSS Data Fusion Contest Part A: 2-D Contest. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2016 , 9, 5547-5559	4.7	64
197	Latent force models for earth observation time series prediction 2016 ,		2
196	Kernel spectral angle mapper. <i>Electronics Letters</i> , 2016 , 52, 1218-1220	1.1	16
195	Multitemporal and multiresolution leaf area index retrieval for operational local rice crop monitoring. <i>Remote Sensing of Environment</i> , 2016 , 187, 102-118	13.2	104
194	. <i>IEEE Geoscience and Remote Sensing Magazine</i> , 2016 , 4, 58-78	8.9	107
193	Active Learning Methods for Efficient Hybrid Biophysical Variable Retrieval. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2016 , 13, 1012-1016	4.1	42
192	. <i>IEEE Geoscience and Remote Sensing Magazine</i> , 2016 , 4, 5-7	8.9	5
191	Predicting carbon dioxide and energy fluxes across global FLUXNET sites with regression algorithms. <i>Biogeosciences</i> , 2016 , 13, 4291-4313	4.6	291
190	Multitemporal Monitoring of Plant Area Index in the Valencia Rice District with PocketLAI. <i>Remote Sensing</i> , 2016 , 8, 202	5	32
189	Emulation of Leaf, Canopy and Atmosphere Radiative Transfer Models for Fast Global Sensitivity Analysis. <i>Remote Sensing</i> , 2016 , 8, 673	5	54
188	Kernel Manifold Alignment for Domain Adaptation. <i>PLoS ONE</i> , 2016 , 11, e0148655	3.7	52
187	Spectral band selection for vegetation properties retrieval using Gaussian processes regression. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2016 , 52, 554-567	7.3	103
186	Learning Structures in Earth Observation Data with Gaussian Processes. <i>Lecture Notes in Computer Science</i> , 2016 , 78-94	0.9	
185	Spectral alignment of multi-temporal cross-sensor images with automated kernel canonical correlation analysis. <i>ISPRS Journal of Photogrammetry and Remote Sensing</i> , 2015 , 107, 50-63	11.8	88
184	Uncertainty analysis of gross primary production upscaling using Random Forests, remote sensing and eddy covariance data. <i>Remote Sensing of Environment</i> , 2015 , 168, 360-373	13.2	70
183	Optical remote sensing and the retrieval of terrestrial vegetation bio-geophysical properties [A review]. <i>ISPRS Journal of Photogrammetry and Remote Sensing</i> , 2015 , 108, 273-290	11.8	326

182	Dimensionality Reduction via Regression in Hyperspectral Imagery. <i>IEEE Journal on Selected Topics in Signal Processing</i> , 2015 , 9, 1026-1036	7.5	28
181	. <i>Proceedings of the IEEE</i> , 2015 , 103, 1560-1584	14.3	201
180	Experimental Sentinel-2 LAI estimation using parametric, non-parametric and physical retrieval methods: A comparison. <i>ISPRS Journal of Photogrammetry and Remote Sensing</i> , 2015 , 108, 260-272	11.8	174
179	Ranking drivers of global carbon and energy fluxes over land 2015 ,		2
178	Spectral clustering with the probabilistic cluster kernel. <i>Neurocomputing</i> , 2015 , 149, 1299-1304	5.4	15
177	Measuring the Spatial and Spectral Performance of WorldView-3 2015 ,		6
176	Weakly supervised alignment of multisensor images 2015 ,		2
175	An Emulator Toolbox to Approximate Radiative Transfer Models with Statistical Learning. <i>Remote Sensing</i> , 2015 , 7, 9347-9370	5	43
174	Large-scale random features for kernel regression 2015 ,		3
173	Replacing radiative transfer models by surrogate approximations through machine learning 2015 ,		1
172	Mapping Leaf Area Index With a Smartphone and Gaussian Processes. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2015 , 12, 2501-2505	4.1	25
171	Shared feature representations of LiDAR and optical images: Trading sparsity for semantic discrimination 2015 ,		3
170	Advances in Hyperspectral Image Classification: Earth Monitoring with Statistical Learning Methods. <i>IEEE Signal Processing Magazine</i> , 2014 , 31, 45-54	9.4	447
169	. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2014 , 52, 2186-2196	8.1	35
168	Support vector machines in engineering: an overview. <i>Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery</i> , 2014 , 4, 234-267	6.9	79
167	Retrieval of Biophysical Parameters With Heteroscedastic Gaussian Processes. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2014 , 11, 838-842	4.1	77
166	Global and time-resolved monitoring of crop photosynthesis with chlorophyll fluorescence. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, E1327-33	11.5	577
165	Prediction of Daily Global Solar Irradiation Using Temporal Gaussian Processes. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2014 , 11, 1936-1940	4.1	61

164	. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2014 , 52, 7708-7720	8.1	104
163	Explicit Recursive and Adaptive Filtering in Reproducing Kernel Hilbert Spaces. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2014 , 25, 1413-1419	10.3	3
162	Semisupervised Kernel Feature Extraction for Remote Sensing Image Analysis. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2014 , 52, 5567-5578	8.1	23
161	A unified SVM framework for signal estimation 2014 , 26, 1-20		12
160	Toward a Semiautomatic Machine Learning Retrieval of Biophysical Parameters. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2014 , 7, 1249-1259	4.7	67
159	2014 ,		6
158	Prelaunch assessment of worldview-3 information content 2014 ,		7
157	A family of kernel anomaly change detectors 2014 ,		3
156	Dimensionality reduction via regression on hyperspectral infrared sounding data 2014 ,		1
155	Principal polynomial analysis. <i>International Journal of Neural Systems</i> , 2014 , 24, 1440007	6.2	18
154	Unsupervised Alignment of Image Manifolds with Centrality Measures 2014 ,		6
153	Lossless coding of hyperspectral images with principal polynomial analysis 2014 ,		5
152	Cloud masking of multitemporal remote sensing images 2014 ,		1
151	Reply to Magnani et al.: Linking large-scale chlorophyll fluorescence observations with cropland gross primary production. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, E2511	11.5	11
150	Hyperspectral Remote Sensing Data Analysis and Future Challenges. <i>IEEE Geoscience and Remote Sensing Magazine</i> , 2013 , 1, 6-36	8.9	1055
149	Multitemporal fusion of Landsat/TM and ENVISAT/MERIS for crop monitoring. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2013 , 23, 132-141	7.3	110
148	Spectro-temporal reflectance surfaces: a new conceptual framework for the integration of remote-sensing data from multiple different sensors. <i>International Journal of Remote Sensing</i> , 2013 , 34, 3699-3715	3.1	9
147	Gaussian processes uncertainty estimates in experimental Sentinel-2 LAI and leaf chlorophyll content retrieval. <i>ISPRS Journal of Photogrammetry and Remote Sensing</i> , 2013 , 86, 157-167	11.8	93

146	2013,		2
145	Multiset Kernel CCA for multitemporal image classification 2013,		1
144	Multitask Remote Sensing Data Classification. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2013 , 51, 151-161	8.1	39
143	Kernel Multivariate Analysis Framework for Supervised Subspace Learning: A Tutorial on Linear and Kernel Multivariate Methods. <i>IEEE Signal Processing Magazine</i> , 2013 , 30, 16-29	9.4	72
142	GEOV1: LAI, FAPAR essential climate variables and FCOVER global time series capitalizing over existing products. Part 2: Validation and intercomparison with reference products. <i>Remote Sensing of Environment</i> , 2013 , 137, 310-329	13.2	227
141	Encoding Invariances in Remote Sensing Image Classification With SVM. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2013 , 10, 981-985	4.1	33
140	. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2013 , 6, 867-874	4.7	72
139	Multi-sensor change detection based on nonlinear canonical correlations 2013,		9
138	Estimation of vegetation chlorophyll content with Variational Heteroscedastic Gaussian Processes 2013,		3
137	Advances in synergy of AATSR-MERIS sensors for cloud detection 2013,		2
136	Domain adaptation with Hidden Markov Random Fields 2013,		1
135	Kernel change discriminant analysis for multitemporal cloud masking 2013,		2
134	Empirical and Physical Estimation of Canopy Water Content from CHRIS/PROBA Data. <i>Remote Sensing</i> , 2013 , 5, 5265-5284	5	17
133	Interactive Pansharpener and Active Classification in Remote Sensing. <i>Intelligent Systems Reference Library</i> , 2013 , 67-81	0.8	
132	Feature selection using support vector machines and bootstrap methods for ventricular fibrillation detection. <i>Expert Systems With Applications</i> , 2012 , 39, 1956-1967	7.8	55
131	Remote sensing image segmentation by active queries. <i>Pattern Recognition</i> , 2012 , 45, 2180-2192	7.7	36
130	Kernel Entropy Component Analysis for Remote Sensing Image Clustering. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2012 , 9, 312-316	4.1	35
129	Unsupervised Change Detection With Kernels. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2012 , 9, 1026-1030	4.1	66

128	A Support Vector Machine MUSIC Algorithm. <i>IEEE Transactions on Antennas and Propagation</i> , 2012 , 60, 4901-4910	4.9	27
127	Semisupervised kernel orthonormalized partial least squares 2012 ,		2
126	Nonlinear data description with Principal Polynomial Analysis 2012 ,		2
125	Learning with the kernel signal to noise ratio 2012 ,		2
124	Machine learning regression algorithms for biophysical parameter retrieval: Opportunities for Sentinel-2 and -3. <i>Remote Sensing of Environment</i> , 2012 , 118, 127-139	13.2	302
123	A Review of Kernel Methods in ECG Signal Classification 2012 , 195-217		
122	Semisupervised Classification of Remote Sensing Images With Active Queries. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2012 , 50, 3751-3763	8.1	65
121	Retrieval of Vegetation Biophysical Parameters Using Gaussian Process Techniques. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2012 , 50, 1832-1843	8.1	157
120	Including invariances in SVM remote sensing image classification 2012 ,		3
119	Semisupervised nonlinear feature extraction for image classification 2012 ,		3
118	. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2012 , 50, 1759-1769	8.1	40
117	Large Margin Filtering. <i>IEEE Transactions on Signal Processing</i> , 2012 , 60, 648-659	4.8	9
116	Nonlinearities and adaptation of color vision from sequential principal curves analysis. <i>Neural Computation</i> , 2012 , 24, 2751-88	2.9	24
115	A Review of Kernel Methods in Remote Sensing Data Analysis 2011 , 171-206		13
114	Kernel entropy component analysis in remote sensing data clustering 2011 ,		4
113	Urban Image Classification With Semisupervised Multiscale Cluster Kernels. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2011 , 4, 65-74	4.7	54
112	. <i>IEEE Journal on Selected Topics in Signal Processing</i> , 2011 , 5, 365-369	7.5	10
111	On the Impact of Lossy Compression on Hyperspectral Image Classification and Unmixing. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2011 , 8, 253-257	4.1	59

110	Multioutput Support Vector Regression for Remote Sensing Biophysical Parameter Estimation. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2011 , 8, 804-808	4.1	173
109	Regularized Multiresolution Spatial Unmixing for ENVISAT/MERIS and Landsat/TM Image Fusion. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2011 , 8, 844-848	4.1	27
108	Gridding Artifacts on Medium-Resolution Satellite Image Time Series: MERIS Case Study. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2011 , 49, 2601-2611	8.1	18
107	Structured Output SVM for Remote Sensing Image Classification. <i>Journal of Signal Processing Systems</i> , 2011 , 65, 301-310	1.4	13
106	Land cover classification of VHR airborne images for citrus grove identification. <i>ISPRS Journal of Photogrammetry and Remote Sensing</i> , 2011 , 66, 115-123	11.8	21
105	. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2011 , 49, 4308-4317	8.1	38
104	Iterative Gaussianization: from ICA to random rotations. <i>IEEE Transactions on Neural Networks</i> , 2011 , 22, 537-49		55
103	Explicit signal to noise ratio in reproducing kernel Hilbert spaces 2011 ,		13
102	Optimal modalities for radiative transfer-neural network estimation of canopy biophysical characteristics: Evaluation over an agricultural area with CHRIS/PROBA observations. <i>Remote Sensing of Environment</i> , 2011 , 115, 415-426	13.2	110
101	Multitemporal fusion of Landsat and MERIS images 2011 ,		2
100	Explicit recursivity into reproducing kernel Hilbert spaces 2011 ,		1
99	Principal polynomial analysis for remote sensing data processing 2011 ,		2
98	Large scale semi-supervised image segmentation with active queries 2011 ,		1
97	Support vector machines in remote sensing: the tricks of the trade 2011 ,		4
96	Kernel-based retrieval of atmospheric profiles from IASI data 2011 ,		5
95	Unsupervised change detection in the feature space using kernels 2011 ,		2
94	Cluster-based active learning for compact image classification 2010 ,		8
93	Semi-supervised remote sensing image classification via maximum entropy 2010 ,		7

92	Multitask SVM learning for remote sensing data classification 2010 ,		1
91	Adaptive kernel ridge regression for image denoising 2010 ,		2
90	. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2010 , 48, 207-220	8.1	87
89	Estimating biophysical variable dependences with kernels 2010 ,		2
88	Nonlinear retrieval of atmospheric profiles from MetOp-IASI and MTG-IRS data 2010 ,		2
87	Unsupervised change detection by kernel clustering 2010 ,		8
86	A support vector domain method for change detection in multitemporal images. <i>Pattern Recognition Letters</i> , 2010 , 31, 1148-1154	4.7	65
85	Semisupervised Neural Networks for Efficient Hyperspectral Image Classification. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2010 , 48, 2271-2282	8.1	237
84	Semisupervised One-Class Support Vector Machines for Classification of Remote Sensing Data. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2010 , 48, 3188-3197	8.1	171
83	Learning Relevant Image Features With Multiple-Kernel Classification. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2010 , 48, 3780-3791	8.1	160
82	Multisource Composite Kernels for Urban-Image Classification. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2010 , 7, 88-92	4.1	71
81	Remote Sensing Feature Selection by Kernel Dependence Measures. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2010 , 7, 587-591	4.1	62
80	Spatio-Spectral Remote Sensing Image Classification With Graph Kernels. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2010 , 7, 741-745	4.1	102
79	Structured output SVM for remote sensing image classification 2009 ,		4
78	PCA Gaussianization for image processing 2009 ,		2
77	Learning the relevant image features with multiple kernels 2009 ,		2
76	Cloud screening with combined MERIS and AATSR images 2009 ,		5
75	Learning non-linear time-scales with kernel -filters. <i>Neurocomputing</i> , 2009 , 72, 1324-1328	5.4	4

74	Classification of Hyperspectral Images With Regularized Linear Discriminant Analysis. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2009 , 47, 862-873	8.1	396
73	. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2009 , 47, 3822-3833	8.1	38
72	Biophysical Parameter Estimation With a Semisupervised Support Vector Machine. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2009 , 6, 248-252	4.1	42
71	A Composite Semisupervised SVM for Classification of Hyperspectral Images. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2009 , 6, 234-238	4.1	102
70	Semisupervised Remote Sensing Image Classification With Cluster Kernels. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2009 , 6, 224-228	4.1	93
69	Recent advances in techniques for hyperspectral image processing. <i>Remote Sensing of Environment</i> , 2009 , 113, S110-S122	13.2	1102
68	Cluster kernels for semisupervised classification of VHR urban images 2009 ,		1
67	Recent advances in remote sensing image processing 2009 ,		7
66	Biophysical parameter estimation with adaptive Gaussian Processes 2009 ,		9
65	Machine learning in remote sensing data processing 2009 ,		22
64	Kernel-Based Framework for Multitemporal and Multisource Remote Sensing Data Classification and Change Detection. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2008 , 46, 1822-1835	8.1	251
63	Efficient Kernel Orthonormalized PLS for Remote Sensing Applications. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2008 , 46, 2872-2881	8.1	47
62	Semisupervised Image Classification With Laplacian Support Vector Machines. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2008 , 5, 336-340	4.1	198
61	Recovering wavelet relations using SVM for image denoising 2008 ,		2
60	Semi-Supervised Remote Sensing Image Classification based on Clustering and the Mean Map Kernel 2008 ,		7
59	Semi-Supervised Kernel Orthogonal Subspace Projection 2008 ,		2
58	Image classification with semi-supervised one-class support vector machine 2008 ,		5
57	Semi-Supervised Support Vector Biophysical Parameter Estimation 2008 ,		1

56	Sparse Deconvolution Using Support Vector Machines. <i>Eurasip Journal on Advances in Signal Processing</i> , 2008 , 2008,	1.9	10
55	Target detection with a contextual kernel orthogonal subspace projection 2008 ,		3
54	Automatic correction of the effects of the light source on spherical objects. An application to the analysis of hyperspectral images of citrus fruits. <i>Journal of Food Engineering</i> , 2008 , 85, 191-200	6	88
53	Hyperspectral system for early detection of rottenness caused by <i>Penicillium digitatum</i> in mandarins. <i>Journal of Food Engineering</i> , 2008 , 89, 80-86	6	107
52	Segmentation of Hyperspectral Images for the Detection of Rotten Mandarins. <i>Lecture Notes in Computer Science</i> , 2008 , 1071-1080	0.9	2
51	Classification of Satellite Images with Regularized AdaBoosting of RBF Neural Networks. <i>Studies in Computational Intelligence</i> , 2008 , 307-326	0.8	3
50	Therapeutic Drug Monitoring of Kidney Transplant Recipients Using Profiled Support Vector Machines. <i>IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews</i> , 2007 , 37, 359-372		6
49	Nonuniform Interpolation of Noisy Signals Using Support Vector Machines. <i>IEEE Transactions on Signal Processing</i> , 2007 , 55, 4116-4126	4.8	19
48	Statistical criteria for early-stopping of support vector machines. <i>Neurocomputing</i> , 2007 , 70, 2588-2592	5.4	1
47	Semi-Supervised Graph-Based Hyperspectral Image Classification. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2007 , 45, 3044-3054	8.1	435
46	A Support Vector Domain Description Approach to Supervised Classification of Remote Sensing Images. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2007 , 45, 2683-2692	8.1	111
45	Semi-supervised cloud screening with Laplacian SVM 2007 ,		9
44	Feature extraction from remote sensing data using Kernel Orthonormalized PLS 2007 ,		1
43	An unsupervised support vector method for change detection 2007 ,		3
42	Hyperspectral detection of citrus damage with Mahalanobis kernel classifier. <i>Electronics Letters</i> , 2007 , 43, 1082	1.1	16
41	Combination of one-class remote sensing image classifiers 2007 ,		3
40	Hyperspectral image classification with mahalanobis relevance vector machines 2007 ,		6
39	Kernel Antenna Array Processing. <i>IEEE Transactions on Antennas and Propagation</i> , 2007 , 55, 642-650	4.9	23

38	. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2007 , 45, 4105-4118	8.1	101
37	Efficient regularized LDA for hyperspectral image classification 2007 , 6748, 257		1
36	Nonlinear System Identification With Composite Relevance Vector Machines. <i>IEEE Signal Processing Letters</i> , 2007 , 14, 279-282	3.2	23
35	Efficient pruning of multilayer perceptrons using a fuzzy sigmoid activation function. <i>Neurocomputing</i> , 2006 , 69, 909-912	5.4	2
34	Enhancing decision-based neural networks through local competition. <i>Neurocomputing</i> , 2006 , 69, 905-908	3.4	3
33	Multitemporal image classification and change detection with kernels 2006 , 6365, 136		4
32	New Cloud Detection Algorithm for Multispectral and Hyperspectral Images: Application to ENVISAT/MERIS and PROBA/CHRIS Sensors 2006 ,		11
31	Semi-supervised Hyperspectral Image Classification with Graphs 2006 ,		9
30	Advanced processing of hyperspectral images 2006 ,		13
29	Robust support vector regression for biophysical variable estimation from remotely sensed images. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2006 , 3, 339-343	4.1	115
28	Support vector machines for nonlinear kernel ARMA system identification. <i>IEEE Transactions on Neural Networks</i> , 2006 , 17, 1617-22		61
27	. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2006 , 3, 93-97	4.1	777
26	Modelling spatial and spectral systematic noise patterns on CHRIS/PROBA hyperspectral data 2006 ,		2
25	Retrieval of oceanic chlorophyll concentration with relevance vector machines. <i>Remote Sensing of Environment</i> , 2006 , 105, 23-33	13.2	78
24	Non-linear RLS-based algorithm for pattern classification. <i>Signal Processing</i> , 2006 , 86, 1104-1108	4.4	3
23	Unbiased sensitivity analysis and pruning techniques in neural networks for surface ozone modelling. <i>Ecological Modelling</i> , 2005 , 182, 149-158	3	43
22	. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2005 , 43, 1351-1362	8.1	943
21	Cloud detection for CHRIS/Proba hyperspectral images 2005 ,		6

20	Perceptual adaptive insensitivity for support vector machine image coding. <i>IEEE Transactions on Neural Networks</i> , 2005 , 16, 1574-81		8
19	Relevance vector machines for sparse learning of biophysical parameters 2005 ,		2
18	Robust automatic classification method for hyperspectral imagery 2004 , 5238, 398		
17	Robust Filter using support vector machines. <i>Neurocomputing</i> , 2004 , 62, 493-499	5.4	8
16	Fuzzy sigmoid kernel for support vector classifiers. <i>Neurocomputing</i> , 2004 , 62, 501-506	5.4	31
15	Profiled support vector machines for antisense oligonucleotide efficacy prediction. <i>BMC Bioinformatics</i> , 2004 , 5, 135	3.6	21
14	Foetal ECG recovery using dynamic neural networks. <i>Artificial Intelligence in Medicine</i> , 2004 , 31, 197-209	7.4	45
13	Enhancing genetic feature selection through restricted search and Walsh analysis. <i>IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews</i> , 2004 , 34, 398-406		49
12	. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2004 , 42, 1530-1542	8.1	196
11	Regularized methods for hyperspectral image classification 2004 ,		2
10	Partially supervised hierarchical clustering of SAR and multispectral imagery for urban areas monitoring 2004 ,		3
9	Prediction of cyclosporine dosage in patients after kidney transplantation using neural networks. <i>IEEE Transactions on Biomedical Engineering</i> , 2003 , 50, 442-8	5	27
8	Dosage individualization of erythropoietin using a profile-dependent support vector regression. <i>IEEE Transactions on Biomedical Engineering</i> , 2003 , 50, 1136-42	5	38
7	Use of neural networks for dosage individualisation of erythropoietin in patients with secondary anemia to chronic renal failure. <i>Computers in Biology and Medicine</i> , 2003 , 33, 361-73	7	24
6	Cyclosporine concentration prediction using clustering and support vector regression methods. <i>Electronics Letters</i> , 2002 , 38, 568	1.1	9
5	Methods to evaluate the performance of fetal electrocardiogram extraction algorithms		4
4	Predicting carbon dioxide and energy fluxes across global FLUXNET sites with regression algorithms		7
3	Supplementary material to "Predicting carbon dioxide and energy fluxes across global FLUXNET sites with regression algorithms";		2

- 2 ESTIMATION OF OCEANIC PARTICULATE ORGANIC CARBON WITH MACHINE LEARNING. *ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences*,V-2-2020, 949-956 4
- 1 Inference over radiative transfer models using variational and expectation maximization methods. *Machine Learning*,1 4