JosÃ© Manuel PeÃ±a

List of Publications by Year
in descending order

64 papers	4,751 citations	117453 34 h-index	123241 61 g-index
64 all docs	64 docs citations	64 times ranked	4351 citing authors

#	Article	IF	Citations
1	Object-based crop identification using multiple vegetation indices, textural features and crop phenology. Remote Sensing of Environment, 2011, 115, 1301-1316.	4.6	488
2	Multi-temporal mapping of the vegetation fraction in early-season wheat fields using images from UAV. Computers and Electronics in Agriculture, 2014, 103, 104-113.	3.7	365
3	Weed Mapping in Early-Season Maize Fields Using Object-Based Analysis of Unmanned Aerial Vehicle (UAV) Images. PLoS ONE, 2013, 8, e77151.	1.1	282
4	Configuration and Specifications of an Unmanned Aerial Vehicle (UAV) for Early Site Specific Weed Management. PLoS ONE, 2013, 8, e58210.	1.1	230
5	An automatic object-based method for optimal thresholding in UAV images: Application for vegetation detection in herbaceous crops. Computers and Electronics in Agriculture, 2015, 114, 43-52.	3.7	222
6	Object- and pixel-based analysis for mapping crops and their agro-environmental associated measures using QuickBird imagery. Computers and Electronics in Agriculture, 2009, 68, 207-215.	3.7	206
7	An Automatic Random Forest-OBIA Algorithm for Early Weed Mapping between and within Crop Rows Using UAV Imagery. Remote Sensing, 2018, 10, 285.	1.8	188
8	High-Throughput 3-D Monitoring of Agricultural-Tree Plantations with Unmanned Aerial Vehicle (UAV) Technology. PLoS ONE, 2015, 10, e0130479.	1.1	183
9	Object-Based Image Classification of Summer Crops with Machine Learning Methods. Remote Sensing, 2014, 6, 5019-5041.	1.8	152
10	A semi-supervised system for weed mapping in sunflower crops using unmanned aerial vehicles and a crop row detection method. Applied Soft Computing Journal, 2015, 37, 533-544.	4.1	145
11	Early season weed mapping in sunflower using UAV technology: variability of herbicide treatment maps against weed thresholds. Precision Agriculture, 2016, 17, 183-199.	3.1	144
12	Quantifying Efficacy and Limits of Unmanned Aerial Vehicle (UAV) Technology for Weed Seedling Detection as Affected by Sensor Resolution. Sensors, 2015, 15, 5609-5626.	2.1	136
13	Selecting patterns and features for between- and within- crop-row weed mapping using UAV-imagery. Expert Systems With Applications, 2016, 47, 85-94.	4.4	132
14	Assessing Optimal Flight Parameters for Generating Accurate Multispectral Orthomosaicks by UAV to Support Site-Specific Crop Management. Remote Sensing, 2015, 7, 12793-12814.	1.8	128
15	Using geostatistical and remote sensing approaches for mapping soil properties. European Journal of Agronomy, 2005, 23, 279-289.	1.9	108
16	Is the current state of the art of weed monitoring suitable for siteâ€specific weed management in arable crops?. Weed Research, 2018, 58, 259-272.	0.8	105
17	Assessing UAV-collected image overlap influence on computation time and digital surface model accuracy in olive orchards. Precision Agriculture, 2018, 19, 115-133.	3.1	97
18	Quantifying pruning impacts on olive tree architecture and annual canopy growth by using UAV-based 3D modelling. Plant Methods, 2017, 13, 55.	1.9	90

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19	3-D Characterization of Vineyards Using a Novel UAV Imagery-Based OBIA Procedure for Precision Viticulture Applications. Remote Sensing, 2018, 10, 584.	1.8	87
20	Mapping the 3D structure of almond trees using UAV acquired photogrammetric point clouds and object-based image analysis. Biosystems Engineering, 2018, 176, 172-184.	1.9	75
21	Comparing UAV-Based Technologies and RGB-D Reconstruction Methods for Plant Height and Biomass Monitoring on Grass Ley. Sensors, 2019, 19, 535.	2.1	70
22	Object-based early monitoring of a grass weed in a grass crop using high resolution UAV imagery. Agronomy for Sustainable Development, 2016, 36, 1.	2.2	66
23	Evaluation of pixel- and object-based approaches for mapping wild oat (Avena sterilis) weed patches in wheat fields using QuickBird imagery for site-specific management. European Journal of Agronomy, 2014, 59, 57-66.	1.9	61
24	Airborne multi-spectral imagery for mapping cruciferous weeds in cereal and legume crops. Precision Agriculture, 2012, 13, 302-321.	3.1	60
25	UAVs for Vegetation Monitoring: Overview and Recent Scientific Contributions. Remote Sensing, 2021, 13, 2139.	1.8	60
26	A Comparison of UAV and Satellites Multispectral Imagery in Monitoring Onion Crop. An Application in the â€˜Cipolla Rossa di Tropeaâ€™ (Italy). Remote Sensing, 2020, 12, 3424.	1.8	48
27	Multispectral classification of grass weeds and wheat (<i>Triticum durum</i>) using linear and nonparametric functional discriminant analysis and neural networks. Weed Research, 2008, 48, 28-37.	0.8	44
28	Logistic regression product-unit neural networks for mapping Ridolfia segetum infestations in sunflower crop using multitemporal remote sensed data. Computers and Electronics in Agriculture, 2008, 64, 293-306.	3.7	43
29	Spectral discrimination of wild oat and canary grass in wheat fields for less herbicide application. Agronomy for Sustainable Development, 2010, 30, 689-699.	2.2	43
30	Assessing Nitrogen and Potassium Deficiencies in Olive Orchards through Discriminant Analysis of Hyperspectral Data. Journal of the American Society for Horticultural Science, 2007, 132, 611-618.	0.5	42
31	Spectral discrimination of Ridolfia segetum and sunflower as affected by phenological stage. Weed Research, 2006, 46, 10-21.	0.8	40
32	Accurate ortho-mosaicked six-band multispectral UAV images as affected by mission planning for precision agriculture proposes. International Journal of Remote Sensing, 2017, 38, 2161-2176.	1.3	37
33	Automatic UAV-based detection of Cynodon dactylon for site-specific vineyard management. PLoS ONE, 2019, 14, e0218132.	1.1	37
34	Mapping Crop Calendar Events and Phenology-Related Metrics at the Parcel Level by Object-Based Image Analysis (OBIA) of MODIS-NDVI Time-Series: A Case Study in Central California. Remote Sensing, 2018, 10, 1745.	1.8	36
35	Mapping Ridolfia segetum patches in sunflower crop using remote sensing. Weed Research, 2007, 47, 164-172.	0.8	34
36	Automatic assessment of agro-environmental indicators from remotely sensed images of tree orchards and its evaluation using olive plantations. Computers and Electronics in Agriculture, 2008, 61, 179-191.	3.7	33

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37	Parameter estimation of q-Gaussian Radial Basis Functions Neural Networks with a Hybrid Algorithm for binary classification. Neurocomputing, 2012, 75, 123-134.	3.5	33
38	Spatial Quality Evaluation of Resampled Unmanned Aerial Vehicle-Imagery for Weed Mapping. Sensors, 2015, 15, 19688-19708.	2.1	33
39	Applying Neural Networks to Hyperspectral and Multispectral Field Data for Discrimination of Cruciferous Weeds in Winter Crops. Scientific World Journal, The, 2012, 2012, 1-11.	0.8	32
40	Assessing land-use in olive groves from aerial photographs. Agriculture, Ecosystems and Environment, 2004, 103, 117-122.	2.5	29
41	Mapping sunflower yield as affected by Ridolfia segetum patches and elevation by applying evolutionary product unit neural networks to remote sensed data. Computers and Electronics in Agriculture, 2008, 60, 122-132.	3.7	29
42	Mapping Cynodon Dactylon Infesting Cover Crops with an Automatic Decision Tree-OBIA Procedure and UAV Imagery for Precision Viticulture. Remote Sensing, 2020, 12, 56.	1.8	29
43	Estimating tree height and biomass of a poplar plantation with image-based UAV technology. AIMS Agriculture and Food, 2018, 3, 313-323.	0.8	29
44	Watson on the Farm: Using Cloud-Based Artificial Intelligence to Identify Early Indicators of Water Stress. Remote Sensing, 2019, 11, 2645.	1.8	25
45	Underlying causes of yield spatial variability and potential for precision management in rice systems. Precision Agriculture, 2013, 14, 512-540.	3.1	24
46	Sunflower yield related to multi-temporal aerial photography, land elevation and weed infestation. Precision Agriculture, 2010, 11, 568-585.	3.1	19
47	Discriminating cropping systems and agro-environmental measures by remote sensing. Agronomy for Sustainable Development, 2008, 28, 355-362.	2.2	18
48	A digital elevation model to aid geostatistical mapping of weeds in sunflower crops. Agronomy for Sustainable Development, 2009, 29, 391-400.	2.2	18
49	Machine learning paradigms for weed mapping via unmanned aerial vehicles. , 2016, , .		17
50	High-Throughput Phenotyping of Bioethanol Potential in Cereals Using UAV-Based Multi-Spectral Imagery. Frontiers in Plant Science, 2019, 10, 948.	1.7	17
51	Classifying Irrigated Crops as Affected by Phenological Stage Using Discriminant Analysis and Neural Networks. Journal of the American Society for Horticultural Science, 2010, 135, 465-473.	0.5	11
52	Sectioning remote imagery for characterization of Avena sterilis infestations. Part A: Weed abundance. Precision Agriculture, 2012, 13, 322-336.	3.1	10
53	Understanding the errors in input prescription maps based on high spatial resolution remote sensing images. Precision Agriculture, 2012, 13, 581-593.	3.1	9
54	A logistic radial basis function regression method for discrimination of cover crops in olive orchards. Expert Systems With Applications, 2010, 37, 8432-8444.	4.4	8

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55	Sectioning remote imagery for characterization of Avena sterilis infestations. Part B: Efficiency and economics of control. Precision Agriculture, 2012, 13, 337-350.	3.1	8
56	Mapping tillage direction and contour farming by object-based analysis of UAV images. Computers and Electronics in Agriculture, 2021, 187, 106281.	3.7	8
57	Assessment of the Persistence of Avena sterilis L. Patches in Wheat Fields for Site-Specific Sustainable Management. Agronomy, 2019, 9, 30.	1.3	7
58	Experimental approach to detect water stress in ornamental plants using sUAS-imagery. , 2018, , .		6
59	An Experimental Comparison for the Identification of Weeds in Sunflower Crops via Unmanned Aerial Vehicles and Object-Based Analysis. Lecture Notes in Computer Science, 2015, , 252-262.	1.0	4
60	Feature Selection for Hybrid Neuro-Logistic Regression Applied to Classification of Remote Sensed Data. , 2008, , .		3
61	Semiautomatic Detection of Artificial Terrestrial Targets for Remotely Sensed Image Georeferencing. IEEE Geoscience and Remote Sensing Letters, 2013, 10, 184-188.	1.4	3
62	Census Parcels Cropping System Classification from Multitemporal Remote Imagery: A Proposed Universal Methodology. PLoS ONE, 2015, 10, e0117551.	1.1	2
63	Mapas de calendario de cultivo y variables fenolÃ³gicas mediante el anÃ¡lisis de imÃ¡genes MODIS y ASTER basado en objetos. Revista De Teledeteccion, 2014, .	0.6	2
64	DetecciÃ³n de malas hierbas en girasol en fase temprana mediante imÃ¡genes tomadas con un vehÃculo aÃ©reo no tripulado (UAV). Revista De Teledeteccion, 2014, , 39.	0.6	1