

# Francesco Pirotti

## List of Publications by Year in descending order

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106  
papers

2,412  
citations

279701

23  
h-index

254106

43  
g-index

110  
all docs

110  
docs citations

110  
times ranked

3144  
citing authors

#	ARTICLE	IF	CITATIONS
1	International benchmarking of terrestrial laser scanning approaches for forest inventories. ISPRS Journal of Photogrammetry and Remote Sensing, 2018, 144, 137-179.	4.9	254
2	Above ground biomass estimation in an African tropical forest with lidar and hyperspectral data. ISPRS Journal of Photogrammetry and Remote Sensing, 2014, 89, 49-58.	4.9	208
3	Suitability of LiDAR point density and derived landform curvature maps for channel network extraction. Hydrological Processes, 2010, 24, 1187-1197.	1.1	122
4	Monitoring Within-Field Variability of Corn Yield using Sentinel-2 and Machine Learning Techniques. Remote Sensing, 2019, 11, 2873.	1.8	86
5	State of the Art of Ground and Aerial Laser Scanning Technologies for High-Resolution Topography of the Earth Surface. European Journal of Remote Sensing, 2013, 46, 66-78.	1.7	79
6	Using Lidar Data to Analyse Sinkhole Characteristics Relevant for Understory Vegetation under Forest Cover” Case Study of a High Karst Area in the Dinaric Mountains. PLoS ONE, 2015, 10, e0122070.	1.1	79
7	Analysis of full-waveform LiDAR data for forestry applications: a review of investigations and methods. IForest, 2011, 4, 100-106.	0.5	77
8	Ground filtering and vegetation mapping using multi-return terrestrial laser scanning. ISPRS Journal of Photogrammetry and Remote Sensing, 2013, 76, 56-63.	4.9	65
9	Retrieval of small-relief marsh morphology from Terrestrial Laser Scanner, optimal spatial filtering, and laser return intensity. Geomorphology, 2009, 113, 12-20.	1.1	63
10	Variations in multiscale curvature distribution and signatures of LiDAR DTM errors. Earth Surface Processes and Landforms, 2013, 38, 1116-1134.	1.2	61
11	Cultural heritage interactive 3D models on the web: An approach using open source and free software. Journal of Cultural Heritage, 2010, 11, 350-353.	1.5	55
12	Mapping fire regimes in China using MODIS active fire and burned area data. Applied Geography, 2017, 85, 14-26.	1.7	55
13	Drivers of farmers' adoption and continuation of climate-smart agricultural practices. A study from northeastern Italy. Science of the Total Environment, 2020, 710, 136345.	3.9	55
14	A spatially explicit database of wind disturbances in European forests over the period 2000–2018. Earth System Science Data, 2020, 12, 257-276.	3.7	52
15	Potential of ALOS2 and NDVI to Estimate Forest Above-Ground Biomass, and Comparison with Lidar-Derived Estimates. Remote Sensing, 2017, 9, 18.	1.8	50
16	The Role of Factors Affecting the Adoption of Environmentally Friendly Farming Practices: Can Geographical Context and Time Explain the Differences Emerging from Literature?. Sustainability, 2018, 10, 3101.	1.6	47
17	Laser Scanner Applications in Forest and Environmental Sciences. European Journal of Remote Sensing, 0, , 109-123.	0.2	47
18	A Particle Filter for Smartphone-Based Indoor Pedestrian Navigation. Micromachines, 2014, 5, 1012-1033.	1.4	44

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19	Airborne and Terrestrial Laser Scanning Data for the Assessment of Standing and Lying Deadwood: Current Situation and New Perspectives. <i>Remote Sensing</i> , 2018, 10, 1356.	1.8	38
20	Performance Evaluation of Two Indoor Mapping Systems: Low-Cost UWB-Aided Photogrammetry and Backpack Laser Scanning. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 416.	1.3	35
21	Assessing a Template Matching Approach for Tree Height and Position Extraction from Lidar-Derived Canopy Height Models of Pinus Pinaster Stands. <i>Forests</i> , 2010, 1, 194-208.	0.9	34
22	Wetland Mapping with Landsat 8 OLI, Sentinel-1, ALOS-1 PALSAR, and LiDAR Data in Southern New Brunswick, Canada. <i>Remote Sensing</i> , 2020, 12, 2095.	1.8	33
23	Vegetation filtering of waveform terrestrial laser scanner data for DTM production. <i>Applied Geomatics</i> , 2013, 5, 311-322.	1.2	30
24	A standardization method to disentangle environmental information from axial trends of xylem anatomical traits. <i>Tree Physiology</i> , 2019, 39, 495-502.	1.4	30
25	A LiDAR-based approach for a multi-purpose characterization of Alpine forests: an Italian case study. <i>IForest</i> , 2013, 6, 156-168.	0.5	28
26	Collaborative WebGIS Design: A Case Study for Road Risk Analysis and Monitoring. <i>Transactions in GIS</i> , 2011, 15, 213-226.	1.0	27
27	Small Footprint Full-Waveform Metrics Contribution to the Prediction of Biomass in Tropical Forests. <i>Remote Sensing</i> , 2014, 6, 9576-9599.	1.8	26
28	EUReCA: An open-source urban building energy modelling tool for the efficient evaluation of cities energy demand. <i>Renewable Energy</i> , 2021, 173, 544-560.	4.3	26
29	A MACHINE LEARNING APPROACH TO MULTISPECTRAL SATELLITE DERIVED BATHYMETRY. <i>ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences</i> , 0, V-3-2020, 565-570.	0.0	24
30	Low-Cost MEMS Sensors and Vision System for Motion and Position Estimation of a Scooter. <i>Sensors</i> , 2013, 13, 1510-1522.	2.1	23
31	Satellite open data to monitor forest damage caused by extreme climate-induced events: a case study of the Vaia storm in Northern Italy. <i>Forestry</i> , 2021, 94, 407-416.	1.2	23
32	Radiative transfer model inversion using high-resolution hyperspectral airborne imagery – Retrieving maize LAI to access biomass and grain yield. <i>Field Crops Research</i> , 2022, 282, 108449.	2.3	23
33	BENCHMARK OF MACHINE LEARNING METHODS FOR CLASSIFICATION OF A SENTINEL-2 IMAGE. <i>International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives</i> , 0, XLI-B7, 335-340.	0.2	22
34	Does degradation from selective logging and illegal activities differently impact forest resources? A case study in Ghana. <i>IForest</i> , 2016, 9, 354-362.	0.5	21
35	Evaluation of the dynamic processes of a landslide with laser scanners and Bayesian methods. <i>Geomatics, Natural Hazards and Risk</i> , 2015, 6, 614-634.	2.0	20
36	BENCHMARK OF MACHINE LEARNING METHODS FOR CLASSIFICATION OF A SENTINEL-2 IMAGE. <i>International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives</i> , 0, XLI-B7, 335-340.	0.2	20

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37	An open source virtual globe rendering engine for 3D applications: NASA World Wind. Open Geospatial Data, Software and Standards, 2017, 2, .	4.3	19
38	A COMPARISON OF TREE SEGMENTATION METHODS USING VERY HIGH DENSITY AIRBORNE LASER SCANNER DATA. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLII-2/W7, 285-290.	0.2	19
39	Solar Irradiance Modelling with NASA WW GIS Environment. ISPRS International Journal of Geo-Information, 2015, 4, 711-724.	1.4	17
40	Toward the use of smartphones for mobile mapping. Geo-Spatial Information Science, 2016, 19, 210-221.	2.4	16
41	Implementation and assessment of two density-based outlier detection methods over large spatial point clouds. Open Geospatial Data, Software and Standards, 2018, 3, .	4.3	16
42	Geo-Spatial Support for Assessment of Anthropic Impact on Biodiversity. ISPRS International Journal of Geo-Information, 2014, 3, 599-618.	1.4	15
43	NDVI from Landsat 8 Vegetation Indices to Study Movement Dynamics of Capra Ibex in Mountain Areas. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XL-7, 147-153.	0.2	15
44	COMPARISON OF DISCRETE RETURN AND WAVEFORM TERRESTRIAL LASER SCANNING FOR DENSE VEGETATION FILTERING. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XXXIX-B7, 511-516.	0.2	14
45	Expansion of subalpine woody vegetation over 40 years on Vancouver Island, British Columbia, Canada. Canadian Journal of Forest Research, 2016, 46, 437-443.	0.8	13
46	Open source R for applying machine learning to RPAS remote sensing images. Open Geospatial Data, Software and Standards, 2017, 2, .	4.3	12
47	Towards Surveying with a Smartphone. Lecture Notes in Geoinformation and Cartography, 2018, , 167-176.	0.5	12
48	Responding to Large-Scale Forest Damage in an Alpine Environment with Remote Sensing, Machine Learning, and Web-GIS. Remote Sensing, 2021, 13, 1541.	1.8	12
49	IceSAT/GLAS Waveform Signal Processing for Ground Cover Classification: State of the Art. European Journal of Remote Sensing, 2010, , 13-26.	0.2	12
50	Accuracy enhancement of unmanned helicopter positioning with low-cost system. Applied Geomatics, 2009, 1, 85-95.	1.2	11
51	Lidar Processing for Defining Sinkhole Characteristics under Dense Forest Cover: A Case Study in the Dinaric Mountains. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XL-7, 113-118.	0.2	11
52	Disturbance Mapping in Arctic Tundra Improved by a Planning Workflow for Drone Studies: Advancing Tools for Future Ecosystem Monitoring. Remote Sensing, 2021, 13, 4466.	1.8	11
53	EXTRACTION AND VISUALIZATION OF 3D BUILDING MODELS IN URBAN AREAS FOR FLOOD SIMULATION. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLII-2/W11, 669-673.	0.2	10
54	DETECTION OF BUILDING ROOFS AND FACADES FROM AERIAL LASER SCANNING DATA USING DEEP LEARNING. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLII-2/W11, 975-980.	0.2	10

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55	SEMI-AUTOMATED DETECTION OF SURFACE DEGRADATION ON BRIDGES BASED ON A LEVEL SET METHOD. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XL-3/W3, 15-21.	0.2	10
56	Land cover change across 45 years in the world's largest mangrove forest (Sundarbans): the contribution of remote sensing in forest monitoring. European Journal of Remote Sensing, 0, , 1-17.	1.7	10
57	Preface to the special issue: the role of geomatics in hydrogeological risk. Geomatics, Natural Hazards and Risk, 2015, 6, 357-361.	2.0	9
58	Open software and standards in the realm of laser scanning technology. Open Geospatial Data, Software and Standards, 2019, 4, .	4.3	9
59	Estimated Biomass Loss Caused by the Vaia Windthrow in Northern Italy: Evaluation of Active and Passive Remote Sensing Options. Remote Sensing, 2021, 13, 4924.	1.8	9
60	ASSESSMENT OF CANOPY AND GROUND HEIGHT ACCURACY FROM GEDI LIDAR OVER STEEP MOUNTAIN AREAS. ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences, 0, V-3-2022, 431-438.	0.0	9
61	Analysis and impact of recent climate trends on grape composition in north-east Italy. BIO Web of Conferences, 2019, 13, 04014.	0.1	8
62	An ISVD-based Euclidian structure from motion for smartphones. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XL-5, 401-406.	0.2	8
63	INITIAL EVALUATION OF 3D RECONSTRUCTION OF CLOSE OBJECTS WITH SMARTPHONE STEREO VISION. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLII-1, 289-293.	0.2	7
64	CLASSIFICATION OF AERIAL LASER SCANNING POINT CLOUDS USING MACHINE LEARNING: A COMPARISON BETWEEN RANDOM FOREST AND TENSORFLOW. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLII-2/W13, 1105-1111.	0.2	7
65	Resource Communication. Temporal optimization of fuel treatment design in blue gum (Eucalyptus) Tj ETQq1 1 0.784314 rgBT /Over	0.1	7
66	Aiding Indoor Photogrammetry with UWB Sensors. Photogrammetric Engineering and Remote Sensing, 2019, 85, 369-378.	0.3	6
67	Preface to the special issue "Open Science for earth remote sensing: latest developments in software and data" Open Geospatial Data, Software and Standards, 2017, 2, .	4.3	5
68	DSM AND DTM FOR EXTRACTING 3D BUILDING MODELS: ADVANTAGES AND LIMITATIONS. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLII-2/W13, 1539-1544.	0.2	5
69	COMPARISON OF VEGETATION INDICES FROM RPAS AND SENTINEL-2 IMAGERY FOR DETECTING PERMANENT PASTURES. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLII-3, 1381-1387.	0.2	5
70	MIGRATION OF DIGITAL CARTOGRAPHY TO CITYGML; A WEB-BASED TOOL FOR SUPPORTING SIMPLE ETL PROCEDURES. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLII-4, 193-200.	0.2	5
71	Analysis of correlation between full-waveform metrics, scan geometry and land-cover: an application over forests. ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences, 0, II-5/W2, 235-240.	0.0	5
72	A Web-Based Application to Monitor and Inform about the COVID-19 Outbreak in Italy: The {COVID-19ita} Initiative. Healthcare (Switzerland), 2022, 10, 473.	1.0	5

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73	Innovations in Photogrammetry and Remote Sensing: Modern Sensors, New Processing Strategies and Frontiers in Applications. <i>Sensors</i> , 2021, 21, 2420.	2.1	4
74	PLANNING HARVESTING OPERATIONS IN FOREST ENVIRONMENT: REMOTE SENSING FOR DECISION SUPPORT. <i>ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences</i> , 0, IV-3/W1, 33-40.	0.0	4
75	URBAN GEO BIG DATA. <i>International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives</i> , 0, XLII-4/W14, 23-30.	0.2	4
76	Open-source geospatial tools and technologies for urban and environmental studies. <i>Open Geospatial Data, Software and Standards</i> , 2020, 5, .	4.3	4
77	MACHINE LEARNING FOR CLASSIFICATION OF AN ERODING SCARP SURFACE USING TERRESTRIAL PHOTOGRAMMETRY WITH NIR AND RGB IMAGERY. <i>ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences</i> , 0, V-3-2020, 431-437.	0.0	3
78	KERNEL FEATURE CROSS-CORRELATION FOR UNSUPERVISED QUANTIFICATION OF DAMAGE FROM WINDTHROW IN FORESTS. <i>International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives</i> , 0, XLI-B7, 17-22.	0.2	3
79	VEGETATION CHARACTERISTICS USING MULTI-RETURN TERRESTRIAL LASER SCANNER. <i>International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives</i> , 0, XXXVIII-5/W12, 277-282.	0.2	3
80	KERNEL FEATURE CROSS-CORRELATION FOR UNSUPERVISED QUANTIFICATION OF DAMAGE FROM WINDTHROW IN FORESTS. <i>International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives</i> , 0, XLI-B7, 17-22.	0.2	3
81	SENTINEL-5P NO2 DATA: CROSS-VALIDATION AND COMPARISON WITH GROUND MEASUREMENTS. <i>International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives</i> , 0, XLIII-B3-2022, 749-756.	0.2	3
82	SEAWEED PRESENCE DETECTION USING MACHINE LEARNING AND REMOTE SENSING. <i>International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives</i> , 0, XLIII-B3-2022, 1011-1017.	0.2	3
83	COMPARING ACCURACY OF ULTRA-DENSE LASER SCANNER AND PHOTOGRAMMETRY POINT CLOUDS. <i>International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives</i> , 0, XLIII-B1-2022, 353-359.	0.2	3
84	OPEN SOURCE WEB TOOL FOR TRACKING IN A LOWCOST MOBILE MAPPING SYSTEM. <i>International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives</i> , 0, XLII-2/W8, 99-104.	0.2	2
85	On the use of INS to improve Feature Matching. <i>International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives</i> , 0, XL-1, 227-232.	0.2	2
86	COMPARING DATA ACQUISITION METHODOLOGIES FOR DTM PRODUCTION. <i>International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives</i> , 0, XL-5/W3, 59-62.	0.2	2
87	Micro-scale Landslide Displacements Detection Using Bayesian Methods Applied to GNSS Data. , 2015, , 123-138.		2
88	A GEODATABASE FOR MULTISOURCE DATA APPLIED TO CULTURAL HERITAGE: THE CASE STUDY OF VILLA REVEDIN BOLASCO. <i>International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives</i> , 0, XLI-B5, 267-271.	0.2	2
89	Painting recognition with smartphones equipped with inertial measurement unit. , 2015, , .		1
90	Processing lidar waveform data for 3D visual assessment of forest environments. <i>International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives</i> , 0, XL-5, 493-499.	0.2	1

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91	Waveform lidar data analysis for detecting vegetation structure and coastal morphology. European Journal of Remote Sensing, 2010, , 117-127.	0.2	1
92	TRAINING IN INNOVATIVE TECHNOLOGIES FOR CLOSE-RANGE SENSING IN ALPINE TERRAIN " 3RD EDITION. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLIII-B5-2020, 243-250.	0.2	1
93	APPLICATION OF TREE DETECTION METHODS OVER LIDAR DATA FOR FOREST VOLUME ESTIMATION. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLIII-B3-2020, 1055-1060.	0.2	1
94	Natural Disturbances and Protection Forests: At the Cutting Edge of Remote Sensing Technologies for the Rapid Assessment of Protective Effects against Rockfall. , 0, , .		1
95	DETECTING AND EVALUATING DISTURBANCE IN TEMPERATE RAINFOREST WITH SENTINEL-2, MACHINE LEARNING AND FOREST PARAMETERS. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLIII-B3-2022, 913-920.	0.2	1
96	Digression on a particular "ABEL" integral. Journal of Interdisciplinary Mathematics, 2009, 12, 863-874.	0.4	0
97	TLS and photogrammetry for 3D modelling of a low relief: case study of ancient archive, Palazzo Bo, Padua. , 2018, , .		0
98	Preface of Special Issue on Laser Scanning. Applied Sciences (Switzerland), 2019, 9, 2713.	1.3	0
99	WAVEFORM ANALYSIS FOR THE EXTRACTION OF POST-FIRE VEGETATION CHARACTERISTICS. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XXXIX-B7, 523-527.	0.2	0
100	INTEGRATION OF LIDAR AND 3D MODELLING FOR THE ANALYSIS OF A FLOODING EVENT. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XL-5/W3, 107-110.	0.2	0
101	ANTHROPIC RISK ASSESSMENT ON BIODIVERSITY. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XL-5/W3, 21-26.	0.2	0
102	PHOTOGRAMMETRIC RECONSTRUCTION WITH BAYESIAN INFORMATION. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLI-B1, 681-687.	0.2	0
103	ASSESSMENT OF VOLUME AND ABOVE-GROUND BIOMASS IN ARAUCARIA FOREST THROUGH SATELLITE IMAGES, COMPARING DIFFERENT METHODS IN THE SOUTH OF CHILE. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLII-3/W12-2020, 331-336.	0.2	0
104	Short Communication. Basic wood density and moisture content of 14 shrub species under two different site conditions in the Chilean Mediterranean shrubland. Forest Systems, 2022, 31, eSC01-eSC01.	0.1	0
105	ISPRS-SHY " OPEN DATA COLLECTOR FOR SUPPORTING GROUND TRUTH REMOTE SENSING ANALYSIS. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLIII-B5-2022, 45-50.	0.2	0
106	A COMPARATIVE ASSESSMENT OF LAND USE-LAND COVER DYNAMICS BETWEEN BANGLADESH AND INDIAN SUNDARBANS FROM 1975"2020: A GEOSPATIAL AND STATISTICAL-BASED APPROACH. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLIII-B3-2022, 625-632.	0.2	0