Gerardo Herrera

List of Publications by Year
in descending order

89 papers	3,905 citations	94269 37 h-index	133063 59 g-index
94 all docs	94 docs citations	94 times ranked	2856 citing authors

#	Article	IF	Citations
1	ValInSAR: A Systematic Approach for the Validation of Differential SAR Interferometry in Land Subsidence Areas. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2022, 15, 3650-3671.	2.3	2
2	Stakeholders' Perspective on Groundwater Management in Four Water-Stressed Mediterranean Areas: Priorities and Challenges. Land, 2022, 11, 738.	1.2	5
3	Mapping the global threat of land subsidence. Science, 2021, 371, 34-36.	6.0	204
4	Modeling historical subsidence due to groundwater withdrawal in the Alto Guadalentín aquifer-system (Spain). Engineering Geology, 2021, 283, 105998.	2.9	8
5	Combining Satellite InSAR, Slope Units and Finite Element Modeling for Stability Analysis in Mining Waste Disposal Areas. Remote Sensing, 2021, 13, 2008.	1.8	9
6	We lose ground: Global assessment of land subsidence impact extent. Science of the Total Environment, 2021, 786, 147415.	3.9	31
7	Rapid characterisation of the extremely large landslide threatening the Rules Reservoir (Southern) Tj ETQq1 1 0.784314 rgBT /Overlo	2.7	15
8	Landslides in Urban Environments. , 2021, , .		1
9	Improving multi-technique monitoring using Sentinel-1 and Cosmo-SkyMed data and upgrading groundwater model capabilities. Science of the Total Environment, 2020, 703, 134757.	3.9	21
10	Integration of landslide hazard into urban planning across Europe. Landscape and Urban Planning, 2020, 196, 103740.	3.4	45
11	Geotechnics for rockfall assessment in the volcanic island of Gran Canaria (Canary Islands, Spain). Journal of Maps, 2020, 16, 605-613.	1.0	12
12	Vulnerability Assessment of Buildings due to Land Subsidence Using InSAR Data in the Ancient Historical City of Pistoia (Italy). Sensors, 2020, 20, 2749.	2.1	37
13	Remote analysis of an open-pit slope failure: Las Cruces case study, Spain. Landslides, 2020, 17, 2173-2188.	2.7	34
14	Potential Impacts of Future Climate Change Scenarios on Ground Subsidence. Water (Switzerland), 2020, 12, 219.	1.2	14
15	3D groundwater flow and deformation modelling of Madrid aquifer. Journal of Hydrology, 2020, 585, 124773.	2.3	14
16	Semi-Automatic Identification and Pre-Screening of Geological–Geotechnical Deformational Processes Using Persistent Scatterer Interferometry Datasets. Remote Sensing, 2019, 11, 1675.	1.8	49
17	Coastal lateral spreading in the world heritage site of the Tramuntana Range (Majorca, Spain). The use of PSInSAR monitoring to identify vulnerability. Landslides, 2018, 15, 797-809.	2.7	23
18	Site scale modeling of slow-moving landslides, a 3D viscoplastic finite element modeling approach. Landslides, 2018, 15, 257-272.	2.7	18

#	ARTICLE	IF	CITATIONS
19	Fast detection of ground motions on vulnerable elements using Sentinel-1 InSAR data. Geomatics, Natural Hazards and Risk, 2018, 9, 152-174.	2.0	34
20	Landslide databases in the Geological Surveys of Europe. Landslides, 2018, 15, 359-379.	2.7	85
21	Rockfall Simulation Based on UAV Photogrammetry Data Obtained during an Emergency Declaration: Application at a Cultural Heritage Site. Remote Sensing, 2018, 10, 1923.	1.8	57
22	From ERS 1/2 to Sentinel-1: Subsidence Monitoring in Italy in the Last Two Decades. Frontiers in Earth Science, 2018, 6, .	0.8	55
23	InSAR-Based Mapping to Support Decision-Making after an Earthquake. Remote Sensing, 2018, 10, 899.	1.8	18
24	THE SAFETY PROJECT: SENTINEL-1 FOR THE MANAGEMENT OF GEOLOGICAL RISK. , 2018, , .		2
25	Mapping groundwater level and aquifer storage variations from InSAR measurements in the Madrid aquifer, Central Spain. Journal of Hydrology, 2017, 547, 678-689.	2.3	67
26	Multiband PSInSAR and long-period monitoring of land subsidence in a strategic detrital aquifer (Vega) Tj ETQq0 0 0 rgBT /Overlock 10 T 71-87.	2.3	23
27	Spectral analysis of climate cycles to predict rainfall induced landslides in the western Mediterranean (Majorca, Spain). Natural Hazards, 2017, 89, 985-1007.	1.6	14
28	Mapping Vulnerable Urban Areas Affected by Slow-Moving Landslides Using Sentinel-1 InSAR Data. Remote Sensing, 2017, 9, 876.	1.8	76
29	A Methodology to Detect and Update Active Deformation Areas Based on Sentinel-1 SAR Images. Remote Sensing, 2017, 9, 1002.	1.8	102
30	Exploitation of Satellite A-DInSAR Time Series for Detection, Characterization and Modelling of Land Subsidence. Geosciences (Switzerland), 2017, 7, 25.	1.0	20
31	A-DInSAR Monitoring of Landslide and Subsidence Activity: A Case of Urban Damage in Arcos de la Frontera, Spain. Remote Sensing, 2017, 9, 787.	1.8	24
32	Evaluation of the SBAS InSAR Service of the European Space Agencyâ€™s Geohazard Exploitation Platform (GEP). Remote Sensing, 2017, 9, 1291.	1.8	56
33	Groundwater and Subsidence Modeling Combining Geological and Multi-Satellite SAR Data over the Alto GuadalentÃn Aquifer (SE Spain). Geofluids, 2017, 2017, 1-17.	0.3	23
34	Integration of Geohazards into Urban and Land-Use Planning. Towards a Landslide Directive. The EuroGeoSurveys Questionnaire. , 2017, , 1067-1072.		2
35	Interpolation of GPS and Geological Data Using InSAR Deformation Maps: Method and Application to Land Subsidence in the Alto GuadalentÃn Aquifer (SE Spain). Remote Sensing, 2016, 8, 965.	1.8	42
36	Comparison of water-level, extensometric, DInSAR and simulation data for quantification of subsidence in Murcia City (SE Spain). Hydrogeology Journal, 2016, 24, 727-747.	0.9	25

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37	Deformational behaviours of alluvial units detected by advanced radar interferometry in the vega media of the segura river, southeast spain. Geografiska Annaler, Series A: Physical Geography, 2016, 98, 15-38.	0.6	2
38	Calibration and validation of rockfall modelling at regional scale: application along a roadway in Mallorca (Spain) and organization of its management. Landslides, 2016, 13, 751-763.	2.7	23
39	Assessing sinkhole activity in the Ebro Valley mantled evaporite karst using advanced DInSAR. Geomorphology, 2015, 229, 30-44.	1.1	50
40	Combination of Conventional and Advanced DInSAR to Monitor Very Fast Mining Subsidence with TerraSAR-X Data: Bytom City (Poland). Remote Sensing, 2015, 7, 5300-5328.	1.8	96
41	Monitoring ground subsidence in urban environments: M-30 tunnels under Madrid City (Spain). Ingenieria E Investigacion, 2015, 35, 30-35.	0.2	10
42	3D Stability Analysis of the Portalet Landslide Using Finite Element Method. , 2015, , 1519-1524.		3
43	A User-Oriented Methodology for DInSAR Time Series Analysis and Interpretation: Landslides and Subsidence Case Studies. Pure and Applied Geophysics, 2015, 172, 3081-3105.	0.8	46
44	Twenty-year advanced DInSAR analysis of severe land subsidence: The Alto GuadalentÃn Basin (Spain) case study. Engineering Geology, 2015, 198, 40-52.	2.9	67
45	Current Topics on Deformation Monitoring and Modelling, Geodynamics and Natural Hazards: Introduction. Pure and Applied Geophysics, 2015, 172, 2961-2964.	0.8	1
46	Subsidence activity maps derived from DInSAR data: Orihuela case study. Natural Hazards and Earth System Sciences, 2014, 14, 1341-1360.	1.5	43
47	Comparison of event landslide inventories: the Pogliaschina catchment test case, Italy. Natural Hazards and Earth System Sciences, 2014, 14, 1749-1759.	1.5	32
48	A quasi-elastic aquifer deformational behavior: Madrid aquifer case study. Journal of Hydrology, 2014, 519, 1192-1204.	2.3	59
49	Using Modern Sensor Data and Advanced Numerical Modelling for Slow Landslides Motion Forecasting. Lecture Notes in Earth System Sciences, 2014, , 271-275.	0.5	0
50	2D viscoplastic finite element modelling of slow landslides: the Portalet case study (Spain). Landslides, 2014, 11, 29-42.	2.7	46
51	Radar interferometry techniques for the study of ground subsidence phenomena: a review of practical issues through cases in Spain. Environmental Earth Sciences, 2014, 71, 163-181.	1.3	135
52	Morphology and causes of landslides in Portalet area (Spanish Pyrenees): Probabilistic analysis by means of numerical modelling. Engineering Failure Analysis, 2014, 36, 390-406.	1.8	6
53	DInSAR analysis of ALOS PALSAR images for the assessment of very slow landslides: the Tena Valley case study. Landslides, 2014, 11, 225-246.	2.7	81
54	The Son Poc rockfall (Mallorca, Spain) on the 6th of March 2013: 3D simulation. Landslides, 2014, 11, 493-503.	2.7	23

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55	A methodology for improving landslide PSI data analysis. International Journal of Remote Sensing, 2014, 35, 2186-2214.	1.3	159
56	Instrumental monitoring of the subsidence due to groundwater withdrawal in the city of Murcia (Spain). Environmental Earth Sciences, 2013, 70, 1957-1963.	1.3	13
57	Synthesis, characterization and electrochemical properties of iron-zirconia solid solution nanoparticles prepared using a sol–gel technique. Physical Chemistry Chemical Physics, 2013, 15, 19312.	1.3	19
58	Monitoring an earthfill dam using differential SAR interferometry: La Pedrera dam, Alicante, Spain. Engineering Geology, 2013, 157, 21-32.	2.9	55
59	Multi-sensor advanced DInSAR monitoring of very slow landslides: The Tena Valley case study (Central) Tj ETQq1 1 0.784314 rgBT /Ov	4.6	241
60	The European DORIS downstream service as a multi-scale system for landslides and subsidence risk management. , 2013, , .		0
61	InSAR Data for Mapping and Monitoring Landslides in Tena Valley. , 2013, , 243-249.		0
62	Exploitation of Large Archives of ERS and ENVISAT C-Band SAR Data to Characterize Ground Deformations. Remote Sensing, 2013, 5, 3896-3917.	1.8	49
63	Landslide Activity Maps Generation by Means of Persistent Scatterer Interferometry. Remote Sensing, 2013, 5, 6198-6222.	1.8	90
64	Losses Caused by Recent Mass-Movements in Majorca (Spain). , 2013, , 105-111.		5
65	Recent Mass Movements in the Tramuntana Range (Majorca, Spain). , 2013, , 27-35.		2
66	Subsidence damage assessment of a Gothic church using differential interferometry and field data. Structural Health Monitoring, 2012, 11, 751-762.	4.3	38
67	Forensic analysis of buildings affected by mining subsidence based on Differential Interferometry (Part III). Engineering Failure Analysis, 2012, 24, 67-76.	1.8	25
68	Tectonic and seismic implications of an intersegment rupture. Tectonophysics, 2012, 546-547, 28-37.	0.9	68
69	Persistent Scatterer Interferometry subsidence data exploitation using spatial tools: The Vega Media of the Segura River Basin case study. Journal of Hydrology, 2011, 400, 411-428.	2.3	26
70	Analysis with C- and X-band satellite SAR data of the Portalet landslide area. Landslides, 2011, 8, 195-206.	2.7	97
71	A ground subsidence study based on DInSAR data: Calibration of soil parameters and subsidence prediction in Murcia City (Spain). Engineering Geology, 2010, 111, 19-30.	2.9	68
72	Mapping ground movements in open pit mining areas using differential SAR interferometry. International Journal of Rock Mechanics and Minings Sciences, 2010, 47, 1114-1125.	2.6	58

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73	Forensic analysis of buildings affected by mining subsidence. Engineering Failure Analysis, 2010, 17, 270-285.	1.8	34
74	Study of the land subsidence in Orihuela City (SE Spain) using PSI data: Distribution, evolution and correlation with conditioning and triggering factors. Engineering Geology, 2010, 115, 105-121.	2.9	39
75	Analysis of subsidence using TerraSAR-X data: Murcia case study. Engineering Geology, 2010, 116, 284-295.	2.9	62
76	Assessment of the performance of X-band satellite radar data for landslide mapping and monitoring: Upper Tena Valley case study. Natural Hazards and Earth System Sciences, 2010, 10, 1865-1875.	1.5	121
77	Application of TerraSAR-X data to the monitoring of urban subsidence in the city of Murcia. , 2010, , .		3
78	Urban Applications of Persistent Scatterer Interferometry. Remote Sensing and Digital Image Processing, 2010, , 233-248.	0.7	13
79	Mapping and monitoring geomorphological processes in mountainous areas using PSI data: Central Pyrenees case study. Natural Hazards and Earth System Sciences, 2009, 9, 1587-1598.	1.5	45
80	Advanced interpretation of subsidence in Murcia (SE Spain) using A-DInSAR data â€" modelling and validation. Natural Hazards and Earth System Sciences, 2009, 9, 647-661.	1.5	86
81	A landslide forecasting model using ground based SAR data: The Portalet case study. Engineering Geology, 2009, 105, 220-230.	2.9	114
82	Validation and comparison of Advanced Differential Interferometry Techniques: Murcia metropolitan area case study. ISPRS Journal of Photogrammetry and Remote Sensing, 2009, 64, 501-512.	4.9	44
83	Numerical modelling and analysis of the influence of local variation in the thickness of a coal seam on surrounding stresses: Application to a practical case. International Journal of Coal Geology, 2009, 79, 157-166.	1.9	32
84	Advanced DInSAR analysis on mining areas: La Union case study (Murcia, SE Spain). Engineering Geology, 2007, 90, 148-159.	2.9	164
85	Mapping ground subsidence induced by aquifer overexploitation using advanced Differential SAR Interferometry: Vega Media of the Segura River (SE Spain) case study. Remote Sensing of Environment, 2005, 98, 269-283.	4.6	108
86	Control of deformation of buildings affected by subsidence using persistent scatterer interferometry. Structure and Infrastructure Engineering, 0, , 1-13.	2.0	22
87	Evaluation of the potential of InSAR time series to study the spatio-temporal evolution of piezometric levels in the Madrid aquifer. Proceedings of the International Association of Hydrological Sciences, 0, 372, 29-32.	1.0	1
88	Regional subsidence modelling in Murcia city (SE Spain) using 1-D vertical finite element analysis and 2-D interpolation of ground surface displacements. Proceedings of the International Association of Hydrological Sciences, 0, 372, 425-429.	1.0	1
89	Application of multi-sensor advanced DInSAR analysis to severe land subsidence recognition: Alto GuadalentÃn Basin (Spain). Proceedings of the International Association of Hydrological Sciences, 0, 372, 45-48.	1.0	2