

Mario Zarroca

List of Publications by Year in descending order

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Version: 2024-02-01

44
papers

1,245
citations

331670

21
h-index

361022

35
g-index

46
all docs

46
docs citations

46
times ranked

1398
citing authors

#	ARTICLE	IF	CITATIONS
1	Tsunami waves extensively resurfaced the shorelines of an early Martian ocean. <i>Scientific Reports</i> , 2016, 6, 25106.	3.3	121
2	Electrical methods (VES and ERT) for identifying, mapping and monitoring different saline domains in a coastal plain region (Alt Empordà, Northern Spain). <i>Journal of Hydrology</i> , 2011, 409, 407-422.	5.4	103
3	Evaluation of trenching, ground penetrating radar (GPR) and electrical resistivity tomography (ERT) for sinkhole characterization. <i>Earth Surface Processes and Landforms</i> , 2014, 39, 214-227.	2.5	81
4	Investigating gravitational grabens related to lateral spreading and evaporite dissolution subsidence by means of detailed mapping, trenching, and electrical resistivity tomography (Spanish Pyrenees). <i>Lithosphere</i> , 2012, 4, 331-353.	1.4	68
5	Sinkhole investigation in an urban area by trenching in combination with GPR, ERT and high-precision leveling. Mantled evaporite karst of Zaragoza city, NE Spain. <i>Engineering Geology</i> , 2017, 231, 9-20.	6.3	59
6	Differentiating between gravitational and tectonic faults by means of geomorphological mapping, trenching and geophysical surveys. The case of the Zenzano Fault (Iberian Chain, N Spain). <i>Geomorphology</i> , 2013, 189, 93-108.	2.6	53
7	Investigating a damaging buried sinkhole cluster in an urban area (Zaragoza city, NE Spain) integrating multiple techniques: Geomorphological surveys, DInSAR, DEMs, GPR, ERT, and trenching. <i>Geomorphology</i> , 2015, 229, 3-16.	2.6	53
8	Quantifying groundwater discharge from different sources into a Mediterranean wetland by using ²²² Rn and Ra isotopes. <i>Journal of Hydrology</i> , 2012, 466-467, 11-22.	5.4	48
9	Late Holocene episodic displacement on fault scarps related to interstratal dissolution of evaporites (Teruel Neogene Graben, NE Spain). <i>Journal of Structural Geology</i> , 2012, 34, 2-19.	2.3	46
10	Large landslides associated with a diapiric fold in Canelles Reservoir (Spanish Pyrenees): Detailed geological and geomorphological mapping, trenching and electrical resistivity imaging. <i>Geomorphology</i> , 2015, 241, 224-242.	2.6	46
11	Integrated geophysics and soil gas profiles as a tool to characterize active faults: the Amer fault example (Pyrenees, NE Spain). <i>Environmental Earth Sciences</i> , 2012, 67, 889-910.	2.7	44
12	Application of electrical resistivity imaging (ERI) to a tailings dam project for artisanal and small-scale gold mining in Zaruma-Portovelo, Ecuador. <i>Journal of Applied Geophysics</i> , 2015, 113, 103-113.	2.1	40
13	The impact of droughts and climate change on sinkhole occurrence. A case study from the evaporite karst of the Fluvia Valley, NE Spain. <i>Science of the Total Environment</i> , 2017, 579, 345-358.	8.0	37
14	Characterization of radon levels in soil and groundwater in the North Maladeta Fault area (Central Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 Environmental Radioactivity, 2018, 189, 1-13.	1.7	33
15	Soil radon dynamics in the Amer fault zone: An example of very high seasonal variations. <i>Journal of Environmental Radioactivity</i> , 2016, 151, 293-303.	1.7	30
16	Martian outflow channels: How did their source aquifers form and why did they drain so rapidly?. <i>Scientific Reports</i> , 2015, 5, 13404.	3.3	29
17	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications. <i>Geomorphology</i> , 2016, 267, 76-97.	2.6	29
18	Identifying the boundaries of sinkholes and subsidence areas via trenching and establishing setback distances. <i>Engineering Geology</i> , 2018, 233, 255-268.	6.3	27

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19	Reconstructing the internal structure and long-term evolution of hazardous sinkholes combining trenching, electrical resistivity imaging (ERI) and ground penetrating radar (GPR). <i>Geomorphology</i> , 2017, 285, 287-304.	2.6	26
20	Integrated geophysical and morphostratigraphic approach to investigate a coseismic (?) translational slide responsible for the destruction of the MontclÀs village (Spanish Pyrenees). <i>Landslides</i> , 2014, 11, 655-671.	5.4	24
21	Late Holocene evolution of playa lakes in the central Ebro depression based on geophysical surveys and morpho-stratigraphic analysis of lacustrine terraces. <i>Geomorphology</i> , 2013, 196, 177-197.	2.6	23
22	The application of GPR and ERI in combination with exposure logging and retrodeformation analysis to characterize sinkholes and reconstruct their impact on fluvial sedimentation. <i>Earth Surface Processes and Landforms</i> , 2017, 42, 1049-1064.	2.5	21
23	Delineating coastal groundwater discharge processes in a wetland area by means of electrical resistivity imaging, ρ_{Ra} and ρ_{Rn} . <i>Hydrological Processes</i> , 2014, 28, 2382-2395.	2.6	19
24	Subsurface initiation of tafoni in granite terrains – Geophysical evidence from NE Spain: Geomorphological implications. <i>Geomorphology</i> , 2013, 196, 94-105.	2.6	18
25	An assessment of the influence of sulfidic mine wastes on rainwater quality in a semiarid climate (SE) Tj ETQq1 1 0.784314 rgBT /Ove	4.1	18
26	Groundwater flow induced collapse and flooding in Noctis Labyrinthus, Mars. <i>Planetary and Space Science</i> , 2016, 124, 1-14.	1.7	18
27	Time-lapse resistivity analysis of Quaternary sediments in the Midlands of Ireland. <i>Journal of Applied Geophysics</i> , 2012, 82, 46-58.	2.1	16
28	Sinkholes in hypogene versus epigene karst systems, illustrated with the hypogene gypsum karst of the Sant Miquel de Campmajor Valley, NE Spain. <i>Geomorphology</i> , 2019, 328, 57-78.	2.6	15
29	Morpho-stratigraphic characterization of a tufa mound complex in the Spanish Pyrenees using ground penetrating radar and trenching, implications for studies in Mars. <i>Earth and Planetary Science Letters</i> , 2014, 388, 197-210.	4.4	12
30	Sedimentological and palaeohydrological characterization of Late Pleistocene and Holocene tufa mound palaeolakes using trenching methods in the Spanish Pyrenees. <i>Sedimentology</i> , 2016, 63, 1786-1819.	3.1	12
31	Paleoflood records from sinkholes using an example from the Ebro River floodplain, northeastern Spain. <i>Quaternary Research</i> , 2017, 88, 71-88.	1.7	10
32	Chronology and paleoenvironmental interpretation of talus flatiron sequences in a subáhumid mountainous area: Tremp Depression, Spanish Pyrenees. <i>Earth Surface Processes and Landforms</i> , 2013, 38, 1513-1522.	2.5	9
33	The 1997 Mars Pathfinder Spacecraft Landing Site: Spillover Deposits from an Early Mars Inland Sea. <i>Scientific Reports</i> , 2019, 9, 4045.	3.3	9
34	Natural acid rock drainage in alpine catchments: A side effect of climate warming. <i>Science of the Total Environment</i> , 2021, 778, 146070.	8.0	9
35	Origin and evolution of SariÀ±ena Lake (central Ebro Basin): A piping-based model. <i>Geomorphology</i> , 2017, 290, 164-183.	2.6	8
36	Subsidence mechanisms and sedimentation in alluvial sinkholes inferred from trenching and ground penetrating radar (GPR). Implications for subsidence and flooding hazard assessment. <i>Quaternary International</i> , 2019, 525, 1-15.	1.5	7

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37	Neotectonics and late Holocene paleoseismic evidence in the Plio-Quaternary Daroca Half-graben, Iberian Chain, NE Spain. Implications for fault source characterization. <i>Journal of Structural Geology</i> , 2020, 131, 103933.	2.3	7
38	Granite caves in the north-east of the Iberian Peninsula: Artificial hypogea versus tafoni. <i>Zeitschrift für Geomorphologie</i> , 2011, 55, 341-364.	0.8	5
39	The Chaotic Terrains of Mercury Reveal a History of Planetary Volatile Retention and Loss in the Innermost Solar System. <i>Scientific Reports</i> , 2020, 10, 4737.	3.3	5
40	North polar trough formation due to in-situ erosion as a source of young ice in mid-latitude mantles on Mars. <i>Scientific Reports</i> , 2021, 11, 6750.	3.3	3
41	The episodic rise, net growing rate and kinematics of radial faults of the Salinas de Oro diapir using paleoseismological techniques (NE Spain). Salt upwelling versus karstic subsidence. <i>Geomorphology</i> , 2019, 342, 210-222.	2.6	2
42	Reply to the discussion by Pinyol et al. (2016) on Gutiérrez et al. (2015) "Large landslides associated with a diapiric fold in Canelles Reservoir (Spanish Pyrenees): Detailed geological and geomorphological mapping, trenching and electrical resistivity imaging". <i>Geomorphology</i> , 2016, 263, 175-178.	2.6	0
43	Weathering evolution in lutites of the K/Pg transition red beds of the Tremp Group (Tremp-Isona Basin, NE Iberian Peninsula). <i>Journal of Metamorphic Geology</i> , 2014, 32, 107-122.	1.0	0
44	The Olot Volcanic Field. <i>World Geomorphological Landscapes</i> , 2014, , 249-256.	0.3	0