

Sergio Sanchez-Moral

List of Publications by Year in descending order

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106
papers

3,930
citations

87888

38
h-index

133252

59
g-index

109
all docs

109
docs citations

109
times ranked

3297
citing authors

#	ARTICLE	IF	CITATIONS
1	Paleobiology and comparative morphology of a late Neandertal sample from El Sidron, Asturias, Spain. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 19266-19271.	7.1	206
2	Role of pore structure in salt crystallisation in unsaturated porous stone. Journal of Crystal Growth, 2004, 260, 532-544.	1.5	159
3	Hidden, abiotic CO ₂ flows and gaseous reservoirs in the terrestrial carbon cycle: Review and perspectives. Agricultural and Forest Meteorology, 2010, 150, 321-329.	4.8	146
4	Microorganisms and Microbially Induced Fabrics in Cave Walls. Geomicrobiology Journal, 2001, 18, 223-240.	2.0	143
5	On the origin of fiber calcite crystals in moonmilk deposits. Die Naturwissenschaften, 2006, 93, 27-32.	1.6	135
6	Paleolithic Art in Peril: Policy and Science Collide at Altamira Cave. Science, 2011, 334, 42-43.	12.6	120
7	Microclimatic characterization of a karstic cave: human impact on microenvironmental parameters of a prehistoric rock art cave (Candamo Cave, northern Spain). Environmental Geology, 1998, 33, 231-242.	1.2	119
8	Inorganic deterioration affecting the Altamira Cave, N Spain: quantitative approach to wall-corrosion (solutional etching) processes induced by visitors. Science of the Total Environment, 1999, 243-244, 67-84.	8.0	105
9	The biogeochemical role of Actinobacteria in Altamira Cave, Spain. FEMS Microbiology Ecology, 2012, 81, 281-290.	2.7	97
10	Can flux tower research neglect geochemical CO ₂ exchange?. Agricultural and Forest Meteorology, 2008, 148, 1045-1054.	4.8	95
11	Geomicrobiological Study of the Grotta dei Cervi, Porto Badisco, Italy. Geomicrobiology Journal, 2001, 18, 241-258.	2.0	93
12	Biomediated Precipitation of Calcium Carbonate Metastable Phases in Hypogean Environments: A Short Review. Geomicrobiology Journal, 2003, 20, 491-500.	2.0	87
13	Isolation of five Rubrobacter strains from biodeteriorated monuments. Die Naturwissenschaften, 2009, 96, 71-79.	1.6	87
14	Microbial Communities Associated With Hydromagnesite and Needle-Fiber Aragonite Deposits in a Karstic Cave (Altamira, Northern Spain). Geomicrobiology Journal, 1999, 16, 9-25.	2.0	86
15	Detection of human-induced environmental disturbances in a show cave. Environmental Science and Pollution Research, 2011, 18, 1037-1045.	5.3	85
16	Short-term CO ₂ (g) exchange between a shallow karstic cavity and the external atmosphere during summer: Role of the surface soil layer. Atmospheric Environment, 2011, 45, 1418-1427.	4.1	79
17	A NEW DATE FOR THE NEANDERTHALS FROM EL SIDRÓN CAVE (ASTURIAS, NORTHERN SPAIN)*. Archaeometry, 2013, 55, 148-158.	1.3	76
18	Microbial communities and associated mineral fabrics in Altamira Cave, Spain. International Journal of Speleology, 2009, 38, 83-92.	1.0	76

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19	Deterioration of building materials in Roman catacombs: The influence of visitors. <i>Science of the Total Environment</i> , 2005, 349, 260-276.	8.0	75
20	The Actinobacterial Colonization of Etruscan Paintings. <i>Scientific Reports</i> , 2013, 3, 1440.	3.3	74
21	Cave aerosols: distribution and contribution to speleothem geochemistry. <i>Quaternary Science Reviews</i> , 2013, 63, 23-41.	3.0	73
22	Pathogenic and opportunistic microorganisms in caves. <i>International Journal of Speleology</i> , 2010, 39, 15-24.	1.0	73
23	Lime-“pozzolana mortars in Roman catacombs: composition, structures and restoration. <i>Cement and Concrete Research</i> , 2005, 35, 1555-1565.	11.0	65
24	Radon continuous monitoring in Altamira Cave (northern Spain) to assess user's annual effective dose. <i>Journal of Environmental Radioactivity</i> , 2005, 80, 161-174.	1.7	63
25	Entomogenous fungi and the conservation of the cultural heritage: A review. <i>International Biodeterioration and Biodegradation</i> , 2008, 62, 325-330.	3.9	63
26	Fungal outbreak in a show cave. <i>Science of the Total Environment</i> , 2010, 408, 3632-3638.	8.0	62
27	Salt damage and microclimate in the Postumius Tomb, Roman Necropolis of Carmona, Spain. <i>Environmental Earth Sciences</i> , 2011, 63, 1529-1543.	2.7	53
28	Biogenic Mn oxide minerals coating in a subsurface granite environment. <i>Chemical Geology</i> , 2012, 322-323, 181-191.	3.3	52
29	Bacterially mediated mineralisation processes lead to biodeterioration of artworks in Maltese catacombs. <i>Science of the Total Environment</i> , 2011, 409, 2773-2782.	8.0	51
30	The fungal colonisation of rock-art caves: experimental evidence. <i>Die Naturwissenschaften</i> , 2009, 96, 1027-1034.	1.6	48
31	Dedolomites associated with karstification. An example of early dedolomitization in lacustrine sequences from the Tertiary Madrid basin, central Spain. <i>Carbonates and Evaporites</i> , 1996, 11, 85-103.	1.0	46
32	Main drivers of diffusive and advective processes of CO ₂ -gas exchange between a shallow vadose zone and the atmosphere. <i>International Journal of Greenhouse Gas Control</i> , 2014, 21, 113-129.	4.6	44
33	High ²²² Rn levels in a show cave (Castañar de Ibor, Spain): Proposal and application of management measures to minimize the effects on guides and visitors. <i>Atmospheric Environment</i> , 2006, 40, 7395-7400.	4.1	42
34	Subterranean atmospheres may act as daily methane sinks. <i>Nature Communications</i> , 2015, 6, 7003.	12.8	42
35	Calcitization of Mg-“Ca carbonate and Ca sulphate deposits in a continental Tertiary basin (Calatayud) Tj ETQq1 1.0.784314 rgBT /Ove	2.1	39
36	THE TECHNOLOGICAL AND TYPOLOGICAL BEHAVIOUR OF A NEANDERTHAL GROUP FROM EL SIDRÁN CAVE (ASTURIAS, SPAIN). <i>Oxford Journal of Archaeology</i> , 2010, 29, 119-148.	0.4	38

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37	Characterization of trace gases' fluctuations on a "low energy" cave (Castañar de Ibor, Spain) using techniques of entropy of curves. <i>International Journal of Climatology</i> , 2011, 31, 127-143.	3.5	38
38	The role of microorganisms in the formation of calcitic moonmilk deposits and speleothems in Altamira Cave. <i>Geomorphology</i> , 2012, 139-140, 285-292.	2.6	38
39	Atmospheric turbulence triggers pronounced diel pattern in karst carbonate geochemistry. <i>Biogeosciences</i> , 2013, 10, 5009-5017.	3.3	38
40	Deterioration of an Etruscan tomb by bacteria from the order Rhizobiales. <i>Scientific Reports</i> , 2014, 4, 3610.	3.3	38
41	Annual and transient signatures of gas exchange and transport in the Castañar de Ibor cave (Spain). <i>International Journal of Speleology</i> , 2009, 38, 153-162.	1.0	38
42	Role of soil pore structure in water infiltration and CO ₂ exchange between the atmosphere and underground air in the vadose zone: A combined laboratory and field approach. <i>Catena</i> , 2017, 149, 402-416.	5.0	36
43	Is the availability of different nutrients a critical factor for the impact of bacteria on subterranean carbon budgets?. <i>Die Naturwissenschaften</i> , 2009, 96, 1035-1042.	1.6	32
44	Combining stable isotope (¹³ C) of trace gases and aerobiological data to monitor the entry and dispersion of microorganisms in caves. <i>Environmental Science and Pollution Research</i> , 2014, 21, 473-484.	5.3	28
45	Recolonization of mortars by endolithic organisms on the walls of San Roque church in Campeche (Mexico): A case of tertiary bioreceptivity. <i>Construction and Building Materials</i> , 2014, 53, 348-359.	7.2	27
46	High radon levels in subterranean environments: monitoring and technical criteria to ensure human safety (case of Castañar cave, Spain). <i>Journal of Environmental Radioactivity</i> , 2015, 145, 19-29.	1.7	26
47	A GIS-based methodology to quantitatively define an Adjacent Protected Area in a shallow karst cavity: The case of Altamira cave. <i>Journal of Environmental Management</i> , 2013, 118, 122-134.	7.8	25
48	Prokaryotic communities from a lava tube cave in La Palma Island (Spain) are involved in the biogeochemical cycle of major elements. <i>PeerJ</i> , 2021, 9, e11386.	2.0	25
49	Changes in the CO ₂ dynamics in near-surface cavities under a future warming scenario: Factors and evidence from the field and experimental findings. <i>Science of the Total Environment</i> , 2016, 565, 1151-1164.	8.0	22
50	Cinética de carbonatación de morteros experimentales de cal de tipo romano. <i>Materiales De Construcción</i> , 2004, 54, 23-38.	0.7	22
51	High CO ₂ Levels in Boreholes at El Teide Volcano Complex (Tenerife, Canary Islands): Implications for Volcanic Activity Monitoring. <i>Pure and Applied Geophysics</i> , 2004, 161, 1519-1532.	1.9	21
52	Biologically mediated release of endogenous N ₂ O and NO ₂ gases in a hydrothermal, hypoxic subterranean environment. <i>Science of the Total Environment</i> , 2020, 747, 141218.	8.0	21
53	Penecontemporaneous diagenesis in continental saline sediments: biotization in Quero playa lake (La Mancha, Central Spain). <i>Chemical Geology</i> , 1998, 149, 189-207.	3.3	20
54	Role of subterranean microbiota in the carbon cycle and greenhouse gas dynamics. <i>Science of the Total Environment</i> , 2022, 831, 154921.	8.0	19

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55	Experimental definition of microclimatic conditions based on water transfer and porous media properties for the conservation of prehistoric constructions: Cueva Pintada at Galdar, Gran Canaria, Spain. <i>Environmental Geology</i> , 2009, 56, 1495.	1.2	18
56	Effect of water vapour condensation on the radon content in subsurface air in a hypogeal inactive-volcanic environment in Galdar cave, Spain. <i>Atmospheric Environment</i> , 2013, 75, 15-23.	4.1	18
57	Palaeoenvironmental evolution of the blue Nile (Central Sudan) during the early and mid-holocene (Mesolithic-Neolithic transition). <i>Quaternary Science Reviews</i> , 1997, 16, 583-588.	3.0	17
58	DATING OF THE HOMINID (<i>HOMO NEANDERTHALENSIS</i>) REMAINS ACCUMULATION FROM EL SIDRÁN CAVE (PILOÑA, ASTURIAS, NORTH SPAIN): AN EXAMPLE OF A MULTIMETHODOLOGICAL APPROACH TO THE DATING OF UPPER PLEISTOCENE SITES. <i>Archaeometry</i> , 2010, 52, 680-705.	1.3	17
59	Composition, uses, provenance and stability of rocks and ancient mortars in a Theban Tomb in Luxor (Egypt). <i>Materials and Structures/Materiaux Et Constructions</i> , 2016, 49, 941-960.	3.1	17
60	3D soft-sediment deformation structures: evidence for Quaternary seismicity in the Madrid basin, Spain. <i>Terra Nova</i> , 1997, 9, 208-212.	2.1	16
61	Changes in the storage and sink of carbon dioxide in subsurface atmospheres controlled by climate-driven processes: the case of the Ojo Guareña karst system. <i>Environmental Earth Sciences</i> , 2015, 74, 7715-7730.	2.7	16
62	Abiotic and seasonal control of soil-produced CO ₂ efflux in karstic ecosystems located in Oceanic and Mediterranean climates. <i>Atmospheric Environment</i> , 2017, 164, 31-49.	4.1	16
63	Comparative analysis of water condensate porosity using mercury intrusion porosimetry and nitrogen and water adsorption techniques in porous building stones. <i>Construction and Building Materials</i> , 2021, 288, 123131.	7.2	16
64	Meteoric calcitization of magnesite in Miocene lacustrine deposits (Calatayud basin, NE Spain). <i>Sedimentary Geology</i> , 1998, 119, 183-194.	2.1	15
65	Examining Hydrated Minerals Using Optically Stimulated X-Ray Diffraction, an Inexpensive Modification of Traditional Diffractometers. <i>Journal of Sedimentary Research</i> , 2000, 70, 964-967.	1.6	12
66	Analysis of potential direct insolation as a degradation factor of cave paintings in Villar del Humo, Cuenca, Central Spain. <i>Geoarchaeology - an International Journal</i> , 2009, 24, 450-465.	1.5	12
67	Environment-driven control of fungi in subterranean ecosystems: the case of La Garma Cave (northern Spain). <i>International Microbiology</i> , 2021, 24, 573-591.	2.4	12
68	Low-magnesium uranium-bearing calcite with high degree of crystallinity and gigantic luminescence emission. <i>Applied Radiation and Isotopes</i> , 2007, 65, 147-154.	1.5	11
69	Microbial Activity in Subterranean Ecosystems: Recent Advances. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 8130.	2.5	11
70	Leaching of uranyl-silica complexes from the host metapelite rock favoring high radon activity of subsoil air: case of Castañar cave (Spain). <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2013, 298, 1567-1585.	1.5	10
71	A study on the state of conservation of the Roman Necropolis of Carmona (Sevilla, Spain). <i>Journal of Cultural Heritage</i> , 2018, 34, 185-197.	3.3	10
72	Insights on Climate-Driven Fluctuations of Cave ²²² Rn and CO ₂ Concentrations Using Statistical and Wavelet Analyses. <i>Geofluids</i> , 2020, 2020, 1-17.	0.7	10

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73	The water balance equations in saline playa lakes: comparison between experimental and recent data from Quero Playa Lake (central Spain). <i>Sedimentary Geology</i> , 2002, 148, 221-234.	2.1	9
74	Role of alkalis of aggregate origin in the deterioration of CAC concrete. <i>Cement and Concrete Research</i> , 2005, 35, 1698-1704.	11.0	9
75	Variations in seepage water geochemistry induced by natural and anthropogenic microclimatic changes: Implications for speleothem growth conditions. <i>Geodinamica Acta</i> , 2010, 23, 1-13.	2.2	9
76	The deterioration of Circular Mausoleum, Roman Necropolis of Carmona, Spain. <i>Science of the Total Environment</i> , 2015, 518-519, 65-77.	8.0	9
77	Diversity of Microfungi in a High Radon Cave Ecosystem. <i>Frontiers in Microbiology</i> , 2022, 13, 869661.	3.5	9
78	Nest Gasses as a Potential Attraction Cue for Biting Flying Insects and Other Ectoparasites of Cavity Nesting Birds. <i>Frontiers in Ecology and Evolution</i> , 2020, 8, .	2.2	8
79	Environment and subsistence strategies at La Viã±a rock shelter and Llonin cave (Asturias, Spain) during MIS3. <i>Journal of Archaeological Science: Reports</i> , 2020, 30, 102198.	0.5	8
80	Geomorphology of Dra Abu el-Naga (Egypt): The basis of the funerary sacred landscape. <i>Journal of African Earth Sciences</i> , 2017, 131, 233-250.	2.0	7
81	Early Detection of Phototrophic Biofilms in the Polychrome Panel, El Castillo Cave, Spain. , 2022, 1, 40-63.		7
82	Mortars, pigments and saline efflorescence from Canarian pre-Hispanic constructions (Galdar, Grand Tj ETQq0 0 0 rgBT /Overlock 10 Tf	7.2	6
83	Phosphor plasters of on the courtyard wall of Djehuty's tomb (Luxor, Egypt). <i>Radiation Measurements</i> , 2008, 43, 849-853.	1.4	6
84	Geochemical Fingerprinting of Rising Deep Endogenous Gases in an Active Hypogenic Karst System. <i>Geofluids</i> , 2018, 2018, 1-19.	0.7	6
85	Global models for 222Rn and CO2 concentrations in the Cave of Altamira. <i>Theoretical and Applied Climatology</i> , 2021, 143, 603-626.	2.8	6
86	Dominance of Arcobacter in the white filaments from the thermal sulfidic spring of Fetida Cave (Apulia, southern Italy). <i>Science of the Total Environment</i> , 2021, 800, 149465.	8.0	6
87	Causas y mecanismos de deterioro de los materiales pã©treos del pavimento del conjunto arqueolã³gico de Baelo Claudia, Cã±diz/Espaã±a. <i>Materiales De Construccion</i> , 1999, 49, 5-18.	0.7	6
88	Uranyl-Evansites from Porto (Northwest Portugal) and Galicia (Northwest Spain): Structure and Assignment of Spectra Catholuminescence and Raman Bands. <i>Spectroscopy Letters</i> , 2011, 44, 511-515.	1.0	5
89	Composition, Luminescence, and Color of a Natural Blue Calcium Carbonate from Madagascar. <i>Spectroscopy Letters</i> , 2015, 48, 107-111.	1.0	5
90	Weathering Processes on Sandstone Painting and Carving Surfaces at Prehistoric Rock Sites in Southern Spain. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 5330.	2.5	5

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91	Hydration diapirism: a climate-related initiation of evaporite mounds in two continental Neogene basins of central Spain. Geological Society Special Publication, 1996, 100, 49-63.	1.3	4
92	Rare Earth Elements in a Speleothem Analyzed by ICP-MS, EDS, and Spectra Cathodoluminescence. Spectroscopy Letters, 2011, 44, 474-479.	1.0	4
93	Petrophysical properties, composition and deterioration of the Calatorao biogenic stone: case of the sculptures masonry of the Valley of the Fallen (Madrid, Spain). Environmental Earth Sciences, 2013, 69, 1733-1750.	2.7	4
94	14. Scientific Data Suggest Altamira Cave Should Remain Closed. , 2015, , 303-320.		4
95	New insights on speleoseismology: The geothermal gradient and heat flow values in caves for the study of active faults. Quaternary International, 2017, 451, 165-175.	1.5	4
96	Effect of Ventilation on Karst System Equilibrium (Altamira Cave, N Spain): an Appraisal of Karst Contribution to the Global Carbon Cycle Balance. Environmental Earth Sciences, 2010, , 469-474.	0.2	4
97	Composition and spectra of copper-carotenoid sediments from a pyrite mine stream in Spain. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2015, 135, 203-210.	3.9	3
98	Mechanical Characterisation of Ancient Egyptian Mortars. Key Engineering Materials, 0, 465, 487-490.	0.4	1
99	Mineral-Variations Study of Canelobre Cave Phosphate Stalactites by Raman and Luminescence Methods. Spectroscopy Letters, 2011, 44, 539-542.	1.0	1
100	Tectono-Sedimentary Evolution of the Madrid Basin (Spain) during the Late Miocene: Data from Paleokarst Profiles in Diagenetically-Complex Continental Carbonates. Geosciences (Switzerland), 2020, 10, 433.	2.2	1
101	Holistic Approach to the Restoration of a Vandalized Monument: The Cross of the Inquisition, Seville City Hall, Spain. Applied Sciences (Switzerland), 2022, 12, 6222.	2.5	1
102	Materiales de construcción incompatibles dentro de las esculturas estereotómicas de Avalos en el Valle de Caños (Madrid, España). Materiales De Construcción, 2013, 63, 117-129.	0.7	0
103	Geo-environmental evaluation for the preventive conservation of open-air archaeological sites: the case of the Roman Necropolis of Carmona (Spain). Archaeological Prospection, 2020, 27, 13-26.	2.2	0
104	Micromorphological Study of Site Formation Processes at El Sidrón Cave (Asturias, Northern Spain): Encrustations over Neanderthal Bones. Geosciences (Switzerland), 2021, 11, 413.	2.2	0
105	Estudio geoarqueológico de la cueva de El Sidrón (Piloña, Asturias).. Boletín Geológico Y Minero, 2018, 1129, 107-128.	0.1	0
106	Evidencias de terremotos cuaternarios en una sima hipogélica: La Sima de Benás (Murcia, SE España). Cuaternario Y Geomorfología, 2019, 33, 25-52.	0.2	0