Ricardo Amils Pibernat

List of Publications by Year
in descending order

83 papers	3,614 citations	159573 30 h-index	138468 58 g-index
91 all docs	91 docs citations	91 times ranked	3832 citing authors

#	Article	IF	Citations
1	Eukaryotic diversity in Spain's River of Fire. Nature, 2002, 417, 137-137.	27.8	379
2	The RÃo Tinto Basin, Spain: Mineralogy, sedimentary geobiology, and implications for interpretation of outcrop rocks at Meridiani Planum, Mars. Earth and Planetary Science Letters, 2005, 240, 149-167.	4.4	274
3	Microbial Diversity in Anaerobic Sediments at RÃo Tinto, a Naturally Acidic Environment with a High Heavy Metal Content. Applied and Environmental Microbiology, 2011, 77, 6085-6093.	3.1	205
4	Inhibition of carbonate synthesis in acidic oceans on early Mars. Nature, 2004, 431, 423-426.	27.8	169
5	Extreme environments as Mars terrestrial analogs: The Rio Tinto case. Planetary and Space Science, 2007, 55, 370-381.	1.7	166
6	Astrobiology through the Ages of Mars: The Study of Terrestrial Analogues to Understand the Habitability of Mars. Astrobiology, 2010, 10, 821-843.	3.0	141
7	Eukaryotic Community Distribution and Its Relationship to Water Physicochemical Parameters in an Extreme Acidic Environment, Río Tinto (Southwestern Spain). Applied and Environmental Microbiology, 2006, 72, 5325-5330.	3.1	126
8	Viable cyanobacteria in the deep continental subsurface. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 10702-10707.	7.1	124
9	Microbial community structure across the tree of life in the extreme RÃo Tinto. ISME Journal, 2011, 5, 42-50.	9.8	110
10	Microbial community dynamics in a chemolithotrophic denitrification reactor inoculated with methanogenic granular sludge. Chemosphere, 2008, 70, 462-474.	8.2	93
11	Geological record of an acidic environment driven by iron hydrochemistry: The Tinto River system. Journal of Geophysical Research, 2003, 108, .	3.3	90
12	Underground Habitats in the RÃo Tinto Basin: A Model for Subsurface Life Habitats on Mars. Astrobiology, 2008, 8, 1023-1047.	3.0	85
13	Comparative microbial ecology study of the sediments and the water column of the RÃo Tinto, an extreme acidic environment. FEMS Microbiology Ecology, 2012, 81, 303-314.	2.7	82
14	Enrichment and isolation of acidophilic sulfateâ€reducing bacteria from <scp>T</scp>into <scp>R</scp>iver sediments. Environmental Microbiology Reports, 2013, 5, 672-678.	2.4	75
15	RÃo Tinto: A Geochemical and Mineralogical Terrestrial Analogue of Mars. Life, 2014, 4, 511-534.	2.4	68
16	Microbial mediated formation of Fe-carbonate minerals under extreme acidic conditions. Scientific Reports, 2014, 4, 4767.	3.3	68
17	Tolerance to cadmium in sp. (Chlorophyta) strains isolated from an extreme acidic environment, the Tinto River (SW, Spain). Aquatic Toxicology, 2005, 75, 316-329.	4.0	59
18	Nucleation of Fe-rich phosphates and carbonates on microbial cells and exopolymeric substances. Frontiers in Microbiology, 2015, 6, 1024.	3.5	58

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19	Photocatalytic elimination of indoor air biological and chemical pollution in realistic conditions. Chemosphere, 2012, 87, 625-630.	8.2	55
20	Protection of chemolithoautotrophic bacteria exposed to simulated Mars environmental conditions. Icarus, 2010, 209, 482-487.	2.5	47
21	Metal Accumulation Screening of the RÃo Tinto Flora (Huelva, Spain). Biological Trace Element Research, 2010, 134, 318-341.	3.5	46
22	Subsurface formation of oxidants on Mars and implications for the preservation of organic biosignatures. Earth and Planetary Science Letters, 2008, 272, 456-463.	4.4	45
23	Four psychrophilic bacteria from Antarctica extracellularly biosynthesize at low temperature highly stable silver nanoparticles with outstanding antimicrobial activity. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 483, 60-69.	4.7	44
24	Prokaryotic diversity and community composition in the Salar de Uyuni, a large scale, chaotropic salt flat. Environmental Microbiology, 2017, 19, 3745-3754.	3.8	42
25	An oligonucleotide prokaryotic acidophile microarray: its validation and its use to monitor seasonal variations in extreme acidic environments with total environmental RNA. Environmental Microbiology, 2008, 10, 836-850.	3.8	41
26	An Improved Semiquantitative Method for Elemental Analysis of Plants Using Inductive Coupled Plasma Mass Spectrometry. Biological Trace Element Research, 2011, 144, 1302-1317.	3.5	40
27	Active microbial biofilms in deep poor porous continental subsurface rocks. Scientific Reports, 2018, 8, 1538.	3.3	39
28	Screening of anaerobic activities in sediments of an acidic environment: Tinto River. Extremophiles, 2012, 16, 829-839.	2.3	38
29	Lessons learned from thirty years of geomicrobiological studies of RÃo Tinto. Research in Microbiology, 2016, 167, 539-545.	2.1	36
30	Methanogenesis in the sediments of Rio Tinto, an extreme acidic river. Environmental Microbiology, 2011, 13, 2336-2341.	3.8	33
31	The deep continental subsurface: the dark biosphere. International Microbiology, 2018, 21, 3-14.	2.4	32
32	Evaluation of Leptospirillum spp. in the RÃo Tinto, a model of interest to biohydrometallurgy. Hydrometallurgy, 2008, 94, 155-161.	4.3	31
33	Composition, speciation and distribution of iron minerals in Imperata cylindrica. Plant Physiology and Biochemistry, 2007, 45, 335-340.	5.8	30
34	Identification of the subsurface sulfide bodies responsible for acidity in RÃo Tinto source water, Spain. Earth and Planetary Science Letters, 2014, 391, 36-41.	4.4	30
35	Some Ecological Mechanisms to Generate Habitability in Planetary Subsurface Areas by Chemolithotrophic Communities: The RÃo Tinto Subsurface Ecosystem as a Model System. Astrobiology, 2008, 8, 157-173.	3.0	29
36	Ultra-small microorganisms in the polyextreme conditions of the Dallol volcano, Northern Afar, Ethiopia. Scientific Reports, 2019, 9, 7907.	3.3	28

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37	Photoreduction fuels biogeochemical cycling of iron in Spain's acid rivers. Chemical Geology, 2008, 252, 202-213.	3.3	27
38	Fungal jarosite biomineralization in RÃo Tinto. Research in Microbiology, 2014, 165, 719-725.	2.1	27
39	Lack of correlation of desiccation and radiation tolerance in microorganisms from diverse extreme environments tested under anoxic conditions. FEMS Microbiology Letters, 2018, 365, .	1.8	25
40	Tessaracoccus lapidicaptus sp. nov., an actinobacterium isolated from the deep subsurface of the Iberian pyrite belt. International Journal of Systematic and Evolutionary Microbiology, 2014, 64, 3546-3552.	1.7	24
41	Surface geochemistry of soils associated to the Tinto River (Huelva, Spain). Science of the Total Environment, 2007, 378, 223-227.	8.0	23
42	Association between catastrophic paleovegetation changes during Devonianâ€"Carboniferous boundary and the formation of giant massive sulfide deposits. Earth and Planetary Science Letters, 2010, 299, 398-408.	4.4	23
43	Carbonate precipitation under bulk acidic conditions as a potential biosignature for searching life on Mars. Earth and Planetary Science Letters, 2012, 351-352, 13-26.	4.4	23
44	Study of methanogenic enrichment cultures of rock cores from the deep subsurface of the Iberian Pyritic Belt. Heliyon, 2018, 4, e00605.	3.2	23
45	Prokaryotic and viral community structure in the singular chaotropic salt lake Salar de Uyuni. Environmental Microbiology, 2019, 21, 2029-2042.	3.8	22
46	Fungal Iron Biomineralization in RÃo Tinto. Minerals (Basel, Switzerland), 2016, 6, 37.	2.0	20
47	Iberian Pyrite Belt Subsurface Life (IPBSL), a Drilling Project of Biohydrometallurgical Interest. Advanced Materials Research, 0, 825, 15-18.	0.3	18
48	Role of biogenic Fe(III) minerals as a sink and carrier of heavy metals in the Rio Tinto, Spain. Science of the Total Environment, 2020, 718, 137294.	8.0	18
49	The responses of an anaerobic microorganism, Yersinia intermedia MASE-LG-1 to individual and combined simulated Martian stresses. PLoS ONE, 2017, 12, e0185178.	2.5	17
50	Microbial Markers Profile in Anaerobic Mars Analogue Environments Using the LDChip (Life Detector) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 7, 365.	3.6	16
51	Astrobiology of life on Earth. Environmental Microbiology, 2021, 23, 3335-3344.	3.8	16
52	The environment of early Mars and the missing carbonates. Meteoritics and Planetary Science, 2011, 46, 1447-1469.	1.6	15
53	Comparison of iron localization in wild plants and hydroponic cultures of Imperata cylindrica (L.) P. Beauv.. Plant and Soil, 2017, 418, 25-35.	3.7	15
54	Immunocytochemical analysis of the subcellular distribution of ferritin in Imperata cylindrica (L.) Raeuschel, an iron hyperaccumulator plant. Acta Histochemica, 2012, 114, 232-236.	1.8	14

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55	Taxonomic and functional analyses of intact microbial communities thriving in extreme, astrobiology-relevant, anoxic sites. Microbiome, 2021, 9, 50.	11.1	14
56	Localization of Nickel in Tissues of Streptanthus polygaloides Gray (Cruciferae) and Endemic Nickel Hyperaccumulators from California. Biological Trace Element Research, 2014, 157, 75-83.	3.5	13
57	Visualizing Microorganism-Mineral Interaction in the Iberian Pyrite Belt Subsurface: The Acidovorax Case. Frontiers in Microbiology, 2020, 11, 572104.	3.5	13
58	Subsurface and surface halophile communities of the chaotropic Salar de Uyuni. Environmental Microbiology, 2021, 23, 3987-4001.	3.8	13
59	Biological production of <scp>H₂</scp>, CH₄ and CO₂ in the deep subsurface of the Iberian Pyrite Belt. Environmental Microbiology, 2021, 23, 3913-3922.	3.8	13
60	Plant Tissues and Embryos Biominerals in Sarcocornia pruinosa, a Halophyte from the RÃo Tinto Salt Marshes. Minerals (Basel, Switzerland), 2018, 8, 505.	2.0	12
61	Impact of Simulated Martian Conditions on (Facultatively) Anaerobic Bacterial Strains from Different Mars Analogue Sites. Current Issues in Molecular Biology, 2020, 38, 103-122.	2.4	12
62	Detection of Peptidic Sequences in the Ancient Acidic Sediments of RÃo Tinto, Spain. Origins of Life and Evolution of Biospheres, 2011, 41, 523-527.	1.9	11
63	A mineralogical archive of the biogeochemical sulfur cycle preserved in the subsurface of the RÃo Tinto system. American Mineralogist, 2018, 103, 394-411.	1.9	10
64	Subsurface Geomicrobiology of the Iberian Pyritic Belt. Soil Biology, 2008, , 205-223.	0.8	8
65	Draft Genome Sequence of <i>Rhodoplanes</i> sp. Strain T2.26MG-98, Isolated from 492.6 Meters Deep on the Subsurface of the Iberian Pyrite Belt. Microbiology Resource Announcements, 2019, 8, .	0.6	8
66	Beyond Chloride Brines: Variable Metabolomic Responses in the Anaerobic Organism Yersinia intermedia MASE-LG-1 to NaCl and MgSO4 at Identical Water Activity. Frontiers in Microbiology, 2018, 9, 335.	3.5	7
67	A Laboratory of Extremophiles: Iceland Coordination Action for Research Activities on Life in Extreme Environments (CAREX) Field Campaign. Life, 2013, 3, 211-233.	2.4	6
68	Preservation of Underground Microbial Diversity in Ancient Subsurface Deposits (>6 Ma) of the Rio Tinto Basement. Microorganisms, 2021, 9, 1592.	3.6	6
69	The Molecular Record of Metabolic Activity in the Subsurface of the RÃo Tinto Mars Analog. Astrobiology, 2021, 21, 1387-1405.	3.0	6
70	Biogeochemical Niches of Fe-Cycling Communities Influencing Heavy Metal Transport along the Rio Tinto, Spain. Applied and Environmental Microbiology, 2022, 88, AEM0229021.	3.1	6
71	Formation of ironâ€rich shelled structures by microbial communities. Journal of Geophysical Research G: Biogeosciences, 2015, 120, 147-168.	3.0	4
72	Productivity Contribution of Paleozoic Woodlands to the Formation of Shaleâ€Hosted Massive Sulfide Deposits in the Iberian Pyrite Belt (Tharsis, Spain). Journal of Geophysical Research G: Biogeosciences, 2018, 123, 1017-1040.	3.0	4

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73	Adaptation of granular sludge microbial communities to nitrate, sulfide, and/or p-cresol removal. International Microbiology, 2019, 22, 305-316.	2.4	4
74	Reply to the Comment on â€œIdentification of the subsurface sulfide bodies responsible for acidity in RÃo Tinto source water, Spainâ€•(Earth Planet. Sci. Lett. 391 (2014) 36â€“41). Earth and Planetary Science Letters, 2014, 403, 459-462.	4.4	3
75	Draft Genome Sequence of Pseudomonas sp. Strain T2.31D-1, Isolated from a Drilling Core Sample Obtained 414 Meters below Surface in the Iberian Pyrite Belt. Microbiology Resource Announcements, 2021, 10, .	0.6	3
76	Methanogenesis at High Temperature, High Ionic Strength and Low pH in the Volcanic Area of Dallol, Ethiopia. Microorganisms, 2021, 9, 1231.	3.6	3
77	Hydrogeochemical Variability of the Acidic Springs in the Rio Tinto Headwaters. Water (Switzerland), 2021, 13, 2861.	2.7	3
78	Unveiling microbial preservation under hyperacidic and oxidizing conditions in the Oligocene Rio Tinto deposit. Scientific Reports, 2021, 11, 21543.	3.3	2
79	Draft Genome Sequence of Shewanella sp. Strain T2.3D-1.1, Isolated from 121.8 Meters Deep in the Subsurface of the Iberian Pyrite Belt. Microbiology Resource Announcements, 2020, 9, .	0.6	2
80	Acidophiles and Astrobiology. , 2016, , 285-300.		1
81	Draft Genome Sequence of <i>Brevundimonas</i> sp. Strain T2.26MG-97, Isolated from a Rock Core Sample from 492.6 Meters Deep on the Subsurface of the Iberian Pyrite Belt. Microbiology Resource Announcements, 2019, 8, .	0.6	1
82	Extremofiles 2.0. Microorganisms, 2021, 9, 784.	3.6	0
83	Chaotropicity. , 2022, , 1-2.		0