Jose-Julio Ortega-Calvo

List of Publications by Year
in descending order

84 papers	3,927 citations	101496 36 h-index	128225 60 g-index
91 all docs	91 docs citations	91 times ranked	3786 citing authors

#	Article	IF	Citations
1	Changes in enzyme activities and microbial biomass after â€œin situâ€•remediation of a heavy metal-contaminated soil. Applied Soil Ecology, 2005, 28, 125-137.	2.1	230
2	From Bioavailability Science to Regulation of Organic Chemicals. Environmental Science & Technology, 2015, 49, 10255-10264.	4.6	171
3	Factors affecting the weathering and colonization of monuments by phototrophic microorganisms. Science of the Total Environment, 1995, 167, 329-341.	3.9	169
4	Biodeterioration of building materials by cyanobacteria and algae. International Biodeterioration, 1991, 28, 165-185.	0.2	165
5	Distribution of the Mycobacterium community and polycyclic aromatic hydrocarbons (PAHs) among different size fractions of a long-term PAH-contaminated soil. Environmental Microbiology, 2006, 8, 836-847.	1.8	139
6	Influence of the sunflower rhizosphere on the biodegradation of PAHs in soil. Soil Biology and Biochemistry, 2013, 57, 830-840.	4.2	127
7	Is it possible to increase bioavailability but not environmental risk of PAHs in bioremediation?. Journal of Hazardous Materials, 2013, 261, 733-745.	6.5	118
8	Chemical composition ofSpirulina and eukaryotic algae food products marketed in Spain. Journal of Applied Phycology, 1993, 5, 425-435.	1.5	108
9	Lichen colonization of the Roman pavement at Baelo Claudia (Cadiz, Spain): biodeterioration vs. bioprotection. Science of the Total Environment, 1995, 167, 353-363.	3.9	101
10	Effect of Humic Fractions and Clay on Biodegradation of Phenanthrene by a Pseudomonas fluorescens Strain Isolated from Soil. Applied and Environmental Microbiology, 1998, 64, 3123-3126.	1.4	98
11	Biosurfactant- and Biodegradation-Enhanced Partitioning of Polycyclic Aromatic Hydrocarbons from Nonaqueous-Phase Liquids. Environmental Science & Technology, 2003, 37, 2988-2996.	4.6	91
12	Electrokinetic enhancement of phenanthrene biodegradation in creosote-polluted clay soil. Environmental Pollution, 2006, 142, 326-332.	3.7	86
13	The effect of humic acids on biodegradation of polycyclic aromatic hydrocarbons depends on the exposure regime. Environmental Pollution, 2014, 184, 435-442.	3.7	85
14	Chemotaxis in polycyclic aromatic hydrocarbon-degrading bacteria isolated from coal-tar- and oil-polluted rhizospheres. FEMS Microbiology Ecology, 2003, 44, 373-381.	1.3	83
15	Bacterial chemotaxis towards aromatic hydrocarbons in Pseudomonas. Environmental Microbiology, 2011, 13, 1733-1744.	1.8	78
16	Bioavailability of pollutants and chemotaxis. Current Opinion in Biotechnology, 2013, 24, 451-456.	3.3	78
17	Influence of Soil Components on the Transport of Polycyclic Aromatic Hydrocarbon-Degrading Bacteria through Saturated Porous Media. Environmental Science & Technology, 2000, 34, 3649-3656.	4.6	70
18	Bioavailability of solid and non-aqueous phase liquid (NAPL)-dissolved phenanthrene to the biosurfactant-producing bacterium Pseudomonas aeruginosa 19SJ. Environmental Microbiology, 2001, 3, 561-569.	1.8	63

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19	Endolithic cyanobacteria in Maastricht limestone. Science of the Total Environment, 1990, 94, 209-220.	3.9	62
20	Bioavailability of the herbicide 2,4-D formulated with organoclays. Soil Biology and Biochemistry, 2006, 38, 2117-2124.	4.2	62
21	Chemoeffectors Decrease the Deposition of Chemotactic Bacteria during Transport in Porous Media. Environmental Science & Technology, 2008, 42, 1131-1137.	4.6	62
22	Enhanced kinetics of solidâ€phase microextraction and biodegradation of polycyclic aromatic hydrocarbons in the presence of dissolved organic matter. Environmental Toxicology and Chemistry, 2008, 27, 1526-1532.	2.2	61
23	Effect of a Nonionic Surfactant on Biodegradation of Slowly Desorbing PAHs in Contaminated Soils. Environmental Science & Technology, 2011, 45, 3019-3026.	4.6	61
24	Role of Desorption Kinetics in the Rhamnolipid-Enhanced Biodegradation of Polycyclic Aromatic Hydrocarbons. Environmental Science & Technology, 2014, 48, 10869-10877.	4.6	61
25	Rhamnolipid-enhanced solubilization and biodegradation of PAHs in soils after conventional bioremediation. Science of the Total Environment, 2019, 668, 790-796.	3.9	58
26	Integrating Biodegradation and Electroosmosis for the Enhanced Removal of Polycyclic Aromatic Hydrocarbons from Creosoteâ€Polluted Soils. Journal of Environmental Quality, 2007, 36, 1444-1451.	1.0	57
27	Pyrolysis/methylation: A method for structural elucidation of the chemical nature of aquatic humic substances. Water Research, 1993, 27, 1693-1696.	5.3	54
28	Impact of Dissolved Organic Matter on Bacterial Tactic Motility, Attachment, and Transport. Environmental Science & Technology, 2015, 49, 4498-4505.	4.6	54
29	Effect of Varying the Rate of Partitioning of Phenanthrene in Nonaqueous-Phase Liquids on Biodegradation in Soil Slurries. Environmental Science & Technology, 1995, 29, 2222-2225.	4.6	52
30	Microbial communities in weathered sandstones: the case of Carrascosa del Campo church, Spain. Science of the Total Environment, 1995, 167, 249-254.	3.9	46
31	Effects of solid olive-mill waste addition to soil on sorption, degradation and leaching of the herbicide simazine. Soil Use and Management, 2003, 19, 150-156.	2.6	45
32	Adsorptive bioremediation of soil highly contaminated with crude oil. Science of the Total Environment, 2020, 706, 135739.	3.9	44
33	Colloidal and biological properties of cationic single-chain and dimeric surfactants. Colloids and Surfaces B: Biointerfaces, 2014, 114, 247-254.	2.5	43
34	Comparison of mineralization of solid-sorbed phenanthrene by polycyclic aromatic hydrocarbon (PAH)-degrading Mycobacterium spp. and Sphingomonas spp.. Applied Microbiology and Biotechnology, 2006, 72, 829-836.	1.7	42
35	Effect of sulfur starvation on the morphology and ultrastructure of the cyanobacterium Gloeothece sp. PCC 6909. Archives of Microbiology, 1995, 163, 447-453.	1.0	38
36	Effect of organic matter and clays on the biodegradation of Phenanthrene in soils. International Biodeterioration and Biodegradation, 1997, 40, 101-106.	1.9	36

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37	Bioavailability of labile and desorptionâ€resistant phenanthrene sorbed to montmorillonite clay containing humic fractions. Environmental Toxicology and Chemistry, 1999, 18, 2729-2735.	2.2	36
38	Effect of Slow Desorption on the Kinetics of Biodegradation of Polycyclic Aromatic Hydrocarbons. Environmental Science & Technology, 2005, 39, 8776-8783.	4.6	36
39	Chemical Effectors Cause Different Motile Behavior and Deposition of Bacteria in Porous Media. Environmental Science & Technology, 2012, 46, 6790-6797.	4.6	36
40	Deterioration of building materials from the Great Jaguar Pyramid at Tikal, Guatemala. Building and Environment, 1995, 30, 591-598.	3.0	35
41	Swimming performance of Bradyrhizobium diazoefficiens is an emergent property of its two flagellar systems. Scientific Reports, 2016, 6, 23841.	1.6	33
42	Biodegradation of Sorbed 2,4-Dinitrotoluene in a Clay-Rich, Aggregated Porous Medium. Environmental Science & Technology, 1999, 33, 3737-3742.	4.6	31
43	Simultaneous biodegradation of creosote-polycyclic aromatic hydrocarbons by a pyrene-degrading Mycobacterium. Applied Microbiology and Biotechnology, 2008, 78, 165-172.	1.7	31
44	Organic and Inorganic Compounds in Limestone Weathering Crusts from Cathedrals in Southern and Western Europe. Environmental Science & Technology, 1995, 29, 1691-1701.	4.6	30
45	Sulphateâ€limited growth in the N 2 â€fixing unicellular cyanobacterium Gloeothece (NÃgeli) sp. PCC 6909. New Phytologist, 1994, 128, 273-281.	3.5	29
46	Cyanobacterial Sulfate Accumulation from Black Crust of a Historic Building. Geomicrobiology Journal, 1994, 12, 15-22.	1.0	29
47	Applications of analytical pyrolysis to the study of stony cultural properties. Journal of Analytical and Applied Pyrolysis, 1991, 20, 239-251.	2.6	28
48	The chemical structure of fungal melanins and their possible contribution to black stains in stone monuments. Science of the Total Environment, 1995, 167, 305-314.	3.9	27
49	Effect of Interface Fertilization on Biodegradation of Polycyclic Aromatic Hydrocarbons Present in Nonaqueous-Phase Liquids. Environmental Science & Technology, 2011, 45, 1074-1081.	4.6	27
50	Bacterial tactic response to silver nanoparticles. Environmental Microbiology Reports, 2011, 3, 526-534.	1.0	26
51	Recalcitrance of polycyclic aromatic hydrocarbons in soil contributes to background pollution. Environmental Pollution, 2011, 159, 3692-3699.	3.7	25
52	Tactic response of bacteria to zero-valent iron nanoparticles. Environmental Pollution, 2016, 213, 438-445.	3.7	25
53	Implementing standardized desorption extraction into bioavailability-oriented bioremediation of PAH-polluted soils. Science of the Total Environment, 2019, 696, 134011.	3.9	24
54	Scientific concepts and methods for moving persistence assessments into the 21st century. Integrated Environmental Assessment and Management, 2022, 18, 1454-1487.	1.6	24

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55	Influence of Low Oxygen Tensions and Sorption to Sediment Black Carbon on Biodegradation of Pyrene. Applied and Environmental Microbiology, 2010, 76, 4430-4437.	1.4	22
56	Conventional pyrolysis: A biased technique for providing structural information on humic substances?. Die Naturwissenschaften, 1994, 81, 28-29.	0.6	21
57	Differential Responses of Eubacterial, Mycobacterium, and Sphingomonas Communities in Polycyclic Aromatic Hydrocarbon (PAH)â€Contaminated Soil to Artificially Induced Changes in PAH Profile. Journal of Environmental Quality, 2007, 36, 1403-1411.	1.0	21
58	Bioavailability of phenanthrene and nitrobenzene sorbed on carbonaceous materials. Carbon, 2016, 110, 404-413.	5.4	21
59	Rhizosphere-enhanced biosurfactant action on slowly desorbing PAHs in contaminated soil. Science of the Total Environment, 2020, 720, 137608.	3.9	21
60	Dual partitioning and attachment effects of rhamnolipid on pyrene biodegradation under bioavailability restrictions. Environmental Pollution, 2015, 205, 378-384.	3.7	20
61	Root-mediated bacterial accessibility and cometabolism of pyrene in soil. Science of the Total Environment, 2021, 760, 143408.	3.9	19
62	Microbial induced corrosion of metallic antiquities and works of art: a critical review. International Biodeterioration and Biodegradation, 1992, 29, 367-375.	1.9	18
63	Flow cytometry discrimination between bacteria and clayÃ¢Â€Â“humic acid particles during growth-linked biodegradation of phenanthrene by Pseudomonas aeruginosa 19SJ. FEMS Microbiology Ecology, 2003, 43, 55-61.	1.3	16
64	Effect of Electrokinetics on the Bioaccessibility of Polycyclic Aromatic Hydrocarbons in Polluted Soils. Journal of Environmental Quality, 2010, 39, 1993-1998.	1.0	16
65	Impact of bacterial motility on biosorption and cometabolism of pyrene in a porous medium. Science of the Total Environment, 2020, 717, 137210.	3.9	16
66	Development of eukaryotic zoospores within polycyclic aromatic hydrocarbon (PAH)-polluted environments: A set of behaviors that are relevant for bioremediation. Science of the Total Environment, 2015, 511, 767-776.	3.9	14
67	Role of photo- and biodegradation of two PAHs on leaves: Modelling the impact on air quality ecosystem services provided by urban trees. Science of the Total Environment, 2020, 739, 139893.	3.9	14
68	Impact of Chemoeffectors on Bacterial Motility, Transport, and Contaminant Degradation in Sand-Filled Percolation Columns. Environmental Science & Technology, 2018, 52, 10673-10679.	4.6	12
69	Determining the bioavailability of benzo(a)pyrene through standardized desorption extraction in a certified reference contaminated soil. Science of the Total Environment, 2022, 803, 150025.	3.9	12
70	Decay of Roman and repair mortars in mosaics from Italica, Spain. Science of the Total Environment, 1994, 153, 123-131.	3.9	11
71	Mycelium-Enhanced Bacterial Degradation of Organic Pollutants under Bioavailability Restrictions. Environmental Science & Technology, 2017, 51, 11935-11942.	4.6	11
72	ENHANCED KINETICS OF SOLID-PHASE MICROEXTRACTION AND BIODEGRADATION OF POLYCYCLIC AROMATIC HYDROCARBONS IN THE PRESENCE OF DISSOLVED ORGANIC MATTER. Environmental Toxicology and Chemistry, 2007, preprint, 1.	2.2	11

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73	Nature-based approaches to reducing the environmental risk of organic contaminants resulting from military activities. Science of the Total Environment, 2022, 843, 157007.	3.9	11
74	Carbon nanomaterials differentially impact mineralization kinetics of phenanthrene and indigenous microbial communities in a natural soil. NanoImpact, 2018, 11, 146-155.	2.4	10
75	The effect of organic acids on the behaviour and biodegradation of 14C-phenanthrene in contaminated soil. Soil Biology and Biochemistry, 2020, 143, 107722.	4.2	10
76	Dual 14C/residue analysis method to assess the microbial accessibility of native phenanthrene in environmental samples. Environmental Geochemistry and Health, 2008, 30, 159-163.	1.8	9
77	Mobilization of Pollutant-Degrading Bacteria by Eukaryotic Zoospores. Environmental Science & Technology, 2016, 50, 7633-7640.	4.6	9
78	Pyrolysis/Methylation: A Microanalytical Method for Investigating Polar Organic Compounds in Cultural Properties. International Journal of Environmental Analytical Chemistry, 1994, 56, 63-71.	1.8	7
79	Why Biodegradable Chemicals Persist in the Environment? A Look at Bioavailability. Handbook of Environmental Chemistry, 2020, , 243-265.	0.2	7
80	Role of tactic response on the mobilization of motile bacteria through micrometer-sized pores. Science of the Total Environment, 2022, 832, 154938.	3.9	6
81	Microbial degradation of pyrene in holm oak (Quercus ilex) phyllosphere: Role of particulate matter in regulating bioaccessibility. Science of the Total Environment, 2021, 786, 147431.	3.9	3
82	Bioavailability of Polycyclic Aromatic Hydrocarbons in Soil as Affected by Microorganisms and Plants. , 2017, , 305-319.		2
83	Connectivity and pore accessibility in models of soil carbon cycling. Global Change Biology, 2021, 27, 5405-5406.	4.2	2
84	Introduction Setting of the Scene, Definitions, and Guide to Volume. Handbook of Environmental Chemistry, 2020, , 1-4.	0.2	0