

Jordi Mas

List of Publications by Year in descending order

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104
papers

3,082
citations

159585

30
h-index

175258

52
g-index

105
all docs

105
docs citations

105
times ranked

3852
citing authors

#	ARTICLE	IF	CITATIONS
1	Ecology of Phototrophic Sulfur Bacteria. <i>Advances in Photosynthesis and Respiration</i> , 1995, , 49-85.	1.0	185
2	Microbial communities from different types of natural wastewater treatment systems: Vertical and horizontal flow constructed wetlands and biofilters. <i>Water Research</i> , 2014, 55, 304-312.	11.3	170
3	Phototrophic sulfur bacteria in two Spanish lakes: Vertical distribution and limiting factors1. <i>Limnology and Oceanography</i> , 1985, 30, 919-931.	3.1	169
4	Silicon-based microfabricated microbial fuel cell toxicity sensor. <i>Biosensors and Bioelectronics</i> , 2011, 26, 2426-2430.	10.1	165
5	Predatory prokaryotes: Predation and primary consumption evolved in bacteria. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1986, 83, 2138-2142.	7.1	136
6	Assessment of soil and groundwater impacts by treated urban wastewater reuse. A case study: Application in a golf course (Girona, Spain). <i>Science of the Total Environment</i> , 2007, 374, 26-35.	8.0	118
7	Comparison of Different Denaturing Gradient Gel Electrophoresis Primer Sets for the Study of Marine Bacterioplankton Communities. <i>Applied and Environmental Microbiology</i> , 2007, 73, 5962-5967.	3.1	102
8	The influence of poly- γ -hydroxybutyrate accumulation on cell volume and buoyant density in <i>alcaligenes eutrophus</i> . <i>Archives of Microbiology</i> , 1985, 143, 178-184.	2.2	85
9	Role of discontinuous chlorination on microbial production by drinking water biofilms. <i>Water Research</i> , 2005, 39, 1896-1906.	11.3	75
10	Transient Storage of Electrical Charge in Biofilms of <i>Shewanella oneidensis</i> MR-1 Growing in a Microbial Fuel Cell. <i>Environmental Science & Technology</i> , 2011, 45, 10250-10256.	10.0	75
11	Key design factors affecting microbial community composition and pathogenic organism removal in horizontal subsurface flow constructed wetlands. <i>Science of the Total Environment</i> , 2014, 481, 81-89.	8.0	72
12	Molecular Characterization of an Oil-Degrading Cyanobacterial Consortium. <i>Microbial Ecology</i> , 2005, 50, 580-588.	2.8	70
13	Electrochemical performance and microbial community profiles in microbial fuel cells in relation to electron transfer mechanisms. <i>BMC Microbiology</i> , 2017, 17, 208.	3.3	67
14	Buoyant density changes due to intracellular content of sulfur in <i>Chromatium warmingii</i> and <i>Chromatium vinosum</i> . <i>Archives of Microbiology</i> , 1984, 137, 350-356.	2.2	60
15	Fast phage detection and quantification: An optical density-based approach. <i>PLoS ONE</i> , 2019, 14, e0216292.	2.5	59
16	Calorimetry of microbial growth using a thermopile based microreactor. <i>Thermochimica Acta</i> , 2005, 427, 187-191.	2.7	53
17	Diel cycle of metabolism of phototrophic purple sulfur bacteria in Lake Cis \tilde{A} ³ (Spain)1. <i>Limnology and Oceanography</i> , 1985, 30, 932-943.	3.1	50
18	Analytical monitoring of alcoholic fermentation using NIR spectroscopy. <i>Biotechnology and Bioengineering</i> , 2004, 88, 536-542.	3.3	48

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19	Mathematical model for determining the effects of intracytoplasmic inclusions on volume and density of microorganisms. <i>Journal of Bacteriology</i> , 1985, 164, 749-756.	2.2	48
20	Amperometric detection of Enterobacteriaceae in river water by measuring β -galactosidase activity at interdigitated microelectrode arrays. <i>Analytica Chimica Acta</i> , 2010, 677, 156-161.	5.4	47
21	Superparamagnetic Ag@Co Nanocomposites on Granulated Cation Exchange Polymeric Matrices with Enhanced Antibacterial Activity for the Environmentally Safe Purification of Water. <i>Advanced Functional Materials</i> , 2013, 23, 2450-2458.	14.9	47
22	High-diversity biofilm for the oxidation of sulfide-containing effluents. <i>Applied Microbiology and Biotechnology</i> , 2004, 64, 726-734.	3.6	45
23	Influence of sulfur accumulation and composition of sulfur globule on cell volume and buoyant density of <i>Chromatium vinosum</i> . <i>Archives of Microbiology</i> , 1987, 146, 362-369.	2.2	41
24	On-chip impedance measurements to monitor biofilm formation in the drinking water distribution network. <i>Sensors and Actuators B: Chemical</i> , 2006, 118, 129-134.	7.8	40
25	Impedimetric approach for quantifying low bacteria concentrations based on the changes produced in the electrode-solution interface during the pre-attachment stage. <i>Biosensors and Bioelectronics</i> , 2008, 23, 1540-1546.	10.1	40
26	Monitoring alcoholic fermentation by joint use of soft and hard modelling methods. <i>Analytica Chimica Acta</i> , 2006, 556, 364-373.	5.4	37
27	Environmentally-safe bimetallic Ag@Co magnetic nanocomposites with antimicrobial activity. <i>Chemical Communications</i> , 2011, 47, 10464.	4.1	35
28	Characterization of Fibrous Polymer Silver/Cobalt Nanocomposite with Enhanced Bactericide Activity. <i>Langmuir</i> , 2012, 28, 783-790.	3.5	35
29	Storage Products in Purple and Green Sulfur Bacteria. <i>Advances in Photosynthesis and Respiration</i> , 1995, , 973-990.	1.0	32
30	In vivo role of adenosine-5-phosphosulfate reductase in the purple sulfur bacterium <i>Allochromatium vinosum</i> . <i>Archives of Microbiology</i> , 2001, 176, 301-305.	2.2	32
31	Dynamics of microbial diversity profiles in waters of different qualities. Approximation to an ecological quality indicator. <i>Science of the Total Environment</i> , 2014, 468-469, 1154-1161.	8.0	31
32	Primary production in estuarine oxic/anoxic interfaces: contribution of microbial dark CO ₂ fixation in the Ebro River Salt Wedge Estuary. <i>Marine Ecology - Progress Series</i> , 2001, 215, 49-56.	1.9	31
33	Assessing bacterial diversity in a seawater-processing wastewater treatment plant by 454-pyrosequencing of the 16S rRNA and amoA genes. <i>Microbial Biotechnology</i> , 2013, 6, 435-442.	4.2	30
34	Impedimetric characterization of the changes produced in the electrode-solution interface by bacterial attachment. <i>Electrochemistry Communications</i> , 2007, 9, 2654-2660.	4.7	29
35	Monolithically integrated biophotonic lab-on-a-chip for cell culture and simultaneous pH monitoring. <i>Lab on A Chip</i> , 2013, 13, 4239.	6.0	28
36	A new non-aerated illuminated packed-column reactor for the development of sulfide-oxidizing biofilms. <i>Applied Microbiology and Biotechnology</i> , 2004, 64, 659-664.	3.6	26

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37	Evaluation of DNA extraction methods from complex phototrophic biofilms. <i>Biofouling</i> , 2010, 26, 349-357.	2.2	24
38	Impedance spectral fingerprint of <i>E. coli</i> cells on interdigitated electrodes: A new approach for label free and selective detection. <i>Sensing and Bio-Sensing Research</i> , 2016, 7, 100-106.	4.2	24
39	Sinking speeds of free-living phototrophic bacteria determined with covered and uncovered traps. <i>Journal of Plankton Research</i> , 1989, 11, 887-905.	1.8	23
40	Role of cyanobacteria in oil biodegradation by microbial mats. <i>International Biodeterioration and Biodegradation</i> , 2006, 58, 186-195.	3.9	22
41	Effect of chlorine, biodegradable dissolved organic carbon and suspended bacteria on biofilm development in drinking water systems. <i>Journal of Basic Microbiology</i> , 2002, 42, 311-319.	3.3	21
42	Potential chemical and microbiological risks on human health from urban wastewater reuse in agriculture. Case study of wastewater effluents in Spain. <i>Journal of Environmental Science and Health - Part B Pesticides, Food Contaminants, and Agricultural Wastes</i> , 2010, 45, 300-309.	1.5	21
43	Polyurethane foams doped with stable silver nanoparticles as bactericidal and catalytic materials for the effective treatment of water. <i>New Journal of Chemistry</i> , 2016, 40, 3716-3725.	2.8	21
44	Portable and miniaturized optofluidic analysis system with ambient light correction for fast in situ determination of environmental pollution. <i>Sensors and Actuators B: Chemical</i> , 2016, 222, 55-62.	7.8	21
45	Sonochemical coating of Prussian Blue for the production of smart bacterial-sensing hospital textiles. <i>Ultrasonics Sonochemistry</i> , 2021, 70, 105317.	8.2	21
46	Elucidating the composition profiles of alcoholic fermentations by use of ALS methodology. <i>Analytica Chimica Acta</i> , 2005, 544, 199-205.	5.4	20
47	Sensitivity and Response Time of Polyethyleneimine Modified Impedimetric Transducer for Bacteria Detection. <i>Electroanalysis</i> , 2015, 27, 656-662.	2.9	20
48	Molecular characterization of activated sludge from a seawaterâ€processing wastewater treatment plant. <i>Microbial Biotechnology</i> , 2011, 4, 628-642.	4.2	19
49	Effect of the cathode/anode ratio and the choice of cathode catalyst on the performance of microbial fuel cell transducers for the determination of microbial activity. <i>Sensors and Actuators B: Chemical</i> , 2012, 170, 88-94.	7.8	19
50	Fast and sensitive optical toxicity bioassay based on dual wavelength analysis of bacterial ferricyanide reduction kinetics. <i>Biosensors and Bioelectronics</i> , 2015, 67, 272-279.	10.1	18
51	Comparison of pure cultures and natural assemblages of planktonic photosynthetic sulfur bacteria by low molecular mass RNA fingerprinting. <i>FEMS Microbiology Ecology</i> , 2000, 32, 25-34.	2.7	17
52	Electro-addressable conductive alginate hydrogel for bacterial trapping and general toxicity determination. <i>Analytica Chimica Acta</i> , 2018, 1036, 115-120.	5.4	17
53	Bioelectrochromic hydrogel for fast antibiotic-susceptibility testing. <i>Journal of Colloid and Interface Science</i> , 2018, 511, 251-258.	9.4	16
54	Rapid Detection of <i>Legionella pneumophila</i> in Drinking Water, Based on Filter Immunoassay and Chronoamperometric Measurement. <i>Biosensors</i> , 2020, 10, 102.	4.7	16

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55	Continuous measurement of acute toxicity in water using a solid state microrespirometer. <i>Sensors and Actuators B: Chemical</i> , 2007, 126, 515-521.	7.8	15
56	Assessment of bismuth thiols and conventional disinfectants on drinking water biofilms. <i>Journal of Applied Microbiology</i> , 2003, 95, 288-293.	3.1	14
57	Paper-based chromatic toxicity bioassay by analysis of bacterial ferricyanide reduction. <i>Analytica Chimica Acta</i> , 2016, 910, 60-67.	5.4	14
58	Identification of phototrophic sulfur bacteria through the analysis of lmwRNA band patterns. <i>Archives of Microbiology</i> , 1998, 170, 269-278.	2.2	13
59	In Situ Assessment on the Physiological State of Purple and Green Sulfur Bacteria through the Analyses of Pigment and 5S rRNA Content. <i>Microbial Ecology</i> , 2001, 42, 427-437.	2.8	13
60	A new method based on image analysis for determining cyanobacterial biomass by CLSM in stratified benthic sediments. <i>Ultramicroscopy</i> , 2007, 107, 669-673.	1.9	13
61	Sensing bacteria but treating them well: Determination of optimal incubation and storage conditions. <i>Analytical Biochemistry</i> , 2008, 383, 68-75.	2.4	13
62	Phosphate-limited growth of <i>Chromatium vinosum</i> in continuous culture. <i>Archives of Microbiology</i> , 1992, 157, 135-140.	2.2	10
63	Resolution of binary mixtures of microorganisms using electrochemical impedance spectroscopy and artificial neural networks. <i>Biosensors and Bioelectronics</i> , 2008, 24, 958-962.	10.1	10
64	Intermatrix synthesis of monometallic and magnetic metal/metal oxide nanoparticles with bactericidal activity on anionic exchange polymers. <i>RSC Advances</i> , 2012, 2, 4596.	3.6	10
65	Description of a redox-controlled sulfidostat for the growth of sulfide-oxidizing phototrophs. <i>Applied and Environmental Microbiology</i> , 1996, 62, 3640-3645.	3.1	10
66	An analysis of the bacterial community in a membrane bioreactor fed with photo-Fenton pre-treated toxic water. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2011, 38, 1171-1178.	3.0	9
67	Design of a microfluidic respirometer for semi-continuous amperometric short time biochemical oxygen demand (BOD _{st}) analysis. <i>Biochemical Engineering Journal</i> , 2012, 66, 27-37.	3.6	9
68	Prevalence of potentially thermophilic microorganisms in biofilms from greenhouse-enclosed drip irrigation systems. <i>Archives of Microbiology</i> , 2014, 196, 219-226.	2.2	9
69	Biological support media influence the bacterial biofouling community in reverse osmosis water reclamation demonstration plants. <i>Biofouling</i> , 2015, 31, 173-180.	2.2	9
70	Intermatrix synthesis of Ag, AgAu and Au nanoparticles by the galvanic replacement strategy for bactericidal and electrocatalytically active nanocomposites. <i>New Journal of Chemistry</i> , 2016, 40, 10344-10352.	2.8	9
71	Measurement of light absorption and determination of the specific rate of light uptake in cultures of phototrophic microorganisms. <i>Applied and Environmental Microbiology</i> , 1996, 62, 620-624.	3.1	9
72	Utilisation of a packed-bed biofilm reactor for the determination of the potential of biofilm accumulation in water systems. <i>Biofouling</i> , 2005, 21, 151-160.	2.2	8

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73	Microbial trench-based optofluidic system for reagentless determination of phenolic compounds. Lab on A Chip, 2015, 15, 1717-1726.	6.0	8
74	Influence of primer mismatch and microdiversity on DGGE results: a case study with SAR11. Aquatic Microbial Ecology, 2009, 54, 211-216.	1.8	8
75	Acclimation of the photosynthetic response of Chromatium vinosum to light-limiting conditions. Archives of Microbiology, 1998, 170, 405-410.	2.2	7
76	Fluorometric detection of phages in liquid media: Application to turbid samples. Analytica Chimica Acta, 2020, 1111, 23-30.	5.4	7
77	In situ specific loss and growth rates of purple sulfur bacteria in Lake Cisfemes. FEMS Microbiology Letters, 1990, 73, 271-281.	1.8	6
78	Microbial response to disinfectants. , 2003, , 657-693.		6
79	Polymer-Metal Nanocomposites Containing Dual-Function Metal Nanoparticles: Ion-Exchange Materials Modified with Catalytically-Active and Bactericide Silver Nanoparticles. Solvent Extraction and Ion Exchange, 2014, 32, 301-315.	2.0	6
80	Enzymatic Biosensors Based on Electrodeposited Alginate Hydrogels. Procedia Engineering, 2016, 168, 622-625.	1.2	6
81	Integrated Photonic System for Early Warning of Cyanobacterial Blooms in Aquaponics. Analytical Chemistry, 2021, 93, 722-730.	6.5	6
82	Utilization of reducing power in light-limited cultures of Chromatium vinosum DSM 185. Archives of Microbiology, 1998, 170, 411-417.	2.2	5
83	The β -galactosidase assay in perspective: Critical thoughts for biosensor development. Analytical Biochemistry, 2021, 635, 114446.	2.4	5
84	Bacteria Detection at a Single-Cell Level through a Cyanotype-Based Photochemical Reaction. Analytical Chemistry, 2022, 94, 787-792.	6.5	5
85	Variations in cell size and buoyant density of Escherichia coli K12 during glycogen accumulation. FEMS Microbiology Letters, 1989, 57, 231-236.	1.8	4
86	Persistence and proliferation of some unicellular algae in drinking water systems as result of their heterotrophic metabolism: short communication. Water S A, 2004, 29, 113.	0.4	4
87	Measuring acute toxicity using a solid-state microrespirometer. Sensors and Actuators B: Chemical, 2008, 135, 13-20.	7.8	4
88	Impedimetric approach for monitoring bacterial cultures based on the changes in the magnitude of the interface capacitance. Analytical Methods, 2010, 2, 1036.	2.7	4
89	Ecologically Friendly Polymer-Metal and Polymer-Metal Oxide Nanocomposites for Complex Water Treatment. , 2012, , .		4
90	Second order effects of aspect ratio variations in high sensitivity grating couplers. Microelectronic Engineering, 2007, 84, 1775-1778.	2.4	3

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91	Advances in bacterial concentration methods and their integration in portable detection platforms: A review. <i>Analytica Chimica Acta</i> , 2022, 1209, 339079.	5.4	3
92	Polyhydroxyalkanoate Accumulation in Planktonic and Anaerobic Environments. , 1990, , 263-274.		3
93	Activity-tunable nanocomposites based on dissolution and in situ recrystallization of nanoparticles on ion exchange resins. <i>RSC Advances</i> , 2015, 5, 89971-89975.	3.6	2
94	Fast fabrication of reusable polyethersulfone microbial biosensors through biocompatible phase separation. <i>Talanta</i> , 2020, 206, 120192.	5.5	2
95	Kinetics of photoacclimation in cultures of <i>Chromatium vinosum</i> DSM 185 during shifts in light irradiance. <i>Microbiology (United Kingdom)</i> , 1999, 145, 827-833.	1.8	1
96	Performance of different cathode catalysts in microbial fuel cell transducers for the determination of microbial activity. <i>Procedia Engineering</i> , 2010, 5, 790-795.	1.2	1
97	Nanoplasmonic Paper-Based Platform for General Screening of Biomacromolecules. <i>Nanomaterials</i> , 2020, 10, 2335.	4.1	1
98	Variations in cell size and buoyant density of <i>Escherichia coli</i> K12 during glycogen accumulation. <i>FEMS Microbiology Letters</i> , 1989, 57, 231-236.	1.8	1
99	Effect of exogenous nucleotides on growth and photopigment synthesis in <i>Rhodospseudomonas capsulata</i> . <i>FEBS Letters</i> , 1983, 154, 196-200.	2.8	0
100	Growth of indigenous microorganisms in samples of crude oil in the absence of external electron acceptors. <i>Ophelia</i> , 2004, 58, 223-232.	0.3	0
101	Real Time Automatic System for the Impedimetric Monitoring of Bacterial Growth. <i>Analytical Letters</i> , 2011, 44, 2571-2581.	1.8	0
102	Photonic lab-on-a-chip with environmental light correction for in situ determination of enteric pathogen contamination. , 2014, , .		0
103	Self-oriented Ag-based polycrystalline cubic nanostructures through polymer stabilization. <i>Nanotechnology</i> , 2016, 27, 425603.	2.6	0
104	Assessing Bacterial Diversity in a Seawater-processing Wastewater Treatment Plant by 454-pyrosequencing of the 16S rRNA and amoA Genes. , 2016, , 159-172.		0