Debora F Rodrigues

List of Publications by Year
in descending order

109 papers	7,564 citations	61945 43 h-index	53190 85 g-index
110 all docs	110 docs citations	110 times ranked	10347 citing authors

#	Article	IF	Citations
1	Zwitterionic polymers in biofouling and inorganic fouling mechanisms. , 2022, , 33-70.		1
2	Bio self-healing concrete using MICP by an indigenous Bacillus cereus strain isolated from Qatari soil. Construction and Building Materials, 2022, 328, 126943.	3.2	41
3	Use of polyaniline coating on magnetic MoO3 and its effects on material stability and visible-light photocatalysis of tetracycline. Journal of Environmental Chemical Engineering, 2022, 10, 107635.	3.3	15
4	Effect of Endosymbiotic Bacteria on Fungal Resistance Toward Heavy Metals. Frontiers in Microbiology, 2022, 13, 822541.	1.5	3
5	Democratization of fungal highway columns as a tool to investigate bacteria associated with soil fungi. FEMS Microbiology Ecology, 2021, 97, .	1.3	15
6	Copper mining bacteria: Converting toxic copper ions into a stable single-atom copper. Science Advances, 2021, 7, .	4.7	16
7	Investigation of the removal and recovery of nitrate by an amine-enriched composite under different fixed-bed column conditions. Chemical Engineering Research and Design, 2021, 150, 365-372.	2.7	15
8	Polyacrylic acid-brushes tethered to graphene oxide membrane coating for scaling and biofouling mitigation on reverse osmosis membranes. Journal of Membrane Science, 2021, 630, 119308.	4.1	37
9	Prevention of infection caused by enteropathogenic E. coli O157:H7 in intestinal cells using enrofloxacin entrapped in polymer based nanocarriers. Journal of Hazardous Materials, 2021, 414, 125454.	6.5	13
10	The role of nanomaterials and antibiotics in microbial resistance and environmental impact: an overview. Current Opinion in Chemical Engineering, 2021, 33, 100707.	3.8	9
11	Asymmetric flow field-flow fractionation (AF4) with fluorescence and multi-detector analysis for direct, real-time, size-resolved measurements of drug release from polymeric nanoparticles. Journal of Controlled Release, 2021, 338, 410-421.	4.8	9
12	Design and performance of Fe3O4@SiO2/MoO3/polydopamine-graphene oxide composites for visible light photocatalysis. Emergent Materials, 2021, 4, 1425-1439.	3.2	10
13	Widespread bacterial diversity within the bacteriome of fungi. Communications Biology, 2021, 4, 1168.	2.0	19
14	Mineral Scaling on Reverse Osmosis Membranes: Role of Mass, Orientation, and Crystallinity on Permeability. Environmental Science & Technology, 2021, 55, 16110-16119.	4.6	9
15	In Situ Polymerization of Polypyrrole and Polyaniline on the Surface of Magnetic Molybdenum Trioxide Nanoparticles: Implications for Water Treatment. ACS Applied Nano Materials, 2021, 4, 12415-12428.	2.4	5
16	Nano-based adsorbent and photocatalyst use for pharmaceutical contaminant removal during indirect potable water reuse. Npj Clean Water, 2020, 3, .	3.1	127
17	Emerging investigator series: polymeric nanocarriers for agricultural applications: synthesis, characterization, and environmental and biological interactions. Environmental Science: Nano, 2020, 7, 37-67.	2.2	68
18	Oxidation state of Mo affects dissolution and visible-light photocatalytic activity of MoO3 nanostructures. Journal of Catalysis, 2020, 381, 508-519.	3.1	52

#	Article	IF	Citations
19	Inorganic salts and organic matter effects on nanorod, nanowire, and nanoplate MoO3 aggregation, dissolution, and photocatalysis. Environmental Science: Nano, 2020, 7, 3794-3804.	2.2	4
20	Microbially-induced mineral scaling in desalination conditions: Mechanisms and effects of commercial antiscalants. Water Research, 2020, 179, 115863.	5.3	37
21	Redox mechanisms of conversion of Cr(VI) to Cr(III) by graphene oxide-polymer composite. Scientific Reports, 2020, 10, 9237.	1.6	85
22	Magnetic Active Water Filter Membrane for Induced Heating to Remove Biofoulants. ACS Applied Materials & Interfaces, 2020, 12, 10291-10298.	4.0	5
23	Aerobic degradation of dichlorinated dibenzo-p-dioxin and dichlorinated dibenzofuran by bacteria strains obtained from tropical contaminated soil. Biodegradation, 2020, 31, 123-137.	1.5	12
24	Structure and morphology of calcium-silicate-hydrates cross-linked with dipodal organosilanes. Cement and Concrete Research, 2020, 133, 106076.	4.6	21
25	Enrofloxacin-Impregnated PLGA Nanocarriers for Efficient Therapeutics and Diminished Generation of Reactive Oxygen Species. ACS Applied Nano Materials, 2019, 2, 5035-5043.	2.4	16
26	Impact of water chemistry, shelf-life, and regeneration in the removal of different chemical and biological contaminants in water by a model Polymeric Graphene Oxide Nanocomposite Membrane Coating. Journal of Water Process Engineering, 2019, 32, 100967.	2.6	14
27	Antibacterial activity of silver/reduced graphene oxide nanocomposite synthesized by sustainable process. Energy, Ecology and Environment, 2019, 4, 318-324.	1.9	4
28	Graphene Oxide Nanocomposite Hydrogel Beads for Removal of Selenium in Contaminated Water. ACS Applied Polymer Materials, 2019, 1, 2668-2679.	2.0	45
29	Use of Response Surface Methodology To Develop and Optimize the Composition of a Chitosanâ€“Polyethyleneimineâ€“Graphene Oxide Nanocomposite Membrane Coating To More Effectively Remove Cr(VI) and Cu(II) from Water. ACS Applied Materials & Interfaces, 2019, 11, 17784-17795.	4.0	102
30	Exposure-Dependent Antimicrobial Activity and Oxidative Properties of Polymer-Based Graphene Oxide Nanocomposites. Materials Science Forum, 2019, 947, 13-20.	0.3	2
31	Effect of cadmium on the performance of partial nitrification using sequencing batch reactor. Chemosphere, 2019, 222, 913-922.	4.2	42
32	Investigation of Thermal Properties of Graphene-Coated Membranes by Laser Irradiation to Remove Biofoulants. Environmental Science & Technology, 2019, 53, 903-911.	4.6	11
33	Isolation, identification and biodiversity of antiscalant degrading seawater bacteria using MALDI-TOF-MS and multivariate analysis. Science of the Total Environment, 2019, 656, 910-920.	3.9	27
34	Cellular and metabolic approaches to investigate the effects of graphene and graphene oxide in the fungi Aspergillus flavus and Aspergillus niger. Carbon, 2019, 143, 419-429.	5.4	37
35	Use of DPSIR Framework to Analyze Water Resources in Qatar and Overview of Reverse Osmosis as an Environment Friendly Technology. Environmental Progress and Sustainable Energy, 2019, 38, 13081.	1.3	20
36	Confocal microscopy as a new real-time quantification method for oil content in produced water. Journal of Petroleum Science and Engineering, 2018, 167, 54-63.	2.1	4

#	Article	IF	Citations
37	Gypsum scale formation on graphene oxide modified reverse osmosis membrane. Journal of Membrane Science, 2018, 552, 132-143.	4.1	67
38	Biological Degradation and Biostability of Nanocomposites Based on Polysulfone with Different Concentrations of Reduced Graphene Oxide. Macromolecular Materials and Engineering, 2018, 303, 1700359.	1.7	9
39	Chronic toxicity of graphene and graphene oxide in sequencing batch bioreactors: A comparative investigation. Journal of Hazardous Materials, 2018, 343, 200-207.	6.5	38
40	Level of Fimbriation Alters the Adhesion of Escherichia coli Bacteria to Interfaces. Langmuir, 2018, 34, 1133-1142.	1.6	31
41	Relationship of Biodiversity with Heavy Metal Tolerance and Sorption Capacity: A Meta-Analysis Approach. Environmental Science & Technology, 2018, 52, 184-194.	4.6	76
42	A morphological, enzymatic and metabolic approach to elucidate apoptotic-like cell death in fungi exposed to h- and Î±-molybdenum trioxide nanoparticles. Nanoscale, 2018, 10, 20702-20716.	2.8	29
43	Recent advances in graphene-based biosensor technology with applications in life sciences. Journal of Nanobiotechnology, 2018, 16, 75.	4.2	343
44	The Influence of Salinity, pH, Temperature and Particles on Produced Water Oil Quantification Precision and Accuracy with Confocal Laser Fluorescence Microscopy. Energy & Fuels, 2018, 32, 6978-6989.	2.5	8
45	Influence of environmental factors on tenuazonic acid production by Epicoccum sorghinum: An integrative approach of field and laboratory conditions. Science of the Total Environment, 2018, 640-641, 1132-1138.	3.9	7
46	Draft Genome Sequence of Sorghum Grain Mold Fungus Epicoccum sorghinum , a Producer of Tenuazonic Acid. Genome Announcements, 2017, 5, .	0.8	19
47	Designing polymeric adhesives for antimicrobial materials: poly(ethylene imine) polymer, graphene, graphene oxide and molybdenum trioxide â€“ a biomimetic approach. Journal of Materials Chemistry B, 2017, 5, 6616-6628.	2.9	37
48	Response surface methodology as a powerful tool to optimize the synthesis of polymer-based graphene oxide nanocomposites for simultaneous removal of cationic and anionic heavy metal contaminants. RSC Advances, 2017, 7, 18480-18490.	1.7	52
49	Acute toxicity of graphene nanoplatelets on biological wastewater treatment process. Environmental Science: Nano, 2017, 4, 160-169.	2.2	35
50	Electrospinning Superhydrophobic and Antibacterial PS/MWNT Nanofibers onto Multilayer Gas Barrier Films. Macromolecular Symposia, 2017, 374, 1600138.	0.4	11
51	Biodegradation of graphene oxide-polymer nanocomposite films in wastewater. Environmental Science: Nano, 2017, 4, 1808-1816.	2.2	46
52	Chitosan Crossâ€Linked Graphene Oxide Nanocomposite Films with Antimicrobial Activity for Application in Food Industry. Macromolecular Symposia, 2017, 374, 1600114.	0.4	72
53	Functionalization of reduced graphene oxide with polysulfone brushes enhance antibacterial properties and reduce human cytotoxicity. Carbon, 2017, 111, 258-268.	5.4	43
54	High-capacity hydrogel polymer composite adsorbent for nitrate and phosphate removal from water. Proceedings of the Water Environment Federation, 2017, 2017, 438-460.	0.0	1

#	Article	IF	Citations
55	Photothermal inactivation of heat-resistant bacteria on nanoporous gold disk arrays. Optical Materials Express, 2016, 6, 1217.	1.6	53
56	Toxicity and Environmental Applications of Graphene-Based Nanomaterials. Carbon Nanostructures, 2016, , 323-356.	0.1	6
57	Biostimulation of metal-resistant microbial consortium to remove zinc from contaminated environments. Science of the Total Environment, 2016, 550, 670-675.	3.9	22
58	Incorporation of graphene oxide into a chitosanâ€“poly(acrylic acid) porous polymer nanocomposite for enhanced lead adsorption. Environmental Science: Nano, 2016, 3, 638-646.	2.2	73
59	Extremophiles: Applications in Nanotechnology. , 2016, , .		20
60	Application of Nanoparticles. , 2016, , 163-193.		5
61	Thermophiles and Psychrophiles in Nanotechnology. , 2016, , 89-127.		11
62	Nanoparticles Synthesized by Microorganisms. , 2016, , 1-51.		5
63	CO2 sequestration by ureolytic microbial consortia through microbially-induced calcite precipitation. Science of the Total Environment, 2016, 572, 671-680.	3.9	54
64	Alkaliphiles and Acidophiles in Nanotechnology. , 2016, , 129-162.		5
65	Photothermal inactivation of bacteria on plasmonic nanostructures. Proceedings of SPIE, 2016, , .	0.8	1
66	Halophiles in Nanotechnology. , 2016, , 53-88.		9
67	On the antibacterial mechanism of graphene oxide (GO) Langmuirâ€“Blodgett films. Chemical Communications, 2015, 51, 2886-2889.	2.2	232
68	Toxicity of exfoliated-MoS₂and annealed exfoliated-MoS₂towards planktonic cells, biofilms, and mammalian cells in the presence of electron donor. Environmental Science: Nano, 2015, 2, 370-379.	2.2	70
69	Biotic and abiotic effects on CO2 sequestration during microbially-induced calcium carbonate precipitation. FEMS Microbiology Ecology, 2015, 91, .	1.3	56
70	Carbon-based nanomaterials for removal of chemical and biological contaminants from water: A review of mechanisms and applications. Carbon, 2015, 91, 122-143.	5.4	486
71	Sonochemically grown 1D ZnO nanostructures and their applications. Proceedings of SPIE, 2015, , .	0.8	0
72	Antibacterial properties and mechanisms of toxicity of sonochemically grown ZnO nanorods. RSC Advances, 2015, 5, 2568-2575.	1.7	61

#	Article	IF	Citations
73	A comparative study of lysozyme adsorption with graphene, graphene oxide, and single-walled carbon nanotubes: Potential environmental applications. Chemical Engineering Journal, 2014, 240, 147-154.	6.6	93
74	The synergism of temperature, pH and growth phases on heavy metal biosorption by two environmental isolates. Journal of Hazardous Materials, 2014, 279, 236-243.	6.5	67
75	Efficacy of Carbonaceous Materials for Sorbing Polychlorinated Biphenyls from Aqueous Solution. Environmental Science & Technology, 2014, 48, 10372-10379.	4.6	41
76	Optimized carbonate micro-particle production by Sporosarcina pasteurii using response surface methodology. Ecological Engineering, 2014, 62, 168-174.	1.6	43
77	Surface Modification of Membrane Filters Using Graphene and Graphene Oxide-Based Nanomaterials for Bacterial Inactivation and Removal. ACS Sustainable Chemistry and Engineering, 2014, 2, 1559-1565.	3.2	196
78	Graphene oxide functionalized with ethylenediamine triacetic acid for heavy metal adsorption and anti-microbial applications. Carbon, 2014, 77, 289-301.	5.4	212
79	Copper removal using a heavy-metal resistant microbial consortium in a fixed-bed reactor. Water Research, 2014, 62, 156-166.	5.3	51
80	High throughput colorimetric assay for rapid urease activity quantification. Journal of Microbiological Methods, 2013, 95, 324-326.	0.7	48
81	Toxicity of Functionalized Single-Walled Carbon Nanotubes on Soil Microbial Communities: Implications for Nutrient Cycling in Soil. Environmental Science & Technology, 2013, 47, 625-633.	4.6	138
82	Investigation of acute effects of graphene oxide on wastewater microbial community: A case study. Journal of Hazardous Materials, 2013, 256-257, 33-39.	6.5	236
83	Antimicrobial PVK:SWNT nanocomposite coated membrane for water purification: Performance and toxicity testing. Water Research, 2013, 47, 3966-3975.	5.3	62
84	Improved removal of lead(ii) from water using a polymer-based graphene oxide nanocomposite. Journal of Materials Chemistry A, 2013, 1, 3789.	5.2	190
85	CHAPTER 12. Carbon-Based Polymer Nanocomposites: From Material Preparation to Antimicrobial Applications. RSC Polymer Chemistry Series, 2013, , 327-350.	0.1	1
86	Temperatureâ€Responsiveness and Antimicrobial Properties of CNTâ€“PNIPAM Hybrid Brush Films. Macromolecular Chemistry and Physics, 2013, 214, 464-469.	1.1	18
87	Antimicrobial Applications of Electroactive PVK-SWNT Nanocomposites. Environmental Science & Technology, 2012, 46, 1804-1810.	4.6	116
88	Graphene nanocomposite for biomedical applications: fabrication, antimicrobial and cytotoxic investigations. Nanotechnology, 2012, 23, 395101.	1.3	172
89	Tunable Protein and Bacterial Cell Adsorption on Colloidally Templated Superhydrophobic Polythiophene Films. Chemistry of Materials, 2012, 24, 870-880.	3.2	122
90	Toxicity of a polymerâ€“graphene oxide composite against bacterial planktonic cells, biofilms, and mammalian cells. Nanoscale, 2012, 4, 4746.	2.8	375

#	Article	IF	Citations
91	Bactericidal and Anticorrosion Properties in PVK/MWNT Nanocomposite Coatings on Stainless Steel. Macromolecular Materials and Engineering, 2012, 297, 807-813.	1.7	19
92	Antimicrobial graphene polymer (PVK-GO) nanocomposite films. Chemical Communications, 2011, 47, 8892.	2.2	186
93	Complete Genome Sequence of the Thermophilic Bacterium Exiguobacterium sp. AT1b. Journal of Bacteriology, 2011, 193, 2880-2881.	1.0	47
94	Biofilters: A Solution for Heavy Metals Removal from Water?. Journal of Bioremediation & Biodegradation, 2011, 02, .	0.5	9
95	The Genome Sequence ofPsychrobacter arcticus273-4, a Psychroactive Siberian Permafrost Bacterium, Reveals Mechanisms for Adaptation to Low-Temperature Growth. Applied and Environmental Microbiology, 2010, 76, 2304-2312.	1.4	184
96	Toxic Effects of Single-Walled Carbon Nanotubes in the Development of E. coli Biofilm. Environmental Science & Technology, 2010, 44, 4583-4589.	4.6	183
97	Role of type 1 fimbriae and mannose in the development ofEscherichia coliK12 biofilm: from initial cell adhesion to biofilm formation. Biofouling, 2009, 25, 401-411.	0.8	76
98	Diversity of hydrocarbon-degradingKlebsiellastrains isolated from hydrocarbon-contaminated estuaries. Journal of Applied Microbiology, 2009, 106, 1304-1314.	1.4	44
99	Biogeography of two cold-adapted genera: Psychrobacter and Exiguobacterium. ISME Journal, 2009, 3, 658-665.	4.4	78
100	Architecture of thermal adaptation in an Exiguobacterium sibiricum strain isolated from 3 million year old permafrost: A genome and transcriptome approach. BMC Genomics, 2008, 9, 547.	1.2	134
101	Antibacterial Effects of Carbon Nanotubes: Size Does Matter!. Langmuir, 2008, 24, 6409-6413.	1.6	1,003
102	Coping with Our Cold Planet. Applied and Environmental Microbiology, 2008, 74, 1677-1686.	1.4	162
103	Multi-locus real-time PCR for quantitation of bacteria in the environment reveals Exiguobacterium to be prevalent in permafrost. FEMS Microbiology Ecology, 2007, 59, 489-499.	1.3	35
104	Characterization of Exiguobacterium isolates from the Siberian permafrost. Description of Exiguobacterium sibiricum sp. nov.. Extremophiles, 2006, 10, 285-294.	0.9	124
105	Enantioselective reduction of ortho-substituted acetophenones by bacterial strains isolated from medium enriched with biphenyl or diesel fuel. Journal of Molecular Catalysis B: Enzymatic, 2005, 33, 73-79.	1.8	20
106	Development of a static headspace gas chromatographic/mass spectrometric method to analyze the level of volatile contaminants biodegradation. Journal of Chromatography A, 2004, 1048, 67-71.	1.8	11
107	Genomic and Expression Analyses of Cold-Adapted Microorganisms. , 0, , 126-155.		22
108	Visible Light Photocatalytic Degradation of Methylene Blue Using Polypyrrole-Coated Molybdenum-Based Magnetic Photocatalyst. Materials Science Forum, 0, 1053, 397-404.	0.3	0

#	Article	IF	Citations
109	Graphene Oxide-Hybridized Waterborne Epoxy Coating for Simultaneous Anticorrosive and Antibiofilm Functions. Frontiers in Materials, 0, 9, .	1.2	1