Debora F Rodrigues

List of Publications by Year
in descending order

109 papers	7,564 citations	61857 43 h-index	53109 85 g-index
110 all docs	110 docs citations	110 times ranked	10347 citing authors

#	Article	IF	Citations
1	Antibacterial Effects of Carbon Nanotubes: Size Does Matter!. Langmuir, 2008, 24, 6409-6413.	1.6	1,003
2	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
3	Toxicity of a polymerâ€“graphene oxide composite against bacterial planktonic cells, biofilms, and mammalian cells. Nanoscale, 2012, 4, 4746.	2.8	375
4	Recent advances in graphene-based biosensor technology with applications in life sciences. Journal of Nanobiotechnology, 2018, 16, 75.	4.2	343
5	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
6	On the antibacterial mechanism of graphene oxide (GO) Langmuirâ€“Blodgett films. Chemical Communications, 2015, 51, 2886-2889.	2.2	232
7	Graphene oxide functionalized with ethylenediamine triacetic acid for heavy metal adsorption and anti-microbial applications. Carbon, 2014, 77, 289-301.	5.4	212
8	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
9	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
10	Antimicrobial graphene polymer (PVK-GO) nanocomposite films. Chemical Communications, 2011, 47, 8892.	2.2	186
11	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
12	Toxic Effects of Single-Walled Carbon Nanotubes in the Development of E. coli Biofilm. Environmental Science & Technology, 2010, 44, 4583-4589.	4.6	183
13	Graphene nanocomposite for biomedical applications: fabrication, antimicrobial and cytotoxic investigations. Nanotechnology, 2012, 23, 395101.	1.3	172
14	Coping with Our Cold Planet. Applied and Environmental Microbiology, 2008, 74, 1677-1686.	1.4	162
15	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
16	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
17	Nano-based adsorbent and photocatalyst use for pharmaceutical contaminant removal during indirect potable water reuse. Npj Clean Water, 2020, 3, .	3.1	127
18	Characterization of Exiguobacterium isolates from the Siberian permafrost. Description of Exiguobacterium sibiricum sp. nov.. Extremophiles, 2006, 10, 285-294.	0.9	124

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19	Tunable Protein and Bacterial Cell Adsorption on Colloidally Templated Superhydrophobic Polythiophene Films. Chemistry of Materials, 2012, 24, 870-880.	3.2	122
20	Antimicrobial Applications of Electroactive PVK-SWNT Nanocomposites. Environmental Science & Technology, 2012, 46, 1804-1810.	4.6	116
21	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
22	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
23	Redox mechanisms of conversion of Cr(VI) to Cr(III) by graphene oxide-polymer composite. Scientific Reports, 2020, 10, 9237.	1.6	85
24	Biogeography of two cold-adapted genera: Psychrobacter and Exiguobacterium. ISME Journal, 2009, 3, 658-665.	4.4	78
25	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
26	Relationship of Biodiversity with Heavy Metal Tolerance and Sorption Capacity: A Meta-Analysis Approach. Environmental Science & Technology, 2018, 52, 184-194.	4.6	76
27	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
28	Chitosan Crossâ€Linked Graphene Oxide Nanocomposite Films with Antimicrobial Activity for Application in Food Industry. Macromolecular Symposia, 2017, 374, 1600114.	0.4	72
29	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
30	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
31	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
32	Gypsum scale formation on graphene oxide modified reverse osmosis membrane. Journal of Membrane Science, 2018, 552, 132-143.	4.1	67
33	Antimicrobial PVK:SWNT nanocomposite coated membrane for water purification: Performance and toxicity testing. Water Research, 2013, 47, 3966-3975.	5.3	62
34	Antibacterial properties and mechanisms of toxicity of sonochemically grown ZnO nanorods. RSC Advances, 2015, 5, 2568-2575.	1.7	61
35	Biotic and abiotic effects on CO2 sequestration during microbially-induced calcium carbonate precipitation. FEMS Microbiology Ecology, 2015, 91, .	1.3	56
36	CO2 sequestration by ureolytic microbial consortia through microbially-induced calcite precipitation. Science of the Total Environment, 2016, 572, 671-680.	3.9	54

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37	Photothermal inactivation of heat-resistant bacteria on nanoporous gold disk arrays. Optical Materials Express, 2016, 6, 1217.	1.6	53
38	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
39	Oxidation state of Mo affects dissolution and visible-light photocatalytic activity of MoO3 nanostructures. Journal of Catalysis, 2020, 381, 508-519.	3.1	52
40	Copper removal using a heavy-metal resistant microbial consortium in a fixed-bed reactor. Water Research, 2014, 62, 156-166.	5.3	51
41	High throughput colorimetric assay for rapid urease activity quantification. Journal of Microbiological Methods, 2013, 95, 324-326.	0.7	48
42	Complete Genome Sequence of the Thermophilic Bacterium Exiguobacterium sp. AT1b. Journal of Bacteriology, 2011, 193, 2880-2881.	1.0	47
43	Biodegradation of graphene oxide-polymer nanocomposite films in wastewater. Environmental Science: Nano, 2017, 4, 1808-1816.	2.2	46
44	Graphene Oxide Nanocomposite Hydrogel Beads for Removal of Selenium in Contaminated Water. ACS Applied Polymer Materials, 2019, 1, 2668-2679.	2.0	45
45	Diversity of hydrocarbon-degradingKlebsiellastrains isolated from hydrocarbon-contaminated estuaries. Journal of Applied Microbiology, 2009, 106, 1304-1314.	1.4	44
46	Optimized carbonate micro-particle production by Sporosarcina pasteurii using response surface methodology. Ecological Engineering, 2014, 62, 168-174.	1.6	43
47	Functionalization of reduced graphene oxide with polysulfone brushes enhance antibacterial properties and reduce human cytotoxicity. Carbon, 2017, 111, 258-268.	5.4	43
48	Effect of cadmium on the performance of partial nitrification using sequencing batch reactor. Chemosphere, 2019, 222, 913-922.	4.2	42
49	Efficacy of Carbonaceous Materials for Sorbing Polychlorinated Biphenyls from Aqueous Solution. Environmental Science & Technology, 2014, 48, 10372-10379.	4.6	41
50	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
51	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
52	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
53	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
54	Microbially-induced mineral scaling in desalination conditions: Mechanisms and effects of commercial antiscalants. Water Research, 2020, 179, 115863.	5.3	37

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55	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
56	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
57	Acute toxicity of graphene nanoplatelets on biological wastewater treatment process. Environmental Science: Nano, 2017, 4, 160-169.	2.2	35
58	Level of Fimbriation Alters the Adhesion of Escherichia coli Bacteria to Interfaces. Langmuir, 2018, 34, 1133-1142.	1.6	31
59	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
60	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
61	Biostimulation of metal-resistant microbial consortium to remove zinc from contaminated environments. Science of the Total Environment, 2016, 550, 670-675.	3.9	22
62	Genomic and Expression Analyses of Cold-Adapted Microorganisms. , 0, , 126-155.		22
63	Structure and morphology of calcium-silicate-hydrates cross-linked with dipodal organosilanes. Cement and Concrete Research, 2020, 133, 106076.	4.6	21
64	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
65	Extremophiles: Applications in Nanotechnology. , 2016, , .		20
66	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
67	Bactericidal and Anticorrosion Properties in PVK/MWNT Nanocomposite Coatings on Stainless Steel. Macromolecular Materials and Engineering, 2012, 297, 807-813.	1.7	19
68	Draft Genome Sequence of Sorghum Grain Mold Fungus Epicoccum sorghinum , a Producer of Tenuazonic Acid. Genome Announcements, 2017, 5, .	0.8	19
69	Widespread bacterial diversity within the bacteriome of fungi. Communications Biology, 2021, 4, 1168.	2.0	19
70	Temperatureâ€Responsiveness and Antimicrobial Properties of CNTâ€“PNIPAM Hybrid Brush Films. Macromolecular Chemistry and Physics, 2013, 214, 464-469.	1.1	18
71	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
72	Copper mining bacteria: Converting toxic copper ions into a stable single-atom copper. Science Advances, 2021, 7, .	4.7	16

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73	Democratization of fungal highway columns as a tool to investigate bacteria associated with soil fungi. FEMS Microbiology Ecology, 2021, 97, .	1.3	15
74	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
75	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
76	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
77	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
78	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
79	Thermophiles and Psychrophiles in Nanotechnology. , 2016, , 89-127.		11
80	Electrospinning Superhydrophobic and Antibacterial PS/MWNT Nanofibers onto Multilayer Gas Barrier Films. Macromolecular Symposia, 2017, 374, 1600138.	0.4	11
81	Investigation of Thermal Properties of Graphene-Coated Membranes by Laser Irradiation to Remove Biofoulants. Environmental Science & Technology, 2019, 53, 903-911.	4.6	11
82	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
83	Design and performance of Fe3O4@SiO2/MoO3/polydopamine-graphene oxide composites for visible light photocatalysis. Emergent Materials, 2021, 4, 1425-1439.	3.2	10
84	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
85	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
86	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
87	Halophiles in Nanotechnology. , 2016, , 53-88.		9
88	Biofilters: A Solution for Heavy Metals Removal from Water?. Journal of Bioremediation & Biodegradation, 2011, 02, .	0.5	9
89	Mineral Scaling on Reverse Osmosis Membranes: Role of Mass, Orientation, and Crystallinity on Permeability. Environmental Science & Technology, 2021, 55, 16110-16119.	4.6	9
90	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

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91	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
92	Toxicity and Environmental Applications of Graphene-Based Nanomaterials. Carbon Nanostructures, 2016, , 323-356.	0.1	6
93	Application of Nanoparticles. , 2016, , 163-193.		5
94	Nanoparticles Synthesized by Microorganisms. , 2016, , 1-51.		5
95	Alkaliphiles and Acidophiles in Nanotechnology. , 2016, , 129-162.		5
96	Magnetic Active Water Filter Membrane for Induced Heating to Remove Biofoulants. ACS Applied Materials & Interfaces, 2020, 12, 10291-10298.	4.0	5
97	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
98	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
99	Antibacterial activity of silver/reduced graphene oxide nanocomposite synthesized by sustainable process. Energy, Ecology and Environment, 2019, 4, 318-324.	1.9	4
100	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
101	Effect of Endosymbiotic Bacteria on Fungal Resistance Toward Heavy Metals. Frontiers in Microbiology, 2022, 13, 822541.	1.5	3
102	Exposure-Dependent Antimicrobial Activity and Oxidative Properties of Polymer-Based Graphene Oxide Nanocomposites. Materials Science Forum, 2019, 947, 13-20.	0.3	2
103	CHAPTER 12. Carbon-Based Polymer Nanocomposites: From Material Preparation to Antimicrobial Applications. RSC Polymer Chemistry Series, 2013, , 327-350.	0.1	1
104	Photothermal inactivation of bacteria on plasmonic nanostructures. Proceedings of SPIE, 2016, , .	0.8	1
105	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
106	Zwitterionic polymers in biofouling and inorganic fouling mechanisms. , 2022, , 33-70.		1
107	Graphene Oxide-Hybridized Waterborne Epoxy Coating for Simultaneous Anticorrosive and Antibiofilm Functions. Frontiers in Materials, 0, 9, .	1.2	1
108	Sonochemically grown 1D ZnO nanostructures and their applications. Proceedings of SPIE, 2015, , .	0.8	0

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109	Visible Light Photocatalytic Degradation of Methylene Blue Using Polypyrrole-Coated Molybdenum-Based Magnetic Photocatalyst. Materials Science Forum, 0, 1053, 397-404.	0.3	0