Carla C C R De Carvalho

List of Publications by Year
in descending order

93 papers	4,636 citations	136950 32 h-index	106344 65 g-index
93 all docs	93 docs citations	93 times ranked	6204 citing authors

#	Article	IF	Citations
1	Bioaugmentation and biostimulation strategies to improve the effectiveness of bioremediation processes. Biodegradation, 2011, 22, 231-241.	3.0	615
2	The Various Roles of Fatty Acids. Molecules, 2018, 23, 2583.	3.8	403
3	Carvone: Why and how should one bother to produce this terpene. Food Chemistry, 2006, 95, 413-422.	8.2	323
4	Enzymatic and whole cell catalysis: Finding new strategies for old processes. Biotechnology Advances, 2011, 29, 75-83.	11.7	268
5	Marine Biofilms: A Successful Microbial Strategy With Economic Implications. Frontiers in Marine Science, 2018, 5, .	2.5	214
6	Biotransformation of terpenes. Biotechnology Advances, 2006, 24, 134-142.	11.7	211
7	Whole cell biocatalysts: essential workers from Nature to the industry. Microbial Biotechnology, 2017, 10, 250-263.	4.2	181
8	Fluorometric determination of ethidium bromide efflux kinetics in Escherichia coli. Journal of Biological Engineering, 2009, 3, 18.	4.7	164
9	Production of Metabolites as Bacterial Responses to the Marine Environment. Marine Drugs, 2010, 8, 705-727.	4.6	158
10	The remarkable Rhodococcus erythropolis. Applied Microbiology and Biotechnology, 2005, 67, 715-726.	3.6	122
11	Cell wall adaptations of planktonic and biofilm Rhodococcus erythropolis cells to growth on C5 to C16 n-alkane hydrocarbons. Applied Microbiology and Biotechnology, 2009, 82, 311-320.	3.6	109
12	Adaptation of Rhodococcus erythropolis cells for growth and bioremediation under extreme conditions. Research in Microbiology, 2012, 163, 125-136.	2.1	90
13	Carotenoids in Aquatic Ecosystems and Aquaculture: A Colorful Business with Implications for Human Health. Frontiers in Marine Science, 0, 4, .	2.5	88
14	Biofilms: Recent Developments on an Old Battle. Recent Patents on Biotechnology, 2007, 1, 49-57.	0.8	79
15	Degradation of hydrocarbons and alcohols at different temperatures and salinities by Rhodococcus erythropolis DCL14. FEMS Microbiology Ecology, 2005, 51, 389-399.	2.7	66
16	Burkholderia puraquae sp. nov., a novel species of the Burkholderia cepacia complex isolated from hospital settings and agricultural soils. International Journal of Systematic and Evolutionary Microbiology, 2018, 68, 14-20.	1.7	66
17	Adaptation of Rhodococcus erythropolis DCL14 to growth on n-alkanes, alcohols and terpenes. Applied Microbiology and Biotechnology, 2005, 67, 383-388.	3.6	63
18	Mycobacterium sp.,Rhodococcus erythropolis, andPseudomonas putida behavior in the presence of organic solvents. Microscopy Research and Technique, 2004, 64, 215-222.	2.2	55

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19	Phenotypic Modifications in Staphylococcus aureus Cells Exposed to High Concentrations of Vancomycin and Teicoplanin. Frontiers in Microbiology, 2016, 7, 13.	3.5	51
20	Burkholderia cenocepacia Phenotypic Clonal Variation during a 3.5-Year Colonization in the Lungs of a Cystic Fibrosis Patient. Infection and Immunity, 2011, 79, 2950-2960.	2.2	47
21	Membrane transport systems and the biodegradation potential and pathogenicity of genus Rhodococcus. Frontiers in Physiology, 2014, 5, 133.	2.8	47
22	Adaptation of Rhodococcus erythropolis cells to high concentrations of toluene. Applied Microbiology and Biotechnology, 2007, 76, 1423-1430.	3.6	46
23	Dietary Carotenoids Regulate Astaxanthin Content of Copepods and Modulate Their Susceptibility to UV Light and Copper Toxicity. Marine Drugs, 2012, 10, 998-1018.	4.6	43
24	Maintenance of cell viability in the biotransformation of (âˆ’)-carveol with whole cells of Rhodococcus erythropolis. Journal of Molecular Catalysis B: Enzymatic, 2002, 19-20, 389-398.	1.8	40
25	Rapid adaptation of Rhodococcus erythropolis cells to salt stress by synthesizing polyunsaturated fatty acids. Applied Microbiology and Biotechnology, 2014, 98, 5599-606.	3.6	40
26	Sitosterol bioconversion with resting cells in liquid polymer based systems. Bioresource Technology, 2009, 100, 4050-4053.	9.6	39
27	Effect of carbon sources on lipid accumulation in Rhodococcus cells. Biochemical Engineering Journal, 2015, 94, 100-105.	3.6	38
28	Cell adaptation to solvent, substrate and product: a successful strategy to overcome product inhibition in a bioconversion system. Applied Microbiology and Biotechnology, 2005, 69, 268-275.	3.6	37
29	Fatty Acids as a Tool to Understand Microbial Diversity and Their Role in Food Webs of Mediterranean Temporary Ponds. Molecules, 2014, 19, 5570-5598.	3.8	37
30	Extraordinary soluteâ€stress tolerance contributes to the environmental tenacity of mycobacteria. Environmental Microbiology Reports, 2015, 7, 746-764.	2.4	37
31	Steroid bioconversion: Towards green processes. Food and Bioproducts Processing, 2010, 88, 12-20.	3.6	36
32	Siderophores as Ã¢â‚¬Å“Trojan HorsesÃ¢â‚¬Â• tackling multidrug resistance?. Frontiers in Microbiology, 2014, 5, 290.	3.5	36
33	Biofilms: Microbial Strategies for Surviving UV Exposure. Advances in Experimental Medicine and Biology, 2017, 996, 233-239.	1.6	34
34	Preventing biofilm formation: promoting cell separation with terpenes. FEMS Microbiology Ecology, 2007, 61, 406-413.	2.7	33
35	Behaviour of Mycobacterium sp. NRRL B-3805 whole cells in aqueous, organic-aqueous and organic media studied by fluorescence microscopy. Applied Microbiology and Biotechnology, 2004, 64, 695-701.	3.6	32
36	Assessment of three-dimensional biofilm structure using an optical microscope. BioTechniques, 2007, 42, 616-620.	1.8	30

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37	Lipids of Prokaryotic Origin at the Base of Marine Food Webs. Marine Drugs, 2012, 10, 2698-2714.	4.6	30
38	Production and Recovery of Limonene-1,2-Diol and Simultaneous Resolution of a Diastereomeric Mixture of Limonene-1,2-Epoxide with whole Cells ofRhodococcus ErythropolisDCL14. Biocatalysis and Biotransformation, 2000, 18, 223-235.	2.0	28
39	Influence of reactor configuration on the production of carvone from carveol by whole cells of Rhodococcus erythropolis DCL14. Journal of Molecular Catalysis B: Enzymatic, 2002, 19-20, 377-387.	1.8	27
40	Solvent toxicity in organic-aqueous systems analysed by multivariate analysis. Bioprocess and Biosystems Engineering, 2004, 26, 361-375.	3.4	26
41	Antibacterial properties of the extract of Abelmoschus esculentus. Biotechnology and Bioprocess Engineering, 2011, 16, 971-977.	2.6	26
42	The multidrug resistance transporters CgTpo1_1 and CgTpo1_2 play a role in virulence and biofilm formation in the human pathogenCandida glabrata. Cellular Microbiology, 2017, 19, e12686.	2.1	26
43	Decoding the ocean's microbiological secrets for marine enzyme biodiscovery. FEMS Microbiology Letters, 2019, 366, .	1.8	26
44	Towards the bio-production of trans-carveol and carvone from limonene: induction after cell growth on limonene and toluene. Tetrahedron: Asymmetry, 2003, 14, 3925-3931.	1.8	25
45	Principal Components Analysis as a Tool to Summarise Biotransformation Data: Influence on Cells of Solvent Type and Phase Ratio. Biocatalysis and Biotransformation, 2003, 21, 305-314.	2.0	24
46	Multi-Enzyme Systems in Flow Chemistry. Processes, 2021, 9, 225.	2.8	22
47	A new NDT technique based on bacterial cells to detect micro surface defects. NDT and E International, 2014, 63, 43-49.	3.7	21
48	Chrysotile as a support for the immobilisation of Mycobacterium sp. NRRL B-3805 cells for the bioconversion of Î²-sitosterol in an organicâ€“aqueous two-liquid phase system. Journal of Molecular Catalysis B: Enzymatic, 2005, 32, 61-65.	1.8	20
49	Adaptive response of Rhodococcus opacus PWD4 to salt and phenolic stress on the level of mycolic acids. AMB Express, 2016, 6, 66.	3.0	20
50	Recent Achievements on Siderophore Production and Application. Recent Patents on Biotechnology, 2011, 5, 183-198.	0.8	17
51	Mycobacterial Response to Organic Solvents and Possible Implications on Cross-Resistance With Antimicrobial Agents. Frontiers in Microbiology, 2018, 9, 961.	3.5	17
52	Biofilms: New Ideas for An Old Problem. Recent Patents on Biotechnology, 2012, 6, 13-22.	0.8	16
53	Adaptation of Cupriavidus necator to conditions favoring polyhydroxyalkanoate production. Journal of Biotechnology, 2013, 164, 309-317.	3.8	16
54	Rhodococcus erythropoliscells adapt their fatty acid composition during biofilm formation on metallic and non-metallic surfaces. FEMS Microbiology Ecology, 2015, 91, fiv135.	2.7	15

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55	Principal component analysis applied to bacterial cell behaviour in the presence of organic solvents. Biocatalysis and Biotransformation, 2004, 22, 203-214.	2.0	14
56	A simple method to observe organic solvent drops with a standard optical microscope. Microscopy Research and Technique, 2003, 60, 465-466.	2.2	13
57	Bacterial diversity assessed by cultivation-based techniques shows predominance ofStaphylococccusspecies on coins collected in Lisbon and Casablanca. FEMS Microbiology Ecology, 2014, 88, 26-37.	2.7	13
58	Cultivationâ€based strategies to find efficient marine biocatalysts. Biotechnology Journal, 2017, 12, 1700036.	3.5	13
59	Ancient Procedures for the High-Tech World: Health Benefits and Antimicrobial Compounds from the Mediterranean Empires. Open Biotechnology Journal, 2008, 2, 235-246.	1.2	13
60	On the feasibility of the microscale approach for a multistep biotransformation: sitosterol side chain cleavage. Journal of Chemical Technology and Biotechnology, 2007, 82, 856-863.	3.2	12
61	Tumour metastasis as an adaptation of tumour cells to fulfil their phosphorus requirements. Medical Hypotheses, 2012, 78, 664-667.	1.5	12
62	Production and Purification of Therapeutic Enzymes. Advances in Experimental Medicine and Biology, 2019, 1148, 1-24.	1.6	12
63	Edible flowers of Helichrysum italicum: Composition, nutritive value, and bioactivities. Food Research International, 2022, 157, 111399.	6.2	11
64	Scalingâ€up of complex wholeâ€cell bioconversions in conventional and nonâ€conventional media. Biotechnology and Bioengineering, 2010, 106, 619-626.	3.3	10
65	Adaptation of Rhodococcus to Organic Solvents. Microbiology Monographs, 2010, , 109-131.	0.6	10
66	Phenotypic Adaptations Help Rhodococcus erythropolis Cells during the Degradation of Paraffin Wax. Biotechnology Journal, 2019, 14, e1800598.	3.5	10
67	Integral Analysis of Liquid-Hot-Water Pretreatment of Wheat Straw: Evaluation of the Production of Sugars, Degradation Products, and Lignin. Sustainability, 2022, 14, 362.	3.2	10
68	Modelling the biokinetic resolution of diastereomers present in unequal initial amounts. Tetrahedron: Asymmetry, 2002, 13, 1637-1643.	1.8	9
69	A simple imaging method for biomass determination. Journal of Microbiological Methods, 2005, 60, 135-140.	1.6	8
70	Anchoring high-throughput screening methods to scale-up bioproduction of siderophores. Process Biochemistry, 2012, 47, 416-421.	3.7	8
71	Degradation of hydrocarbons and alcohols byRhodococcus erythropolisDCL14: A comparison in scale performance. Biocatalysis and Biotransformation, 2007, 25, 144-150.	2.0	7
72	Green Solvents for Biocatalysis. , 2012, , 121-146.		7

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73	Adaptation of Rhodococcus to Organic Solvents. Microbiology Monographs, 2019, , 103-135.	0.6	7
74	Process Development for Benzyl Alcohol Production by Whole-Cell Biocatalysis in Stirred and Packed Bed Reactors. Microorganisms, 2022, 10, 966.	3.6	7
75	Biotransformations. , 2011, , 451-460.		5
76	Mycobacterium vaccae Adaptation to Disinfectants and Hand Sanitisers, and Evaluation of Cross-Tolerance with Antimicrobials. Antibiotics, 2020, 9, 544.	3.7	5
77	Impact of PrsA on membrane lipid composition during daptomycin-resistance-mediated Î²-lactam sensitization in clinical MRSA strains. Journal of Antimicrobial Chemotherapy, 2021, 77, 135-147.	3.0	5
78	Nova TÃ©cnica de END Baseada em CÃ©lulas Bacterianas para DetecÃ§Ã£o de Micro e Nano Defeitos Superficiais. Soldagem E Inspecao, 2015, 20, 253-259.	0.6	4
79	Developments in micro- and nano-defects detection using bacterial cells. NDT and E International, 2016, 78, 20-28.	3.7	4
80	Using Biotechnology to Solve Engineering Problems: Non-Destructive Testing of Microfabrication Components. Materials, 2017, 10, 788.	2.9	4
81	Determining transaminase activity in bacterial libraries by time-lapse imaging. Chemical Communications, 2019, 55, 13538-13541.	4.1	4
82	Ï‰-Transaminase-Mediated Asymmetric Synthesis of (S)-1-(4-Trifluoromethylphenyl)Ethylamine. Catalysts, 2021, 11, 307.	3.5	4
83	Detection of mcr-1 Gene in Undefined Vibrio Species Isolated from Clams. Microorganisms, 2022, 10, 394.	3.6	4
84	Surface discontinuity detection using bacterial suspensions. Welding in the World, Le Soudage Dans Le Monde, 2015, 59, 723-730.	2.5	3
85	Fungi in Fermentation and Biotransformation Systems. Fungal Biology, 2016, , 525-541.	0.6	3
86	Optimization of Multiparameters for Increased Yields of Cytochrome B5 in Bioreactors. Molecules, 2021, 26, 4148.	3.8	2
87	Biocatalysis of Steroids with Mycobacterium sp. in Aqueous and Organic Media. Methods in Molecular Biology, 2017, 1645, 313-320.	0.9	1
88	Biotransformations. , 2017, , 574-585.		1
89	Marine exopolysaccharides provide protection in extreme environments. , 2019, , 95-110.		1
90	Degradation of toluene and xylene by Rhodococcus cells. Journal of Biotechnology, 2007, 131, S101.	3.8	0

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91	Lab-scale bioproduction of siderophores. Journal of Biotechnology, 2010, 150, 424-424.	3.8	0
92	Process intensification platforms for application in bioengineering. , 2011, , .		0
93	Nondestructive testing in microfabrication using bacteria. CiÃªncia & Tecnologia Dos Materiais, 2017, 29, e262-e264.	0.5	0