Stephanie G Burton

List of Publications by Year
in descending order

78	3,388	136950 32	144013 57
papers	citations	h-index	g-index

81	81	81	3972
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The search for the ideal biocatalyst. Nature Biotechnology, 2002, 20, 37-45.	17.5	275
2	Potential applications of laccase-mediated coupling and grafting reactions: A review. Enzyme and Microbial Technology, 2011, 48, 195-208.	3.2	270
3	Thermophilic ethanologenesis: future prospects for second-generation bioethanol production. Trends in Biotechnology, 2009, 27, 398-405.	9.3	229
4	Laccases and Phenol Oxidases in Organic Synthesis - a Review. Current Organic Chemistry, 2003, 7, 1317-1331.	1.6	178
5	Oxidizing enzymes as biocatalysts. Trends in Biotechnology, 2003, 21, 543-549.	9.3	173
6	Phylogenetic analysis of actinobacterial populations associated with Antarctic Dry Valley mineral soils. Environmental Microbiology, 2009, 11, 566-576.	3.8	154
7	Biocatalysis with polyphenol oxidase: a review. Catalysis Today, 1994, 22, 459-487.	4.4	135
8	Hydantoin-hydrolysing enzymes for the enantioselective production of amino acids: new insights and applications. Tetrahedron: Asymmetry, 2004, 15, 2737-2741.	1.8	98
9	A capillary membrane bioreactor using immobilized polyphenol oxidase for the removal of phenols from industrial effluents. Enzyme and Microbial Technology, 1999, 24, 209-217.	3.2	85
10	A novel application for Neurospora crassa: Progress from batch culture to a membrane bioreactor for the bioremediation of phenols. Enzyme and Microbial Technology, 2001, 29, 348-356.	3.2	73
11	Phenoxazinone synthase: what's in a name?. Trends in Biotechnology, 2009, 27, 248-258.	9.3	73
12	Laccase-catalyzed dimerization of ferulic acid amplifies antioxidant activity. Journal of Molecular Catalysis B: Enzymatic, 2012, 74, 29-35.	1.8	68
13	Immobilization of polyphenol oxidase on chitosan-coated polysulphone capillary membranes for improved phenolic effluent bioremediation. Enzyme and Microbial Technology, 1999, 25, 769-773.	3.2	63
14	A novel thermostable nitrilase superfamily amidase from Geobacillus pallidus showing acyl transfer activity. Applied Microbiology and Biotechnology, 2007, 75, 801-811.	3.6	61
15	Development and demonstration of an immobilised-polyphenol oxidase bioprobe for the detection of phenolic pollutants in water. Analytica Chimica Acta, 1999, 389, 161-170.	5.4	60
16	Lipase-catalysed synthesis of esters of ferulic acid with natural compounds and evaluation of their antioxidant properties. Journal of Molecular Catalysis B: Enzymatic, 2009, 56, 277-282.	1.8	59
17	Fungal Bioremediation of Phenolic Wastewaters in an Airlift Reactor. Biotechnology Progress, 2008, 21, 1068-1074.	2.6	57
18	Actinobacterial Peroxidases: an Unexplored Resource for Biocatalysis. Applied Biochemistry and Biotechnology, 2011, 164, 681-713.	2.9	56

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19	Improving the bioremediation of phenolic wastewaters by Trametes versicolor. Bioresource Technology, 2007, 98, 579-587.	9.6	55
20	Laccase-Mediated Oxidation of Totarol. Advanced Synthesis and Catalysis, 2007, 349, 1507-1513.	4.3	49
21	Activity of mushroom polyphenol oxidase in organic medium. Biotechnology and Bioengineering, 1993, 42, 938-944.	3.3	48
22	Degradation of low rank coal by Trichoderma atroviride ES11. Journal of Industrial Microbiology and Biotechnology, 2007, 34, 625-631.	3.0	46
23	Bacterial diversity in the rhizosphere of Proteaceae species. Environmental Microbiology, 2005, 7, 1755-1768.	3.8	45
24	Developments in nitrile and amide biotransformation processes. Trends in Biotechnology, 2010, 28, 561-569.	9.3	45
25	Actinobacteria isolated from termite guts as a source of novel oxidative enzymes. Antonie Van Leeuwenhoek, 2011, 100, 589-605.	1.7	45
26	Enzymatic modification of 2,6-dimethoxyphenol for the synthesis of dimers with high antioxidant capacity. Process Biochemistry, 2012, 47, 1926-1932.	3.7	43
27	Microbial community structure stability, a key parameter in monitoring the development of constructed wetland mesocosms during start-up. Research in Microbiology, 2012, 163, 28-35.	2.1	41
28	Laccase-mediated oxidation of phenolic derivatives. Journal of Molecular Catalysis B: Enzymatic, 2010, 65, 52-57.	1.8	40
29	The effect of mutations near the T1 copper site on the biochemical characteristics of the small laccase from Streptomyces coelicolor A3(2). Enzyme and Microbial Technology, 2015, 68, 23-32.	3.2	40
30	Biotransformation of phenols using immobilised polyphenol oxidase. Journal of Molecular Catalysis B: Enzymatic, 1998, 5, 411-416.	1.8	38
31	Development of bioreactors for application of biocatalysts in biotransformations and bioremediation. Pure and Applied Chemistry, 2001, 73, 77-83.	1.9	36
32	Subtractive hybridization magnetic bead capture: A new technique for the recovery of fullâ€length ORFs from the metagenome. Biotechnology Journal, 2007, 2, 36-40.	3.5	33
33	The effect of the particulate phase on coal biosolubilisation mediated by Trichoderma atroviride in a slurry bioreactor. Fuel Processing Technology, 2008, 89, 123-130.	7.2	32
34	Metagenomics, gene discovery and the ideal biocatalyst. Biochemical Society Transactions, 2004, 32, 298-302.	3.4	31
35	Oxidation of 8-hydroxyquinoline catalyzed by laccase from Trametes pubescens yields an antioxidant aromatic polymer. Journal of Molecular Catalysis B: Enzymatic, 2007, 44, 66-71.	1.8	27
36	Phenolic removal processes in biological sand filters, sand columns and microcosms. Bioresource Technology, 2012, 119, 262-269.	9.6	27

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37	Improving the production of a thermostable amidase through optimising IPTG induction in a highly dense culture of recombinant Escherichia coli. Biochemical Engineering Journal, 2010, 52, 19-24.	3.6	26
38	Novel, Biocatalytically Produced Hydroxytyrosol Dimer Protects against Ultraviolet-Induced Cell Death in Human Immortalized Keratinocytes. Journal of Agricultural and Food Chemistry, 2012, 60, 11509-11517.	5.2	24
39	Treatment of high ethanol concentration wastewater by biological sand filters: Enhanced COD removal and bacterial community dynamics. Journal of Environmental Management, 2012, 109, 54-60.	7.8	24
40	Assessment of temporal and spatial evolution of bacterial communities in a biological sand filter mesocosm treating winery wastewater. Journal of Applied Microbiology, 2013, 115, 91-101.	3.1	24
41	Streptomyces hypolithicus sp. nov., isolated from an Antarctic hypolith community. International Journal of Systematic and Evolutionary Microbiology, 2009, 59, 2032-2035.	1.7	23
42	Immobilization of Geobacillus pallidus RAPc8 nitrile hydratase (NHase) reduces substrate inhibition and enhances thermostability. Journal of Molecular Catalysis B: Enzymatic, 2010, 63, 109-115.	1.8	23
43	Title is missing!. Biotechnology Letters, 1998, 20, 707-711.	2.2	22
44	Ethanol degradation and the benefits of incremental priming in pilot-scale constructed wetlands. Ecological Engineering, 2011, 37, 1453-1459.	3.6	21
45	Microbial responses to solvent and alcohol stress. Biotechnology Journal, 2008, 3, 1388-1397.	3.5	20
46	A novel recombinant ethyl ferulate esterase from Burkholderia multivorans. Journal of Applied Microbiology, 2007, 103, 1610-1620.	3.1	17
47	A novel Pseudomonas putida strain with high levels of hydantoin-converting activity, producing l-amino acids. Journal of Molecular Catalysis B: Enzymatic, 2001, 11, 397-406.	1.8	16
48	Immobilisation of polyphenol oxidase on nylon and polyethersulphone membranes: Effect on product formation. Desalination, 1998, 115, 307-312.	8.2	15
49	Production of enantiomerically pure amino acids: characterisation of South African hydantoinases and hydantoinase-producing bacteria. Journal of Molecular Catalysis B: Enzymatic, 1998, 5, 301-305.	1.8	15
50	Isolation and Characterisation of Sulphur Compounds fromTulbaghia violacea. Planta Medica, 1992, 58, 295-296.	1.3	14
51	Production and characterisation of a novel actinobacterial DyP-type peroxidase and its application in coupling of phenolic monomers. Enzyme and Microbial Technology, 2020, 141, 109654.	3.2	14
52	Activation of mushroom polyphenol oxidase in organic medium by the detergent SDS. Biotechnology Letters, 1995, 17, 627-630.	2.2	13
53	Balancing redox cofactor generation and ATP synthesis: Key microaerobic responses in thermophilic fermentations. Biotechnology and Bioengineering, 2013, 110, 1057-1065.	3.3	13
54	Over-production of hydantoinase and N -carbamoylamino acid amidohydrolase enzymes by regulatory mutants of Agrobacterium tumefaciens. Applied Microbiology and Biotechnology, 2001, 57, 43-49.	3.6	12

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55	Enhanced hydantoinase and N-carbamoylase activity on immobilisation of Agrobacterium tumefaciens. Biotechnology Letters, 2003, 25, 67-72.	2.2	12
56	Molecular Characterization of a Novel Family VIII Esterase from Burkholderia multivorans UWC10. Journal of Molecular Microbiology and Biotechnology, 2007, 13, 181-188.	1.0	12
57	Increasing the scale of peroxidase production byStreptomycessp. strain BSII#1. Journal of Applied Microbiology, 2014, 116, 554-562.	3.1	12
58	Partial purification and characterisation of two actinomycete tyrosinases and their application in cross-linking reactions. Journal of Molecular Catalysis B: Enzymatic, 2015, 122, 353-364.	1.8	12
59	Optimization of catechol production by membrane-immobilized polyphenol oxidase: A modeling approach. Biotechnology and Bioengineering, 2003, 83, 1-7.	3.3	11
60	Mutational analysis of the hydantoin hydrolysis pathway in Pseudomonas putida RU-KM3S. Applied Microbiology and Biotechnology, 2004, 65, 391-400.	3.6	11
61	Distribution of hydantoinase activity in bacterial isolates from geographically distinct environmental sources. Journal of Molecular Catalysis B: Enzymatic, 2006, 39, 160-165.	1.8	10
62	Modelling of immobilised enzyme biocatalytic membrane reactor performance. Journal of Molecular Catalysis B: Enzymatic, 2015, 119, 48-53.	1.8	10
63	Selection ofClostridiumspp. in biological sand filters neutralizing synthetic acid mine drainage. FEMS Microbiology Ecology, 2014, 87, 678-690.	2.7	8
64	Minor differences in sand physicochemistry lead to major differences in bacterial community structure and function after exposure to synthetic acid mine drainage. Biotechnology and Bioprocess Engineering, 2014, 19, 211-220.	2.6	8
65	Worksite-Based Diabetes Disease Management Program. Disease Management: DM, 2002, 5, 1-8.	1.0	7
66	Enhanced operational parameters for amino acid production using hydantoin-hydrolysing enzymes of Pseudomonas putida strain RUKM3s immobilised in EupergitÂ® C. Enzyme and Microbial Technology, 2007, 40, 533-539.	3.2	7
67	Selection of Diazotrophic Bacterial Communities in Biological Sand Filter Mesocosms Used for the Treatment of Phenolic-Laden Wastewater. Microbial Ecology, 2013, 66, 563-570.	2.8	7
68	Designer Ligands. Part 5.1Synthesis of Polydentate Biphenyl Ligands. Synthetic Communications, 2000, 30, 511-522.	2.1	6
69	Genes responsible for hydantoin degradation of a halophilic Ochrobactrum sp. G21 and Delftia sp. I24 â€" New insight into relation of d-hydantoinases and dihydropyrimidinases. Journal of Molecular Catalysis B: Enzymatic, 2008, 52-53, 2-12.	1.8	6
70	Enhanced hydantoin-hydrolyzing enzyme activity in an Agrobacterium tumefaciens strain with two distinct N-carbamoylases. Enzyme and Microbial Technology, 2009, 44, 203-209.	3.2	6
71	Suitability of a modified capillary membrane for growth of fungal biofilms. Desalination, 1998, 115, 303-306.	8.2	5
72	Mechanisms and Applications of Microbial Solvent Tolerance. Microbiology Monographs, 2012, , 177-208.	0.6	3

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73	A dual phase fermentation protocol for the production of hydantoinase and carbamoylase by the wild type Pseudomonas putida RU-KM3. Enzyme and Microbial Technology, 2007, 41, 539-545.	3.2	2
74	Degradation of low rank coal by Trichoderma atroviride ES11. Journal of Industrial Microbiology and Biotechnology, 2007, 34, 633-633.	3.0	2
75	Enzymatic Production of Enantiopure Amino Acids from Mono-substituted Hydantoin Substrates. Methods in Molecular Biology, 2012, 794, 37-54.	0.9	2
76	Analysis of enzyme kinetic measurements for an organic-medium biocatalyst. Biotechnology Letters, 1995, 9, 7-12.	0.5	1
77	Hydantoin-Hydrolyzing Enzymes for the Enantioselective Production of Amino Acids: New Insights and Applications. ChemInform, 2005, 36, no.	0.0	1
78	Development of Biotechnology in South Africa. Electronic Journal of Biotechnology, 2002, 5, .	2.2	0