John E Mcgeehan

List of Publications by Year
in descending order

52	3,267	279798 23	182427 51
papers	citations	h-index	g-index

52	52	52	3931
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Characterization and engineering of a plastic-degrading aromatic polyesterase. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E4350-E4357.	7.1	632
2	Lignocellulose degradation mechanisms across the Tree of Life. Current Opinion in Chemical Biology, 2015, 29, 108-119.	6.1	478
3	Chemical and biological catalysis for plastics recycling and upcycling. Nature Catalysis, 2021, 4, 539-556.	34.4	420
4	Characterization and engineering of a two-enzyme system for plastics depolymerization. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 25476-25485.	7.1	262
5	Techno-economic, life-cycle, and socioeconomic impact analysis of enzymatic recycling of poly(ethylene terephthalate). Joule, 2021, 5, 2479-2503.	24.0	160
6	A promiscuous cytochrome P450 aromatic O-demethylase for lignin bioconversion. Nature Communications, 2018, 9, 2487.	12.8	135
7	Insoluble Aggregates and Protease-resistant Conformers of Prion Protein in Uninfected Human Brains. Journal of Biological Chemistry, 2006, 281, 34848-34858.	3.4	109
8	Structural characterization of a unique marine animal family 7 cellobiohydrolase suggests a mechanism of cellulase salt tolerance. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 10189-10194.	7.1	87
9	Amyloid-Î²42 Interacts Mainly with Insoluble Prion Protein in the Alzheimer Brain. Journal of Biological Chemistry, 2011, 286, 15095-15105.	3.4	75
10	Colouring cryo-cooled crystals: online microspectrophotometry. Journal of Synchrotron Radiation, 2009, 16, 163-172.	2.4	69
11	Advances in spectroscopic methods for biological crystals. 1. Fluorescence lifetime measurements. Journal of Applied Crystallography, 2007, 40, 1105-1112.	4.5	57
12	Critical enzyme reactions in aromatic catabolism for microbial lignin conversion. Nature Catalysis, 2022, 5, 86-98.	34.4	51
13	PrP Conformational Transitions Alter Species Preference of a PrP-specific Antibody. Journal of Biological Chemistry, 2010, 285, 13874-13884.	3.4	50
14	Comparative Performance of PETase as a Function of Reaction Conditions, Substrate Properties, and Product Accumulation. ChemSusChem, 2022, 15, .	6.8	42
15	Enabling microbial syringol conversion through structure-guided protein engineering. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 13970-13976.	7.1	41
16	X-ray radiation-induced damage in DNA monitored by online Raman. Journal of Synchrotron Radiation, 2007, 14, 99-108.	2.4	40
17	Particle Size Reduction of Poly(ethylene terephthalate) Increases the Rate of Enzymatic Depolymerization But Does Not Increase the Overall Conversion Extent. ACS Sustainable Chemistry and Engineering, 2022, 10, 9131-9140.	6.7	39
18	Structural analysis of the genetic switch that regulates the expression of restriction-modification genes. Nucleic Acids Research, 2008, 36, 4778-4787.	14.5	34

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19	X-ray tomographic reconstruction of macromolecular samples. Journal of Applied Crystallography, 2008, 41, 1057-1066.	4.5	28
20	Evolution of the dUTPase Gene of Mammalian and Avian Herpesviruses. Current Protein and Peptide Science, 2001, 2, 325-333.	1.4	27
21	Structural Analysis of Mitochondrial Mutations Reveals a Role for Bigenomic Protein Interactions in Human Disease. PLoS ONE, 2013, 8, e69003.	2.5	25
22	Debottlenecking 4-hydroxybenzoate hydroxylation in Pseudomonas putida KT2440 improves muconate productivity from p-coumarate. Metabolic Engineering, 2022, 70, 31-42.	7.0	25
23	Priorities to inform research on marine plastic pollution in Southeast Asia. Science of the Total Environment, 2022, 841, 156704.	8.0	25
24	Infrared protein crystallography. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2011, 1814, 760-777.	2.3	24
25	Purification and characterisation of a novel DNA methyltransferase, M.AhdI. Nucleic Acids Research, 2003, 31, 2803-2810.	14.5	23
26	Identification and functional prediction of mitochondrial complex III and IV mutations associated with glioblastoma. Neuro-Oncology, 2015, 17, 942-952.	1.2	23
27	Human Mitochondrial Cytochrome b Variants Studied in Yeast: Not All Are Silent Polymorphisms. Human Mutation, 2016, 37, 933-941.	2.5	22
28	Radiation damage to nucleoprotein complexes inÂmacromolecular crystallography. Journal of Synchrotron Radiation, 2015, 22, 213-224.	2.4	21
29	Engineering a Cytochrome P450 for Demethylation of Lignin-Derived Aromatic Aldehydes. Jacs Au, 2021, 1, 252-261.	7.9	20
30	Failure to Detect the Presence of Prions in the Uterine and Gestational Tissues from a Gravida with Creutzfeldt-Jakob Disease. American Journal of Pathology, 2009, 174, 1602-1608.	3.8	19
31	Size Does Matter. Sterically Demanding Metallocene-Substituted 3-Methylidene-Oxindoles Exhibit Poor Kinase Inhibitory Action. Organometallics, 2011, 30, 3177-3181.	2.3	19
32	Biochemical and structural characterization of an aromatic ringâ€“hydroxylating dioxygenase for terephthalic acid catabolism. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2121426119.	7.1	19
33	RNA protects a nucleoprotein complex against radiation damage. Acta Crystallographica Section D: Structural Biology, 2016, 72, 648-657.	2.3	18
34	Raman-assisted crystallography of biomolecules at the synchrotron: Instrumentation, methods and applications. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2011, 1814, 750-759.	2.3	17
35	Cytochromes P450 in the biocatalytic valorization of lignin. Current Opinion in Biotechnology, 2022, 73, 43-50.	6.6	16
36	Concealment of epitope by reduction and alkylation in prion protein. Biochemical and Biophysical Research Communications, 2005, 326, 652-659.	2.1	14

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37	Structural and Biophysical Characterization of the Proteins Interacting with the Herpes Simplex Virus 1 Origin of Replication. Journal of Biological Chemistry, 2009, 284, 16343-16353.	3.4	12
38	Large Multimeric Assemblies of Nucleosome Assembly Protein and Histones Revealed by Small-angle X-ray Scattering and Electron Microscopy. Journal of Biological Chemistry, 2012, 287, 26657-26665.	3.4	12
39	A metastable structure for the compact 30â€nm chromatin fibre. FEBS Letters, 2016, 590, 935-942.	2.8	12
40	The construction of customized nucleosomal arrays. Analytical Biochemistry, 2016, 496, 71-75.	2.4	8
41	A flexible kinetic assay efficiently sorts prospective biocatalysts for PET plastic subunit hydrolysis. RSC Advances, 2022, 12, 8119-8130.	3.6	8
42	Discovery, characterization, and metabolic engineering of Rieske non-heme iron monooxygenases for guaiacol O-demethylation. Chem Catalysis, 2022, 2, 1989-2011.	6.1	8
43	Cloning, expression, purification, and characterisation of the dUTPase encoded by the integrated Bacillus subtilis temperate bacteriophage SPÎ². Protein Expression and Purification, 2005, 42, 92-99.	1.3	6
44	Plastic-embedded protein crystals. Journal of Synchrotron Radiation, 2007, 14, 128-132.	2.4	6
45	Structural analysis of DNAâ€“protein complexes regulating the restrictionâ€“modification systemEsp1396I. Acta Crystallographica Section F: Structural Biology Communications, 2013, 69, 962-966.	0.7	6
46	Non-rigid image registration to reduce beam-induced blurring of cryo-electron microscopy images. Journal of Synchrotron Radiation, 2013, 20, 58-66.	2.4	5
47	A novel strategy for the expression and purification of the DNA methyltransferase, M.AhdI. Protein Expression and Purification, 2004, 37, 236-242.	1.3	4
48	Radiation damage within nucleoprotein complexes studied by macromolecular X-ray crystallography. Radiation Physics and Chemistry, 2016, 128, 118-125.	2.8	4
49	A newly identified Rab-GDI paralogue has a role in neural development in amphibia. Gene, 2017, 599, 78-86.	2.2	4
50	Crystallization and preliminary crystallographic analysis of deoxyuridine 5â€²-triphosphate nucleotidohydrolase fromBacillus subtilis. Acta Crystallographica Section D: Biological Crystallography, 2001, 57, 876-878.	2.5	3
51	Structural and Mutagenic Analysis of the RM Controller Protein C.Esp1396I. PLoS ONE, 2014, 9, e98365.	2.5	3
52	Reply to Kascsak: Definition of the PrP 3F4 Epitope Revisited. Journal of Biological Chemistry, 2010, 285, le6.	3.4	0