

Michael J Mcpherson

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

119
papers

4,925
citations

36
h-index

68
g-index

127
ext. papers

5,428
ext. citations

6.6
avg, IF

4.99
L-index

#	Paper	IF	Citations
119	Affinity purification of fibrinogen using an Affimer column.. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2022 , 1866, 130115	4	
118	One-step gold nanoparticle size-shift assay using synthetic binding proteins and dynamic light scattering. <i>Sensors and Actuators B: Chemical</i> , 2022 , 361, 131709	8.5	1
117	Isolation of Artificial Binding Proteins (Affimer Reagents) for Use in Molecular and Cellular Biology. <i>Methods in Molecular Biology</i> , 2021 , 2247, 105-121	1.4	0
116	Reagentless Affimer- and antibody-based impedimetric biosensors for CEA-detection using a novel non-conducting polymer. <i>Biosensors and Bioelectronics</i> , 2021 , 178, 113013	11.8	8
115	RAS-inhibiting biologics identify and probe druggable pockets including an SII- β allosteric site. <i>Nature Communications</i> , 2021 , 12, 4045	17.4	3
114	Fibrinogen interaction with complement C3: a potential therapeutic target to reduce thrombosis risk. <i>Haematologica</i> , 2021 , 106, 1616-1623	6.6	1
113	Affimer-based impedimetric biosensors for fibroblast growth factor receptor 3 (FGFR3): a novel tool for detection and surveillance of recurrent bladder cancer. <i>Sensors and Actuators B: Chemical</i> , 2021 , 326, 128829	8.5	6
112	Selection and characterisation of Affimers specific for CEA recognition. <i>Scientific Reports</i> , 2021 , 11, 744	4.9	3
111	C-Terminal Domain of the Human Zinc Transporter hZnT8 Is Structurally Indistinguishable from Its Disease Risk Variant (R325W). <i>International Journal of Molecular Sciences</i> , 2020 , 21,	6.3	2
110	Affimer reagents as tools in diagnosing plant virus diseases. <i>Scientific Reports</i> , 2019 , 9, 7524	4.9	6
109	Affimer-Enzyme-Inhibitor Switch Sensor for Rapid Wash-free Assays of Multimeric Proteins. <i>ACS Sensors</i> , 2019 , 4, 3014-3022	9.2	11
108	Affimers as anti-idiotypic affinity reagents for pharmacokinetic analysis of biotherapeutics. <i>BioTechniques</i> , 2019 , 67, 261-269	2.5	7
107	Affimer proteins as a tool to modulate fibrinolysis, stabilize the blood clot, and reduce bleeding complications. <i>Blood</i> , 2019 , 133, 1233-1244	2.2	8
106	Non-immunoglobulin scaffold proteins: Precision tools for studying protein-protein interactions in cancer. <i>New Biotechnology</i> , 2018 , 45, 28-35	6.4	13
105	Oxygen Activation Switch in the Copper Amine Oxidase of Escherichia coli. <i>Biochemistry</i> , 2018 , 57, 5301-5314	5.314	4
104	Identification of the site of oxidase substrate binding in Scytalidium thermophilum catalase. <i>Acta Crystallographica Section D: Structural Biology</i> , 2018 , 74, 979-985	5.5	3
103	Affimer proteins inhibit immune complex binding to Fc γ RIIIa with high specificity through competitive and allosteric modes of action. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, E72-E81	11.5	27

102	Ultraefficient Cap-Exchange Protocol To Compact Biofunctional Quantum Dots for Sensitive Ratiometric Biosensing and Cell Imaging. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 15232-15244	9.5	28
101	Development of an Affimer-antibody combined immunological diagnosis kit for glypican-3. <i>Scientific Reports</i> , 2017 , 7, 9608	4.9	17
100	Passive Picoinjection Enables Controlled Crystallization in a Droplet Microfluidic Device. <i>Small</i> , 2017 , 13, 1702154	11	24
99	Generation of specific inhibitors of SUMO-1- and SUMO-2/3-mediated protein-protein interactions using Affimer (Adhiron) technology. <i>Science Signaling</i> , 2017 , 10,	8.8	30
98	Isolation of isoform-specific binding proteins (Affimers) by phage display using negative selection. <i>Science Signaling</i> , 2017 , 10,	8.8	19
97	Affimer proteins are versatile and renewable affinity reagents. <i>ELife</i> , 2017 , 6,	8.9	103
96	Combinatorial microfluidic droplet engineering for biomimetic material synthesis. <i>Science Advances</i> , 2016 , 2, e1600567	14.3	44
95	Label-free electrochemical impedance biosensor to detect human interleukin-8 in serum with sub-pg/ml sensitivity. <i>Biosensors and Bioelectronics</i> , 2016 , 80, 607-613	11.8	87
94	Exploiting orientation-selective DEER: determining molecular structure in systems containing Cu(ii) centres. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 5981-94	3.6	37
93	Rapid preparation of highly reliable PDMS double emulsion microfluidic devices. <i>RSC Advances</i> , 2016 , 6, 25927-25933	3.7	16
92	Phage display selected magnetite interacting Adhiron for shape controlled nanoparticle synthesis. <i>Chemical Science</i> , 2015 , 6, 5586-5594	9.4	28
91	Primary Amine Oxidase of Escherichia coli Is a Metabolic Enzyme that Can Use a Human Leukocyte Molecule as a Substrate. <i>PLoS ONE</i> , 2015 , 10, e0142367	3.7	14
90	Probing the molecular mechanisms in copper amine oxidases by generating heterodimers. <i>ChemBioChem</i> , 2015 , 16, 559-64	3.8	4
89	Adhiron: a stable and versatile peptide display scaffold for molecular recognition applications. <i>Protein Engineering, Design and Selection</i> , 2014 , 27, 145-55	1.9	103
88	Investigating the active centre of the Scytalidium thermophilum catalase. <i>Acta Crystallographica Section F: Structural Biology Communications</i> , 2013 , 69, 369-75		2
87	Structure, recombinant expression and mutagenesis studies of the catalase with oxidase activity from Scytalidium thermophilum. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2013 , 69, 398-408		7
86	Peptide-Based Biomaterials: Rational Molecular Design of Complementary Self-Assembling Peptide Hydrogels (Adv. Healthcare Mater. 5/2012). <i>Advanced Healthcare Materials</i> , 2012 , 1, 679-679	10.1	
85	Recombinant production of the therapeutic peptide lunasin. <i>Microbial Cell Factories</i> , 2012 , 11, 28	6.4	19

84	Recombinant production of self-assembling β -structured peptides using SUMO as a fusion partner. <i>Microbial Cell Factories</i> , 2012 , 11, 92	6.4	11
83	Rational molecular design of complementary self-assembling peptide hydrogels. <i>Advanced Healthcare Materials</i> , 2012 , 1, 640-5	10.1	41
82	A urea channel from <i>Bacillus cereus</i> reveals a novel hexameric structure. <i>Biochemical Journal</i> , 2012 , 445, 157-66	3.8	8
81	Dissecting the mechanism of oxygen trafficking in a metalloenzyme. <i>Faraday Discussions</i> , 2011 , 148, 269-82; discussion 299-314	3.6	2
80	Crystal structure of a prokaryotic homologue of the mammalian oligopeptide-proton symporters, PepT1 and PepT2. <i>EMBO Journal</i> , 2011 , 30, 417-26	13	209
79	PIMS sequencing extension: a laboratory information management system for DNA sequencing facilities. <i>BMC Research Notes</i> , 2011 , 4, 48	2.3	7
78	Tyrosine 381 in <i>E. coli</i> copper amine oxidase influences substrate specificity. <i>Journal of Neural Transmission</i> , 2011 , 118, 1043-53	4.3	5
77	Enhanced expression and purification of fungal galactose oxidase in <i>Escherichia coli</i> and use for analysis of a saturation mutagenesis library. <i>ChemBioChem</i> , 2011 , 12, 593-601	3.8	20
76	Exploring the roles of the metal ions in <i>Escherichia coli</i> copper amine oxidase. <i>Biochemistry</i> , 2010 , 49, 1268-80	3.2	26
75	Additive effects of plant expressed double-stranded RNAs on root-knot nematode development. <i>International Journal for Parasitology</i> , 2010 , 40, 855-64	4.3	42
74	Recombinant self-assembling peptides as biomaterials for tissue engineering. <i>Biomaterials</i> , 2010 , 31, 9395-405	15.6	81
73	Recombinant Production of Self-Assembling Peptides. <i>Advances in Chemical Engineering</i> , 2009 , 79-117	0.6	1
72	Production of self-assembling biomaterials for tissue engineering. <i>Trends in Biotechnology</i> , 2009 , 27, 423-33	15.1	188
71	Bioproduction and characterization of a pH responsive self-assembling peptide. <i>Biotechnology and Bioengineering</i> , 2009 , 103, 241-51	4.9	36
70	Crystallization and preliminary X-ray analysis of a bifunctional catalase-phenol oxidase from <i>Scytalidium thermophilum</i> . <i>Acta Crystallographica Section F: Structural Biology Communications</i> , 2009 , 65, 486-8		3
69	Probing metal ion substrate-binding to the <i>E. coli</i> ZitB exporter in native membranes by solid state NMR. <i>Molecular Membrane Biology</i> , 2008 , 25, 683-90	3.4	13
68	Reliable scale-up of membrane protein over-expression by bacterial auto-induction: from microwell plates to pilot scale fermentations. <i>Molecular Membrane Biology</i> , 2008 , 25, 588-98	3.4	18
67	Large-scale preparation of bacterial cell membranes by tangential flow filtration. <i>Molecular Membrane Biology</i> , 2008 , 25, 609-16	3.4	2

66	A high-throughput assay of membrane protein stability. <i>Molecular Membrane Biology</i> , 2008 , 25, 617-24	3.4	21
65	Investigation of the structure and function of a <i>Shewanella oneidensis</i> arsenical-resistance family transporter. <i>Molecular Membrane Biology</i> , 2008 , 25, 691-705	3.4	19
64	Cross-link formation of the cysteine 228-tyrosine 272 catalytic cofactor of galactose oxidase does not require dioxygen. <i>Biochemistry</i> , 2008 , 47, 10428-39	3.2	40
63	Purification, characterization, and identification of a novel bifunctional catalase-phenol oxidase from <i>Scytalidium thermophilum</i> . <i>Applied Microbiology and Biotechnology</i> , 2008 , 79, 407-15	5.7	36
62	Structure of a xenon derivative of <i>Escherichia coli</i> copper amine oxidase: confirmation of the proposed oxygen-entry pathway. <i>Acta Crystallographica Section F: Structural Biology Communications</i> , 2008 , 64, 1105-9		14
61	The stacking tryptophan of galactose oxidase: a second-coordination sphere residue that has profound effects on tyrosyl radical behavior and enzyme catalysis. <i>Biochemistry</i> , 2007 , 46, 4606-18	3.2	85
60	Hydrazine and amphetamine binding to amine oxidases: old drugs with new prospects. <i>Journal of Neural Transmission</i> , 2007 , 114, 743-6	4.3	4
59	Prokaryotic Copper Amine Oxidases 2006 ,		1
58	Active site rearrangement of the 2-hydrazinopyridine adduct in <i>Escherichia coli</i> amine oxidase to an azo copper(II) chelate form: a key role for tyrosine 369 in controlling the mobility of the TPQ-2HP adduct. <i>Biochemistry</i> , 2005 , 44, 1583-94	3.2	18
57	Role of the interactions between the active site base and the substrate Schiff base in amine oxidase catalysis. Evidence from structural and spectroscopic studies of the 2-hydrazinopyridine adduct of <i>Escherichia coli</i> amine oxidase. <i>Biochemistry</i> , 2005 , 44, 1568-82	3.2	31
56	RNA interference and plant parasitic nematodes. <i>Trends in Plant Science</i> , 2005 , 10, 362-7	13.1	75
55	RNA interference of dual oxidase in the plant nematode <i>Meloidogyne incognita</i> . <i>Molecular Plant-Microbe Interactions</i> , 2005 , 18, 1099-106	3.6	92
54	Structural and kinetic studies of a series of mutants of galactose oxidase identified by directed evolution. <i>Protein Engineering, Design and Selection</i> , 2004 , 17, 141-8	1.9	25
53	A peptide inhibitor of vascular adhesion protein-1 (VAP-1) blocks leukocyte-endothelium interactions under shear stress. <i>European Journal of Immunology</i> , 2004 , 34, 2276-85	6.1	37
52	Enhanced fructose oxidase activity in a galactose oxidase variant. <i>ChemBioChem</i> , 2004 , 5, 972-9	3.8	29
51	Medical implications from the crystal structure of a copper-containing amine oxidase complexed with the antidepressant drug tranylcypromine. <i>FEBS Letters</i> , 2004 , 576, 301-5	3.8	17
50	Engineering plants for nematode resistance. <i>Annual Review of Phytopathology</i> , 2003 , 41, 615-39	10.8	88
49	Cofactor processing in galactose oxidase. <i>Biochemical Society Transactions</i> , 2003 , 31, 506-9	5.1	4

48	Probing the catalytic mechanism of Escherichia coli amine oxidase using mutational variants and a reversible inhibitor as a substrate analogue. <i>Biochemical Journal</i> , 2002 , 365, 809-16	3.8	24
47	Analysis of the distribution of copper amine oxidase in cell walls of legume seedlings. <i>Planta</i> , 2001 , 214, 37-45	4.7	42
46	Crystal structure of the precursor of galactose oxidase: an unusual self-processing enzyme. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2001 , 98, 12932-7	11.5	97
45	Conserved tyrosine-369 in the active site of Escherichia coli copper amine oxidase is not essential. <i>Biochemistry</i> , 2001 , 40, 12808-18	3.2	24
44	Protease inhibitors and directed evolution: enhancing plant resistance to nematodes. <i>Biochemical Society Symposia</i> , 2001 , 125-42		6
43	CRYSTAL STRUCTURE OF THE PRECURSOR OF GALACTOSE OXIDASE. <i>Biochemical Society Transactions</i> , 2000 , 28, A77-A77	5.1	1
42	Investigation into the mechanism of \ln_{ax} shifts and their dependence on pH for the 2-hydrazinopyridine derivatives of two copper amine oxidases. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2000 , 8, 17-25		12
41	Transgenic resistance to the nematode <i>Rotylenchulus reniformis</i> conferred by <i>Arabidopsis thaliana</i> plants expressing proteinase inhibitors. <i>Molecular Breeding</i> , 2000 , 6, 257-264	3.4	47
40	Galactose Oxidase Pro-Sequence Cleavage and Cofactor Assembly Are Self-Processing Reactions. <i>Journal of the American Chemical Society</i> , 2000 , 122, 990-991	16.4	76
39	Visualization of dioxygen bound to copper during enzyme catalysis. <i>Science</i> , 1999 , 286, 1724-8	33.3	154
38	The active site base controls cofactor reactivity in Escherichia coli amine oxidase: x-ray crystallographic studies with mutational variants. <i>Biochemistry</i> , 1999 , 38, 8217-27	3.2	84
37	Enhanced transgenic plant resistance to nematodes by dual proteinase inhibitor constructs. <i>Planta</i> , 1998 , 204, 472-9	4.7	133
36	Developmental expression and biochemical analysis of the <i>Arabidopsis atao1</i> gene encoding an H ₂ O ₂ -generating diamine oxidase. <i>Plant Journal</i> , 1998 , 13, 781-91	6.9	151
35	Catalytic mechanism of the quinoenzyme amine oxidase from Escherichia coli: exploring the reductive half-reaction. <i>Biochemistry</i> , 1997 , 36, 1608-20	3.2	144
34	Kinetic Studies on the Redox Interconversion of GOase(semi) and GOase(ox) Forms of Galactose Oxidase with Inorganic Complexes as Redox Partners. <i>Inorganic Chemistry</i> , 1997 , 36, 4520-4525	5.1	36
33	Continual green-fluorescent protein monitoring of cauliflower mosaic virus 35S promoter activity in nematode-induced feeding cells in <i>Arabidopsis thaliana</i> . <i>Molecular Plant-Microbe Interactions</i> , 1997 , 10, 394-400	3.6	84
32	Characterization of cDNAs encoding serine proteinases from the soybean cyst nematode <i>Heterodera glycines</i> . <i>Molecular and Biochemical Parasitology</i> , 1997 , 89, 195-207	1.9	34
31	Structure and mechanism of galactose oxidase: catalytic role of tyrosine 495. <i>Journal of Biological Inorganic Chemistry</i> , 1997 , 2, 327-335	3.7	34

30	Properties of the Trp290His variant of Fusarium NRRL 2903 galactose oxidase: interactions of the GOase semi state with different buffers, its redox activity and ability to bind azide. <i>Journal of Biological Inorganic Chemistry</i> , 1997 , 2, 702-709	3.7	17
29	Resistance to both cyst and root-knot nematodes conferred by transgenic Arabidopsis expressing a modified plant cystatin. <i>Plant Journal</i> , 1997 , 12, 455-61	6.9	160
28	Engineering Plant Nematode Resistance by Anti-Feedants. <i>Developments in Plant Pathology</i> , 1997 , 237-249		4
27	Engineered oryzacystatin-I expressed in transgenic hairy roots confers resistance to <i>Globodera pallida</i> . <i>Plant Journal</i> , 1995 , 8, 121-31	6.9	210
26	Involvement of the NH ₂ -terminal region of oryzacystatin-I in cysteine proteinase inhibition. <i>Protein Engineering, Design and Selection</i> , 1995 , 8, 1303-7	1.9	17
25	Cloning and molecular analysis of the pea seedling copper amine oxidase. <i>Journal of Biological Chemistry</i> , 1995 , 270, 16939-46	5.4	99
24	Molecular and functional studies of copper amine oxidase from <i>Arabidopsis thaliana</i> . <i>Biochemical Society Transactions</i> , 1995 , 23, 630S	5.1	2
23	Tyrosine 495 is a key residue in the active site of galactose oxidase. <i>Biochemical Society Transactions</i> , 1995 , 23, 510S	5.1	17
22	Designs for engineered resistance to root-parasitic nematodes. <i>Trends in Biotechnology</i> , 1995 , 13, 369-374	5.1	54
21	Novel Plant Defences Against Nematodes 1994 , 197-210		4
20	Cellulose-triggered sporulation in the galactose oxidase-producing fungus <i>Cladobotryum (Dactylium) dendroides</i> NRRL 2903 and its re-identification as a species of <i>Fusarium</i> . <i>Mycological Research</i> , 1994 , 98, 474-480		35
19	Crystallization of the NADP(+)-dependent glutamate dehydrogenase from <i>Escherichia coli</i> . <i>Journal of Molecular Biology</i> , 1993 , 234, 1270-3	6.5	9
18	Galactose oxidase: molecular analysis and mutagenesis studies. <i>Biochemical Society Transactions</i> , 1993 , 21 (Pt 3), 752-6	5.1	25
17	Preliminary studies of two active site mutants of galactose oxidase. <i>Biochemical Society Transactions</i> , 1993 , 21 (Pt 3), 319S	5.1	4
16	The <i>gdhA1</i> point mutation in <i>Escherichia coli</i> K12 CLR207 alters a key lysine residue of glutamate dehydrogenase. <i>Molecular Genetics and Genomics</i> , 1993 , 240, 286-9		7
15	Three-dimensional structure of galactose oxidase: an enzyme with a built-in secondary cofactor. <i>Faraday Discussions</i> , 1992 , 75-84	3.6	35
14	Efficient deletion mutagenesis by PCR. <i>Protein Engineering, Design and Selection</i> , 1992 , 5, 467-8	1.9	10
13	Molecular events at nematode-induced feeding sites. <i>European Journal of Plant Pathology</i> , 1992 , 98, 175-181		1

12	The glutamate dehydrogenase gene of <i>Clostridium symbiosum</i> . Cloning by polymerase chain reaction, sequence analysis and over-expression in <i>Escherichia coli</i> . <i>FEBS Journal</i> , 1992 , 206, 151-9		89
11	Novel thioether bond revealed by a 1.7 Å crystal structure of galactose oxidase. <i>Nature</i> , 1991 , 350, 87-90	5.4	675
10	Gene expression in nematode-infected plant roots. <i>Molecular Genetics and Genomics</i> , 1991 , 226, 361-6		38
9	Structural analysis of galactose oxidase. <i>Biochemical Society Transactions</i> , 1990 , 18, 931-2	5.1	6
8	Multiple interactions of lysine-128 of <i>Escherichia coli</i> glutamate dehydrogenase revealed by site-directed mutagenesis studies. <i>Protein Engineering, Design and Selection</i> , 1988 , 2, 147-52	1.9	22
7	Multimolecular organization of the bacterial enzyme pullulanase. <i>Biochemical Society Transactions</i> , 1988 , 16, 722-723	5.1	
6	Functional analysis of the starch debranching enzyme pullulanase. <i>Biochemical Society Transactions</i> , 1988 , 16, 723-724	5.1	
5	Site-directed mutagenesis studies of <i>Escherichia coli</i> glutamate dehydrogenase. <i>Biochemical Society Transactions</i> , 1988 , 16, 874-875	5.1	
4	The <i>Klebsiella aerogenes</i> glutamate dehydrogenase (gdhA) gene: cloning, high-level expression and hybrid enzyme formation in <i>Escherichia coli</i> . <i>Molecular Genetics and Genomics</i> , 1985 , 199, 141-5		17
3	Respiratory nitrate reductase of <i>Escherichia coli</i> . Sequence identification of the large subunit gene. <i>FEBS Letters</i> , 1984 , 177, 260-4	3.8	28
2	Complete nucleotide sequence of the <i>Escherichia coli</i> gdhA gene. <i>Nucleic Acids Research</i> , 1983 , 11, 5257-66	1	88
1	Localisation of a strongly conserved section of coding sequence in glutamate dehydrogenase genes. <i>FEBS Letters</i> , 1982 , 147, 21-5	3.8	35