

# Alexander McPherson

## List of Publications by Year in descending order

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140  
papers

6,983  
citations

61687

45  
h-index

73587

79  
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144  
all docs

144  
docs citations

144  
times ranked

6568  
citing authors

#	ARTICLE	IF	CITATIONS
1	Structures of two novel crystal forms of <i>Aspergillus oryzae</i> alpha amylase (taka-amylase). <i>Journal of Bioscience and Bioengineering</i> , 2021, 131, 605-612.	1.1	4
2	Atomic-Force Microscopy (AFM) Investigation of Viruses. , 2021, , 218-232.		0
3	Structures of additional crystal forms of Satellite tobacco mosaic virus grown from a variety of salts. <i>Acta Crystallographica Section F, Structural Biology Communications</i> , 2021, 77, 473-483.	0.4	2
4	Crystal structure of a proteolytically cleaved, amino terminal domain of apolipoprotein E3. <i>Biochemical and Biophysical Research Communications</i> , 2020, 525, 57-60.	1.0	2
5	Binding of benzoic acid and anions within the cupin domains of the vicilin protein canavalin from jack bean ( <i>Canavalia ensiformis</i> ): Crystal structures. <i>Biochemical and Biophysical Research Communications</i> , 2020, 524, 268-271.	1.0	2
6	The Crystal Structures of <i>Thermomyces (Humicola) Lanuginosa</i> Lipase in Complex with Enzymatic Reactants. <i>Current Enzyme Inhibition</i> , 2020, 16, 199-213.	0.3	5
7	pH and Redox Induced Color Changes in Protein Crystals Suffused with Dyes. <i>Crystals</i> , 2019, 9, 126.	1.0	1
8	The structure of bovine $\hat{I}^2$ -lactoglobulin in crystals grown at pH 3.8 exhibiting novel threefold twinning. <i>Acta Crystallographica Section F, Structural Biology Communications</i> , 2019, 75, 640-645.	0.4	2
9	The crystal structure of the $\hat{I}^2$ subunit of luteinizing hormone and a model for the intact hormone. <i>Current Research in Structural Biology</i> , 2019, 1, 1-5.	1.1	1
10	The structure of an iron-containing alcohol dehydrogenase from a hyperthermophilic archaeon in two chemical states. <i>Acta Crystallographica Section F, Structural Biology Communications</i> , 2019, 75, 217-226.	0.4	7
11	Lattice Interactions in Crystals of Soybean Trypsin Inhibitor (Kunitz) Produced by Inclusion of 1,5-Disulfonylnaphthalene. <i>Crystal Growth and Design</i> , 2019, 19, 2963-2969.	1.4	4
12	The structure of human apolipoprotein C-1 in four different crystal forms. <i>Journal of Lipid Research</i> , 2019, 60, 400-411.	2.0	9
13	The X-ray crystal structure of human endothelin 1, a polypeptide hormone regulator of blood pressure. <i>Acta Crystallographica Section F, Structural Biology Communications</i> , 2019, 75, 47-53.	0.4	5
14	Penetration of dyes into protein crystals. <i>Acta Crystallographica Section F, Structural Biology Communications</i> , 2019, 75, 132-140.	0.4	3
15	Investigation into the binding of dyes within protein crystals. <i>Acta Crystallographica Section F, Structural Biology Communications</i> , 2018, 74, 593-602.	0.4	5
16	Protein Crystallization. <i>Methods in Molecular Biology</i> , 2017, 1607, 17-50.	0.4	37
17	The structure of the Pfp1 protease from the hyperthermophilic archaeon <i>Thermococcus thioreducens</i> in two crystal forms. <i>Acta Crystallographica Section D: Structural Biology</i> , 2017, 73, 749-756.	1.1	3
18	A guide to the crystallographic analysis of icosahedral viruses. <i>Crystallography Reviews</i> , 2015, 21, 3-56.	0.4	6

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19	Introduction to protein crystallization. Acta Crystallographica Section F, Structural Biology Communications, 2014, 70, 2-20.	0.4	291
20	Optimization of crystallization conditions for biological macromolecules. Acta Crystallographica Section F, Structural Biology Communications, 2014, 70, 1445-1467.	0.4	84
21	Mechanisms, kinetics, impurities and defects: consequences in macromolecular crystallization. Acta Crystallographica Section F, Structural Biology Communications, 2014, 70, 384-403.	0.4	22
22	<i>Satellite tobacco mosaic virus</i> refined to 1.4Å resolution. Acta Crystallographica Section D: Biological Crystallography, 2014, 70, 2316-2330.	2.5	14
23	The crystallographic structure of Panicum Mosaic Virus (PMV). Journal of Structural Biology, 2013, 181, 37-52.	1.3	13
24	Morphogenesis of Mimivirus and Its Viral Factories: an Atomic Force Microscopy Study of Infected Cells. Journal of Virology, 2013, 87, 11200-11213.	1.5	43
25	An atomic force microscopy investigation of cyanophage structure. Micron, 2012, 43, 1336-1342.	1.1	9
26	A model for the structure of satellite tobacco mosaic virus. Journal of Structural Biology, 2012, 180, 110-116.	1.3	37
27	Tyrosine Microcrystals Produced by Digestion of Proteins with Pancreatic Enzymes. Crystal Growth and Design, 2012, 12, 3594-3602.	1.4	2
28	Atomic Force Microscopy in Imaging of Viruses and Virus-Infected Cells. Microbiology and Molecular Biology Reviews, 2011, 75, 268-285.	2.9	116
29	Nano-fibers produced by viral infection of amoeba visualized by atomic force microscopy. Biopolymers, 2011, 95, 234-239.	1.2	4
30	Investigation of bacteriophage T4 by atomic force microscopy. Bacteriophage, 2011, 1, 165-173.	1.9	13
31	Atomic Force Microscopy Investigation of Viruses. Methods in Molecular Biology, 2011, 736, 171-195.	0.4	13
32	Atomic force microscopy investigation of the giant mimivirus. Virology, 2010, 404, 127-137.	1.1	73
33	Structure of a crystal form of human methemoglobin indicative of fiber formation. Acta Crystallographica Section D: Biological Crystallography, 2010, 66, 1316-1322.	2.5	2
34	Structure of bovine pancreatic ribonuclease complexed with uridine 5'-monophosphate at 1.60Å resolution. Acta Crystallographica Section F: Structural Biology Communications, 2010, 66, 113-120.	0.7	3
35	Biophysical and atomic force microscopy characterization of the RNA from satellite tobacco mosaic virus. Nucleic Acids Research, 2010, 38, 8284-8294.	6.5	18
36	The Three-Dimensional Structure of Mimivirus. Intervirology, 2010, 53, 268-273.	1.2	58

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37	Structural analysis of a <i>Synechococcus</i> myovirus S-CAM4 and infected cells by atomic force microscopy. <i>Journal of General Virology</i> , 2010, 91, 3095-3104.	1.3	10
38	X-ray Crystallographic Analyses of Pig Pancreatic $\alpha$ -Amylase with Limit Dextrin, Oligosaccharide, and $\alpha$ -Cyclodextrin. <i>Biochemistry</i> , 2010, 49, 3101-3115.	1.2	48
39	Structural Studies of the Giant Mimivirus. <i>PLoS Biology</i> , 2009, 7, e1000092.	2.6	209
40	High-resolution structure of proteinase K cocrystallized with digalacturonic acid. <i>Acta Crystallographica Section F: Structural Biology Communications</i> , 2009, 65, 192-198.	0.7	5
41	Structure of pig heart citrate synthase at 1.78 Å resolution. <i>Acta Crystallographica Section F: Structural Biology Communications</i> , 2009, 65, 430-434.	0.7	16
42	Crystal structure and nanoanatomy of the <i>E. coli</i> RecA protein. <i>FASEB Journal</i> , 2008, 22, 591.7.	0.2	0
43	Mutation in the Glycosylated Gag Protein of Murine Leukemia Virus Results in Reduced In Vivo Infectivity and a Novel Defect in Viral Budding or Release. <i>Journal of Virology</i> , 2007, 81, 3685-3692.	1.5	33
44	Operator-assisted harvesting of protein crystals using a universal micromanipulation robot. <i>Journal of Applied Crystallography</i> , 2007, 40, 539-545.	1.9	26
45	A novel strategy for the crystallization of proteins: X-ray diffraction validation. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2007, 63, 310-318.	2.5	29
46	A new crystal form of bovine pancreatic RNase A in complex with 2'-deoxyguanosine-5'-monophosphate. <i>Acta Crystallographica Section F: Structural Biology Communications</i> , 2007, 63, 728-733.	0.7	7
47	Development of an alternative approach to protein crystallization. <i>Journal of Structural and Functional Genomics</i> , 2007, 8, 193-198.	1.2	6
48	Searching for silver bullets: An alternative strategy for crystallizing macromolecules. <i>Journal of Structural Biology</i> , 2006, 156, 387-406.	1.3	156
49	Atomic force microscopy investigation of Turnip Yellow Mosaic Virus capsid disruption and RNA extrusion. <i>Virology</i> , 2006, 352, 329-337.	1.1	29
50	Molecular Dynamics Simulations of the Complete Satellite Tobacco Mosaic Virus. <i>Structure</i> , 2006, 14, 437-449.	1.6	390
51	Identification of DNA and RNA from retroviruses using ribonuclease A. <i>Scanning</i> , 2006, 28, 278-281.	0.7	14
52	Unraveling the Architecture of Viruses by High-Resolution Atomic Force Microscopy. , 2005, 292, 085-108.		15
53	The RNA of turnip yellow mosaic virus exhibits icosahedral order. <i>Virology</i> , 2005, 334, 245-254.	1.1	30
54	Micelle formation and crystallization as paradigms for virus assembly. <i>BioEssays</i> , 2005, 27, 447-458.	1.2	76

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55	Preliminary analysis of crystals of panicum mosaic virus (PMV) by X-ray diffraction and atomic force microscopy. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2005, 61, 173-179.	2.5	8
56	Combined use of AFM and X-ray diffraction to analyze crystals of an engineered, domain-deleted antibody. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2005, 61, 416-422.	2.5	6
57	Four crystal forms of a Bence-Jones protein. <i>Acta Crystallographica Section F: Structural Biology Communications</i> , 2005, 61, 79-82.	0.7	3
58	Investigation by Atomic Force Microscopy of the Structure of Ty3 Retrotransposon Particles. <i>Journal of Virology</i> , 2005, 79, 8032-8045.	1.5	27
59	Crystallographic Structure of the T=1 Particle of Brome Mosaic Virus. <i>Journal of Molecular Biology</i> , 2005, 346, 815-831.	2.0	42
60	Atomic force microscopy investigation of a chlorella virus, PBCV-1. <i>Journal of Structural Biology</i> , 2005, 149, 256-263.	1.3	38
61	Protein crystallization in the structural genomics era. <i>Journal of Structural and Functional Genomics</i> , 2004, 5, 3-12.	1.2	32
62	Crystals of the $\hat{I}^2$ -subunit of bovine luteinizing hormone and indicators for the involvement of proteolysis in protein crystallization. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2004, 60, 872-877.	2.5	3
63	Introduction to protein crystallization. <i>Methods</i> , 2004, 34, 254-265.	1.9	214
64	Macromolecular crystallization in the structural genomics era. <i>Journal of Structural Biology</i> , 2003, 142, 1-2.	1.3	20
65	Macromolecular crystal growth as revealed by atomic force microscopy. <i>Journal of Structural Biology</i> , 2003, 142, 32-46.	1.3	50
66	Rapid Visualization at High Resolution of Pathogens by Atomic Force Microscopy. <i>American Journal of Pathology</i> , 2002, 160, 1959-1966.	1.9	55
67	The crystallographic structure of brome mosaic virus. <i>Journal of Molecular Biology</i> , 2002, 317, 95-108.	2.0	138
68	Atomic Force Microscopy Investigation of Fibroblasts Infected with Wild-Type and Mutant Murine Leukemia Virus (MuLV). <i>Biophysical Journal</i> , 2002, 83, 3665-3674.	0.2	45
69	The structure of tomato aspermy virus by X-ray crystallography. <i>Journal of Structural Biology</i> , 2002, 139, 90-102.	1.3	26
70	Biophysical Studies on the RNA Cores of Satellite Tobacco Mosaic Virus. <i>Biophysical Journal</i> , 2001, 80, 2364-2371.	0.2	23
71	X-ray diffraction and atomic force microscopy analysis of twinned crystals: rhombohedral canavalin. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2001, 57, 829-839.	2.5	20
72	Atomic force microscopy applications in macromolecular crystallography. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2001, 57, 1053-1060.	2.5	49

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73	Self-repair of biological fibers catalyzed by the surface of a virus crystal. <i>Proteins: Structure, Function and Bioinformatics</i> , 2001, 44, 392-396.	1.5	5
74	The liquid protein phase in crystallization: a case study of intact immunoglobulins. <i>Journal of Crystal Growth</i> , 2001, 232, 30-39.	0.7	69
75	The influence of precipitant concentration on macromolecular crystal growth mechanisms. <i>Journal of Crystal Growth</i> , 2001, 232, 114-118.	0.7	17
76	Crystallization of Brome Mosaic Virus and T = 1 Brome Mosaic Virus Particles Following a Structural Transition. <i>Virology</i> , 2001, 286, 290-303.	1.1	51
77	Structural Transitions of Satellite Tobacco Mosaic Virus Particles. <i>Virology</i> , 2001, 284, 223-234.	1.1	19
78	A comparison of salts for the crystallization of macromolecules. <i>Protein Science</i> , 2001, 10, 418-422.	3.1	102
79	Satellite tobacco mosaic virus RNA: structure and implications for assembly. <i>Current Opinion in Structural Biology</i> , 2001, 11, 59-65.	2.6	72
80	Macromolecular Crystals in the Service of Biotechnology and Medicine. <i>Materials Research Society Symposia Proceedings</i> , 2000, 620, 1.	0.1	0
81	In situ X-ray crystallography. <i>Journal of Applied Crystallography</i> , 2000, 33, 397-400.	1.9	26
82	The refined structure of canavalin from jack bean in two crystal forms at 2.1 and 2.0 Å resolution. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2000, 56, 411-420.	2.5	50
83	Atomic force microscopy studies of icosahedral virus crystal growth. <i>Colloids and Surfaces B: Biointerfaces</i> , 2000, 19, 333-346.	2.5	24
84	ISS: A science classroom for America. <i>AIP Conference Proceedings</i> , 2000, , .	0.3	1
85	An observable protein crystal growth apparatus for studying the effects of microgravity on protein crystallization. <i>AIP Conference Proceedings</i> , 2000, , .	0.3	0
86	Refined structure of desmodium yellow mottle tymovirus at 2.7 Å resolution. Edited by T. Richmond. <i>Journal of Molecular Biology</i> , 2000, 301, 625-642.	2.0	31
87	Chimeric Human Simian Anti-CD4 Antibodies Form Crystalline High Symmetry Particles. <i>Journal of Structural Biology</i> , 2000, 131, 108-115.	1.3	15
88	Atomic Force Microscopy in the Study of Macromolecular Crystal Growth. <i>Annual Review of Biophysics and Biomolecular Structure</i> , 2000, 29, 361-410.	18.3	105
89	The advancement and structure of growth steps on thaumatin crystals visualized by atomic force microscopy at molecular resolution. <i>Surface Science</i> , 1999, 440, 69-80.	0.8	38
90	Surface Processes in the Crystallization of Turnip Yellow Mosaic Virus Visualized by Atomic Force Microscopy. <i>Journal of Structural Biology</i> , 1999, 127, 35-43.	1.3	58

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91	Crystal-Growing in Space. Science, 1999, 283, 1455f-1455.	6.0	6
92	Comparison of the conformations of two intact monoclonal antibodies with hinges*. Immunological Reviews, 1998, 163, 35-43.	2.8	43
93	Crystallographic structure of an intact IgG1 monoclonal antibody 1 Edited by I. A. Wilson. Journal of Molecular Biology, 1998, 275, 861-872.	2.0	418
94	Refined structure of satellite tobacco mosaic virus at 1.8 Å... resolution. Journal of Molecular Biology, 1998, 277, 37-59.	2.0	110
95	The Crystallographic Structure of the Subtilisin Protease from Penicillium cyclopium,. Biochemistry, 1997, 36, 6597-6604.	1.2	16
96	Refined Structure of an Intact IgG2a Monoclonal Antibody. Biochemistry, 1997, 36, 1581-1597.	1.2	435
97	Atomic Force Microscopy Studies of Living Cells: Visualization of Motility, Division, Aggregation, Transformation, and Apoptosis. Journal of Structural Biology, 1997, 120, 180-191.	1.3	65
98	Recent advances in the microgravity crystallization of biological macromolecules. Trends in Biotechnology, 1997, 15, 197-200.	4.9	32
99	Incorporation of microcrystals by growing protein and virus crystals. , 1996, 24, 247-252.		57
100	Crystallization of biological macromolecules from flash frozen samples on the Russian Space Station Mir. , 1996, 52, 449-458.		26
101	Incorporation of impurities into macromolecular crystals. Journal of Crystal Growth, 1996, 168, 74-92.	0.7	56
102	Crystal structure of turnip yellow mosaic virus. Nature Structural and Molecular Biology, 1996, 3, 771-781.	3.6	124
103	Macromolecular Crystal Growth in Microgravity. Crystallography Reviews, 1996, 6, 157-305.	0.4	42
104	Preliminary X-ray diffraction analysis of crystals of turnip yellow mosaic virus (TYMV). Proteins: Structure, Function and Bioinformatics, 1995, 21, 78-81.	1.5	16
105	Preliminary X-ray diffraction analysis of crystals of tomato aspermy virus (TAV). Proteins: Structure, Function and Bioinformatics, 1995, 21, 265-267.	1.5	2
106	Crystallization of intact monoclonal antibodies. Proteins: Structure, Function and Bioinformatics, 1995, 23, 285-289.	1.5	51
107	The structure of satellite panicum mosaic virus at 1.9 Å... resolution. Nature Structural Biology, 1995, 2, 882-890.	9.7	57
108	Structural Comparison of the Plant Satellite Viruses. Virology, 1995, 214, 571-583.	1.1	45

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109	Structure of an anti-idiotypic Fab against feline peritonitis virus neutralizing antibody and a comparison with the complexed Fab. FASEB Journal, 1995, 9, 107-114.	0.2	24
110	Refined Molecular Structure of Pig Pancreatic $\alpha$ -Amylase at 2.1 Å... Resolution. Journal of Molecular Biology, 1994, 235, 1560-1584.	2.0	166
111	Crystallization and Preliminary X-ray Analysis of Human Plasma Apolipoprotein C-I. Journal of Molecular Biology, 1994, 236, 382-384.	2.0	15
112	Characterization of Crystals of Satellite Panicum Mosaic Virus. Journal of Molecular Biology, 1994, 238, 849-851.	2.0	8
113	Light scattering investigations of protein and virus crystal growth: ferritin, apoferritin and satellite tobacco mosaic virus. Journal of Crystal Growth, 1993, 128, 1232-1235.	0.7	61
114	Crystallization of satellite tobacco mosaic virus I. Nucleation phenomena. Journal of Crystal Growth, 1993, 126, 544-554.	0.7	57
115	Double-helical RNA in satellite tobacco mosaic virus. Nature, 1993, 361, 179-182.	13.7	102
116	Three-dimensional Structure of Satellite Tobacco Mosaic Virus at 2.9 Å... Resolution. Journal of Molecular Biology, 1993, 231, 375-391.	2.0	62
117	PCR cloning of the full-length cDNA for the seed protein canavalin from the jack bean plant, <i>Canavalia ensiformis</i> . Plant Molecular Biology, 1992, 18, 147-149.	2.0	7
118	Macromolecular crystal growth experiments on international microgravity laboratory "1. Protein Science, 1992, 1, 1254-1268.	3.1	85
119	The three-dimensional structure of an intact monoclonal antibody for canine lymphoma. Nature, 1992, 360, 369-372.	13.7	236
120	Two approaches to the rapid screening of crystallization conditions. Journal of Crystal Growth, 1992, 122, 161-167.	0.7	55
121	A brief history of protein crystal growth. Journal of Crystal Growth, 1991, 110, 1-10.	0.7	80
122	Current approaches to macromolecular crystallization. FEBS Journal, 1990, 189, 1-23.	0.2	313
123	Preliminary Crystallographic Analysis of a Proteolytically Modified Form of E. coli Single Stranded DNA Binding Protein. Journal of Biomolecular Structure and Dynamics, 1989, 6, 1071-1076.	2.0	6
124	Science in Pictures: Macromolecular Crystals. Scientific American, 1989, 260, 62-69.	1.0	68
125	Preliminary analysis of crystals of satellite tobacco mosaic virus. Journal of Molecular Biology, 1989, 209, 323-325.	2.0	31
126	Interactions of Biological Macromolecules Visualized by X-ray Crystallography. Crystallography Reviews, 1987, 1, 191-250.	0.4	9



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127	Crystal structure of RNase A complexed with d(pA) <sub>4</sub> . Journal of Molecular Biology, 1986, 189, 305-327.	2.0	48
128	The effects of neutral detergents on the crystallization of soluble proteins. Journal of Crystal Growth, 1986, 76, 547-553.	0.7	24
129	A model for intracellular complexation between gene-5 protein and bacteriophage fd DNA. FEBS Journal, 1985, 150, 287-296.	0.2	24
130	Cooperative Interactions of the Gene 5 Protein. Journal of Biomolecular Structure and Dynamics, 1984, 2, 495-510.	2.0	20
131	Biochemical and X-Ray Diffraction Analysis of Concanavalin B Crystals from Jack Bean. Plant Physiology, 1984, 76, 175-183.	2.3	21
132	Crystallization of $\hat{I}\pm 1$ -acid glycoprotein. Biochemical and Biophysical Research Communications, 1984, 124, 619-624.	1.0	19
133	Biochemical Characterization of Canavalin, the Major Storage Protein of Jack Bean. Plant Physiology, 1982, 70, 1199-1209.	2.3	50
134	Spatially filtered images of <i>B. subtilis</i> $\hat{I}\pm$ $\hat{E}$ -amylase crystals. Journal of Microscopy, 1981, 121, 201-210.	0.8	1
135	Identification of canavalin as a proteolytically modified form of Jack bean $\hat{I}\pm$ -d-mannosidase. Phytochemistry, 1980, 19, 957-959.	1.4	11
136	The Growth and Preliminary Investigation of Protein and Nucleic Acid Crystals for X-ray Diffraction Analysis. Methods of Biochemical Analysis, 1976, 23, 249-345.	0.2	187
137	Preliminary structure analysis of canavalin from Jack Bean. Archives of Biochemistry and Biophysics, 1975, 169, 650-661.	1.4	41
138	Crystallographic study of beef liver catalase. Archives of Biochemistry and Biophysics, 1973, 157, 23-27.	1.4	25
139	Preliminary study of <i>B. subtilis</i> alpha-amylase crystals by electron microscopy and optical diffraction. Journal of Ultrastructure Research, 1973, 44, 75-84.	1.4	9
140	X-ray crystallographic analysis of swine pancreas $\hat{I}\pm$ -amylase. Biochimica Et Biophysica Acta (BBA) - Protein Structure, 1972, 285, 493-497.	1.7	18