

# Robert McKenna

## List of Publications by Year in descending order

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242  
papers

10,781  
citations

19657  
61  
h-index

48315  
88  
g-index

248  
all docs

248  
docs citations

248  
times ranked

7570  
citing authors

#	ARTICLE	IF	CITATIONS
1	Dithiocarbamates Strongly Inhibit Carbonic Anhydrases and Show Antiglaucoma Action in Vivo. Journal of Medicinal Chemistry, 2012, 55, 1721-1730.	6.4	211
2	Selective hydrophobic pocket binding observed within the carbonic anhydrase II active site accommodate different 4-substituted-ureido-benzenesulfonamides and correlate to inhibitor potency. Chemical Communications, 2010, 46, 8371.	4.1	200
3	Structure of Adeno-Associated Virus Serotype 8, a Gene Therapy Vector. Journal of Virology, 2007, 81, 12260-12271.	3.4	199
4	Entrapment of Carbon Dioxide in the Active Site of Carbonic Anhydrase II. Journal of Biological Chemistry, 2008, 283, 30766-30771.	3.4	197
5	Asparagine synthetase: Function, structure, and role in disease. Journal of Biological Chemistry, 2017, 292, 19952-19958.	3.4	197
6	Structural annotation of human carbonic anhydrases. Journal of Enzyme Inhibition and Medicinal Chemistry, 2013, 28, 267-277.	5.2	189
7	Carbonic Anhydrases: Role in pH Control and Cancer. Metabolites, 2018, 8, 19.	2.9	180
8	<b>Anticonvulsant/antiepileptic carbonic anhydrase inhibitors: a patent review</b>. Expert Opinion on Therapeutic Patents, 2013, 23, 717-724.	5.0	172
9	Structure determination of feline panleukopenia virus empty particles. Proteins: Structure, Function and Bioinformatics, 1993, 16, 155-171.	2.6	167
10	Solvent-Mediated Proton Transfer in Catalysis by Carbonic Anhydrase. Accounts of Chemical Research, 2007, 40, 669-675.	15.6	167
11	Structurally Mapping the Diverse Phenotype of Adeno-Associated Virus Serotype 4. Journal of Virology, 2006, 80, 11556-11570.	3.4	165
12	Structural Insight into the Unique Properties of Adeno-Associated Virus Serotype 9. Journal of Virology, 2012, 86, 6947-6958.	3.4	163
13	Dithiocarbamates: a new class of carbonic anhydrase inhibitors. Crystallographic and kinetic investigations. Chemical Communications, 2012, 48, 1868.	4.1	157
14	Atomic Crystal and Molecular Dynamics Simulation Structures of Human Carbonic Anhydrase II:Â Insights into the Proton Transfer Mechanismâ€¢. Biochemistry, 2007, 46, 2930-2937.	2.5	155
15	Structure and Dynamics of Adeno-Associated Virus Serotype 1 VP1-Unique N-Terminal Domain and Its Role in Capsid Trafficking. Journal of Virology, 2013, 87, 4974-4984.	3.4	151
16	Structural and Kinetic Characterization of Active-Site Histidine as a Proton Shuttle in Catalysis by Human Carbonic Anhydrase II. Biochemistry, 2005, 44, 1097-1105.	2.5	146
17	A Short, Strong Hydrogen Bond in the Active Site of Human Carbonic Anhydrase II. Biochemistry, 2010, 49, 249-251.	2.5	138
18	A class of sulfonamide carbonic anhydrase inhibitors with neuropathic pain modulating effects. Bioorganic and Medicinal Chemistry, 2015, 23, 1828-1840.	3.0	126

#	ARTICLE	IF	CITATIONS
19	Structural Characterization of the Dual Glycan Binding Adeno-Associated Virus Serotype 6. <i>Journal of Virology</i> , 2010, 84, 12945-12957.	3.4	120
20	Comparative Analysis of Adeno-Associated Virus Capsid Stability and Dynamics. <i>Journal of Virology</i> , 2013, 87, 13150-13160.	3.4	114
21	Hypoxia-induced carbonic anhydrase IX facilitates lactate flux in human breast cancer cells by non-catalytic function. <i>Scientific Reports</i> , 2015, 5, 13605.	3.3	109
22	Targeting Carbonic Anhydrase IX Activity and Expression. <i>Molecules</i> , 2015, 20, 2323-2348.	3.8	103
23	Update on carbonic anhydrase inhibitors: a patent review (2008 – 2011). <i>Expert Opinion on Therapeutic Patents</i> , 2012, 22, 903-915.	5.0	102
24	Insights towards sulfonamide drug specificity in $\alpha$ -carbonic anhydrases. <i>Bioorganic and Medicinal Chemistry</i> , 2013, 21, 1526-1533.	3.0	102
25	Capsid Antibodies to Different Adeno-Associated Virus Serotypes Bind Common Regions. <i>Journal of Virology</i> , 2013, 87, 9111-9124.	3.4	102
26	Structural and Kinetic Analysis of the Chemical Rescue of the Proton Transfer Function of Carbonic Anhydrase II. <i>Biochemistry</i> , 2001, 40, 1741-1748.	2.5	101
27	Neutron Diffraction of Acetazolamide-Bound Human Carbonic Anhydrase II Reveals Atomic Details of Drug Binding. <i>Journal of the American Chemical Society</i> , 2012, 134, 14726-14729.	13.7	100
28	Heparin binding induces conformational changes in Adeno-associated virus serotype 2. <i>Journal of Structural Biology</i> , 2009, 165, 146-156.	2.8	98
29	Structural study of interaction between brinzolamide and dorzolamide inhibition of human carbonic anhydrases. <i>Bioorganic and Medicinal Chemistry</i> , 2013, 21, 7210-7215.	3.0	98
30	Non-Classical Inhibition of Carbonic Anhydrase. <i>International Journal of Molecular Sciences</i> , 2016, 17, 1150.	4.1	98
31	Carbonic Anhydrase Inhibitors Drug Design. <i>Sub-Cellular Biochemistry</i> , 2014, 75, 291-323.	2.4	96
32	Thermal Stability as a Determinant of AAV Serotype Identity. <i>Molecular Therapy - Methods and Clinical Development</i> , 2017, 6, 171-182.	4.1	95
33	High-resolution structure of human carbonic anhydrase II complexed with acetazolamide reveals insights into inhibitor drug design. <i>Acta Crystallographica Section F: Structural Biology Communications</i> , 2009, 65, 992-995.	0.7	93
34	Cancer Drug Development of Carbonic Anhydrase Inhibitors beyond the Active Site. <i>Molecules</i> , 2018, 23, 1045.	3.8	93
35	Intramolecular proton shuttle supports not only catalytic but also noncatalytic function of carbonic anhydrase II. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 3071-3076.	7.1	92
36	Sulfonamides incorporating 1,3,5-triazine moieties selectively and potently inhibit carbonic anhydrase transmembrane isoforms IX, XII and XIV over cytosolic isoforms I and II: Solution and X-ray crystallographic studies. <i>Bioorganic and Medicinal Chemistry</i> , 2011, 19, 3105-3119.	3.0	90

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37	Probing the Surface of Human Carbonic Anhydrase for Clues towards the Design of Isoform Specific Inhibitors. <i>BioMed Research International</i> , 2015, 2015, 1-15.	1.9	88
38	Mapping a Neutralizing Epitope onto the Capsid of Adeno-Associated Virus Serotype 8. <i>Journal of Virology</i> , 2012, 86, 7739-7751.	3.4	86
39	Elucidation of the Proton Transport Mechanism in Human Carbonic Anhydrase II. <i>Journal of the American Chemical Society</i> , 2009, 131, 7598-7608.	13.7	84
40	Speeding Up Proton Transfer in a Fast Enzyme: A Kinetic and Crystallographic Studies on the Effect of Hydrophobic Amino Acid Substitutions in the Active Site of Human Carbonic Anhydrase II. <i>Biochemistry</i> , 2007, 46, 3803-3813.	2.5	83
41	Neutron Structure of Human Carbonic Anhydrase II: Implications for Proton Transfer. <i>Biochemistry</i> , 2010, 49, 415-421.	2.5	82
42	Structural Determinants of Tissue Tropism and In Vivo Pathogenicity for the Parvovirus Minute Virus of Mice. <i>Journal of Virology</i> , 2005, 79, 10931-10943.	3.4	79
43	Human Bocavirus Capsid Structure: Insights into the Structural Repertoire of the Parvoviridae. <i>Journal of Virology</i> , 2010, 84, 5880-5889.	3.4	79
44	Structural Studies of Adeno-Associated Virus Serotype 8 Capsid Transitions Associated with Endosomal Trafficking. <i>Journal of Virology</i> , 2011, 85, 11791-11799.	3.4	78
45	Biochemical and Physical Characterization of Parvovirus Minute Virus of Mice Virus-like Particles. <i>Virology</i> , 2000, 267, 299-309.	2.4	75
46	Sulfonamide Inhibitors of Human Carbonic Anhydrases Designed through a Three-Tails Approach: Improving Ligand/Isoform Matching and Selectivity of Action. <i>Journal of Medicinal Chemistry</i> , 2020, 63, 7422-7444.	6.4	75
47	Sub-2 Å Ewald curvature corrected structure of an AAV2 capsid variant. <i>Nature Communications</i> , 2018, 9, 3628.	12.8	73
48	Human Carbonic Anhydrase III: Structural and Kinetic Study of Catalysis and Proton Transfer. <i>Biochemistry</i> , 2005, 44, 10046-10053.	2.5	72
49	Host-Selected Amino Acid Changes at the Sialic Acid Binding Pocket of the Parvovirus Capsid Modulate Cell Binding Affinity and Determine Virulence. <i>Journal of Virology</i> , 2006, 80, 1563-1573.	3.4	72
50	Polylysine Induces an Antiparallel Actin Dimer That Nucleates Filament Assembly. <i>Journal of Biological Chemistry</i> , 2002, 277, 20999-21006.	3.4	70
51	Carbonic anhydrase inhibitors. The X-ray crystal structure of human isoform II in adduct with an adamantyl analogue of acetazolamide resides in a less utilized binding pocket than most hydrophobic inhibitors. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2010, 20, 4376-4381.	2.2	70
52	Carbonic Anhydrase: An Efficient Enzyme with Possible Global Implications. <i>International Journal of Chemical Engineering</i> , 2013, 2013, 1-6.	2.4	70
53	Design of a Carbonic Anhydrase IX Active-Site Mimic To Screen Inhibitors for Possible Anticancer Properties. <i>Biochemistry</i> , 2009, 48, 1322-1331.	2.5	69
54	Anticonvulsant 4-Aminobenzenesulfonamide Derivatives with Branched-Alkylamide Moieties: X-ray Crystallography and Inhibition Studies of Human Carbonic Anhydrase Isoforms I, II, VII, and XIV. <i>Journal of Medicinal Chemistry</i> , 2011, 54, 3977-3981.	6.4	69

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55	Structural Insights into Adeno-Associated Virus Serotype 5. <i>Journal of Virology</i> , 2013, 87, 11187-11199.	3.4	69
56	Saccharin: A lead compound for structure-based drug design of carbonic anhydrase IX inhibitors. <i>Bioorganic and Medicinal Chemistry</i> , 2015, 23, 849-854.	3.0	69
57	Chemical Rescue in Catalysis by Human Carbonic Anhydrases II and III. <i>Biochemistry</i> , 2002, 41, 3235-3242.	2.5	65
58	Structure of Human Carnitine Acetyltransferase. <i>Journal of Biological Chemistry</i> , 2003, 278, 13159-13165.	3.4	64
59	Adeno-Associated Virus Serotype 1 (AAV1)- and AAV5-Antibody Complex Structures Reveal Evolutionary Commonalities in Parvovirus Antigenic Reactivity. <i>Journal of Virology</i> , 2015, 89, 1794-1808.	3.4	64
60	Coumarinyl-substituted sulfonamides strongly inhibit several human carbonic anhydrase isoforms: solution and crystallographic investigations. <i>Bioorganic and Medicinal Chemistry</i> , 2010, 18, 4873-4878.	3.0	63
61	Lactate flux in astrocytes is enhanced by a noncatalytic action of carbonic anhydrase II. <i>Journal of Physiology</i> , 2012, 590, 2333-2351.	2.9	63
62	Characterization of the Adeno-Associated Virus 1 and 6 Sialic Acid Binding Site. <i>Journal of Virology</i> , 2016, 90, 5219-5230.	3.4	63
63	Kinetic and X-ray crystallographic investigations on carbonic anhydrase isoforms I, II, IX and XII of a thioureido analog of SLC-0111. <i>Bioorganic and Medicinal Chemistry</i> , 2016, 24, 976-981.	3.0	63
64	Discovery of New Sulfonamide Carbonic Anhydrase IX Inhibitors Incorporating Nitrogenous Bases. <i>ACS Medicinal Chemistry Letters</i> , 2017, 8, 1314-1319.	2.8	61
65	Identification of the Sialic Acid Structures Recognized by Minute Virus of Mice and the Role of Binding Affinity in Virulence Adaptation. <i>Journal of Biological Chemistry</i> , 2006, 281, 25670-25677.	3.4	60
66	Elucidating the role of metal ions in carbonic anhydrase catalysis. <i>Nature Communications</i> , 2020, 11, 4557.	12.8	60
67	Structure activity study of carbonic anhydrase IX: Selective inhibition with ureido-substituted benzenesulfonamides. <i>European Journal of Medicinal Chemistry</i> , 2017, 132, 184-191.	5.5	58
68	Chemical Rescue of Enzymes: Proton Transfer in Mutants of Human Carbonic Anhydrase II. <i>Journal of the American Chemical Society</i> , 2011, 133, 6223-6234.	13.7	56
69	Structure and inhibition studies of a type II beta-carbonic anhydrase psCA3 from <i>Pseudomonas aeruginosa</i> . <i>Bioorganic and Medicinal Chemistry</i> , 2015, 23, 4831-4838.	3.0	56
70	Short AÎ² peptides attenuate AÎ²42 toxicity in vivo. <i>Journal of Experimental Medicine</i> , 2018, 215, 283-301.	8.5	56
71	Inhibition of Carbonic Anhydrase II by Thioxolone: A Mechanistic and Structural Study. <i>Biochemistry</i> , 2008, 47, 3174-3184.	2.5	54
72	Kinetic and structural characterization of thermostabilized mutants of human carbonic anhydrase II. <i>Protein Engineering, Design and Selection</i> , 2012, 25, 347-355.	2.1	54

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73	Evidence for pH-Dependent Protease Activity in the Adeno-Associated Virus Capsid. <i>Journal of Virology</i> , 2012, 86, 11877-11885.	3.4	53
74	Water Networks in Fast Proton Transfer during Catalysis by Human Carbonic Anhydrase II. <i>Biochemistry</i> , 2013, 52, 125-131.	2.5	53
75	Adeno-Associated Virus Capsid Proteins May Play a Role in Transcription and Second-Strand Synthesis of Recombinant Genomes. <i>Journal of Virology</i> , 2014, 88, 1071-1079.	3.4	53
76	Discovery of $\hat{I}^2$ -Adrenergic Receptors Blockerâ€“Carbonic Anhydrase Inhibitor Hybrids for Multitargeted Antiglaucoma Therapy. <i>Journal of Medicinal Chemistry</i> , 2018, 61, 5380-5394.	6.4	53
77	Neutron Structure of Human Carbonic Anhydrase II: A Hydrogen-Bonded Water Network â€œSwitchâ€•Is Observed between pH 7.8 and 10.0. <i>Biochemistry</i> , 2011, 50, 9421-9423.	2.5	52
78	The Structure of Carbonic Anhydrase IX Is Adapted for Low-pH Catalysis. <i>Biochemistry</i> , 2016, 55, 4642-4653.	2.5	51
79	Structural Insights into Carbonic Anhydrase IX Isoform Specificity of Carbohydrate-Based Sulfamates. <i>Journal of Medicinal Chemistry</i> , 2014, 57, 8635-8645.	6.4	50
80	Sequestration of carbon dioxide by the hydrophobic pocket of the carbonic anhydrases. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2010, 1804, 326-331.	2.3	49
81	Carbonic Anhydrase Inhibition with Benzenesulfonamides and Tetrafluorobenzenesulfonamides Obtained via Click Chemistry. <i>ACS Medicinal Chemistry Letters</i> , 2014, 5, 927-930.	2.8	48
82	Conformational variability of different sulfonamide inhibitors with thienyl-acetamido moieties attributes to differential binding in the active site of cytosolic human carbonic anhydrase isoforms. <i>Bioorganic and Medicinal Chemistry</i> , 2011, 19, 3732-3738.	3.0	47
83	Structure of neurotropic adeno-associated virus AAVrh.8. <i>Journal of Structural Biology</i> , 2015, 192, 21-36.	2.8	47
84	Differential expression and function of CAIX and CAXII in breast cancer: A comparison between tumorgraft models and cells. <i>PLoS ONE</i> , 2018, 13, e0199476.	2.5	47
85	A Class of 4-Sulfamoylphenyl- $\hat{I}$ %-aminoalkyl Ethers with Effective Carbonic Anhydrase Inhibitory Action and Antiglaucoma Effects. <i>Journal of Medicinal Chemistry</i> , 2014, 57, 9673-9686.	6.4	46
86	Inclusion of a 5-fluorouracil moiety in nitrogenous bases derivatives as human carbonic anhydrase IX and XII inhibitors produced a targeted action against MDA-MB-231 and T47D breast cancer cells. <i>European Journal of Medicinal Chemistry</i> , 2020, 190, 112112.	5.5	46
87	Completion of the AAV Structural Atlas: Serotype Capsid Structures Reveals Clade-Specific Features. <i>Viruses</i> , 2021, 13, 101.	3.3	46
88	The Role of Select Subtype Polymorphisms on HIV-1 Protease Conformational Sampling and Dynamics. <i>Journal of Biological Chemistry</i> , 2014, 289, 17203-17214.	3.4	43
89	Production, purification and preliminary X-ray crystallographic studies of adeno-associated virus serotype 1. <i>Acta Crystallographica Section F: Structural Biology Communications</i> , 2006, 62, 1271-1274.	0.7	42
90	Role of Hydrophilic Residues in Proton Transfer during Catalysis by Human Carbonic Anhydrase II. <i>Biochemistry</i> , 2008, 47, 12028-12036.	2.5	41

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91	Carbonic anhydrase inhibitors: a review on the progress of patent literature (2011–2016). Expert Opinion on Therapeutic Patents, 2016, 26, 947-956.	5.0	40
92	"To Be or Not to Be" Protonated: Atomic Details of Human Carbonic Anhydrase-Clinical Drug Complexes by Neutron Crystallography and Simulation. Structure, 2018, 26, 383-390.e3.	3.3	40
93	Transport Activity of the Sodium Bicarbonate Cotransporter NBCe1 Is Enhanced by Different Isoforms of Carbonic Anhydrase. PLoS ONE, 2011, 6, e27167.	2.5	39
94	Structure of an Enteric Pathogen, Bovine Parvovirus. Journal of Virology, 2015, 89, 2603-2614.	3.4	39
95	Cryo-electron Microscopy Reconstruction and Stability Studies of the Wild Type and the R432A Variant of Adeno-associated Virus Type 2 Reveal that Capsid Structural Stability Is a Major Factor in Genome Packaging. Journal of Virology, 2016, 90, 8542-8551.	3.4	39
96	The Escherichia coli Clamp Loader Can Actively Pry Open the $\beta^2$ -Sliding Clamp. Journal of Biological Chemistry, 2011, 286, 42704-42714.	3.4	38
97	Structural and catalytic characterization of a thermally stable and acid-stable variant of human carbonic anhydrase II containing an engineered disulfide bond. Acta Crystallographica Section D: Biological Crystallography, 2013, 69, 1414-1422.	2.5	38
98	Structure–Activity Relationships of Benzenesulfonamide–Based Inhibitors towards Carbonic Anhydrase Isoform Specificity. ChemBioChem, 2017, 18, 213-222.	2.6	38
99	Comparative Analysis of the Capsid Structures of AAVrh.10, AAVrh.39, and AAV8. Journal of Virology, 2020, 94, .	3.4	38
100	Production, purification, crystallization and preliminary X-ray structural studies of adeno-associated virus serotype 5. Acta Crystallographica Section F: Structural Biology Communications, 2005, 61, 917-921.	0.7	37
101	Apo-Human Carbonic Anhydrase II Revisited: Implications of the Loss of a Metal in Protein Structure, Stability, and Solvent Network <sup>&lt;sup&gt;</sup>	2.5	37
102	Structural Insights into Human Bocaparvoviruses. Journal of Virology, 2017, 91, .	3.4	37
103	Crystallography and Its Impact on Carbonic Anhydrase Research. International Journal of Medicinal Chemistry, 2018, 2018, 1-21.	2.2	37
104	High-Resolution Structural Characterization of a New Adeno-associated Virus Serotype 5 Antibody Epitope toward Engineering Antibody-Resistant Recombinant Gene Delivery Vectors. Journal of Virology, 2019, 93, .	3.4	37
105	Carbonic Anhydrases and Their Biotechnological Applications. Biomolecules, 2013, 3, 553-562.	4.0	36
106	Joint neutron crystallographic and NMR solution studies of Tyr residue ionization and hydrogen bonding: Implications for enzyme-mediated proton transfer. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 5673-5678.	7.1	36
107	Origins of Enhanced Proton Transport in the Y7F Mutant of Human Carbonic Anhydrase II. Journal of the American Chemical Society, 2008, 130, 11399-11408.	13.7	35
108	Tricyclic Sulfonamides Incorporating Benzothiopyrano[4,3-c]pyrazole and Pyridothiopyrano[4,3-c]pyrazole Effectively Inhibit $\beta^1$ - and $\beta^2$ -Carbonic Anhydrase: X-ray Crystallography and Solution Investigations on 15 Isoforms. Journal of Medicinal Chemistry, 2012, 55, 9619-9629.	6.4	35



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109	Structural and catalytic effects of proline substitution and surface loop deletion in the extended active site of human carbonic anhydrase <sc>II</sc>. FEBS Journal, 2015, 282, 1445-1457.	4.7	35
110	CAIX forms a transport metabolon with monocarboxylate transporters in human breast cancer cells. Oncogene, 2020, 39, 1710-1723.	5.9	35
111	Structural and kinetic analysis of proton shuttle residues in the active site of human carbonic anhydrase III. Proteins: Structure, Function and Bioinformatics, 2007, 68, 337-343.	2.6	33
112	Selective inhibition of carbonic anhydrase IX over carbonic anhydrase XII in breast cancer cells using benzene sulfonamides: Disconnect between activity and growth inhibition. PLoS ONE, 2018, 13, e0207417.	2.5	32
113	Adeno-Associated Virus (AAV) Capsid Stability and Liposome Remodeling During Endo/Lysosomal pH Trafficking. Viruses, 2020, 12, 668.	3.3	32
114	Structural insights and functional implications of choline acetyltransferase. Journal of Structural Biology, 2004, 148, 226-235.	2.8	31
115	Structural insight into activity enhancement and inhibition of H64A carbonic anhydrase II by imidazoles. IUCr, 2014, 1, 129-135.	2.2	31
116	The structure of AAVrh32.33, a novel gene delivery vector. Journal of Structural Biology, 2014, 186, 308-317.	2.8	31
117	Analysis of the Binding Moiety Mediating the Interaction between Monocarboxylate Transporters and Carbonic Anhydrase II. Journal of Biological Chemistry, 2015, 290, 4476-4486.	3.4	30
118	Tracking solvent and protein movement during CO <sub>2</sub> release in carbonic anhydrase II crystals. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 5257-5262.	7.1	30
119	Structural and Kinetic Study of the Extended Active Site for Proton Transfer in Human Carbonic Anhydrase II. Biochemistry, 2010, 49, 6394-6399.	2.5	29
120	Characterization of AAV-Specific Affinity Ligands: Consequences for Vector Purification and Development Strategies. Molecular Therapy - Methods and Clinical Development, 2020, 19, 362-373.	4.1	29
121	Structural Characterization of H-1 Parvovirus: Comparison of Infectious Virions to Empty Capsids. Journal of Virology, 2013, 87, 5128-5140.	3.4	28
122	An intramolecular lock facilitates folding and stabilizes the tertiary structure of <i>Streptococcus mutans</i> adhesin P1. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 15746-15751.	7.1	28
123	Mapping Antigenic Epitopes on the Human Bocavirus Capsid. Journal of Virology, 2016, 90, 4670-4680.	3.4	28
124	Neutron structure of human carbonic anhydrase II in complex with methazolamide: mapping the solvent and hydrogen-bonding patterns of an effective clinical drug. IUCr, 2016, 3, 319-325.	2.2	27
125	â€œA Sweet Combinationâ€ Developing Saccharin and Acesulfame K Structures for Selectively Targeting the Tumor-Associated Carbonic Anhydrases IX and XII. Journal of Medicinal Chemistry, 2020, 63, 321-333.	6.4	27
126	Crystal Structure of Carbonic Anhydrase II in Complex with an Activating Ligand: Implications in Neuronal Function. Molecular Neurobiology, 2018, 55, 7431-7437.	4.0	26



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127	<i>Pseudomonas aeruginosa</i> $\hat{\Gamma}^2$ -carbonic anhydrase, psCA1, is required for calcium deposition and contributes to virulence. <i>Cell Calcium</i> , 2019, 84, 102080.	2.4	26
128	A non-catalytic function of carbonic anhydrase IX contributes to the glycolytic phenotype and pH regulation in human breast cancer cells. <i>Biochemical Journal</i> , 2019, 476, 1497-1513.	3.7	26
129	Membrane-anchored carbonic anhydrase IV interacts with monocarboxylate transporters via their chaperones CD147 and GP70. <i>Journal of Biological Chemistry</i> , 2019, 294, 593-607.	3.4	26
130	Structural Basis of Nanomolar Inhibition of Tumor-Associated Carbonic Anhydrase IX: X-Ray Crystallographic and Inhibition Study of Lipophilic Inhibitors with Acetazolamide Backbone. <i>Journal of Medicinal Chemistry</i> , 2020, 63, 13064-13075.	6.4	26
131	Actin crystal dynamics: structural implications for F-actin nucleation, polymerization, and branching mediated by the anti-parallel dimer. <i>Journal of Structural Biology</i> , 2004, 146, 291-301.	2.8	25
132	Mapping Selective Inhibition of the Cancer-Related Carbonic Anhydrase IX Using Structure-Activity Relationships of Glucosyl-Based Sulfamates. <i>Journal of Medicinal Chemistry</i> , 2015, 58, 6630-6638.	6.4	25
133	In Vitro Evaluation of ESE-15-ol, an Estradiol Analogue with Nanomolar Antimitotic and Carbonic Anhydrase Inhibitory Activity. <i>PLoS ONE</i> , 2012, 7, e52205.	2.5	25
134	Carbon Dioxide -Trapped-in a $\hat{\Gamma}^2$ -Carbonic Anhydrase. <i>Biochemistry</i> , 2015, 54, 6631-6638.	2.5	24
135	Atomic structure of a rationally engineered gene delivery vector, AAV2.5. <i>Journal of Structural Biology</i> , 2018, 203, 236-241.	2.8	24
136	Overview of the Carbonic Anhydrase Family. <i>Sub-Cellular Biochemistry</i> , 2014, 75, 3-5.	2.4	24
137	Production, purification, crystallization and preliminary X-ray analysis of adeno-associated virus serotype 8. <i>Acta Crystallographica Section F: Structural Biology Communications</i> , 2005, 61, 558-561.	0.7	23
138	Structural Insights into the Extracytoplasmic Thiamine-Binding Lipoprotein p37 of <i>Mycoplasma hyorhinis</i> . <i>Journal of Bacteriology</i> , 2009, 191, 2585-2592.	2.2	23
139	Effect of incorporating a thiophene tail in the scaffold of acetazolamide on the inhibition of human carbonic anhydrase isoforms I, II, IX and XII. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2013, 23, 5646-5649.	2.2	23
140	Exploring Heteroaryl-pyrazole Carboxylic Acids as Human Carbonic Anhydrase XII Inhibitors. <i>ACS Medicinal Chemistry Letters</i> , 2017, 8, 941-946.	2.8	23
141	Parvovirus Capsid Structures Required for Infection: Mutations Controlling Receptor Recognition and Protease Cleavages. <i>Journal of Virology</i> , 2017, 91, .	3.4	23
142	Characterization of a novel variant in siblings with Asparagine Synthetase Deficiency. <i>Molecular Genetics and Metabolism</i> , 2018, 123, 317-325.	1.1	23
143	Structural Mapping of Anion Inhibitors to $\hat{\Gamma}^2$ -Carbonic Anhydrase psCA3 from <i>Pseudomonas aeruginosa</i> . <i>ChemMedChem</i> , 2018, 13, 2024-2029.	3.2	23
144	Adeno-associated Virus 9 Structural Rearrangements Induced by Endosomal Trafficking pH and Glycan Attachment. <i>Journal of Virology</i> , 2021, 95, e0084321.	3.4	23

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145	Generation and characterization of anti-Adeno-associated virus serotype 8 (AAV8) and anti-AAV9 monoclonal antibodies. <i>Journal of Virological Methods</i> , 2016, 236, 105-110.	2.1	22
146	Crystal Structure of Cleaved Serp-1, a Myxomavirus-Derived Immune Modulating Serpin: Structural Design of Serpin Reactive Center Loop Peptides with Improved Therapeutic Function. <i>Biochemistry</i> , 2018, 57, 1096-1107.	2.5	22
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