Vincenzo Alterio

List of Publications by Year in descending order

49 papers	3,642 citations	249298 26 h-index	252626 46 g-index
50 all docs	50 docs citations	50 times ranked	3219 citing authors

#	Article	IF	Citations
1	Inhibition of carbonic anhydrases IX/XII by SLC-0111 boosts cisplatin effects in hampering head and neck squamous carcinoma cell growth and invasion. Journal of Experimental and Clinical Cancer Research, 2022, 41, 122.	3.5	20
2	Zeta-carbonic anhydrases show CS2 hydrolase activity: A new metabolic carbon acquisition pathway in diatoms?. Computational and Structural Biotechnology Journal, 2021, 19, 3427-3436.	1.9	10
3	Benzyl alcohol inhibits carbonic anhydrases by anchoring to the zinc coordinated water molecule. Biochemical and Biophysical Research Communications, 2021, 548, 217-221.	1.0	5
4	A Novel Inhibitor of Carbonic Anhydrases Prevents Hypoxia-Induced TNBC Cell Plasticity. International Journal of Molecular Sciences, 2020, 21, 8405.	1.8	14
5	Phenyl(thio)phosphon(amid)ate Benzenesulfonamides as Potent and Selective Inhibitors of Human Carbonic Anhydrases II and VII Counteract Allodynia in a Mouse Model of Oxaliplatin-Induced Neuropathy. Journal of Medicinal Chemistry, 2020, 63, 5185-5200.	2.9	16
6	2-Mercaptobenzoxazoles: a class of carbonic anhydrase inhibitors with a novel binding mode to the enzyme active site. Chemical Communications, 2020, 56, 8297-8300.	2.2	6
7	Î¶-Carbonic anhydrases. , 2019, , 131-137.		1
8	Î±-Carbonic anhydrases. , 2019, , 19-54.		2
9	Biochemical and Structural Insights into Carbonic Anhydrase XII/Fab6A10 Complex. Journal of Molecular Biology, 2019, 431, 4910-4921.	2.0	23
10	Exploring benzoxaborole derivatives as carbonic anhydrase inhibitors: a structural and computational analysis reveals their conformational variability as a tool to increase enzyme selectivity. Journal of Enzyme Inhibition and Medicinal Chemistry, 2019, 34, 1498-1505.	2.5	7
11	Inhibition of carbonic anhydrase IX targets primary tumors, metastases, and cancer stem cells: Three for the price of one. Medicinal Research Reviews, 2018, 38, 1799-1836.	5.0	207
12	Crystal structure of the human carbonic anhydrase II adduct with 1-(4-sulfamoylphenyl-ethyl)-2,4,6-triphenylpyridinium perchlorate, a membrane-impermeant, isoform selective inhibitor. Journal of Enzyme Inhibition and Medicinal Chemistry, 2018, 33, 151-157.	2.5	26
13	Inhibition of carbonic anhydrases by a substrate analog: benzyl carbamate directly coordinates the catalytic zinc ion mimicking bicarbonate binding. Chemical Communications, 2018, 54, 10312-10315.	2.2	19
14	Disclosing the Interaction of Carbonic Anhydrase IX with Cullin-Associated NEDD8-Dissociated Protein 1 by Molecular Modeling and Integrated Binding Measurements. ACS Chemical Biology, 2017, 12, 1460-1465.	1.6	17
15	Probing Molecular Interactions between Human Carbonic Anhydrases (hCAs) and a Novel Class of Benzenesulfonamides. Journal of Medicinal Chemistry, 2017, 60, 4316-4326.	2.9	40
16	Insights into the binding mode of sulphamates and sulphamides to hCA II: crystallographic studies and binding free energy calculations. Journal of Enzyme Inhibition and Medicinal Chemistry, 2017, 32, 1002-1011.	2.5	26
17	The anticonvulsant sulfamide JNJ-26990990 and its S,S-dioxide analog strongly inhibit carbonic anhydrases: solution and X-ray crystallographic studies. Organic and Biomolecular Chemistry, 2016, 14, 4853-4858.	1.5	26
18	Benzoxaborole as a new chemotype for carbonic anhydrase inhibition. Chemical Communications, 2016, 52, 11983-11986.	2.2	69

#	Article	IF	Citations
19	Kinetic and X-ray crystallographic investigations of substituted 2-thio-6-oxo-1,6-dihydropyrimidineâ€“benzenesulfonamides acting as carbonic anhydrase inhibitors. Bioorganic and Medicinal Chemistry, 2016, 24, 3643-3648.	1.4	15
20	Thermostable Carbonic Anhydrases in Biotechnological Applications. International Journal of Molecular Sciences, 2015, 16, 15456-15480.	1.8	66
21	Cadmium-Containing Carbonic Anhydrase CDCA1 in Marine Diatom Thalassiosira weissflogii. Marine Drugs, 2015, 13, 1688-1697.	2.2	48
22	Recent Developments of Carbonic Anhydrase Inhibitors as Potential Drugs. BioMed Research International, 2015, 2015, 1-2.	0.9	4
23	Hydroxylamine-O-sulfonamide is a versatile lead compound for the development of carbonic anhydrase inhibitors. Chemical Communications, 2015, 51, 11519-11522.	2.2	10
24	Crystal structure of the most catalytically effective carbonic anhydrase enzyme known, SazCA from the thermophilic bacterium Sulfurihydrogenibium azorense. Bioorganic and Medicinal Chemistry Letters, 2015, 25, 2002-2006.	1.0	72
25	Discovery of 1,1â€²-Biphenyl-4-sulfonamides as a New Class of Potent and Selective Carbonic Anhydrase XIV Inhibitors. Journal of Medicinal Chemistry, 2015, 58, 8564-8572.	2.9	40
26	CDCA1 From Thalassiosira weissflogii as Representative Member of Î¶-Class CAs: General Features and Biotechnological Applications. , 2015, , 351-359.		0
27	Thermal-Stable Carbonic Anhydrases: A Structural Overview. Sub-Cellular Biochemistry, 2014, 75, 387-404.	1.0	9
28	Hydrophobic Substituents of the Phenylmethylsulfamide Moiety Can Be Used for the Development of New Selective Carbonic Anhydrase Inhibitors. BioMed Research International, 2014, 2014, 1-11.	0.9	14
29	The structural comparison between membraneâ€associated human carbonic anhydrases provides insights into drug design of selective inhibitors. Biopolymers, 2014, 101, 769-778.	1.2	44
30	Biochemical characterization of the chloroplastic Î²-carbonic anhydrase from Flaveria bidentis (L.) â€œKuntzeâ€• Journal of Enzyme Inhibition and Medicinal Chemistry, 2014, 29, 500-504.	2.5	19
31	Exploiting the hydrophobic and hydrophilic binding sites for designing carbonic anhydrase inhibitors. Expert Opinion on Drug Discovery, 2013, 8, 793-810.	2.5	229
32	Hypoxia-Targeting Carbonic Anhydrase IX Inhibitors by a New Series of Nitroimidazole-Sulfonamides/Sulfamides/Sulfamates. Journal of Medicinal Chemistry, 2013, 56, 8512-8520.	2.9	76
33	Structural and inhibition insights into carbonic anhydrase CDCA1 from the marine diatom Thalassiosira weissflogii. Biochimie, 2012, 94, 1232-1241.	1.3	100
34	Multiple Binding Modes of Inhibitors to Carbonic Anhydrases: How to Design Specific Drugs Targeting 15 Different Isoforms?. Chemical Reviews, 2012, 112, 4421-4468.	23.0	1,056
35	Carbonic anhydrase VII is S-glutathionylated without loss of catalytic activity and affinity for sulfonamide inhibitors. Bioorganic and Medicinal Chemistry Letters, 2012, 22, 1560-1564.	1.0	53
36	Carbonic anhydrase inhibitors: X-ray crystallographic studies for the binding of N-substituted benzenesulfonamides to human isoform II. Chemical Communications, 2011, 47, 11636.	2.2	50

#	Article	IF	Citations
37	Molecular organization of the cullin E3 ligase adaptor KCTD11. Biochimie, 2011, 93, 715-724.	1.3	50
38	Recent Advances in Structural Studies of the Carbonic Anhydrase Family: The Crystal Structure of Human CA IX and CA XIII. Current Pharmaceutical Design, 2010, 16, 3246-3254.	0.9	32
39	Crystal structure of an Sâ€formylglutathione hydrolase from Pseudoalteromonas haloplanktis TAC125. Biopolymers, 2010, 93, 669-677.	1.2	21
40	Crystal structure of the C183S/C217S mutant of human CA VII in complex with acetazolamide. Bioorganic and Medicinal Chemistry Letters, 2010, 20, 5023-5026.	1.0	81
41	The first example of a significant active site conformational rearrangement in a carbonic anhydrase-inhibitor adduct: the carbonic anhydrase Iâ€“topiramate complex. Organic and Biomolecular Chemistry, 2010, 8, 3528.	1.5	40
42	Crystal structure of the catalytic domain of the tumor-associated human carbonic anhydrase IX. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 16233-16238.	3.3	451
43	Carbonic Anhydrase Inhibitors. Comparison of Aliphatic Sulfamate/Bis-sulfamate Adducts with Isozymes II and IX as a Platform for Designing Tight-Binding, More Isoform-Selective Inhibitors. Journal of Medicinal Chemistry, 2009, 52, 5990-5998.	2.9	21
44	Functional and structural features of the oxyanion hole in a thermophilic esterase from Alicyclobacillus acidocaldarius. Proteins: Structure, Function and Bioinformatics, 2008, 71, 1721-1731.	1.5	31
45	Carbonic anhydrase inhibitors: Inhibition of human, bacterial, and archaeal isozymes with benzene-1,3-disulfonamidesâ€”Solution and crystallographic studies. Bioorganic and Medicinal Chemistry Letters, 2007, 17, 4201-4207.	1.0	47
46	Carbonic Anhydrase Inhibitors:â€‰ X-ray and Molecular Modeling Study for the Interaction of a Fluorescent Antitumor Sulfonamide with Isozyme II and IX. Journal of the American Chemical Society, 2006, 128, 8329-8335.	6.6	200
47	Metal Ion Substitution in the Catalytic Site Greatly Affects the Binding of Sulfhydryl-Containing Compounds to Leucyl Aminopeptidase,. Biochemistry, 2006, 45, 3226-3234.	1.2	34
48	Carbonic Anhydrase Inhibitors:Â Stacking with Phe131 Determines Active Site Binding Region of Inhibitors As Exemplified by the X-ray Crystal Structure of a Membrane-Impermeant Antitumor Sulfonamide Complexed with Isozyme II. Journal of Medicinal Chemistry, 2005, 48, 5721-5727.	2.9	157
49	The Crystal Structure of an EST2 Mutant Unveils Structural Insights on the H Group of the Carboxylesterase/Lipase Family. Journal of Molecular Biology, 2004, 343, 137-146.	2.0	26