

# Silvia Bua

## List of Publications by Year in descending order

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88  
papers

2,549  
citations

128201

31  
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220674

44  
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88  
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88  
docs citations

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times ranked

2273  
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#	ARTICLE	IF	CITATIONS
1	The three-tails approach as a new strategy to improve selectivity of action of sulphonamide inhibitors against tumour-associated carbonic anhydrase IX and XII. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2022, 37, 930-939.	5.3	30
2	Calixarenes Incorporating Sulfonamide Moieties: Versatile Ligands for Carbonic Anhydrases Inhibition. <i>Chemistry - A European Journal</i> , 2022, 28, .	3.5	5
3	Investigation of carbonic anhydrase inhibitory effects and cytotoxicities of pyrazole-based hybrids carrying hydrazone and zinc-binding benzenesulfonamide pharmacophores. <i>Bioorganic Chemistry</i> , 2022, 127, 105969.	4.2	13
4	Biological evaluation, radiosensitizing activity and structural insights of novel halogenated quinazoline-sulfonamide conjugates as selective human carbonic anhydrases IX/XII inhibitors. <i>Bioorganic Chemistry</i> , 2021, 107, 104618.	4.2	15
5	Discovery of Potent Carbonic Anhydrase Inhibitors as Effective Anticonvulsant Agents: Drug Design, Synthesis, and In Vitro and In Vivo Investigations. <i>Journal of Medicinal Chemistry</i> , 2021, 64, 3100-3114.	6.9	20
6	Benzyl alcohol inhibits carbonic anhydrases by anchoring to the zinc coordinated water molecule. <i>Biochemical and Biophysical Research Communications</i> , 2021, 548, 217-221.	2.1	10
7	Comprehensive study on potent and selective carbonic anhydrase inhibitors: Synthesis, bioactivities and molecular modelling studies of 4-(3-(2-arylidenehydrazine-1-carbonyl)-5-(thiophen-2-yl)-1H-pyrazole-1-yl) benzenesulfonamides. <i>European Journal of Medicinal Chemistry</i> , 2021, 217, 113351.	5.5	36
8	Exploring of tumor-associated carbonic anhydrase isoenzyme IX and XII inhibitory effects and cytotoxicities of the novel N-aryl-1-(4-sulfamoylphenyl)-5-(thiophen-2-yl)-1H-pyrazole-3-carboxamides. <i>Bioorganic Chemistry</i> , 2021, 115, 105194.	4.2	16
9	Discovery of potent nucleotide pyrophosphatase/phosphodiesterase3 (NPP3) inhibitors with ancillary carbonic anhydrase inhibition for cancer (immuno)therapy. <i>RSC Medicinal Chemistry</i> , 2021, 12, 1187-1206.	3.5	5
10	Synthesis, biological and molecular dynamics investigations with a series of triazolopyrimidine/triazole-based benzenesulfonamides as novel carbonic anhydrase inhibitors. <i>European Journal of Medicinal Chemistry</i> , 2020, 185, 111843.	5.5	49
11	Bioisosteric Development of Multitarget Nonsteroidal Anti-Inflammatory Drugâ€™Carbonic Anhydrases Inhibitor Hybrids for the Management of Rheumatoid Arthritis. <i>Journal of Medicinal Chemistry</i> , 2020, 63, 2325-2342.	6.9	29
12	Synthesis and selective inhibitory effects of some 2-oxindole benzenesulfonamide conjugates on human carbonic anhydrase isoforms CA I, CA II, CA IX and CAXII. <i>Bioorganic Chemistry</i> , 2020, 95, 103514.	4.2	19
13	Pyrrolo and pyrrolopyrimidine sulfonamides act as cytotoxic agents in hypoxia via inhibition of transmembrane carbonic anhydrases. <i>European Journal of Medicinal Chemistry</i> , 2020, 188, 112021.	5.5	25
14	â€™A Sweet Combinationâ€™ Developing Saccharin and Acesulfame K Structures for Selectively Targeting the Tumor-Associated Carbonic Anhydrases IX and XII. <i>Journal of Medicinal Chemistry</i> , 2020, 63, 321-333.	6.9	28
15	Toxicity evaluation of sulfamides and coumarins that efficiently inhibit human carbonic anhydrases. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2020, 35, 1765-1772.	5.3	13
16	Iodoquinazolinones bearing benzenesulfonamide as human carbonic anhydrase I, II, IX and XII inhibitors: Synthesis, biological evaluation and radiosensitizing activity. <i>European Journal of Medicinal Chemistry</i> , 2020, 200, 112449.	5.5	16
17	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.	6.9	85
18	S-substituted 2-mercaptoquinazolin-4(3H)-one and 4-ethylbenzenesulfonamides act as potent and selective human carbonic anhydrase IX and XII inhibitors. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2020, 35, 733-743.	5.3	22

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19	Discovery of Potent Dual-Tailed Benzenesulfonamide Inhibitors of Human Carbonic Anhydrases Implicated in Glaucoma and in Vivo Profiling of Their Intraocular Pressure-Lowering Action. <i>Journal of Medicinal Chemistry</i> , 2020, 63, 3317-3326.	6.9	36
20	Synthesis of some N-aryl-2-oxindole benzenesulfonamide conjugates with carbonic anhydrase inhibitory activity. <i>Bioorganic Chemistry</i> , 2020, 96, 103635.	4.2	17
21	Dual P-Glycoprotein and CA XII Inhibitors: A New Strategy to Reverse the P-gp Mediated Multidrug Resistance (MDR) in Cancer Cells. <i>Molecules</i> , 2020, 25, 1748.	4.4	31
22	Carbonic anhydrase inhibitors based on sorafenib scaffold: Design, synthesis, crystallographic investigation and effects on primary breast cancer cells. <i>European Journal of Medicinal Chemistry</i> , 2019, 182, 111600.	5.5	40
23	Synthesis and biological evaluation of novel 3-(quinolin-4-ylamino)benzenesulfonamides as carbonic anhydrase isoforms I and II inhibitors. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2019, 34, 1457-1464.	5.3	24
24	Carbonic anhydrase inhibitors as diuretics. , 2019, , 287-309.		4
25	New anthranilic acid-incorporating N-benzenesulfonamidophthalimides as potent inhibitors of carbonic anhydrases I, II, IX, and XII: Synthesis, inÂvitro testing, and in silico assessment. <i>European Journal of Medicinal Chemistry</i> , 2019, 181, 111573.	5.5	15
26	Sulfonamides incorporating piperazine bioisosteres as potent human carbonic anhydrase I, II, IV and IX inhibitors. <i>Bioorganic Chemistry</i> , 2019, 91, 103130.	4.2	15
27	Synthesis, biological evaluation and in silico studies with 4-benzylidene-2-phenyl-5(4H)-imidazolone-based benzenesulfonamides as novel selective carbonic anhydrase IX inhibitors endowed with anticancer activity. <i>Bioorganic Chemistry</i> , 2019, 90, 103102.	4.2	23
28	3-Hydrazinoisatin-based benzenesulfonamides as novel carbonic anhydrase inhibitors endowed with anticancer activity: Synthesis, inÂvitro biological evaluation and in silico insights. <i>European Journal of Medicinal Chemistry</i> , 2019, 184, 111768.	5.5	61
29	Extending the Inhibition Profiles of Coumarin-Based Compounds Against Human Carbonic Anhydrases: Synthesis, Biological, and In Silico Evaluation. <i>Molecules</i> , 2019, 24, 3580.	4.4	8
30	Biochemical and Structural Insights into Carbonic Anhydrase XII/Fab6A10 Complex. <i>Journal of Molecular Biology</i> , 2019, 431, 4910-4921.	4.2	21
31	Synthesis and comparative carbonic anhydrase inhibition of new Schiffâ€™s bases incorporating benzenesulfonamide, methanesulfonamide, and methylsulfonylbenzene scaffolds. <i>Bioorganic Chemistry</i> , 2019, 92, 103225.	4.2	18
32	Synthesis, biological evaluation and in silico modelling studies of 1,3,5-trisubstituted pyrazoles carrying benzenesulfonamide as potential anticancer agents and selective cancer-associated hCA IX isoenzyme inhibitors. <i>Bioorganic Chemistry</i> , 2019, 92, 103222.	4.2	37
33	Novel 2-substituted-benzimidazole-6-sulfonamides as carbonic anhydrase inhibitors: synthesis, biological evaluation against isoforms I, II, IX and XII and molecular docking studies. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2019, 34, 1697-1710.	5.3	29
34	Continued exploration and tail approach synthesis of benzenesulfonamides containing triazole and dual triazole moieties as carbonic anhydrase I, II, IV and IX inhibitors. <i>European Journal of Medicinal Chemistry</i> , 2019, 183, 111698.	5.5	41
35	Diagnostic markers for glaucoma: a patent and literature review (2013-2019). <i>Expert Opinion on Therapeutic Patents</i> , 2019, 29, 829-839.	4.1	21
36	Î±-Carbonic anhydrases are strongly activated by spinaceamine derivatives. <i>Bioorganic and Medicinal Chemistry</i> , 2019, 27, 800-804.	2.7	25

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37	Click-tailed benzenesulfonamides as potent bacterial carbonic anhydrase inhibitors for targeting <i>Mycobacterium tuberculosis</i> and <i>Vibrio cholerae</i> . <i>Bioorganic Chemistry</i> , 2019, 86, 183-186.	4.2	19
38	Benzenesulfonamides incorporating nitrogenous bases show effective inhibition of $\hat{I}^2$ -carbonic anhydrases from the pathogenic fungi <i>Cryptococcus neoformans</i> , <i>Candida glabrata</i> and <i>Malassezia globosa</i> . <i>Bioorganic Chemistry</i> , 2019, 86, 39-43.	4.2	12
39	Novel Diamide-Based Benzenesulfonamides as Selective Carbonic Anhydrase IX Inhibitors Endowed with Antitumor Activity: Synthesis, Biological Evaluation and In Silico Insights. <i>International Journal of Molecular Sciences</i> , 2019, 20, 2484.	4.5	23
40	Activation of human $\hat{I}^{\pm}$ -carbonic anhydrase isoforms I, II, IV and VII with bis-histamine schiff bases and bis-spinaceamine substituted derivatives. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2019, 34, 1193-1198.	5.3	23
41	Indole-Based Hydrazones Containing A Sulfonamide Moiety as Selective Inhibitors of Tumor-Associated Human Carbonic Anhydrase Isoforms IX and XII. <i>International Journal of Molecular Sciences</i> , 2019, 20, 2354.	4.5	23
42	Design, synthesis, and carbonic anhydrase inhibition activity of benzenesulfonamide-linked novel pyrazoline derivatives. <i>Bioorganic Chemistry</i> , 2019, 87, 425-431.	4.2	34
43	Comparison of the Sulfonamide Inhibition Profiles of the $\hat{I}^{\pm}$ -Carbonic Anhydrase Isoforms (SpiCA1.) Tj ETQq1 1 0.784314 rgBT /Overlock Drugs, 2019, 17, 146.	5.3	5
44	Novel 8-Substituted Coumarins That Selectively Inhibit Human Carbonic Anhydrase IX and XII. <i>International Journal of Molecular Sciences</i> , 2019, 20, 1208.	4.5	26
45	Novel synthesized SLC-0111 thiazole and thiadiazole analogues: Determination of their carbonic anhydrase inhibitory activity and molecular modeling studies. <i>Bioorganic Chemistry</i> , 2019, 87, 794-802.	4.2	48
46	Activation Studies of the $\hat{I}^2$ -Carbonic Anhydrase from the Pathogenic Protozoan <i>Entamoeba histolytica</i> with Amino Acids and Amines. <i>Metabolites</i> , 2019, 9, 26.	3.5	10
47	Discovery of new ureido benzenesulfonamides incorporating 1,3,5-triazine moieties as carbonic anhydrase I, II, IX and XII inhibitors. <i>Bioorganic and Medicinal Chemistry</i> , 2019, 27, 1588-1594.	2.7	53
48	Synthesis of novel benzenesulfonamide bearing 1,2,3-triazole linked hydroxy-trifluoromethylpyrazolines and hydrazones as selective carbonic anhydrase isoforms IX and XII inhibitors. <i>Bioorganic Chemistry</i> , 2019, 85, 198-208.	4.2	40
49	Enhancement of the tail hydrophobic interactions within the carbonic anhydrase IX active site via structural extension: Design and synthesis of novel N-substituted isatins-SLC-0111 hybrids as carbonic anhydrase inhibitors and antitumor agents. <i>European Journal of Medicinal Chemistry</i> , 2019, 162, 147-160.	5.5	83
50	3-Aminobenzenesulfonamides incorporating acylthiourea moieties selectively inhibit the tumor-associated carbonic anhydrase isoform IX over the off-target isoforms I, II and IV. <i>Bioorganic Chemistry</i> , 2019, 82, 123-128.	4.2	9
51	Design, synthesis and biological evaluation of novel ureido benzenesulfonamides incorporating 1,3,5-triazine moieties as potent carbonic anhydrase IX inhibitors. <i>Bioorganic Chemistry</i> , 2019, 82, 117-122.	4.2	46
52	Synthesis, structure and bioactivity of primary sulfamate-containing natural products. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2018, 28, 3009-3013.	2.1	17
53	Natural Polyphenols Selectively Inhibit $\hat{I}^2$ -Carbonic Anhydrase from the Dandruff-Producing Fungus <i>Malassezia globosa</i> : Activity and Modeling Studies. <i>ChemMedChem</i> , 2018, 13, 816-823.	3.2	34
54	2-Benzylpiperazine: A new scaffold for potent human carbonic anhydrase inhibitors. Synthesis, enzyme inhibition, enantioselectivity, computational and crystallographic studies and in vivo activity for a new class of intraocular pressure lowering agents. <i>European Journal of Medicinal Chemistry</i> , 2018, 151, 363-375.	5.5	35

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55	Design and synthesis of novel 1,3-diaryltriazene-substituted sulfonamides as potent and selective carbonic anhydrase II inhibitors. <i>Bioorganic Chemistry</i> , 2018, 77, 542-547.	4.2	52
56	Synthesis and biological evaluation of novel N,N <sup>2</sup> -diaryl cyanoguanidines acting as potent and selective carbonic anhydrase II inhibitors. <i>Bioorganic Chemistry</i> , 2018, 77, 245-251.	4.2	34
57	Anticancer effects of new dibenzenesulfonamides by inducing apoptosis and autophagy pathways and their carbonic anhydrase inhibitory effects on hCA I, hCA II, hCA IX, hCA XII isoenzymes. <i>Bioorganic Chemistry</i> , 2018, 78, 290-297.	4.2	44
58	Inhibition studies on a panel of human carbonic anhydrases with N <sup>1</sup> -substituted secondary sulfonamides incorporating thiazolinone or imidazolone-indole tails. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2018, 33, 629-638.	5.3	41
59	Mono- and di-thiocarbamate inhibition studies of the $\hat{\Gamma}$ -carbonic anhydrase TweCA $\hat{\Gamma}$ from the marine diatom <i>Thalassiosira weissflogii</i> . <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2018, 33, 707-713.	5.3	18
60	Discovery of Benzenesulfonamide Derivatives as Carbonic Anhydrase Inhibitors with Effective Anticonvulsant Action: Design, Synthesis, and Pharmacological Evaluation. <i>Journal of Medicinal Chemistry</i> , 2018, 61, 3151-3165.	6.9	29
61	Resolution of co-eluting isomers of anti-inflammatory drugs conjugated to carbonic anhydrase inhibitors from plasma in liquid chromatography by energy-resolved tandem mass spectrometry. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2018, 33, 671-679.	5.3	22
62	Improving the carbonic anhydrase inhibition profile of the sulfamoylphenyl pharmacophore by attachment of carbohydrate moieties. <i>Bioorganic Chemistry</i> , 2018, 76, 61-66.	4.2	11
63	Sulfonamide Inhibition Studies of a New $\hat{\Gamma}$ -Carbonic Anhydrase from the Pathogenic Protozoan <i>Entamoeba histolytica</i> . <i>International Journal of Molecular Sciences</i> , 2018, 19, 3946.	4.5	14
64	Cloning, Characterization and Anion Inhibition Studies of a $\hat{\Gamma}$ -Carbonic Anhydrase from the Pathogenic Protozoan <i>Entamoeba histolytica</i> . <i>Molecules</i> , 2018, 23, 3112.	4.4	15
65	Discovery of novel 1,3-diaryltriazene sulfonamides as carbonic anhydrase I, II, VII, and IX inhibitors. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2018, 33, 1575-1580.	5.3	44
66	Evaluation of sulphonamide derivatives acting as inhibitors of human carbonic anhydrase isoforms I, II and <i>Mycobacterium tuberculosis</i> $\hat{\Gamma}$ -class enzyme Rv3273. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2018, 33, 962-971.	5.3	30
67	Discovery of $\hat{\Gamma}$ -Adrenergic Receptors Blocker $\hat{\Gamma}$ -Carbonic Anhydrase Inhibitor Hybrids for Multitargeted Antiglaucoma Therapy. <i>Journal of Medicinal Chemistry</i> , 2018, 61, 5380-5394.	6.9	52
68	Comparison of the Anion Inhibition Profiles of the $\hat{\Gamma}$ -CA Isoforms (SpiCA1, SpiCA2 and SpiCA3) from the Scleractinian Coral <i>Stylophora pistillata</i> . <i>International Journal of Molecular Sciences</i> , 2018, 19, 2128.	4.5	10
69	Novel hydrazido benzenesulfonamides-isatin conjugates: Synthesis, carbonic anhydrase inhibitory activity and molecular modeling studies. <i>European Journal of Medicinal Chemistry</i> , 2018, 157, 28-36.	5.5	54
70	Synthesis, X-ray structure, in silico calculation, and carbonic anhydrase inhibitory properties of benzylimidazole metal complexes. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2018, 33, 1150-1159.	5.3	8
71	Novel 6- and 7-Substituted Coumarins with Inhibitory Action against Lipoxygenase and Tumor-Associated Carbonic Anhydrase IX. <i>Molecules</i> , 2018, 23, 153.	4.4	32
72	Discovery of potent anti-convulsant carbonic anhydrase inhibitors: Design, synthesis, in vitro and in vivo appraisal. <i>European Journal of Medicinal Chemistry</i> , 2018, 156, 430-443.	5.5	24

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73	Synthesis of novel benzenesulfamide derivatives with inhibitory activity against human cytosolic carbonic anhydrase I and II and <i>Vibrio cholerae</i> $\beta$ - and $\gamma$ -class enzymes. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2018, 33, 1125-1136.	5.3	15
74	Synthesis of novel dipeptide sulfonamide conjugates with effective carbonic anhydrase I, II, IX, and XII inhibitory properties. <i>Bioorganic Chemistry</i> , 2018, 81, 311-318.	4.2	20
75	Novel sulfonamides incorporating 1,3,5-triazine and amino acid structural motifs as inhibitors of the physiological carbonic anhydrase isozymes I, II and IV and tumor-associated isozyme IX. <i>Bioorganic Chemistry</i> , 2018, 81, 241-252.	4.2	18
76	Design and synthesis of novel benzenesulfonamide containing 1,2,3-triazoles as potent human carbonic anhydrase isoforms I, II, IV and IX inhibitors. <i>European Journal of Medicinal Chemistry</i> , 2018, 155, 545-551.	5.5	52
77	Novel indolin-2-one-based sulfonamides as carbonic anhydrase inhibitors: Synthesis, <i>in vitro</i> biological evaluation against carbonic anhydrases isoforms I, II, IV and VII and molecular docking studies. <i>European Journal of Medicinal Chemistry</i> , 2017, 127, 521-530.	5.5	58
78	Design and Synthesis of Novel Nonsteroidal Anti-Inflammatory Drugs and Carbonic Anhydrase Inhibitors Hybrids (NSAIDs $\rightarrow$ CAIs) for the Treatment of Rheumatoid Arthritis. <i>Journal of Medicinal Chemistry</i> , 2017, 60, 1159-1170.	6.9	110
79	Investigating the antiplasmodial activity of primary sulfonamide compounds identified in open source malaria data. <i>International Journal for Parasitology: Drugs and Drug Resistance</i> , 2017, 7, 61-70.	3.1	15
80	Synthesis and human/bacterial carbonic anhydrase inhibition with a series of sulfonamides incorporating phthalimido moieties. <i>Bioorganic and Medicinal Chemistry</i> , 2017, 25, 2524-2529.	2.7	29
81	Advances in new psychoactive substances identification: the U.R.I.To.N. Consortium. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2017, 32, 841-849.	5.3	20
82	Inhibition of <i>Malassezia globosa</i> carbonic anhydrase with phenols. <i>Bioorganic and Medicinal Chemistry</i> , 2017, 25, 2577-2582.	2.7	42
83	Benzenesulfonamide bearing imidazothiadiazole and thiazolotriazole scaffolds as potent tumor associated human carbonic anhydrase IX and XII inhibitors. <i>Bioorganic and Medicinal Chemistry</i> , 2017, 25, 1286-1293.	2.7	39
84	Synthesis and biological evaluation of benzenesulphonamide-bearing 1,4,5-trisubstituted-1,2,3-triazoles possessing human carbonic anhydrase I, II, IV, and IX inhibitory activity. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2017, 32, 1187-1194.	5.3	43
85	Discovery of New Sulfonamide Carbonic Anhydrase IX Inhibitors Incorporating Nitrogenous Bases. <i>ACS Medicinal Chemistry Letters</i> , 2017, 8, 1314-1319.	3.6	65
86	Carbonic anhydrase I, II, IV and IX inhibition with a series of 7-amino-3,4-dihydroquinolin-2(1H)-one derivatives. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2017, 32, 885-892.	5.3	13
87	Novel Sulfamide-Containing Compounds as Selective Carbonic Anhydrase I Inhibitors. <i>Molecules</i> , 2017, 22, 1049.	4.4	25
88	Synthesis and carbonic anhydrase inhibitory effects of new N-glycosylsulfonamides incorporating the phenol moiety. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2016, 26, 3892-3895.	2.1	9