Barbara Campanini

List of Publications by Year
in descending order

81 papers	1,722 citations	236925 25 h-index	330143 37 g-index
83 all docs	83 docs citations	83 times ranked	1599 citing authors

#	Article	IF	Citations
1	Use of Exogenous Enzymes in Human Therapy: Approved Drugs and Potential Applications. Current Medicinal Chemistry, 2022, 29, 411-452.	2.4	16
2	Cryo-EM structures of staphylococcal IsdB bound to human hemoglobin reveal the process of heme extraction. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2116708119.	7.1	6
3	Human Serine Racemase Weakly Binds the Third PDZ Domain of PSD-95. International Journal of Molecular Sciences, 2022, 23, 4959.	4.1	1
4	Inhibitors of O-Acetylserine Sulfhydrylase with a Cyclopropane-Carboxylic Acid Scaffold Are Effective Colistin Adjuvants in Gram Negative Bacteria. Pharmaceuticals, 2022, 15, 766.	3.8	1
5	Exploring the chemical space around N-(5-nitrothiazol-2-yl)-1,2,3-thiadiazole-4-carboxamide, a hit compound with serine acetyltransferase (SAT) inhibitory properties. Results in Chemistry, 2022, 4, 100443.	2.0	0
6	Human serine racemase is inhibited by glyceraldehyde 3-phosphate, but not by glyceraldehyde 3-phosphate dehydrogenase. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2021, 1869, 140544.	2.3	3
7	The allosteric interplay between Sâ€nitrosylation and glycine binding controls the activity of human serine racemase. FEBS Journal, 2021, 288, 3034-3054.	4.7	8
8	Investigational Studies on a Hit Compound Cyclopropaneâ€“Carboxylic Acid Derivative Targeting <i>O</i>-Acetylserine Sulfhydrylase as a Colistin Adjuvant. ACS Infectious Diseases, 2021, 7, 281-292.	3.8	13
9	Revealing the Dynamic Allosteric Changes Required for Formation of the Cysteine Synthase Complex by Hydrogen-Deuterium Exchange MS. Molecular and Cellular Proteomics, 2021, 20, 100098.	3.8	1
10	Discovery of Substituted (2-Aminooxazol-4-yl)Isoxazole-3-carboxylic Acids as Inhibitors of Bacterial Serine Acetyltransferase in the Quest for Novel Potential Antibacterial Adjuvants. Pharmaceuticals, 2021, 14, 174.	3.8	5
11	A Competitive O-Acetylserine Sulfhydrylase Inhibitor Modulates the Formation of Cysteine Synthase Complex. Catalysts, 2021, 11, 700.	3.5	4
12	A Novel Assay for Phosphoserine Phosphatase Exploiting Serine Acetyltransferase as the Coupling Enzyme. Life, 2021, 11, 485.	2.4	5
13	Birth of a pathway for sulfur metabolism in early amniote evolution. Nature Ecology and Evolution, 2020, 4, 1239-1246.	7.8	3
14	Inhibition of Nonessential Bacterial Targets: Discovery of a Novel Serine <i>O</i>-Acetyltransferase Inhibitor. ACS Medicinal Chemistry Letters, 2020, 11, 790-797.	2.8	17
15	Off to a slow start: Analyzing lag phases and accelerating rates in steady-state enzyme kinetics. Analytical Biochemistry, 2020, 593, 113595.	2.4	5
16	Iron Metabolism at the Interface between Host and Pathogen: From Nutritional Immunity to Antibacterial Development. International Journal of Molecular Sciences, 2020, 21, 2145.	4.1	42
17	Combination of SAXS and Protein Painting Discloses the Three-Dimensional Organization of the Bacterial Cysteine Synthase Complex, a Potential Target for Enhancers of Antibiotic Action. International Journal of Molecular Sciences, 2019, 20, 5219.	4.1	9
18	More than a Confinement: â€œSoftâ€•and â€œHardâ€•Enzyme Entrapment Modulates Biological Catalyst Function. Catalysts, 2019, 9, 1024.	3.5	12

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19	Interaction of human hemoglobin and semi-hemoglobins with the Staphylococcus aureus hemophore IsdB: a kinetic and mechanistic insight. Scientific Reports, 2019, 9, 18629.	3.3	21
20	Refining the structureâˆ’activity relationships of 2-phenylcyclopropane carboxylic acids as inhibitors of O-acetylserine sulfhydrylase isoforms. Journal of Enzyme Inhibition and Medicinal Chemistry, 2019, 34, 31-43.	5.2	12
21	Integration of Enhanced Sampling Methods with Saturation Transfer Difference Experiments to Identify Protein Druggable Pockets. Journal of Chemical Information and Modeling, 2018, 58, 710-723.	5.4	15
22	Human serine racemase is nitrosylated at multiple sites. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2018, 1866, 813-821.	2.3	11
23	Inhibition of<i>O</i>-acetylserine sulfhydrylase by fluoroalanine derivatives. Journal of Enzyme Inhibition and Medicinal Chemistry, 2018, 33, 1343-1351.	5.2	12
24	Insight into GFPmut2 pH Dependence by Single Crystal Microspectrophotometry and X-ray Crystallography. Journal of Physical Chemistry B, 2018, 122, 11326-11337.	2.6	3
25	Discovery of novel fragments inhibiting O-acetylserine sulphhydrylase by combining scaffold hopping and ligandâ€“based drug design. Journal of Enzyme Inhibition and Medicinal Chemistry, 2018, 33, 1444-1452.	5.2	17
26	Glutamine 89 is a key residue in the allosteric modulation of human serine racemase activity by ATP. Scientific Reports, 2018, 8, 9016.	3.3	12
27	The Energy Landscape of Human Serine Racemase. Frontiers in Molecular Biosciences, 2018, 5, 112.	3.5	28
28	Magnesium and calcium ions differentially affect human serine racemase activity and modulate its quaternary equilibrium toward a tetrameric form. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2017, 1865, 381-387.	2.3	17
29	Modulation of <i>Escherichia coli</i> serine acetyltransferase catalytic activity in the cysteine synthase complex. FEBS Letters, 2017, 591, 1212-1224.	2.8	15
30	Activation of an anti-bacterial toxin by the biosynthetic enzyme CysK: mechanism of binding, interaction specificity and competition with cysteine synthase. Scientific Reports, 2017, 7, 8817.	3.3	7
31	Study of DNA binding and bending by Bacillus subtilis GabR, a PLP-dependent transcription factor. Biochimica Et Biophysica Acta - General Subjects, 2017, 1861, 3474-3489.	2.4	18
32	Structural insight into the interaction of <i>Oâ€‹</i>acetylserine sulfhydrylase with competitive, peptidic inhibitors by saturation transfer differenceâ€‹<scp>NMR</scp>. FEBS Letters, 2016, 590, 943-953.	2.8	10
33	Cyclopropane-1,2-dicarboxylic acids as new tools for the biophysical investigation of<i>O</i>-acetylserine sulfhydrylases by fluorimetric methods and saturation transfer difference (STD) NMR. Journal of Enzyme Inhibition and Medicinal Chemistry, 2016, 31, 78-87.	5.2	21
34	Human serine racemase is allosterically modulated by NADH and reduced nicotinamide derivatives. Biochemical Journal, 2016, 473, 3505-3516.	3.7	11
35	Rational Design, Synthesis, and Preliminary Structureâ€“Activity Relationships of Î±-Substituted-2-Phenylcyclopropane Carboxylic Acids as Inhibitors of <i>Salmonella typhimurium</i> <i>O</i>-Acetylserine Sulfhydrylase. Journal of Medicinal Chemistry, 2016, 59, 2567-2578.	6.4	28
36	Cyclopropane derivatives as potential human serine racemase inhibitors: unveiling novel insights into a difficult target. Journal of Enzyme Inhibition and Medicinal Chemistry, 2016, 31, 645-652.	5.2	12

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37	Regulation of human serine racemase activity and dynamics by halides, ATP and malonate. Amino Acids, 2015, 47, 163-173.	2.7	21
38	Moonlighting O-acetylserine sulfhydrylase: New functions for an old protein. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2015, 1854, 1184-1193.	2.3	35
39	Expanding the chemical space of human serine racemase inhibitors. Bioorganic and Medicinal Chemistry Letters, 2015, 25, 4297-4303.	2.2	22
40	Immobilization of Proteins in Silica Gel: Biochemical and Biophysical Properties. Current Organic Chemistry, 2015, 19, 1653-1668.	1.6	20
41	Inhibitors of the Sulfur Assimilation Pathway in Bacterial Pathogens as Enhancers of Antibiotic Therapy. Current Medicinal Chemistry, 2014, 22, 187-213.	2.4	42
42	<scp>ATP</scp> binding to human serine racemase is cooperative and modulated by glycine. FEBS Journal, 2013, 280, 5853-5863.	4.7	33
43	Role of histidine 148 in stability and dynamics of a highly fluorescent GFP variant. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2013, 1834, 770-779.	2.3	10
44	Fine tuning of the active site modulates specificity in the interaction of O-acetylserine sulfhydrylase isozymes with serine acetyltransferase. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2013, 1834, 169-181.	2.3	35
45	Stimulated Emission Properties of Fluorophores by CW-STED Single Molecule Spectroscopy. Journal of Physical Chemistry B, 2013, 117, 16405-16415.	2.6	14
46	Asymmetry of the Active Site Loop Conformation between Subunits of Glutamate-1-semialdehyde Aminomutase in Solution. BioMed Research International, 2013, 2013, 1-10.	1.9	15
47	Serine racemase: a key player in neuron activity and in neuropathologies. Frontiers in Bioscience - Landmark, 2013, 18, 1112.	3.0	34
48	Isozyme-Specific Ligands for O-acetylserine sulfhydrylase, a Novel Antibiotic Target. PLoS ONE, 2013, 8, e77558.	2.5	43
49	Design and synthesis of trans-2-substituted-cyclopropane-1-carboxylic acids as the first non-natural small molecule inhibitors of O-acetylserine sulfhydrylase. MedChemComm, 2012, 3, 1111.	3.4	36
50	Exploring O-acetylserine sulfhydrylase-B isoenzyme from Salmonella typhimurium by fluorescence spectroscopy. Archives of Biochemistry and Biophysics, 2011, 505, 178-185.	3.0	8
51	The multifaceted pyridoxal 5â€²-phosphate-dependent O-acetylserine sulfhydrylase. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2011, 1814, 1497-1510.	2.3	39
52	Human kynurenine aminotransferaseâ€ƒIIâ€ƒâ€"â€ƒreactivity with substrates and inhibitors. FEBS Journal, 2011, 278, 1882-1900.	4.7	25
53	Effect of the point mutation H148G on GFPmut2 unfolding kinetics by fluorescence spectroscopy. Biophysical Chemistry, 2011, 157, 24-32.	2.8	3
54	Structure and single crystal spectroscopy of Green Fluorescent Proteins. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2011, 1814, 824-833.	2.3	12

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55	Green Fluorescent Protein Photodynamics as a Tool for Fluorescence Correlative Studies and Applications. Springer Series on Fluorescence, 2011, , 35-55.	0.8	0
56	A Two-step Process Controls the Formation of the Bienzyme Cysteine Synthase Complex. Journal of Biological Chemistry, 2010, 285, 12813-12822.	3.4	35
57	Pyridoxal 5â€²-Phosphate-Dependent Enzymes: Catalysis, Conformation, and Genomics. , 2010, , 273-350.		12
58	Single Amino Acid Replacement Makes Aequorea victoria Fluorescent Proteins Reversibly Photoswitchable. Journal of the American Chemical Society, 2010, 132, 85-95.	13.7	61
59	Identification of the Structural Determinants for the Stability of Substrate and Aminoacrylate External Schiff Bases in <i>O</i>-Acetylserine Sulfhydrylase-A. Biochemistry, 2010, 49, 6093-6103.	2.5	25
60	Photoinduced Millisecond Switching Kinetics in the GFPMut2 E222Q Mutant. Journal of Physical Chemistry B, 2010, 114, 4664-4677.	2.6	12
61	Singlet oxygen photosensitisation by GFP mutants: oxygen accessibility to the chromophore. Photochemical and Photobiological Sciences, 2010, 9, 1336-1341.	2.9	34
62	Design of <i>O</i>-Acetylserine Sulfhydrylase Inhibitors by Mimicking Nature. Journal of Medicinal Chemistry, 2010, 53, 345-356.	6.4	75
63	Structural stability of green fluorescent proteins entrapped in polyelectrolyte nanocapsules. Journal of Biophotonics, 2008, 1, 310-319.	2.3	4
64	Protonation and Conformational Dynamics of GFP Mutants by Two-Photon Excitation Fluorescence Correlation Spectroscopy. Journal of Physical Chemistry B, 2008, 112, 8806-8814.	2.6	25
65	A novel Bim-BH3-derived Bcl-XL inhibitor: Biochemical characterization, in vitro, in vivo and ex-vivo anti-leukemic activity. Cell Cycle, 2008, 7, 3211-3224.	2.6	32
66	Green Fluorescent Protein Ground States:â€‰ The Influence of a Second Protonation Site near the Chromophore,. Biochemistry, 2007, 46, 5494-5504.	2.5	60
67	Structure, Mechanism, and Conformational Dynamics of O-Acetylserine Sulfhydrylase from Salmonella typhimurium:â€‰ Comparison of A and B Isozymes. Biochemistry, 2007, 46, 8315-8330.	2.5	58
68	GFP-mut2 Proteins in Trehalose-Water Matrixes: Spatially Heterogeneous Protein-Water-Sugar Structures. Biophysical Journal, 2007, 93, 284-293.	0.5	10
69	Evidence of Discrete Substates and Unfolding Pathways in Green Fluorescent Protein. Biophysical Journal, 2007, 92, 1724-1731.	0.5	16
70	Voltage regulation of single green fluorescent protein mutants. Biophysical Chemistry, 2007, 125, 368-374.	2.8	6
71	Environment effects on the oscillatory unfolding kinetics of GFP. European Biophysics Journal, 2007, 36, 795-803.	2.2	5
72	Enhanced Green Fluorescent Protein (GFP) fluorescence after polyelectrolyte caging. Optics Express, 2006, 14, 9815.	3.4	9

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73	Sulfur Mobilization in Cyanobacteria. Journal of Biological Chemistry, 2006, 281, 38769-38780.	3.4	16
74	Interaction of serine acetyltransferase withO-acetylserine sulfhydrylase active site: Evidence from fluorescence spectroscopy. Protein Science, 2005, 14, 2115-2124.	7.6	83
75	Kinetics of Acid-Induced Spectral Changes in the GFPmut2 Chromophore. Journal of the American Chemical Society, 2005, 127, 626-635.	13.7	57
76	Unfolding of Green Fluorescent Protein mut2 in wet nanoporous silica gels. Protein Science, 2005, 14, 1125-1133.	7.6	57
77	Tracking Unfolding and Refolding of Single GFPmut2 Molecules. Biophysical Journal, 2005, 89, 2033-2045.	0.5	31
78	Surface-exposed Tryptophan Residues Are Essential for O-Acetylserine Sulfhydrylase Structure, Function, and Stability. Journal of Biological Chemistry, 2003, 278, 37511-37519.	3.4	24
79	Unfolding of pyridoxal 5â€²-phosphate-dependent O-acetylserine sulfhydrylase probed by time-resolved tryptophan fluorescence. BBA - Proteins and Proteomics, 2002, 1596, 47-54.	2.1	9
80	Dynamics of green fluorescent protein mutant2 in solution, on spin-coated glasses, and encapsulated in wet silica gels. Protein Science, 2002, 11, 1152-1161.	7.6	61
81	Role of Pyridoxal 5â€²-Phosphate in the Structural Stabilization of O-Acetylserine Sulfhydrylase. Journal of Biological Chemistry, 2000, 275, 40244-40251.	3.4	35