Tomas Majtan

List of Publications by Year
in descending order

55 papers	1,626 citations	279798 23 h-index	315739 38 g-index
59 all docs	59 docs citations	59 times ranked	1742 citing authors

#	Article	IF	Citations
1	Overproduction of hydrogen sulfide, generated by cystathionine Î²-synthase, disrupts brain wave patterns and contributes to neurobehavioral dysfunction in a rat model of down syndrome. Redox Biology, 2022, 51, 102233.	9.0	31
2	Inherited disorders of sulfur amino acid metabolism: recent advances in therapy. Current Opinion in Clinical Nutrition and Metabolic Care, 2021, 24, 62-70.	2.5	2
3	Classical homocystinuria: From cystathionine beta-synthase deficiency to novel enzyme therapies. Biochimie, 2020, 173, 48-56.	2.6	29
4	Interplay of Enzyme Therapy and Dietary Management of Murine Homocystinuria. Nutrients, 2020, 12, 2895.	4.1	6
5	Hypermethioninemia Leads to Fatal Bleeding and Increased Mortality in a Transgenic I278T Mouse Model of Homocystinuria. Biomedicines, 2020, 8, 244.	3.2	5
6	Cystathionine-Î²-synthase: Molecular Regulation and Pharmacological Inhibition. Biomolecules, 2020, 10, 697.	4.0	113
7	Longâ€term uninterrupted enzyme replacement therapy prevents liver disease in murine model of severe homocystinuria. Human Mutation, 2020, 41, 1662-1670.	2.5	7
8	A key leader in homocystinuria research: Jan P. Kraus (1942â€"2019). Human Mutation, 2019, 40, 1909-1909.	2.5	1
9	Behavior, body composition, and vascular phenotype of homocystinuric mice on methionineâ€restricted diet or enzyme replacement therapy. FASEB Journal, 2019, 33, 12477-12486.	0.5	16
10	Import of TAT-Conjugated Propionyl Coenzyme A Carboxylase Using Models of Propionic Acidemia. Molecular and Cellular Biology, 2018, 38, .	2.3	15
11	Crystal structure of cystathionine Î²-synthase from honeybee Apis mellifera. Journal of Structural Biology, 2018, 202, 82-93.	2.8	13
12	Enzyme Replacement Therapy Ameliorates Multiple Symptoms of Murine Homocystinuria. Molecular Therapy, 2018, 26, 834-844.	8.2	28
13	Pharmacokinetics and pharmacodynamics of PEGylated truncated human cystathionine beta-synthase for treatment of homocystinuria. Life Sciences, 2018, 200, 15-25.	4.3	7
14	Biogenesis of Hydrogen Sulfide and Thioethers by Cystathionine Beta-Synthase. Antioxidants and Redox Signaling, 2018, 28, 311-323.	5.4	47
15	Enzyme replacement therapy prevents loss of bone and fat mass in murine homocystinuria. Human Mutation, 2018, 39, 210-218.	2.5	13
16	Engineering and Characterization of an Enzyme Replacement Therapy for Classical Homocystinuria. Biomacromolecules, 2017, 18, 1747-1761.	5.4	16
17	Enzyme replacement prevents neonatal death, liver damage, and osteoporosis in murine homocystinuria. FASEB Journal, 2017, 31, 5495-5506.	0.5	24
18	Potential Pharmacological Chaperones for Cystathionine Beta-Synthase-Deficient Homocystinuria. Handbook of Experimental Pharmacology, 2017, 245, 345-383.	1.8	28

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19	Oligomeric status of human cystathionine betaâ€synthase modulates AdoMet binding. FEBS Letters, 2016, 590, 4461-4471.	2.8	8
20	Kinetic stability of cystathionine beta-synthase can be modulated by structural analogs of S-adenosylmethionine: Potential approach to pharmacological chaperone therapy for homocystinuria. Biochimie, 2016, 126, 6-13.	2.6	23
21	Thioethers as markers of hydrogen sulfide production in homocystinurias. Biochimie, 2016, 126, 14-20.	2.6	28
22	Enzyme replacement with PEGylated cystathionine Î²-synthase ameliorates homocystinuria in murine model. Journal of Clinical Investigation, 2016, 126, 2372-2384.	8.2	37
23	Targeting Cystathionine Beta-Synthase Misfolding in Homocystinuria by Small Ligands: State of the Art and Future Directions. Current Drug Targets, 2016, 17, 1455-1470.	2.1	30
24	Marine natural products as inhibitors of cystathionine beta-synthase activity. Bioorganic and Medicinal Chemistry Letters, 2015, 25, 1064-1066.	2.2	21
25	Purification, crystallization and preliminary crystallographic analysis of the catalytic core of cystathionine Î²-synthase fromSaccharomyces cerevisiae. Acta Crystallographica Section F, Structural Biology Communications, 2014, 70, 320-325.	0.8	0
26	Identification and characterisation of different proteases in Lucilia sericata medicinal maggots involved in maggot debridement therapy. Journal of Applied Biomedicine, 2014, 12, 171-177.	1.7	24
27	Structural insight into the molecular mechanism of allosteric activation of human cystathionine Î²-synthase by <i>S</i> -adenosylmethionine. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E3845-52.	7.1	86
28	The role of surface electrostatics on the stability, function and regulation of human cystathionine Î²-synthase, a complex multidomain and oligomeric protein. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2014, 1844, 1453-1462.	2.3	10
29	Domain Organization, Catalysis and Regulation of Eukaryotic Cystathionine Beta-Synthases. PLoS ONE, 2014, 9, e105290.	2.5	42
30	Fir honeydew honey flavonoids inhibit TNF-Î±-induced MMP-9 expression in human keratinocytes: a new action of honey in wound healing. Archives of Dermatological Research, 2013, 305, 619-627.	1.9	64
31	Identification of Cystathionine Î²â€Synthase Inhibitors Using a Hydrogen Sulfide Selective Probe. Angewandte Chemie - International Edition, 2013, 52, 4641-4644.	13.8	141
32	Comparative Study of Enzyme Activity and Heme Reactivity inDrosophila melanogasterandHomo sapiensCystathionine Î²-Synthases. Biochemistry, 2013, 52, 741-751.	2.5	15
33	Human cystathionine Î²-synthase (CBS) contains two classes of binding sites for <i>S</i>-adenosylmethionine (SAM): complex regulation of CBS activity and stability by SAM. Biochemical Journal, 2013, 449, 109-121.	3.7	78
34	Structural basis of regulation and oligomerization of human cystathionine Î²-synthase, the central enzyme of transsulfuration. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E3790-9.	7.1	89
35	Folding and activity of mutant cystathionine Î²-synthase depends on the position and nature of the purification tag: Characterization of the R266K CBS mutant. Protein Expression and Purification, 2012, 82, 317-324.	1.3	26
36	Conformational Properties of Nine Purified Cystathionine Î²-Synthase Mutants. Biochemistry, 2012, 51, 4755-4763.	2.5	24

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37	Purification, crystallization and preliminary crystallographic analysis of human cystathionine Î²-synthase. Acta Crystallographica Section F: Structural Biology Communications, 2012, 68, 1318-1322.	0.7	9
38	Purification, crystallization and preliminary crystallographic analysis of the full-length cystathionine Î²-synthase fromApis mellifera. Acta Crystallographica Section F: Structural Biology Communications, 2012, 68, 1323-1328.	0.7	3
39	Effect of the Disease-Causing R266K Mutation on the Heme and PLP Environments of Human Cystathionine Î²-Synthase. Biochemistry, 2012, 51, 6360-6370.	2.5	25
40	Cobalt Cystathionine Î²-Synthase: A Cobalt-Substituted Heme Protein with a Unique Thiolate Ligation Motif. Inorganic Chemistry, 2011, 50, 4417-4427.	4.0	17
41	Purification and characterization of cystathionine Î²-synthase bearing a cobalt protoporphyrin. Archives of Biochemistry and Biophysics, 2011, 508, 25-30.	3.0	12
42	Effect of cobalt on Escherichia coli metabolism and metalloporphyrin formation. BioMetals, 2011, 24, 335-347.	4.1	50
43	Electron transfer flavoprotein domain II orientation monitored using double electronâ€electron resonance between an enzymatically reduced, native FAD cofactor, and spin labels. Protein Science, 2011, 20, 610-620.	7.6	13
44	Effect of honey and its major royal jelly protein 1 on cytokine and MMPâ€9 mRNA transcripts in human keratinocytes. Experimental Dermatology, 2010, 19, e73-9.	2.9	96
45	Rescue of Cystathionine Î²-Synthase (CBS) Mutants with Chemical Chaperones. Journal of Biological Chemistry, 2010, 285, 15866-15873.	3.4	63
46	Detection of the class 1 integrons and SGI1 among Salmonella enterica Serovar Typhimurium DT104, U302, DT120, DT193, and nontypable human isolates. Japanese Journal of Infectious Diseases, 2010, 63, 292-5.	1.2	1
47	Detection of the Class 1 Integrons and SGI1 among <i>Salmonella enterica</i> Serovar Typhimurium DT104, U302, DT120, DT193, and Nontypable Human Isolates. Japanese Journal of Infectious Diseases, 2010, 63, 292-295.	1.2	5
48	DEER Distance Measurement Between a Spin Label and a Native FAD Semiquinone in Electron Transfer Flavoprotein. Journal of the American Chemical Society, 2009, 131, 15978-15979.	13.7	21
49	Active Cystathionine Î²-Synthase Can Be Expressed in Heme-free Systems in the Presence of Metal-substituted Porphyrins or a Chemical Chaperone. Journal of Biological Chemistry, 2008, 283, 34588-34595.	3.4	48
50	Oligonucleotide microarray for molecular characterization and genotyping of Salmonella spp. strains. Journal of Antimicrobial Chemotherapy, 2007, 60, 937-946.	3.0	27
51	Transcriptional profiling of bacteriophage BFK20: Coexpression interrogated by â€œguilt-by-associationâ€• algorithm. Virology, 2007, 359, 55-65.	2.4	11
52	Molecular characterization of class 1 integrons in clinical strains of Salmonella typhimurium isolated in Slovakia. Polish Journal of Microbiology, 2007, 56, 19-23.	1.7	2
53	Salmonella enterica serovar Kentucky: antimicrobial resistance and molecular analysis of clinical isolates from the Slovak Republic. Japanese Journal of Infectious Diseases, 2006, 59, 358-62.	1.2	21
54	Resistance of corynebacterial strains to infection and lysis by corynephage BFK 20. Journal of Applied Microbiology, 2005, 98, 184-192.	3.1	13

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55	DNA microarrays â€" techniques and applications in microbial systems. Folia Microbiologica, 2004, 49, 635-64.	2.3	23