Marc-Michael Blum

List of Publications by Year
in descending order

27 papers	846 citations	471477 17 h-index	580810 25 g-index
32 all docs	32 docs citations	32 times ranked	820 citing authors

#	Article	IF	Citations
1	Conformational Switches Modulate Protein Interactions in Peptide Antibiotic Synthetases. Science, 2006, 312, 273-276.	12.6	149
2	Binding of a Designed Substrate Analogue to Diisopropyl Fluorophosphatase:Â Implications for the Phosphotriesterase Mechanism. Journal of the American Chemical Society, 2006, 128, 12750-12757.	13.7	92
3	Rapid determination of hydrogen positions and protonation states of diisopropyl fluorophosphatase by joint neutron and X-ray diffraction refinement. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 713-718.	7.1	77
4	Reversed Enantioselectivity of Diisopropyl Fluorophosphatase against Organophosphorus Nerve Agents by Rational Design. Journal of the American Chemical Society, 2009, 131, 17226-17232.	13.7	63
5	Historical perspective and modern applications of Attenuated Total Reflectance â€“ Fourier Transform Infrared Spectroscopy (ATRâ€FTIR). Drug Testing and Analysis, 2012, 4, 298-302.	2.6	53
6	Inhibitory Potency against Human Acetylcholinesterase and Enzymatic Hydrolysis of Fluorogenic Nerve Agent Mimics by Human Paraoxonase 1 and Squid Diisopropyl Fluorophosphatase. Biochemistry, 2008, 47, 5216-5224.	2.5	51
7	Structural characterization of the catalytic calcium-binding site in diisopropyl fluorophosphatase (DFPase)â€”Comparison with related Î²-propeller enzymes. Chemico-Biological Interactions, 2010, 187, 373-379.	4.0	39
8	V-type nerve agents phosphonylate ubiquitin at biologically relevant lysine residues and induce intramolecular cyclization by an isopeptide bond. Analytical and Bioanalytical Chemistry, 2014, 406, 5171-5185.	3.7	33
9	Quantification of hydrolysis of toxic organophosphates and organophosphonates by diisopropyl fluorophosphatase from Loligo vulgaris by in situ Fourier transform infrared spectroscopy. Analytical Biochemistry, 2009, 385, 187-193.	2.4	27
10	Stable adducts of nerve agents sarin, soman and cyclosarin with TRIS, TES and related buffer compoundsâ€”Characterization by LC-ESI-MS/MS and NMR and implications for analytical chemistry. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2010, 878, 1382-1390.	2.3	27
11	The DFPase from Loligo vulgaris in sugar surfactant-based bicontinuous microemulsions: structure, dynamics, and enzyme activity. European Biophysics Journal, 2011, 40, 761-774.	2.2	22
12	Preliminary time-of-flight neutron diffraction study on diisopropyl fluorophosphatase (DFPase) fromLoligo vulgaris. Acta Crystallographica Section F: Structural Biology Communications, 2007, 63, 42-45.	0.7	21
13	Analytical chemistry and the Chemical Weapons Convention. Analytical and Bioanalytical Chemistry, 2014, 406, 5067-5069.	3.7	20
14	Monitoring the hydrolysis of toxic organophosphonate nerve agents in aqueous buffer and in bicontinuous microemulsions by use of diisopropyl fluorophosphatase (DFPase) with 1Hâ€“31P HSQC NMR spectroscopy. Analytical and Bioanalytical Chemistry, 2010, 396, 1213-1221.	3.7	18
15	Neutron structure and mechanistic studies of diisopropyl fluorophosphatase (DFPase). Acta Crystallographica Section D: Biological Crystallography, 2010, 66, 1131-1138.	2.5	18
16	In vitro and in vivo efficacy of PEGylated diisopropyl fluorophosphatase (DFPase). Drug Testing and Analysis, 2012, 4, 262-270.	2.6	18
17	An enzyme containing microemulsion based on skin friendly oil and surfactant as decontamination medium for organo phosphates: Phase behavior, structure, and enzyme activity. Journal of Colloid and Interface Science, 2014, 413, 127-132.	9.4	18
18	Advice on chemical weapons sample stability and storage provided by the Scientific Advisory Board of the Organisation for the Prohibition of Chemical Weapons to increase investigative capabilities worldwide. Talanta, 2018, 188, 808-832.	5.5	17

#	Article	IF	Citations
19	X-ray structure of perdeuterated diisopropyl fluorophosphatase (DFPase): perdeuteration of proteins for neutron diffraction. Acta Crystallographica Section F: Structural Biology Communications, 2010, 66, 379-385.	0.7	16
20	Sampling and analysis of organophosphorus nerve agents: analytical chemistry in international chemical disarmament. Pure and Applied Chemistry, 2017, 89, 249-258.	1.9	14
21	Adduct of the blistering warfare agent sesquimustard with human serum albumin and its mass spectrometric identification for biomedical verification of exposure. Analytical and Bioanalytical Chemistry, 2020, 412, 7723-7737.	3.7	14
22	Formation of pyrophosphate-like adducts from nerve agents sarin, soman and cyclosarin in phosphate buffer: Implications for analytical and toxicological investigations. Toxicology Letters, 2011, 200, 34-40.	0.8	13
23	Review of UV spectroscopic, chromatographic, and electrophoretic methods for the cholinesterase reactivating antidote pralidoxime (2â€PAM). Drug Testing and Analysis, 2012, 4, 179-193.	2.6	12
24	No chemical killer AI (yet). Nature Machine Intelligence, 0, , .	16.0	2
25	A Short Introduction to Enzyme Catalysis. , 0, , 117-134.		1
26	Road Ahead. , 0, , 273-287.		0
27	Editorial: Analysis of drugs for the therapy of anticholinesterase poisoning. Drug Testing and Analysis, 2012, 4, 167-168.	2.6	0