Diana Imhof

List of Publications by Year in descending order

97 papers	2,486 citations	236612 25 h-index	243296 44 g-index
108 all docs	108 docs citations	108 times ranked	3263 citing authors

#	Article	IF	Citations
1	Lack of beta-arrestin signaling in the absence of active G proteins. Nature Communications, 2018, 9, 341.	5.8	297
2	The experimental power of FR900359 to study Gq-regulated biological processes. Nature Communications, 2015, 6, 10156.	5.8	282
3	Effective Dephosphorylation of Src Substrates by SHP-1. Journal of Biological Chemistry, 2004, 279, 11375-11383.	1.6	84
4	Analysis of Fe(III) Heme Binding to Cysteine-Containing Heme-Regulatory Motifs in Proteins. ACS Chemical Biology, 2013, 8, 1785-1793.	1.6	65
5	On the Nature of Interactions between Ionic Liquids and Small Aminoâ€Acidâ€Based Biomolecules. ChemPhysChem, 2013, 14, 4044-4064.	1.0	60
6	Sequence Specificity of SHP-1 and SHP-2 Src Homology 2 Domains. Journal of Biological Chemistry, 2006, 281, 20271-20282.	1.6	59
7	HDAC1 and HDAC2 integrate checkpoint kinase phosphorylation and cell fate through the phosphatase-2A subunit PR130. Nature Communications, 2018, 9, 764.	5.8	58
8	Regulatory Fe^{II/III} Heme: The Reconstruction of a Molecule's Biography. ChemBioChem, 2014, 15, 2024-2035.	1.3	55
9	Structure functional insights into calcium binding during the activation of coagulation factor XIII A. Scientific Reports, 2019, 9, 11324.	1.6	52
10	Structurally Diverse Î¼â€Conotoxin PIIIA Isomers Block Sodium Channel Na_V1.4. Angewandte Chemie - International Edition, 2012, 51, 4058-4061.	7.2	51
11	Determination of Heminâ€Binding Characteristics of Proteins by a Combinatorial Peptide Library Approach. ChemBioChem, 2011, 12, 2846-2855.	1.3	48
12	Ionic Liquid Applications in Peptide Chemistry: Synthesis, Purification and Analytical Characterization Processes. Molecules, 2012, 17, 4158-4185.	1.7	48
13	A Cell-Permeable Inhibitor to Trap GÎ±q Proteins in the Empty Pocket Conformation. Chemistry and Biology, 2014, 21, 890-902.	6.2	47
14	CO-independent modification of K + channels by tricarbonyldichlororuthenium(II) dimer (CORM-2). European Journal of Pharmacology, 2017, 815, 33-41.	1.7	42
15	The molecular basis of transient heme-protein interactions: analysis, concept and implementation. Bioscience Reports, 2019, 39, .	1.1	42
16	New Insight into the Mode of Action of Nickel Superoxide Dismutase by Investigating Metallopeptide Substrate Models. Chemistry - A European Journal, 2009, 15, 517-523.	1.7	40
17	Development of a Functional cisâ€Prolyl Bond Biomimetic and Mechanistic Implications for Nickel Superoxide Dismutase. Chemistry - A European Journal, 2010, 16, 7572-7578.	1.7	38
18	Development of Conformationally Restricted Analogues of Bradykinin and Somatostatin Using Constrained Amino Acids and Different Types of Cyclization. Current Medicinal Chemistry, 2004, 11, 2823-2844.	1.2	33

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19	A room temperature ionic liquid as convenient solvent for the oxidative folding of conopeptides. Journal of Peptide Science, 2009, 15, 72-77.	0.8	32
20	Molecular determinants for the subtype specificity of Î¼-conotoxin SIIIA targeting neuronal voltage-gated sodium channels. Neuropharmacology, 2011, 61, 105-111.	2.0	32
21	Role of the Chemical Environment beyond the Coordination Site: Structural Insight into Fe^{III} Protoporphyrin Binding to Cysteineâ€Based Hemeâ€Regulatory Protein Motifs. ChemBioChem, 2015, 16, 2216-2224.	1.3	32
22	Detection of new amino acid sequences of alamethicins F30 by nonaqueous capillary electrophoresisâ€“mass spectrometry. Journal of Peptide Science, 2006, 12, 279-290.	0.8	31
23	HeMoQuest: a webserver for qualitative prediction of transient heme binding to protein motifs. BMC Bioinformatics, 2020, 21, 124.	1.2	31
24	Heme interacts with histidine- and tyrosine-based protein motifs and inhibits enzymatic activity of chloramphenicol acetyltransferase from Escherichia coli. Biochimica Et Biophysica Acta - General Subjects, 2016, 1860, 1343-1353.	1.1	30
25	Deciphering Specificity Determinants for FR900359â€Derived G_qÎ± Inhibitors Based on Computational and Structureâ€“Activity Studies. ChemMedChem, 2018, 13, 1634-1643.	1.6	29
26	Structural insights into heme binding to IL-36Î± proinflammatory cytokine. Scientific Reports, 2019, 9, 16893.	1.6	29
27	Synthesis and Biological Evaluation of Analogues of the Peptaibol Ampullosporin A. Journal of Medicinal Chemistry, 2002, 45, 2781-2787.	2.9	28
28	Structural and functional diversity of transient heme binding to bacterial proteins. Biochimica Et Biophysica Acta - General Subjects, 2017, 1861, 683-697.	1.1	28
29	C-Terminal Alpha-1 Antitrypsin Peptide: A New Sepsis Biomarker with Immunomodulatory Function. Mediators of Inflammation, 2016, 2016, 1-13.	1.4	27
30	Conformational Î¼-Conotoxin PIIIA Isomers Revisited: Impact of Cysteine Pairing on Disulfide-Bond Assignment and Structure Elucidation. Analytical Chemistry, 2018, 90, 3321-3327.	3.2	27
31	Heme Determination and Quantification Methods and Their Suitability for Practical Applications and Everyday Use. Analytical Chemistry, 2020, 92, 9429-9440.	3.2	26
32	Spectroscopic studies on peptides and proteins with cysteine-containing heme regulatory motifs (HRM). Journal of Inorganic Biochemistry, 2015, 148, 49-56.	1.5	24
33	Synthesis and Functional Characterization of Tridegin and Its Analogues: Inhibitors and Substrates of Factor XIIIa. ChemMedChem, 2012, 7, 326-333.	1.6	23
34	Linking Labile Heme with Thrombosis. Journal of Clinical Medicine, 2021, 10, 427.	1.0	23
35	Revealing the Position of the Substrate in Nickel Superoxide Dismutase: A Model Study. Angewandte Chemie - International Edition, 2011, 50, 2946-2950.	7.2	22
36	Application of Roomâ€Temperature Aprotic and Protic Ionic Liquids for Oxidative Folding of Cysteineâ€Rich Peptides. ChemBioChem, 2014, 15, 2754-2765.	1.3	22

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37	Development of a capillary electrophoresisâ€based assay of sirtuin enzymes. Electrophoresis, 2008, 29, 3717-3723.	1.3	20
38	High-affinity binding and catalytic activity of His/Tyr-based sequences: Extending heme-regulatory motifs beyond CP. Biochimica Et Biophysica Acta - General Subjects, 2020, 1864, 129603.	1.1	20
39	Heme interaction of the intrinsically disordered N-terminal peptide segment of human cystathionine-Î²-synthase. Scientific Reports, 2018, 8, 2474.	1.6	19
40	Insights into the Folding of Disulfide-Rich Î¼-Conotoxins. ACS Omega, 2018, 3, 12330-12340.	1.6	19
41	An unusual peptide from Conus villepinii: Synthesis, solution structure, and cardioactivity. Peptides, 2010, 31, 1292-1300.	1.2	18
42	Novel Insights into Structure and Function of Factor XIIIa-Inhibitor Tridegin. Journal of Medicinal Chemistry, 2014, 57, 10355-10365.	2.9	18
43	Subtype-specific block of voltage-gated K+ channels by Î¼-conopeptides. Biochemical and Biophysical Research Communications, 2017, 482, 1135-1140.	1.0	18
44	Insights into mechanism and functional consequences of heme binding to hemolysin-activating lysine acyltransferase HlyC from Escherichia coli. Biochimica Et Biophysica Acta - General Subjects, 2018, 1862, 1964-1972.	1.1	18
45	Ionic liquids as reaction media for oxidative folding and native chemical ligation of cysteine-containing peptides. Journal of Molecular Liquids, 2014, 192, 67-70.	2.3	16
46	Synthetic strategies for polypeptides and proteins by chemical ligation. Amino Acids, 2015, 47, 1283-1299.	1.2	16
47	New insights into the mechanism of nickel superoxide degradation from studies of model peptides. Scientific Reports, 2017, 7, 17194.	1.6	16
48	A Computational Approach for Mapping Heme Biology in the Context of Hemolytic Disorders. Frontiers in Bioengineering and Biotechnology, 2020, 8, 74.	2.0	16
49	Inhibitors of blood coagulation factor XIII. Analytical Biochemistry, 2020, 605, 113708.	1.1	16
50	Linking COVID-19 and Heme-Driven Pathophysiologies: A Combined Computationalâ€“Experimental Approach. Biomolecules, 2021, 11, 644.	1.8	16
51	Synthesis of linear and cyclic phosphopeptides as ligands for theN-terminal SH2-domain of protein tyrosine phosphatase SHP-1. Journal of Peptide Science, 2005, 11, 390-400.	0.8	15
52	Molecular Insights and Functional Consequences of the Interaction of Heme with Activated Protein C. Antioxidants and Redox Signaling, 2021, 34, 32-48.	2.5	14
53	Study on the cyclization tendency of backbone cyclic tetrapeptides. Chemical Biology and Drug Design, 2000, 56, 337-345.	1.2	13
54	Studies on the X-Ray and Solution Structure of FeoB from Escherichia coli BL21. Biophysical Journal, 2016, 110, 2642-2650.	0.2	13

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55	The Plasma Factor XIII Heterotetrameric Complex Structure: Unexpected Unequal Pairing within a Symmetric Complex. Biomolecules, 2019, 9, 765.	1.8	13
56	Revisiting the interaction of heme with hemopexin. Biological Chemistry, 2021, 402, 675-691.	1.2	13
57	Total synthesis and characterization of the bilirubin oxidation product (Z)-2-(4-ethenyl-3-methyl-5-oxo-1,5-dihydro-2H-pyrrol-2-ylidene)ethanamide (Z-BOX B). Tetrahedron Letters, 2014, 55, 6526-6529.	0.7	12
58	Synthesis and Evaluation of Amyloid Î² Derived and Amyloid Î² Independent Enhancers of the Peroxidase-like Activity of Heme. Journal of Medicinal Chemistry, 2017, 60, 373-385.	2.9	12
59	Circular dichroism studies of ampullosporin-A analogues. Journal of Peptide Science, 2003, 9, 714-728.	0.8	11
60	Synthesis of differentially protectedN-acylated reduced pseudodipeptides as building units for backbone cyclic peptides. , 2000, 6, 130-138.		10
61	Activation by Tyrosine Phosphorylation as a Prerequisite for Protein Kinase CÎ¶ to Mediate Epidermal Growth Factor Receptor Signaling to ERK. Molecular Cancer Research, 2010, 8, 783-797.	1.5	10
62	Novel Insights Into Appropriate Encapsulation Methods for Bioactive Compounds Into Polymers: A Study With Peptides and HDAC Inhibitors. Macromolecular Bioscience, 2014, 14, 69-80.	2.1	10
63	Ionic liquid 1-ethyl-3-methylimidazolium acetate: an attractive solvent for native chemical ligation of peptides. Tetrahedron Letters, 2014, 55, 3658-3662.	0.7	10
64	Molecular interaction of Î´-conopeptide EVIA with voltage-gated Na+ channels. Biochimica Et Biophysica Acta - General Subjects, 2016, 1860, 2053-2063.	1.1	10
65	Effect of Conformational Diversity on the Bioactivity of Âµ-Conotoxin PIIIA Disulfide Isomers. Marine Drugs, 2019, 17, 390.	2.2	10
66	Strategies towards Targeting GÎ±i/s Proteins: Scanning of Proteinâ€Protein Interaction Sites To Overcome Inaccessibility. ChemMedChem, 2021, 16, 1697-1716.	1.6	10
67	Degradation Kinetics of an Aspartyl-Tripeptide-Derived Diketopiperazine under Forced Conditions. Journal of Pharmaceutical Sciences, 2012, 101, 4178-4190.	1.6	9
68	LC-Trapped Ion Mobility Spectrometry-TOF MS Differentiation of 2- and 3-Disulfide-Bonded Isomers of the Î¼-Conotoxin PIIIA. Analytical Chemistry, 2020, 92, 10920-10924.	3.2	9
69	Protein kinase CÎµ may act as EGF-inducible scaffold protein for phospholipase CÎ³1. Cellular Signalling, 2007, 19, 1830-1843.	1.7	8
70	Quantification of amino acids and peptides in an ionic liquid based aqueous two-phase system by LCâ€“MS analysis. AMB Express, 2018, 8, 66.	1.4	8
71	Design and Biological Evaluation of Linear and Cyclic Phosphopeptide Ligands of the N-Terminal SH2 Domain of Protein Tyrosine Phosphatase SHP-1. Journal of Medicinal Chemistry, 2005, 48, 1528-1539.	2.9	7
72	Capillary electrophoretic study of the degradation pathways and kinetics of the aspartyl model tetrapeptide Gly-Phe-Asp-GlyOH in alkaline solution. Journal of Pharmaceutical and Biomedical Analysis, 2013, 76, 96-103.	1.4	7

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73	Synthesis and Structure Determination of µ-Conotoxin PIIIA Isomers with Different Disulfide Connectivities. Journal of Visualized Experiments, 2018, , .	0.2	7
74	Coagulation Factor XIIIa Inhibitor Tridegin: On the Role of Disulfide Bonds for Folding, Stability, and Function. Journal of Medicinal Chemistry, 2019, 62, 3513-3523.	2.9	7
75	Targeting GÎ±i/s Proteins with Peptidyl Nucleotide Exchange Modulators. ACS Chemical Biology, 2022, 17, 463-473.	1.6	7
76	Cell-specific RNA interference by peptide-inhibited-peptidase-activated siRNAs. Journal of Rnai and Gene Silencing, 2010, 6, 422-30.	1.2	6
77	Eyes Absent Proteins: Characterization of Substrate Specificity and Phosphatase Activity of Mutants Associated with Branchial, Otic and Renal Anomalies. ChemBioChem, 2008, 9, 2285-2294.	1.3	5
78	Propylene carbonate quantification by its derivative 3,5-diacetyl-1,4-dihydro-2,6-lutidine. Talanta, 2016, 151, 75-82.	2.9	5
79	Biofunctionalization of Ceramic Implant Surfaces to Improve their Bone Ingrowth Behavior. Materials Science Forum, 2018, 941, 2483-2488.	0.3	5
80	Structural Insights into the Interaction of Heme with Protein Tyrosine Kinase JAK2**. ChemBioChem, 2021, 22, 861-864.	1.3	5
81	Dextranâ€based coating system for the immobilization of cell adhesion promoting molecules on titanium surfaces. Materialwissenschaft Und Werkstofftechnik, 2009, 40, 853-860.	0.5	4
82	Identification of inhibitors of the transmembrane protease FlaK ofMethanococcus maripaludis. MicrobiologyOpen, 2016, 5, 637-646.	1.2	4
83	1H, 13C, and 15N resonance assignments for the pro-inflammatory cytokine interleukin-36Î±. Biomolecular NMR Assignments, 2016, 10, 329-333.	0.4	4
84	Analyzing Residue Surface Proximity to Interpret Molecular Dynamics. Computer Graphics Forum, 2018, 37, 379-390.	1.8	4
85	NMR experiments on the transient interaction of the intrinsically disordered N-terminal peptide of cystathionine-Î²-synthase with heme. Journal of Magnetic Resonance, 2019, 308, 106561.	1.2	4
86	Editorial: Chemical Design and Biomedical Applications of Disulfide-rich Peptides: Challenges and Opportunities. Frontiers in Chemistry, 2020, 8, 586377.	1.8	4
87	NMR-Based Structural Characterization of a Two-Disulfide-Bonded Analogue of the FXIIIa Inhibitor Tridegin: New Insights into Structureâ€“Activity Relationships. International Journal of Molecular Sciences, 2021, 22, 880.	1.8	4
88	Distinct 3-disulfide-bonded isomers of tridegin differentially inhibit coagulation factor XIIIa: The influence of structural stability on bioactivity. European Journal of Medicinal Chemistry, 2020, 201, 112474.	2.6	4
89	Phosphopeptide Ligands of the SHP-1 N-SH2 Domain: Effects on Binding and Stimulation of Phosphatase Activity. ChemMedChem, 2006, 1, 869-877.	1.6	3
90	Monitoring phosphatase reactions of multiple phosphorylated substrates by reversed-phase HPLC. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2007, 853, 204-213.	1.2	3

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91	Isomerization and epimerization of the aspartyl tetrapeptide <scp>A</scp>laâ€<scp>P</scp>heâ€<scp>A</scp>spâ€<scp>G</scp>ly<scp>OH</scp> at p<scp>H</scp> 10â€"A<scp>CE</scp> study. Electrophoresis, 2013, 34, 2666-2673.	3	3
92	A Tough Nut to Crack: Intracellular Detection and Quantification of Heme in Malaria Parasites by a Genetically Encoded Protein Sensor. ChemBioChem, 2017, 18, 1561-1564.	1.3	3
93	1H, 13C, and 15N resonance assignments of the cytokine interleukin-36Î² isoform-2. Biomolecular NMR Assignments, 2019, 13, 155-161.	0.4	2
94	Modulation of SHPâ€1 phosphatase activity by monovalent and bivalent SH2 phosphopeptide ligands. Biopolymers, 2010, 93, 102-112.	1.2	1
95	Synthetic Strategies to a Backbone-Side Chain Cyclic SHP-1 N-SH2 Ligand Containing N-Functionalized Alkyl Phosphotyrosine. Protein and Peptide Letters, 2010, 17, 809-816.	0.4	0
96	Modulation of KV10.1 Potassium Channel Function by Intracellular Heme. Biophysical Journal, 2019, 116, 15a.	0.2	0
97	Encapsulation of the HDACi Ex527 into Liposomes and Polymer-Based Particles. Methods in Molecular Biology, 2017, 1510, 387-398.	0.4	0