Hein J Wijma

List of Publications by Year
in descending order

39 papers	1,695 citations	279798 23 h-index	302126 39 g-index
39 all docs	39 docs citations	39 times ranked	2029 citing authors

#	Article	IF	Citations
1	Stabilizing AqdC, a Pseudomonas Quinolone Signalâ€Cleaving Dioxygenase from Mycobacteria, by FRESCOâ€Based Protein Engineering. ChemBioChem, 2021, 22, 733-742.	2.6	7
2	Thermodynamics Determine the Diastereochemical Outcome of Catalytic Reactions. ChemCatChem, 2021, 13, 2530-2536.	3.7	7
3	Catalytic and structural properties of <scp>ATP</scp>â€dependent caprolactamase from Pseudomonas jessenii. Proteins: Structure, Function and Bioinformatics, 2021, 89, 1079-1098.	2.6	6
4	Computational Redesign of an Ï‰-Transaminase from Pseudomonas jessenii for Asymmetric Synthesis of Enantiopure Bulky Amines. ACS Catalysis, 2021, 11, 10733-10747.	11.2	28
5	Computational Prediction of Ï‰-Transaminase Specificity by a Combination of Docking and Molecular Dynamics Simulations. Journal of Chemical Information and Modeling, 2021, 61, 5569-5580.	5.4	17
6	Asymmetric Synthesis of Optically Pure Aliphatic Amines with an Engineered Robust Ï‰-Transaminase. Catalysts, 2020, 10, 1310.	3.5	10
7	Computational Design of Enantiocomplementary Epoxide Hydrolases for Asymmetric Synthesis of Aliphatic and Aromatic Diols. ChemBioChem, 2020, 21, 1893-1904.	2.6	15
8	Computational redesign of enzymes for regio- and enantioselective hydroamination. Nature Chemical Biology, 2018, 14, 664-670.	8.0	137
9	A robust cosolvent-compatible halohydrin dehalogenase by computational library design. Protein Engineering, Design and Selection, 2017, 30, 173-187.	2.1	23
10	Real-Time Conformational Changes and Controlled Orientation of Native Proteins Inside a Protein Nanoreactor. Journal of the American Chemical Society, 2017, 139, 18640-18646.	13.7	83
11	Versatile Peptide C-Terminal Functionalization via a Computationally Engineered Peptide Amidase. ACS Catalysis, 2016, 6, 5405-5414.	11.2	60
12	Exploring the gating mechanisms of aquaporin-3: new clues for the design of inhibitors?. Molecular BioSystems, 2016, 12, 1564-1573.	2.9	32
13	Metabolism of Î²-valine via a CoA-dependent ammonia lyase pathway. Applied Microbiology and Biotechnology, 2015, 99, 8987-8998.	3.6	2
14	Enantioselective Enzymes by Computational Design and In Silico Screening. Angewandte Chemie - International Edition, 2015, 54, 3726-3730.	13.8	119
15	X-ray crystallographic validation of structure predictions used in computational design for protein stabilization. Proteins: Structure, Function and Bioinformatics, 2015, 83, 940-951.	2.6	17
16	Computationally designed libraries for rapid enzyme stabilization. Protein Engineering, Design and Selection, 2014, 27, 49-58.	2.1	205
17	Stabilization of cyclohexanone monooxygenase by a computationally designed disulfide bond spanning only one residue. FEBS Open Bio, 2014, 4, 168-174.	2.3	59
18	Computational Library Design for Increasing Haloalkane Dehalogenase Stability. ChemBioChem, 2014, 15, 1660-1672.	2.6	68

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19	Computationally Efficient and Accurate Enantioselectivity Modeling by Clusters of Molecular Dynamics Simulations. Journal of Chemical Information and Modeling, 2014, 54, 2079-2092.	5.4	44
20	Computational design gains momentum in enzyme catalysis engineering. FEBS Journal, 2013, 280, 2948-2960.	4.7	58
21	Biocatalytic and Structural Properties of a Highly Engineered Halohydrin Dehalogenase. ChemBioChem, 2013, 14, 870-881.	2.6	44
22	Structure- and sequence-analysis inspired engineering of proteins for enhanced thermostability. Current Opinion in Structural Biology, 2013, 23, 588-594.	5.7	161
23	Biochemical Properties and Crystal Structure of a Î²-Phenylalanine Aminotransferase from Variovorax paradoxus. Applied and Environmental Microbiology, 2013, 79, 185-195.	3.1	29
24	Hot or not? Discovery and characterization of a thermostable alditol oxidase from Acidothermus cellulolyticus 11B. Applied Microbiology and Biotechnology, 2012, 95, 389-403.	3.6	20
25	Directed Evolution Strategies for Enantiocomplementary Haloalkane Dehalogenases: From Chemical Waste to Enantiopure Building Blocks. ChemBioChem, 2012, 13, 137-148.	2.6	55
26	Aminoacyl-coenzyme A synthesis catalyzed by a CoA ligase fromPenicillium chrysogenum. FEBS Letters, 2011, 585, 893-898.	2.8	8
27	Kinetic Resolution of Î±â€Bromoamides: Experimental and Theoretical Investigation of Highly Enantioselective Reactions Catalyzed by Haloalkane Dehalogenases. Advanced Synthesis and Catalysis, 2011, 353, 931-944.	4.3	35
28	Engineering of an enantioselective tyrosine aminomutase by mutation of a single active site residue in phenylalanine aminomutase. Chemical Communications, 2010, 46, 8157.	4.1	23
29	Protein Film Voltammetry of Copper-Containing Nitrite Reductase Reveals Reversible Inactivation. Journal of the American Chemical Society, 2007, 129, 8557-8565.	13.7	45
30	Effect of the Methionine Ligand on the Reorganization Energy of the Type-1 Copper Site of Nitrite Reductase. Journal of the American Chemical Society, 2007, 129, 519-525.	13.7	25
31	Thermal stability effects of removing the type-2 copper ligand His306 at the interface of nitrite reductase subunits. European Biophysics Journal, 2007, 36, 805-813.	2.2	3
32	A Rearranging Ligand Enables Allosteric Control of Catalytic Activity in Copper-containing Nitrite Reductase. Journal of Molecular Biology, 2006, 358, 1081-1093.	4.2	12
33	A Random-sequential Mechanism for Nitrite Binding and Active Site Reduction in Copper-containing Nitrite Reductase*. Journal of Biological Chemistry, 2006, 281, 16340-16346.	3.4	72
34	Calorimetric and spectroscopic investigations of the thermal denaturation of wild type nitrite reductase. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2005, 1752, 47-55.	2.3	19
35	Sensing Nitrite through a Pseudoazurin-Nitrite Reductase Electron Transfer Relay. ChemPhysChem, 2005, 6, 1114-1120.	2.1	29
36	The Substrate-Bound Type 2 Copper Site of Nitrite Reductase:Â The Nitrogen Hyperfine Coupling of Nitrite Revealed by Pulsed EPRâ€. Biochemistry, 2005, 44, 15193-15202.	2.5	15

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37	A Systematic Study of the Influence of Peptide Modification of a Gold Electrode on the Cyclic Voltammetry of Pseudoazurin fromAlcaligenes faecalis Strain S-6. Electroanalysis, 2004, 16, 1155-1165.	2.9	7
38	Bidirectional Catalysis by Copper-Containing Nitrite Reductaseâ€. Biochemistry, 2004, 43, 10467-10474.	2.5	59
39	Reconstitution of the Type-1 Active Site of the H145G/A Variants of Nitrite Reductase by Ligand Insertionâ€. Biochemistry, 2003, 42, 4075-4083.	2.5	37