Gustav Oberdorfer

List of Publications by Year
in descending order

27 papers	1,828 citations	430754 18 h-index	526166 27 g-index
28 all docs	28 docs citations	28 times ranked	3009 citing authors

#	Article	IF	Citations
1	High thermodynamic stability of parametrically designed helical bundles. Science, 2014, 346, 481-485.	6.0	264
2	De novo design of protein homo-oligomers with modular hydrogen-bond networkâ€“mediated specificity. Science, 2016, 352, 680-687.	6.0	262
3	Improved molecular replacement by density- and energy-guided protein structure optimization. Nature, 2011, 473, 540-543.	13.7	226
4	Asymmetric Bioreduction of Cï£¾C Bonds using Enoate Reductases OPR1, OPR3 and YqjM: Enzymeâ€Based Stereocontrol. Advanced Synthesis and Catalysis, 2008, 350, 411-418.	2.1	178
5	Fusion of Binding Domains to Thermobifida cellulosilytica Cutinase to Tune Sorption Characteristics and Enhancing PET Hydrolysis. Biomacromolecules, 2013, 14, 1769-1776.	2.6	137
6	Principles for designing proteins with cavities formed by curved Î² sheets. Science, 2017, 355, 201-206.	6.0	117
7	De novo design of self-assembling helical protein filaments. Science, 2018, 362, 705-709.	6.0	112
8	De novo design of a non-local Î²-sheet protein with high stability and accuracy. Nature Structural and Molecular Biology, 2018, 25, 1028-1034.	3.6	101
9	Engineering V-Type Nerve Agents Detoxifying Enzymes Using Computationally Focused Libraries. ACS Chemical Biology, 2013, 8, 2394-2403.	1.6	91
10	Computational design of a homotrimeric metalloprotein with a trisbipyridyl core. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 15012-15017.	3.3	41
11	An Algorithm for the Deconvolution of Mass Spectrosopic Patterns in Isotope Labeling Studies. Evaluation for the Hydrogenâ^'Deuterium Exchange Reaction in Ketones. Journal of Organic Chemistry, 2007, 72, 5778-5783.	1.7	40
12	Vascular Bioactivation of Nitroglycerin by Aldehyde Dehydrogenase-2. Journal of Biological Chemistry, 2012, 287, 38124-38134.	1.6	33
13	Stereopreferences of Old Yellow Enzymes: Structure Correlations and Sequence Patterns in Enoate Reductases. ChemCatChem, 2011, 3, 1562-1566.	1.8	32
14	Structure of a Berberine Bridge Enzyme-Like Enzyme with an Active Site Specific to the Plant Family Brassicaceae. PLoS ONE, 2016, 11, e0156892.	1.1	30
15	Stereocomplementary Asymmetric Reduction of Bulkyâ€“Bulky Ketones by Biocatalytic Hydrogen Transfer. European Journal of Organic Chemistry, 2008, 2008, 2539-2543.	1.2	25
16	Stereocontrol Strategies in the Asymmetric Bioreduction of Alkenes. Synlett, 2012, 23, 1857-1864.	1.0	23
17	Characterization of the PLPâ€dependent aminotransferase NikK from Streptomycesâ€ƒtendae and its putative role in nikkomycin biosynthesis. FEBS Journal, 2011, 278, 4122-4135.	2.2	19
18	Epoxideâ€Hydrolaseâ€Initiated Hydrolysis/Rearrangement Cascade of a Methyleneâ€Interrupted Bisâ€Epoxide Yields Chiral THF Moieties without Involvement of a â€œCyclaseâ€• ChemBioChem, 2009, 10, 1697-1704.	1.3	18

#	Article	IF	Citations
19	De novo design of a homo-trimeric amantadine-binding protein. ELife, 2019, 8, .	2.8	18
20	The Crystal Structure of D-Threonine Aldolase from Alcaligenes xylosoxidans Provides Insight into a Metal Ion Assisted PLP-Dependent Mechanism. PLoS ONE, 2015, 10, e0124056.	1.1	16
21	Structural and Functional Characterization of NikO, an Enolpyruvyl Transferase Essential in Nikkomycin Biosynthesis. Journal of Biological Chemistry, 2012, 287, 31427-31436.	1.6	14
22	The Structure of Glycerol Trinitrate Reductase NerA from Agrobacterium radiobacter Reveals the Molecular Reason for Nitroâ€•and Eneâ€Reductase Activity in OYE Homologues. ChemBioChem, 2013, 14, 836-845.	1.3	10
23	Essential Functional Interplay of the Catalytic Groups in Acid Phosphatase. ACS Catalysis, 2022, 12, 3357-3370.	5.5	5
24	A Novel High-Throughput Nanopore-Sequencing-Based Strategy for Rapid and Automated S-Protein Typing of SARS-CoV-2 Variants. Viruses, 2021, 13, 2548.	1.5	5
25	Computational backbone design enables soluble engineering of transferrin receptor apical domain. Proteins: Structure, Function and Bioinformatics, 2020, 88, 1569-1577.	1.5	4
26	A local platform for user-friendly FAIR data management and reproducible analytics. Journal of Biotechnology, 2021, 341, 43-50.	1.9	4
27	Derivatives of Natural Organocatalytic Cofactors and Artificial Organocatalytic Cofactors as Catalysts in Enzymes. ChemBioChem, 2022, 23, .	1.3	3