Gustav Oberdorfer

List of Publications by Citations

25 papers	1,396 citations	16 h-index	28 g-index
28 ext. papers	1,651 ext. citations	11.3 avg, IF	3.78 L-index

#	Paper	IF	Citations
25	High thermodynamic stability of parametrically designed helical bundles. *Science*, **2014**, 346, 481-485	33.3	196
24	Improved molecular replacement by density- and energy-guided protein structure optimization. *Nature*, **2011**, 473, 540-3	50.4	196
23	De novo design of protein homo-oligomers with modular hydrogen-bond network-mediated specificity. *Science*, **2016**, 352, 680-7	33.3	194
22	Asymmetric Bioreduction of C?C Bonds using Enoate Reductases OPR1, OPR3 and YqjM: Enzyme-Based Stereocontrol. *Advanced Synthesis and Catalysis*, **2008**, 350, 411-418	5.6	165
21	Fusion of binding domains to Thermobifida cellulosilytica cutinase to tune sorption characteristics and enhancing PET hydrolysis. *Biomacromolecules*, **2013**, 14, 1769-76	6.9	102
20	Principles for designing proteins with cavities formed by curved sheets. *Science*, **2017**, 355, 201-206	33.3	82
19	De novo design of self-assembling helical protein filaments. *Science*, **2018**, 362, 705-709	33.3	78
18	Engineering V-type nerve agents detoxifying enzymes using computationally focused libraries. *ACS Chemical Biology*, **2013**, 8, 2394-403	4.9	71
17	De novo design of a non-local sheet protein with high stability and accuracy. *Nature Structural and Molecular Biology*, **2018**, 25, 1028-1034	17.6	54
16	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	11.5	33
15	Stereopreferences of Old Yellow Enzymes: Structure Correlations and Sequence Patterns in Enoate Reductases. *ChemCatChem*, **2011**, 3, 1562-1566	5.2	30
14	Vascular bioactivation of nitroglycerin by aldehyde dehydrogenase-2: reaction intermediates revealed by crystallography and mass spectrometry. *Journal of Biological Chemistry*, **2012**, 287, 38124-34	5.4	24
13	An algorithm for the deconvolution of mass spectroscopic patterns in isotope labeling studies. Evaluation for the hydrogen-deuterium exchange reaction in ketones. *Journal of Organic Chemistry*, **2007**, 72, 5778-83	4.2	24
12	Stereocomplementary Asymmetric Reduction of BulkyBulky Ketones by Biocatalytic Hydrogen Transfer. *European Journal of Organic Chemistry*, **2008**, 2008, 2539-2543	3.2	24
11	Stereocontrol Strategies in the Asymmetric Bioreduction of Alkenes. *Synlett*, **2012**, 23, 1857-1864	2.2	22
10	Structure of a Berberine Bridge Enzyme-Like Enzyme with an Active Site Specific to the Plant Family Brassicaceae. *PLoS ONE*, **2016**, 11, e0156892	3.7	20
9	Characterization of the PLP-dependent aminotransferase NikK from Streptomyces tendae and its putative role in nikkomycin biosynthesis. *FEBS Journal*, **2011**, 278, 4122-35	5.7	16

List of Publications

8	Epoxide-hydrolase-initiated hydrolysis/rearrangement cascade of a methylene-interrupted bis-epoxide yields chiral THF moieties without involvement of a "cyclase". *ChemBioChem*, **2009**, 10, 1697-704	3.8	15
7	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	3.7	14
6	Structural and functional characterization of NikO, an enolpyruvyl transferase essential in nikkomycin biosynthesis. *Journal of Biological Chemistry*, **2012**, 287, 31427-36	5.4	12
5	The structure of glycerol trinitrate reductase NerA from Agrobacterium radiobacter reveals the molecular reason for nitro- and ene-reductase activity in OYE homologues. *ChemBioChem*, **2013**, 14, 836-45	3.8	10
4	De novo design of a homo-trimeric amantadine-binding protein. *ELife*, **2019**, 8,	8.9	10
3	A local platform for user-friendly FAIR data management and reproducible analytics. *Journal of Biotechnology*, **2021**, 341, 43-50	3.7	2
2	Computational backbone design enables soluble engineering of transferrin receptor apical domain. *Proteins: Structure, Function and Bioinformatics*, **2020**, 88, 1569-1577	4.2	1
1	Essential Functional Interplay of the Catalytic Groups in Acid Phosphatase.. *ACS Catalysis*, **2022**, 12, 3357-3370	13.1	0