Martin Culka

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/4284119/publications.pdf

Version: 2024-02-01

14	194	1040056 9	1125743 13
papers	citations	h-index	g-index

15	15	15	227
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Dinucleoside polyphosphates act as 5â€²-RNA caps in bacteria. Nature Communications, 2020, 11, 1052.	12.8	41
2	Protonâ€“Electron Transfer to the Active Site Is Essential for the Reaction Mechanism of Soluble Î”⁹-Desaturase. Journal of the American Chemical Society, 2020, 142, 10412-10423.	13.7	24
3	Breaking Benzene Aromaticityâ€”Computational Insights into the Mechanism of the Tungsten-Containing Benzoyl-CoA Reductase. Journal of the American Chemical Society, 2017, 139, 14488-14500.	13.7	19
4	Preparation of (Pentafluorosulfanyl)benzenes by Direct Fluorination of Diaryldisulfides: Synthetic Approach and Mechanistic Aspects. Chemistry - A European Journal, 2019, 25, 11375-11382.	3.3	18
5	Factors Stabilizing Î²-Sheets in Protein Structures from a Quantum-Chemical Perspective. Journal of Physical Chemistry B, 2019, 123, 6453-6461.	2.6	16
6	Mechanisms and Specificity of Phenazine Biosynthesis Protein PhzF. Scientific Reports, 2017, 7, 6272.	3.3	12
7	Toward Ab Initio Protein Folding: Inherent Secondary Structure Propensity of Short Peptides from the Bioinformatics and Quantum-Chemical Perspective. Journal of Physical Chemistry B, 2019, 123, 1215-1227.	2.6	12
8	PyCPR â€“ a python-based implementation of the Conjugate Peak Refinement (CPR) algorithm for finding transition state structures. Journal of Molecular Modeling, 2016, 22, 242.	1.8	10
9	Dinucleoside Polyphosphates as RNA Building Blocks with Pairing Ability in Transcription Initiation. ACS Chemical Biology, 2020, 15, 1765-1772.	3.4	10
10	Predicting Effects of Site-Directed Mutagenesis on Enzyme Kinetics by QM/MM and QM Calculations: A Case of Glutamate Carboxypeptidase II. Journal of Physical Chemistry B, 2022, 126, 132-143.	2.6	9
11	Interplay between Conformational Strain and Intramolecular Interaction in Protein Structures: Which of Them Is Evolutionarily Conserved?. Journal of Physical Chemistry B, 2020, 124, 3252-3260.	2.6	7
12	Mapping Conformational Space of All 8000 Tripeptides by Quantum Chemical Methods: What Strain Is Affordable within Folded Protein Chains?. Journal of Physical Chemistry B, 2021, 125, 58-69.	2.6	6
13	Computational Biochemistryâ€”Enzyme Mechanisms Explored. Advances in Protein Chemistry and Structural Biology, 2017, 109, 77-112.	2.3	5
14	Understanding desaturation/hydroxylation activity of castor stearoyl Î”9-Desaturase through rational mutagenesis. Computational and Structural Biotechnology Journal, 2022, 20, 1378-1388.	4.1	3