Frank Schulz

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/9070600/publications.pdf

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34 papers	1,452 citations	471509 17 h-index	361022 35 g-index
40 all docs	40 docs citations	40 times ranked	1186 citing authors

#	Article	IF	Citations
1	Polyether cyclization cascade alterations in response to monensin polyketide synthase mutations. ChemBioChem, 2021, , .	2.6	0
2	Rational prioritization strategy allows the design of macrolide derivatives that overcome antibiotic resistance. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, e2113632118.	7.1	7
3	Sensitivity of VCD spectroscopy for small structural and stereochemical changes of macrolide antibiotics. Chemical Communications, 2020, 56, 10926-10929.	4.1	17
4	Identification of crucial bottlenecks in engineered polyketide biosynthesis. Organic and Biomolecular Chemistry, 2019, 17, 6374-6385.	2.8	6
5	Exploring the Promiscuous Enzymatic Activation of Unnatural Polyketide Extender Units in Vitro and in Vivo for Monensin Biosynthesis. ChemBioChem, 2019, 20, 1183-1189.	2.6	9
6	A Multiperspective Approach to Solvent Regulation of Enzymatic Activity: HMGâ€CoA Reductase. ChemBioChem, 2018, 19, 153-158.	2.6	3
7	Flexible enzymatic activation of artificial polyketide extender units by Streptomyces cinnamonensis into the monensin biosynthetic pathway. Letters in Applied Microbiology, 2018, 67, 226-234.	2.2	6
8	An in Vitro Biosynthesis of Sesquiterpenes Starting from Acetic Acid. ChemBioChem, 2018, 19, 2146-2151.	2.6	16
9	Stereochemical assignment of fusiccocadiene from NMR shielding constants and vibrational circular dichroism spectroscopy. Chirality, 2017, 29, 409-414.	2.6	9
10	Elucidation of the Catalytic Mechanism of a Miniature Zinc Finger Hydrolase. Journal of Physical Chemistry B, 2017, 121, 6390-6398.	2.6	20
11	Biosynthesis-driven structureâ€“activity relationship study of premonensin-derivatives. Organic and Biomolecular Chemistry, 2016, 14, 7671-7675.	2.8	6
12	Data in support of substrate flexibility of a mutated acyltransferase domain and implications for polyketide biosynthesis. Data in Brief, 2015, 5, 528-536.	1.0	3
13	Biosynthetic interceptors. Nature Chemistry, 2015, 7, 102-104.	13.6	1
14	Substrate Flexibility of a Mutated Acyltransferase Domain and Implications for Polyketide Biosynthesis. Chemistry and Biology, 2015, 22, 1425-1430.	6.0	41
15	Heterologous fermentation of a diterpene fromAlternaria brassisicola. Mycology, 2014, 5, 207-219.	4.4	7
16	Biosynthesis with Fluorine. ChemBioChem, 2014, 15, 495-497.	2.6	4
17	Predicted Incorporation of Nonâ€native Substrates by a Polyketide Synthase Yields Bioactive Natural Product Derivatives. ChemBioChem, 2014, 15, 1991-1997.	2.6	44
18	Exploration of biosynthetic access to the shared precursor of the fusicoccane diterpenoid family. Chemical Communications, 2013, 49, 4337.	4.1	17

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19	Enzyme-Directed Mutasynthesis: A Combined Experimental and Theoretical Approach to Substrate Recognition of a Polyketide Synthase. ACS Chemical Biology, 2013, 8, 443-450.	3.4	93
20	Quantification of N-acetylcysteamine activated methylmalonate incorporation into polyketide biosynthesis. Beilstein Journal of Organic Chemistry, 2013, 9, 664-674.	2.2	12
21	Minimally Invasive Mutagenesis Gives Rise to a Biosynthetic Polyketide Library. Angewandte Chemie - International Edition, 2012, 51, 10664-10669.	13.8	50
22	Insights into the stereospecificity of ketoreduction in a modular polyketide synthase. Organic and Biomolecular Chemistry, 2011, 9, 2053.	2.8	30
23	Biochemie 2010. Nachrichten Aus Der Chemie, 2011, 59, 297-318.	0.0	0
24	Naturstoffâ€Łego. Nachrichten Aus Der Chemie, 2011, 59, 29-35.	0.0	4
25	The Stereochemistry of Complex Polyketide Biosynthesis by Modular Polyketide Synthases. Molecules, 2011, 16, 6092-6115.	3.8	66
26	The Development of DNA Sequencing: From the Genome of a Bacteriophage to That of a Neanderthal. Angewandte Chemie - International Edition, 2010, 49, 8795-8797.	13.8	3
27	Deazaflavins as mediators in light-driven cytochrome P450 catalyzed hydroxylations. Chemical Communications, 2009, , 7152.	4.1	61
28	Lightâ€Driven Biocatalytic Oxidation and Reduction Reactions: Scope and Limitations. ChemBioChem, 2008, 9, 565-572.	2.6	102
29	Prediction and Manipulation of the Stereochemistry of Enoylreduction in Modular Polyketide Synthases. Chemistry and Biology, 2008, 15, 1231-1240.	6.0	118
30	A Light-Driven Stereoselective Biocatalytic Oxidation. Angewandte Chemie - International Edition, 2007, 46, 2903-2906.	13.8	121
31	Microbial Baeyerâ€"Villiger Oxidation:â€‰ Stereopreference and Substrate Acceptance of Cyclohexanone Monooxygenase Mutants Prepared by Directed Evolution. Organic Letters, 2006, 8, 1221-1224.	4.6	96
32	Converting Phenylacetone Monooxygenase into Phenylcyclohexanone Monooxygenase by Rational Design: Towards Practical Baeyer-Villiger Monooxygenases. Advanced Synthesis and Catalysis, 2005, 347, 979-986.	4.3	132
33	Towards practical biocatalytic Baeyer-Villiger reactions: applying a thermostable enzyme in the gram-scale synthesis of optically-active lactones in a two-liquid-phase system. Beilstein Journal of Organic Chemistry, 2005, 1, 10.	2.2	56
34	Directed Evolution as a Method To Create Enantioselective Cyclohexanone Monooxygenases for Catalysis in Baeyerâ€"Villiger Reactions. Angewandte Chemie - International Edition, 2004, 43, 4075-4078.	13.8	161