Ashay Patel

List of Publications by Year
in descending order

30 papers	1,048 citations	516710 16 h-index	454955 30 g-index
35 all docs	35 docs citations	35 times ranked	1190 citing authors

#	Article	IF	Citations
1	Dynamically Complex [6+4] and [4+2] Cycloadditions in the Biosynthesis of Spinosyn A. Journal of the American Chemical Society, 2016, 138, 3631-3634.	13.7	116
2	Mechanisms and Origins of Periselectivity of the Ambimodal [6 + 4] Cycloadditions of Tropone to Dimethylfulvene. Journal of the American Chemical Society, 2017, 139, 8251-8258.	13.7	87
3	Involvement of Lipocalinâ€like CghA in Decalinâ€Forming Stereoselective Intramolecular [4+2] Cycloaddition. ChemBioChem, 2015, 16, 2294-2298.	2.6	80
4	A carbonate-forming Baeyer-Villiger monooxygenase. Nature Chemical Biology, 2014, 10, 552-554.	8.0	75
5	Transannular [6 + 4] and Ambimodal Cycloaddition in the Biosynthesis of Heronamide A. Journal of the American Chemical Society, 2015, 137, 13518-13523.	13.7	72
6	A Torquoselective 6Ï€ Electrocyclization Approach to Reserpine Alkaloids. Organic Letters, 2012, 14, 5388-5391.	4.6	66
7	Influence of water and enzyme SpnF on the dynamics and energetics of the ambimodal [6+4]/[4+2] cycloaddition. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E848-E855.	7.1	57
8	P450-Mediated Coupling of Indole Fragments To Forge Communesin and Unnatural Isomers. Journal of the American Chemical Society, 2016, 138, 4002-4005.	13.7	51
9	Stereoselective Synthesis of Dienyl-Carboxylate Building Blocks: Formal Synthesis of Inthomycin C. Organic Letters, 2013, 15, 3242-3245.	4.6	49
10	Does Nature Click? Theoretical Prediction of an Enzyme-Catalyzed Transannular 1,3-Dipolar Cycloaddition in the Biosynthesis of Lycojaponicumins A and B. Journal of the American Chemical Society, 2013, 135, 17638-17642.	13.7	46
11	Gating mechanism of elongating Î²-ketoacyl-ACP synthases. Nature Communications, 2020, 11, 1727.	12.8	44
12	Structural and dynamical rationale for fatty acid unsaturation in Escherichia coli. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 6775-6783.	7.1	41
13	Interfacial plasticity facilitates high reaction rate of E. coli FAS malonyl-CoA:ACP transacylase, FabD. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 24224-24233.	7.1	31
14	Synthesis of entâ€Ketorfanol via a Câ€“H Alkenylation/Torquoselective 6Ï€ Electrocyclization Cascade. Angewandte Chemie - International Edition, 2015, 54, 12044-12048.	13.8	30
15	Elucidation of transient protein-protein interactions within carrier protein-dependent biosynthesis. Communications Biology, 2021, 4, 340.	4.4	23
16	Origins of 1,6-Stereoinduction in Torquoselective 6Ï€ Electrocyclizations. Journal of the American Chemical Society, 2013, 135, 4878-4883.	13.7	20
17	Terminal Substituent Effects on the Reactivity, Thermodynamics, and Stereoselectivity of the 8Ï€â€“6Ï€ Electrocyclization Cascades of 1,3,5,7-Tetraenes. Journal of Organic Chemistry, 2014, 79, 11370-11377.	3.2	17
18	Manipulating Proteinâ€“Protein Interactions in Nonribosomal Peptide Synthetase Type II Peptidyl Carrier Proteins. Biochemistry, 2017, 56, 5269-5273.	2.5	16

#	Article	IF	Citations
19	An Unexpected Irelandâ€“Claisen Rearrangement Cascade During the Synthesis of the Tricyclic Core of Curcusone C: Mechanistic Elucidation by Trial-and-Error and Automatic Artificial Force-Induced Reaction (AFIR) Computations. Journal of the American Chemical Society, 2019, 141, 6995-7004.	13.7	15
20	Highly Torquoselective Electrocyclizations and Competing 1,7-Hydrogen Shifts of 1-Azatrienes with Silyl Substitution at the Allylic Carbon. Organic Letters, 2015, 17, 2138-2141.	4.6	14
21	Modifying the Thioester Linkage Affects the Structure of the Acyl Carrier Protein. Angewandte Chemie - International Edition, 2019, 58, 10888-10892.	13.8	14
22	Structural Basis of Acyl-Carrier Protein Interactions in Fatty Acid and Polyketide Biosynthesis. , 2020, , 61-122.		14
23	Mechanistic Probes for the Epimerization Domain of Nonribosomal Peptide Synthetases. ChemBioChem, 2019, 20, 147-152.	2.6	12
24	Transition State Gauche Effects Control the Torquoselectivities of the Electrocyclizations of Chiral 1-Azatrienes. Journal of Organic Chemistry, 2015, 80, 11888-11894.	3.2	11
25	Distortion, Tether, and Entropy Effects on Transannular Dielsâ€“Alder Cycloaddition Reactions of 10â€“18-Membered Rings. Journal of Organic Chemistry, 2015, 80, 11039-11047.	3.2	9
26	Effect of donor atom identity on metal-binding pharmacophore coordination. Journal of Biological Inorganic Chemistry, 2017, 22, 605-613.	2.6	8
27	Reactivity and Stereoselectivity of 6Ï€ and Nazarov Electrocyclizations of Bridged Bicyclic Trienes and Divinyl Ketones. Journal of Organic Chemistry, 2015, 80, 2790-2795.	3.2	6
28	Effect of heterocycle content on metal binding isostere coordination. Chemical Science, 2020, 11, 6907-6914.	7.4	6
29	Modifying the Thioester Linkage Affects the Structure of the Acyl Carrier Protein. Angewandte Chemie, 2019, 131, 11004-11008.	2.0	3
30	Daedal Facets of Splice Modulator Optimization. ACS Medicinal Chemistry Letters, 2018, 9, 1070-1072.	2.8	2