Vishal Rai

List of Publications by Year
in descending order

32 papers	1,914 citations	430874 18 h-index	414414 32 g-index
39 all docs	39 docs citations	39 times ranked	2141 citing authors

#	Article	IF	Citations
1	Protein inspired chemically orthogonal imines for linchpin directed precise and modular labeling of lysine in proteins. Chemical Communications, 2022, 58, 1768-1771.	4.1	6
2	Chemical technologies for precise protein bioconjugation interfacing biology and medicine. Chemical Communications, 2021, 57, 7083-7095.	4.1	13
3	Linchpins empower promiscuous electrophiles to enable site-selective modification of histidine and aspartic acid in proteins. Chemical Science, 2021, 12, 6732-6736.	7.4	20
4	Reactivity and Selectivity Principles in Native Protein Bioconjugation. Chemical Record, 2021, 21, 1941-1956.	5.8	8
5	A single amino acid Gly-tag enables metal-free protein purification. Chemical Science, 2020, 11, 13137-13142.	7.4	10
6	Chemical methods for modification of proteins. Organic and Biomolecular Chemistry, 2020, 18, 4669-4691.	2.8	47
7	Chemoselective and Siteâ€Selective Lysineâ€Directed Lysine Modification Enables Singleâ€Site Labeling of Native Proteins. Angewandte Chemie - International Edition, 2020, 59, 10332-10336.	13.8	49
8	Chemoselective and Siteâ€Selective Lysineâ€Directed Lysine Modification Enables Singleâ€Site Labeling of Native Proteins. Angewandte Chemie, 2020, 132, 10418-10422.	2.0	16
9	Sensitivity booster for mass detection enables unambiguous analysis of peptides, proteins, antibodies, and protein bioconjugates. Chemical Communications, 2019, 55, 9979-9982.	4.1	10
10	Chemical Methods for Selective Labeling of Proteins. European Journal of Organic Chemistry, 2019, 2019, 6749-6763.	2.4	41
11	Computationally designed antibodyâ€"drug conjugates self-assembled via affinity ligands. Nature Biomedical Engineering, 2019, 3, 917-929.	22.5	19
12	Single-site glycine-specific labeling of proteins. Nature Communications, 2019, 10, 2539.	12.8	61
13	Single-site labeling of histidine in proteins, on-demand reversibility, and traceless metal-free protein purification. Chemical Communications, 2019, 55, 1100-1103.	4.1	36
14	Aldehydes can switch the chemoselectivity of electrophiles in protein labeling. Organic and Biomolecular Chemistry, 2018, 16, 9377-9381.	2.8	14
15	Single-Site Labeling of Native Proteins Enabled by a Chemoselective and Site-Selective Chemical Technology. Journal of the American Chemical Society, 2018, 140, 15114-15123.	13.7	104
16	Single-site labeling of lysine in proteins through a metal-free multicomponent approach. Chemical Communications, 2018, 54, 7302-7305.	4.1	42
17	Siteâ€Selective Labeling of Native Proteins by a Multicomponent Approach. Chemistry - A European Journal, 2017, 23, 3819-3823.	3.3	41
18	Chemoselective and site-selective peptide and native protein modification enabled by aldehyde auto-oxidation. Chemical Communications, 2017, 53, 959-962.	4.1	29

#	Article	IF	Citations
19	Protein self-assembly induces promiscuous nucleophilic biocatalysis in Moritaâ€"Baylisâ€"Hillman (MBH) reaction. RSC Advances, 2016, 6, 208-211.	3.6	13
20	Twisted amide electrophiles enable cyclic peptide sequencing. Organic and Biomolecular Chemistry, 2015, 13, 7384-7388.	2.8	9
21	A phthalimidation protocol that follows protein defined parameters. Chemical Communications, 2015, 51, 473-476.	4.1	38
22	Small Heterocycles in Multicomponent Reactions. Chemical Reviews, 2014, 114, 8323-8359.	47.7	790
23	Bending Rigid Molecular Rods: Formation of Oligoproline Macrocycles. Chemistry - A European Journal, 2012, 18, 15612-15617.	3.3	24
24	Innentitelbild: Synchronized Synthesis of Peptide-Based Macrocycles by Digital Microfluidics (Angew.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	2.0	0
25	Synchronized Synthesis of Peptideâ€Based Macrocycles by Digital Microfluidics. Angewandte Chemie - International Edition, 2010, 49, 8625-8629.	13.8	92
26	Inside Cover: Synchronized Synthesis of Peptide-Based Macrocycles by Digital Microfluidics (Angew.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	13.8	0
27	Synthesis of peptide macrocycles using unprotected amino aldehydes. Nature Protocols, 2010, 5, 1813-1822.	12.0	46
28	Macrocyclization of Linear Peptides Enabled by Amphoteric Molecules. Journal of the American Chemical Society, 2010, 132, 2889-2891.	13.7	215
29	Effect of achiral and mixed chiral ligands on the asymmetric synthesis of Î³-nitrophosphonates via Michael addition. Tetrahedron: Asymmetry, 2008, 19, 767-772.	1.8	13
30	Enantioselective conjugate addition of dialkyl phosphites to nitroalkenes. Tetrahedron: Asymmetry, 2008, 19, 2335-2338.	1.8	47
31	Cinchonine catalyzed diastereo- and enantioselective Michael addition of Î±-lithiated phosphonates to nitroalkenes. Tetrahedron: Asymmetry, 2007, 18, 2719-2726.	1.8	16
32	A Theoretical Evaluation of the Michael-Acceptor Ability of Conjugated Nitroalkenes. European Journal of Organic Chemistry, 2006, 2006, 4693-4703.	2.4	26