Vladimir v Popik

List of Publications by Year
in descending order

98 papers	5,622 citations	94433 37 h-index	79698 73 g-index
106 all docs	106 docs citations	106 times ranked	6431 citing authors

#	Article	IF	Citations
1	Photoremovable Protecting Groups in Chemistry and Biology: Reaction Mechanisms and Efficacy. Chemical Reviews, 2013, 113, 119-191.	47.7	1,386
2	Selective Labeling of Living Cells by a Photo-Triggered Click Reaction. Journal of the American Chemical Society, 2009, 131, 15769-15776.	13.7	341
3	Effect of ligand density, receptor density, and nanoparticle size on cell targeting. Nanomedicine: Nanotechnology, Biology, and Medicine, 2013, 9, 194-201.	3.3	291
4	Surface Functionalization Using Catalyst-Free Azideâ”Alkyne Cycloaddition. Bioconjugate Chemistry, 2010, 21, 2076-2085.	3.6	205
5	High Density Orthogonal Surface Immobilization via Photoactivated Copper-Free Click Chemistry. Journal of the American Chemical Society, 2010, 132, 11024-11026.	13.7	203
6	Metal-Free Sequential [3 + 2]-Dipolar Cycloadditions using Cyclooctynes and 1,3-Dipoles of Different Reactivity. Journal of the American Chemical Society, 2011, 133, 949-957.	13.7	187
7	Light-Induced Hetero-Dielsâ”Alder Cycloaddition: A Facile and Selective Photoclick Reaction. Journal of the American Chemical Society, 2011, 133, 5573-5579.	13.7	123
8	Photochemical Generation and the Reactivity ofo-Naphthoquinone Methides in Aqueous Solutions. Journal of the American Chemical Society, 2009, 131, 11892-11899.	13.7	120
9	Fluorophore Targeting to Cellular Proteins via Enzyme-Mediated Azide Ligation and Strain-Promoted Cycloaddition. Journal of the American Chemical Society, 2012, 134, 3720-3728.	13.7	114
10	Photoreactive Polymer Brushes for High-Density Patterned Surface Derivatization Using a Dielsâ€“Alder Photoclick Reaction. Journal of the American Chemical Society, 2012, 134, 179-182.	13.7	93
11	Attach, Remove, or Replace: Reversible Surface Functionalization Using Thiolâ€“Quinone Methide Photoclick Chemistry. Journal of the American Chemical Society, 2012, 134, 8408-8411.	13.7	91
12	Highly Efficient Photochemical Generation of a Triple Bond:Â Synthesis, Properties, and Photodecarbonylation of Cyclopropenones. Journal of Organic Chemistry, 2003, 68, 7833-7840.	3.2	90
13	Patterned Surface Derivatization Using Dielsâ€“Alder Photoclick Reaction. Journal of the American Chemical Society, 2011, 133, 15730-15736.	13.7	89
14	Improved Tumor Targeting of Polymer-Based Nanovesicles Using Polymerâ€“Lipid Blends. Bioconjugate Chemistry, 2011, 22, 2021-2029.	3.6	85
15	Sortase-Tag Expressed Protein Ligation: Combining Protein Purification and Site-Specific Bioconjugation into a Single Step. Analytical Chemistry, 2013, 85, 11090-11097.	6.5	80
16	Selective and reversible photochemical derivatization of cysteine residues in peptides and proteins. Chemical Science, 2014, 5, 1591-1598.	7.4	63
17	Photochemical generation of oxa-dibenzocyclooctyne (ODIBO) for metal-free click ligations. Organic and Biomolecular Chemistry, 2012, 10, 8200.	2.8	55
18	A Dynamic Duo: Pairing Click Chemistry and Postpolymerization Modification To Design Complex Surfaces. Accounts of Chemical Research, 2014, 47, 2999-3008.	15.6	55

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19	Dicarbomethoxycarbene. A Laser Flash Photolysis Study. Journal of the American Chemical Society, 1995, 117, 5477-5483.	13.7	54
20	Photochemical Generation and Reversible Cycloaromatization of a Nine-Membered Ring Cyclic Enediyne. Journal of the American Chemical Society, 2009, 131, 351-356.	13.7	54
21	Wolff Rearrangement of 2-Diazo-1(2H)-Naphthalenone Induced by Nonresonant Two-Photon Absorption of NIR Radiation. Journal of the American Chemical Society, 2004, 126, 4058-4059.	13.7	52
22	Mechanism of the Cyclopropenone Decarbonylation Reaction. A Density Functional Theory and Transient Spectroscopy Study. Journal of Physical Chemistry A, 2006, 110, 1749-1757.	2.5	52
23	Rate Determination of Azide Click Reactions onto Alkyne Polymer Brush Scaffolds: A Comparison of Conventional and Catalyst-Free Cycloadditions for Tunable Surface Modification. Langmuir, 2012, 28, 14693-14702.	3.5	52
24	Multiphoton Activation of Photo-Strain-Promoted Azide Alkyne Cycloaddition â€œClickâ€•Reagents Enables in Situ Labeling with Submicrometer Resolution. Journal of the American Chemical Society, 2017, 139, 14029-14032.	13.7	52
25	Sequential â€œClickâ€•â€“ â€œPhoto-Clickâ€•Cross-Linker for Catalyst-Free Ligation of Azide-Tagged Substrates. Journal of Organic Chemistry, 2014, 79, 2702-2708.	3.2	51
26	Temporal Labeling of Nascent RNA Using Photoclick Chemistry in Live Cells. Journal of the American Chemical Society, 2017, 139, 8090-8093.	13.7	47
27	Experimental and Theoretical Investigation of Reversible Interconversion, Thermal Reactions, and Wavelength-Dependent Photochemistry of Diazo Meldrum's Acid and Its Diazirine Isomer, 6,6-Dimethyl-5,7-dioxa-1,2-diaza-spiro[2,5]oct-1-ene-4,8-dione1. Journal of the American Chemical Society, 2003, 125, 14153-14162.	13.7	46
28	Facile Method for the Siteâ€Specific, Covalent Attachment of Fullâ€Length IgG onto Nanoparticles. Small, 2014, 10, 3354-3363.	10.0	45
29	Multifunctional Surface Manipulation Using Orthogonal Click Chemistry. Langmuir, 2016, 32, 6600-6605.	3.5	45
30	Robust, Solvent-Free, Catalyst-Free Click Chemistry for the Generation of Highly Stable Densely Grafted Poly(ethylene glycol) Polymer Brushes by the Grafting To Method and Their Properties. Macromolecules, 2016, 49, 7625-7631.	4.8	44
31	[18F]Azadibenzocyclooctyne ([18F]ADIBO): A biocompatible radioactive labeling synthon for peptides using catalyst free [3+2] cycloaddition. Bioorganic and Medicinal Chemistry Letters, 2011, 21, 6987-6991.	2.2	43
32	Photo-click chemistry strategies for spatiotemporal control of metal-free ligation, labeling, and surface derivatization. Pure and Applied Chemistry, 2013, 85, 1499-1513.	1.9	42
33	The Mandelic Acid Ketoâ^'Enol System in Aqueous Solution. Generation of the Enol by Hydration of Phenylhydroxyketene and Phenylcarboxycarbene. Journal of the American Chemical Society, 1997, 119, 10203-10212.	13.7	41
34	Two-Photon Photochemical Generation of Reactive Enediyne. Journal of Organic Chemistry, 2006, 71, 7417-7421.	3.2	40
35	Triggering of the Bergman Cyclization by Photochemical Ring Contraction. Facile Cycloaromatization of Benzannulated Cyclodeca-3,7-diene-1,5-diynes. Journal of the American Chemical Society, 2007, 129, 3792-3793.	13.7	40
36	Photolabile Protection of Alcohols, Phenols, and Carboxylic Acids with 3-Hydroxy-2-Naphthalenemethanol. Journal of Organic Chemistry, 2008, 73, 7611-7615.	3.2	40

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37	Nucleophilic Cycloaromatization of Ynamide-Terminated Enediynes. Journal of Organic Chemistry, 2010, 75, 5953-5962.	3.2	39
38	Two-photon induced photodecarbonylation reaction of cyclopropenones. Chemical Communications, 2006, , 454-456.	4.1	37
39	Mutation of Thermoanaerobacter ethanolicus secondary alcohol dehydrogenase at Trp-110 affects stereoselectivity of aromatic ketone reduction. Organic and Biomolecular Chemistry, 2014, 12, 5905-5910.	2.8	37
40	Sequential Photochemistry of Dibenzo[a,e]dicyclopropa[c,g][8]annulene-1,6-dione: Selective Formation of Didehydrodibenzo[a,e][8]annulenes with Ultrafast SPAAC Reactivity. Journal of Organic Chemistry, 2016, 81, 8850-8857.	3.2	36
41	Cyclopropenone-caged Sondheimer diyne (dibenzo[a,e]cyclooctadiyne): a photoactivatable linchpin for efficient SPAAC crosslinking. Chemical Communications, 2016, 52, 553-556.	4.1	35
42	Flash Photolysis of 10-Diazo-9(10H)-phenanthrenone in Aqueous Solution. Hydration of Fluorenylideneketene and the Fluorene-9-carboxylic Acid Ketoâ^'Enol System. Journal of the American Chemical Society, 1997, 119, 8417-8424.	13.7	33
43	Scavenging of Intermediates Formed in Photolysis of Î±-Diazocarbonyl Compounds and Hydroxycyclopropenones. Implication on the Mechanism of the Photo-Wolff Reaction. Journal of the American Chemical Society, 1999, 121, 5930-5932.	13.7	31
44	Enhancement of the Reactivity of Photochemically Generated Enediynes via Ketoâ^'Enol Tautomerization. Journal of the American Chemical Society, 2008, 130, 11771-11777.	13.7	31
45	2,5-Dihydroxybenzyl and (1,4-Dihydroxy-2-naphthyl)methyl, Novel Reductively Armed Photocages for the Hydroxyl Moiety. Journal of Organic Chemistry, 2007, 72, 9190-9194.	3.2	30
46	Wavelength-Dependent Photochemistry of Diazo Meldrum's Acid and Its Spirocyclic Isomer, Diazirino Meldrum's Acid:â€‰ Wolff Rearrangement versus Isomerization. Journal of the American Chemical Society, 2003, 125, 1456-1457.	13.7	29
47	Dual Reactivity of Hydroxy- and Methoxy- Substitutedo-Quinone Methides in Aqueous Solutions: Hydration versus Tautomerization.. Journal of Organic Chemistry, 2010, 75, 7338-7346.	3.2	29
48	Direct grafting of poly(pentafluorophenyl acrylate) onto oxides: versatile substrates for reactive microcapillary printing and self-sorting modification. Chemical Communications, 2014, 50, 5307-5309.	4.1	28
49	The role of molecular geometry in the Wolff rearrangement of Î±-diazocarbonyl compounds Â— Conformational control or structural constraints?. Canadian Journal of Chemistry, 2005, 83, 1382-1390.	1.1	27
50	Colchitaxel, a coupled compound made from microtubule inhibitors colchicine and paclitaxel. Beilstein Journal of Organic Chemistry, 2006, 2, 13.	2.2	27
51	Synthesis and Reactivity of Cinnoline-Fused Cyclic Enediyne. Journal of Organic Chemistry, 2011, 76, 6937-6941.	3.2	27
52	Copperâ€Free Clickâ€Chemistry Platform to Functionalize Cisplatin Prodrugs. Chemistry - A European Journal, 2014, 20, 6861-6865.	3.3	27
53	â€œShine & Clickâ€•Photoâ€Induced Interfacial Unmasking of Strained Alkynes on Small Waterâ€Soluble Gold Nanoparticles. Chemistry - A European Journal, 2017, 23, 1052-1059.	3.3	27
54	Application of Photochemical Decarbonylation of Cyclopropenones for the in Situ Generation of Reactive Enediynes. Construction of a Cyclopropenone-Containing Enediyne Precursor by Using a Cyclopropenone Acetal Building Block. Journal of Organic Chemistry, 2005, 70, 1297-1305.	3.2	26

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55	Photoswitchable enediynes: use of cyclopropenone as photocleavable masking group for the enediyne triple bond. Chemical Communications, 2005, , 617.	4.1	25
56	Dual reactivity of a photochemically-generated cyclic enyneâ€“allene. Chemical Communications, 2009, , 5707.	4.1	25
57	Experimental and Theoretical Analysis of the Photochemistry and Thermal Reactivity of Ethyl Diazomalonate and Its Diazirino Isomer. The Role of Molecular Geometry in the Decomposition of Diazocarbonyl Compounds. Journal of the American Chemical Society, 2004, 126, 11293-11302.	13.7	24
58	Membrane labeling and immobilization viacopper-free click chemistry. Chemical Communications, 2012, 48, 1431-1433.	4.1	24
59	Caging of Carbonyl Compounds as Photolabile (2,5-Dihydroxyphenyl)ethylene Glycol Acetals. Journal of Organic Chemistry, 2009, 74, 1802-1804.	3.2	23
60	Facile Quenching and Spatial Patterning of Cyclooctynes via Strain-Promoted Alkyneâ€“Azide Cycloaddition of Inorganic Azides. Bioconjugate Chemistry, 2017, 28, 1560-1565.	3.6	23
61	Dual-Bioorthogonal Molecular Tool: â€œClick-to-Releaseâ€•and â€œDouble-Clickâ€•Reactivity on Small Molecules and Material Surfaces. Bioconjugate Chemistry, 2019, 30, 1140-1149.	3.6	23
62	Towards Photoswitchable Enediyne Antibiotics: Single and Two-Photon Triggering of Bergman Cyclization. Current Topics in Medicinal Chemistry, 2008, 8, 460-469.	2.1	22
63	Synthesis and Unusual Reactivity ofN-Tosyl-4,5-benzoazacyclodeca-2,6-diyne, Yneamino-Containing Enediyne. Journal of the American Chemical Society, 2007, 129, 12062-12063.	13.7	21
64	A Clickable and Photocleavable Lipid Analogue for Cell Membrane Delivery and Release. Bioconjugate Chemistry, 2015, 26, 1021-1031.	3.6	21
65	Amino Substituted Bisketenes:Â Generation, Structure, and Reactivity. Journal of Organic Chemistry, 2007, 72, 1951-1956.	3.2	20
66	Photolabile Protection of 1,2- and 1,3-Diols with Salicylaldehyde Derivatives. Organic Letters, 2008, 10, 5277-5280.	4.6	20
67	Artificial Membrane Fusion Triggered by Strain-Promoted Alkyneâ€“Azide Cycloaddition. Bioconjugate Chemistry, 2017, 28, 923-932.	3.6	20
68	Flash Photolytic Generation and Study of the Enol of 2-Hydroxy-2-cyano-N-methylacetamide in Aqueous Solution, Leading to an Empirically-Based Estimate of the Ketoâ^'Enol Equilibrium Constant for the Parent Unsubstituted Acetamide in That Medium. Journal of the American Chemical Society, 2001, 123, 2681-2682.	13.7	19
69	Photochemical Triggering of the Bergman and Myers - Saito Cyclizations. Australian Journal of Chemistry, 2010, 63, 1099.	0.9	18
70	Decomposition of 2-diazo-1,3-diketones: Stereocontrol of the mechanism.. Tetrahedron Letters, 1992, 33, 4483-4486.	1.4	15
71	Photoreactions of 3-Diazo-3H-benzofuran-2-one; Dimerization and Hydrolysis of Its Primary Photoproduct, A Quinonoid Cumulenone:Â A Study by Time-Resolved Optical and Infrared Spectroscopy. Journal of the American Chemical Society, 2003, 125, 12872-12880.	13.7	15
72	[¹⁸F]ODIBO: a prosthetic group for bioorthogonal radiolabeling of macromolecules via strain-promoted alkyneâ€“azide cycloaddition. Organic and Biomolecular Chemistry, 2018, 16, 363-366.	2.8	15

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73	Stereochemistry and thermal stability of diazodiketones. Journal of the Chemical Society Perkin Transactions II, 1993, , 1791.	0.9	14
74	The 2-Oxocyclohexanecarboxylic Acid Ketoâ˜'Enol System in Aqueous Solution. Journal of the American Chemical Society, 2003, 125, 6478-6484.	13.7	14
75	The 2-Oxocyclopentanecarboxylic Acid Ketoâ˜'Enol System in Aqueous Solution:â€‰ Generation of the Enol by Hydration of an Acylketene. Journal of the American Chemical Society, 1997, 119, 11183-11190.	13.7	13
76	Flash Photolytic Investigation of 4-Diazoisothiochroman-3-one in Aqueous Solution:Â Observation of a Short-Lived Carboxylic Acid Enol. Journal of the American Chemical Society, 1999, 121, 11330-11335.	13.7	13
77	An acetylene zipperâ€"Sonogashira reaction sequence for the efficient synthesis of conjugated arylalkadiynols. Tetrahedron Letters, 2013, 54, 2235-2238.	1.4	11
78	Photochemical Ring Opening of 7-Benzoyl- and 7-Methoxycarbonyldibenzonorcaradienes. Competing 1,2-Hydrogen Shift and Cyclization Reactions of 1,3-Diradicals. Organic Letters, 2001, 3, 1885-1888.	4.6	9
79	Structure and Photochemistry of 18-Diazo-1,4,7,10,13,16-hexaoxacyclononadeca-17,19-dione and Its Sodium and Potassium Complexes. Control of the Ground-State Conformation of 2-Diazo-1,3-dicarbonyl Fragment via Hostâ˜'Guest Complexation. Journal of Organic Chemistry, 2005, 70, 9867-9873.	3.2	9
80	The 2-Oxocyclobutanecarboxylic Acid Ketoâ˜'Enol System in Aqueous Solution:â€‰ A Remarkable Acid-Strengthening Effect of the Cyclobutane Ring. Journal of Organic Chemistry, 2006, 71, 4460-4467.	3.2	9
81	Wolff rearrangement of Î²â€alkynylâ€Î±â€diazoâ€Î²â€ketoesters: lightâ€induced acetyleneâ€"allene isomerization and its use for activation of enediynes. Journal of Physical Organic Chemistry, 2011, 24, 969-975.	1.9	9
82	9-Aryl-9-xanthenols: a convenient platform for the design of fluorimetric and colorimetric pH indicators. Organic and Biomolecular Chemistry, 2012, 10, 9214.	2.8	9
83	Preparation and photophysical properties of a caged kynurenine. Bioorganic and Medicinal Chemistry Letters, 2012, 22, 2734-2737.	2.2	9
84	The efficiency of ¹⁸F labelling of a prostate specific membrane antigen ligand via strain-promoted azideâ€"alkyne reaction: reaction speed versus hydrophilicity. Chemical Communications, 2018, 54, 7810-7813.	4.1	9
85	The acid dissociation constant of triphenylethenethiol, a simple thioenol, and that of its oxygen-enol analog. Canadian Journal of Chemistry, 1998, 76, 657-661.	1.1	8
86	Photoactivatable Fluorescein Derivatives Caged with a (3-Hydroxy-2-naphthalenyl)methyl Group. Journal of Organic Chemistry, 2014, 79, 7665-7671.	3.2	8
87	Development of Bispecific NT-PSMA Heterodimer for Prostate Cancer Imaging: A Potential Approach to Address Tumor Heterogeneity. Bioconjugate Chemistry, 2019, 30, 1314-1322.	3.6	8
88	Bichromophoric fluorescent photolabile protecting group for alcohols and carboxylic acids. Photochemical and Photobiological Sciences, 2012, 11, 518-521.	2.9	7
89	Photo-Click-Facilitated Screening Platform for the Development of Hetero-Bivalent Agents with High Potency. Journal of Organic Chemistry, 2020, 85, 5771-5777.	3.2	6
90	Photo-cleavable analog of BAPTA for the fast and efficient release of Ca²⁺. Chemical Communications, 2017, 53, 5598-5601.	4.1	4

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91	Acid-catalyzed hydrolysis of phenyldiazoacetic acid. Effect of an ?-diazo group on carboxylic acid acidity. Journal of Physical Organic Chemistry, 1995, 8, 552-558.	1.9	3
92	Access to 2,3-bis(buta-1,3-diynyl)pyridines. Mendeleev Communications, 2011, 21, 19-20.	1.6	3
93	Refining of Particulates at Stimuliâ€Responsive Interfaces: Labelâ€Free Sorting and Isolation. Angewandte Chemie - International Edition, 2021, , .	13.8	3
94	Ultrafast transient absorption spectroscopy of the photodecarbonylation of photo-oxadibenzocyclooctyne (photo-ODIBO). Journal of Chemical Physics, 2021, 154, 074302.	3.0	1
95	Femtosecond photodecarbonylation of photo-ODIBO studied by stimulated Raman spectroscopy and density functional theory. Physical Chemistry Chemical Physics, 2021, 23, 25637-25648.	2.8	1
96	Photoswitchable Enediynes: Use of Cyclopropenone as Photocleavable Masking Group for the Enediyne Triple Bond.. ChemInform, 2005, 36, no.	0.0	0
97	Frontispiece: â€œShine & Clickâ€•Photoâ€Induced Interfacial Unmasking of Strained Alkynes on Small Waterâ€Soluble Gold Nanoparticles. Chemistry - A European Journal, 2017, 23, .	3.3	0
98	Refining of Particulates at Stimuliâ€Responsive Interfaces: Labelâ€Free Sorting and Isolation. Angewandte Chemie, 0, , e202110990.	2.0	0