

Vladimir v Popik

List of Publications by Year in descending order

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98
papers

5,622
citations

94269

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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. <i>Chemical Reviews</i> , 2013, 113, 119-191.	23.0	1,386
2	Selective Labeling of Living Cells by a Photo-Triggered Click Reaction. <i>Journal of the American Chemical Society</i> , 2009, 131, 15769-15776.	6.6	341
3	Effect of ligand density, receptor density, and nanoparticle size on cell targeting. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2013, 9, 194-201.	1.7	291
4	Surface Functionalization Using Catalyst-Free Azide-Alkyne Cycloaddition. <i>Bioconjugate Chemistry</i> , 2010, 21, 2076-2085.	1.8	205
5	High Density Orthogonal Surface Immobilization via Photoactivated Copper-Free Click Chemistry. <i>Journal of the American Chemical Society</i> , 2010, 132, 11024-11026.	6.6	203
6	Metal-Free Sequential [3 + 2]-Dipolar Cycloadditions using Cyclooctynes and 1,3-Dipoles of Different Reactivity. <i>Journal of the American Chemical Society</i> , 2011, 133, 949-957.	6.6	187
7	Light-Induced Hetero-Diels-Alder Cycloaddition: A Facile and Selective Photoclick Reaction. <i>Journal of the American Chemical Society</i> , 2011, 133, 5573-5579.	6.6	123
8	Photochemical Generation and the Reactivity of <i>o</i> -Naphthoquinone Methides in Aqueous Solutions. <i>Journal of the American Chemical Society</i> , 2009, 131, 11892-11899.	6.6	120
9	Fluorophore Targeting to Cellular Proteins via Enzyme-Mediated Azide Ligation and Strain-Promoted Cycloaddition. <i>Journal of the American Chemical Society</i> , 2012, 134, 3720-3728.	6.6	114
10	Photoreactive Polymer Brushes for High-Density Patterned Surface Derivatization Using a Diels-Alder Photoclick Reaction. <i>Journal of the American Chemical Society</i> , 2012, 134, 179-182.	6.6	93
11	Attach, Remove, or Replace: Reversible Surface Functionalization Using Thiol-Quinone Methide Photoclick Chemistry. <i>Journal of the American Chemical Society</i> , 2012, 134, 8408-8411.	6.6	91
12	Highly Efficient Photochemical Generation of a Triple Bond: Synthesis, Properties, and Photodecarbonylation of Cyclopropenones. <i>Journal of Organic Chemistry</i> , 2003, 68, 7833-7840.	1.7	90
13	Patterned Surface Derivatization Using Diels-Alder Photoclick Reaction. <i>Journal of the American Chemical Society</i> , 2011, 133, 15730-15736.	6.6	89
14	Improved Tumor Targeting of Polymer-Based Nanovesicles Using Polymer-Lipid Blends. <i>Bioconjugate Chemistry</i> , 2011, 22, 2021-2029.	1.8	85
15	Sortase-Tag Expressed Protein Ligation: Combining Protein Purification and Site-Specific Bioconjugation into a Single Step. <i>Analytical Chemistry</i> , 2013, 85, 11090-11097.	3.2	80
16	Selective and reversible photochemical derivatization of cysteine residues in peptides and proteins. <i>Chemical Science</i> , 2014, 5, 1591-1598.	3.7	63
17	Photochemical generation of oxa-dibenzocyclooctyne (ODIBO) for metal-free click ligations. <i>Organic and Biomolecular Chemistry</i> , 2012, 10, 8200.	1.5	55
18	A Dynamic Duo: Pairing Click Chemistry and Postpolymerization Modification To Design Complex Surfaces. <i>Accounts of Chemical Research</i> , 2014, 47, 2999-3008.	7.6	55

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19	Dicarbomethoxycarbene. A Laser Flash Photolysis Study. <i>Journal of the American Chemical Society</i> , 1995, 117, 5477-5483.	6.6	54
20	Photochemical Generation and Reversible Cycloaromatization of a Nine-Membered Ring Cyclic Eneidyne. <i>Journal of the American Chemical Society</i> , 2009, 131, 351-356.	6.6	54
21	Wolff Rearrangement of 2-Diazo-1(2H)-Naphthalenone Induced by Nonresonant Two-Photon Absorption of NIR Radiation. <i>Journal of the American Chemical Society</i> , 2004, 126, 4058-4059.	6.6	52
22	Mechanism of the Cyclopropenone Decarbonylation Reaction. A Density Functional Theory and Transient Spectroscopy Study. <i>Journal of Physical Chemistry A</i> , 2006, 110, 1749-1757.	1.1	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. <i>Langmuir</i> , 2012, 28, 14693-14702.	1.6	52
24	Multiphoton Activation of Photo-Strain-Promoted Azide Alkyne Cycloaddition "Click" Reagents Enables in Situ Labeling with Submicrometer Resolution. <i>Journal of the American Chemical Society</i> , 2017, 139, 14029-14032.	6.6	52
25	Sequential "Click" "Photo-Click" Cross-Linker for Catalyst-Free Ligation of Azide-Tagged Substrates. <i>Journal of Organic Chemistry</i> , 2014, 79, 2702-2708.	1.7	51
26	Temporal Labeling of Nascent RNA Using Photoclick Chemistry in Live Cells. <i>Journal of the American Chemical Society</i> , 2017, 139, 8090-8093.	6.6	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-dione. <i>Journal of the American Chemical Society</i> , 2003, 125, 14153-14162.	6.6	46
28	Facile Method for the Site-Specific, Covalent Attachment of Full-Length IgG onto Nanoparticles. <i>Small</i> , 2014, 10, 3354-3363.	5.2	45
29	Multifunctional Surface Manipulation Using Orthogonal Click Chemistry. <i>Langmuir</i> , 2016, 32, 6600-6605.	1.6	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. <i>Macromolecules</i> , 2016, 49, 7625-7631.	2.2	44
31	[¹⁸ F]Azadibenzocyclooctyne ([¹⁸ F]ADIBO): A biocompatible radioactive labeling synthon for peptides using catalyst free [3+2] cycloaddition. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2011, 21, 6987-6991.	1.0	43
32	Photo-click chemistry strategies for spatiotemporal control of metal-free ligation, labeling, and surface derivatization. <i>Pure and Applied Chemistry</i> , 2013, 85, 1499-1513.	0.9	42
33	The Mandelic Acid Keto-Enol System in Aqueous Solution. Generation of the Enol by Hydration of Phenylhydroxyketene and Phenylcarboxycarbene. <i>Journal of the American Chemical Society</i> , 1997, 119, 10203-10212.	6.6	41
34	Two-Photon Photochemical Generation of Reactive Eneidyne. <i>Journal of Organic Chemistry</i> , 2006, 71, 7417-7421.	1.7	40
35	Triggering of the Bergman Cyclization by Photochemical Ring Contraction. Facile Cycloaromatization of Benzannulated Cyclodeca-3,7-diene-1,5-diyne. <i>Journal of the American Chemical Society</i> , 2007, 129, 3792-3793.	6.6	40
36	Photolabile Protection of Alcohols, Phenols, and Carboxylic Acids with 3-Hydroxy-2-Naphthalenemethanol. <i>Journal of Organic Chemistry</i> , 2008, 73, 7611-7615.	1.7	40

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37	Nucleophilic Cycloaromatization of Ynamide-Terminated Eneidyne. <i>Journal of Organic Chemistry</i> , 2010, 75, 5953-5962.	1.7	39
38	Two-photon induced photodecarbonylation reaction of cyclopropenones. <i>Chemical Communications</i> , 2006, , 454-456.	2.2	37
39	Mutation of <i>Thermoanaerobacter ethanolicus</i> secondary alcohol dehydrogenase at Trp-110 affects stereoselectivity of aromatic ketone reduction. <i>Organic and Biomolecular Chemistry</i> , 2014, 12, 5905-5910.	1.5	37
40	Sequential Photochemistry of Dibenzo[<i>a,e</i>]dicyclopropa[<i>c,g</i>][8]annulene-1,6-dione: Selective Formation of Didehydrodibenzo[<i>a,e</i>][8]annulenes with Ultrafast SPAAC Reactivity. <i>Journal of Organic Chemistry</i> , 2016, 81, 8850-8857.	1.7	36
41	Cyclopropenone-caged Sondheimer diyne (dibenzo[<i>a,e</i>]cyclooctadiyne): a photoactivatable linchpin for efficient SPAAC crosslinking. <i>Chemical Communications</i> , 2016, 52, 553-556.	2.2	35
42	Flash Photolysis of 10-Diazo-9(10H)-phenanthrenone in Aqueous Solution. Hydration of Fluorenylidene ketene and the Fluorene-9-carboxylic Acid Keto \rightleftharpoons Enol System. <i>Journal of the American Chemical Society</i> , 1997, 119, 8417-8424.	6.6	33
43	Scavenging of Intermediates Formed in Photolysis of $\hat{\pm}$ -Diazocarbonyl Compounds and Hydroxycyclopropenones. Implication on the Mechanism of the Photo-Wolff Reaction. <i>Journal of the American Chemical Society</i> , 1999, 121, 5930-5932.	6.6	31
44	Enhancement of the Reactivity of Photochemically Generated Eneidyne via Keto \rightleftharpoons Enol Tautomerization. <i>Journal of the American Chemical Society</i> , 2008, 130, 11771-11777.	6.6	31
45	2,5-Dihydroxybenzyl and (1,4-Dihydroxy-2-naphthyl)methyl, Novel Reductively Armed Photocages for the Hydroxyl Moiety. <i>Journal of Organic Chemistry</i> , 2007, 72, 9190-9194.	1.7	30
46	Wavelength-Dependent Photochemistry of Diazo Meldrum's Acid and Its Spirocyclic Isomer, Diazirino Meldrum's Acid: $\hat{\pm}$ Wolff Rearrangement versus Isomerization. <i>Journal of the American Chemical Society</i> , 2003, 125, 1456-1457.	6.6	29
47	Dual Reactivity of Hydroxy- and Methoxy- Substituted <i>o</i> - <i>q</i> Quinone Methides in Aqueous Solutions: Hydration versus Tautomerization.. <i>Journal of Organic Chemistry</i> , 2010, 75, 7338-7346.	1.7	29
48	Direct grafting of poly(pentafluorophenyl acrylate) onto oxides: versatile substrates for reactive microcapillary printing and self-sorting modification. <i>Chemical Communications</i> , 2014, 50, 5307-5309.	2.2	28
49	The role of molecular geometry in the Wolff rearrangement of $\hat{\pm}$ -diazocarbonyl compounds $\hat{\pm}$ —Conformational control or structural constraints?. <i>Canadian Journal of Chemistry</i> , 2005, 83, 1382-1390.	0.6	27
50	Colchitaxel, a coupled compound made from microtubule inhibitors colchicine and paclitaxel. <i>Beilstein Journal of Organic Chemistry</i> , 2006, 2, 13.	1.3	27
51	Synthesis and Reactivity of Cinnoline-Fused Cyclic Eneidyne. <i>Journal of Organic Chemistry</i> , 2011, 76, 6937-6941.	1.7	27
52	Copper-Free Click Chemistry Platform to Functionalize Cisplatin Prodrugs. <i>Chemistry - A European Journal</i> , 2014, 20, 6861-6865.	1.7	27
53	Shine & Click-Photo-Induced Interfacial Unmasking of Strained Alkynes on Small Water-Soluble Gold Nanoparticles. <i>Chemistry - A European Journal</i> , 2017, 23, 1052-1059.	1.7	27
54	Application of Photochemical Decarbonylation of Cyclopropenones for the in Situ Generation of Reactive Eneidyne. Construction of a Cyclopropenone-Containing Eneidyne Precursor by Using a Cyclopropenone Acetal Building Block. <i>Journal of Organic Chemistry</i> , 2005, 70, 1297-1305.	1.7	26

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55	Photoswitchable enediynes: use of cyclopropanone as photocleavable masking group for the enediyne triple bond. <i>Chemical Communications</i> , 2005, , 617.	2.2	25
56	Dual reactivity of a photochemically-generated cyclic enyneâ€“allene. <i>Chemical Communications</i> , 2009, , 5707.	2.2	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. <i>Journal of the American Chemical Society</i> , 2004, 126, 11293-11302.	6.6	24
58	Membrane labeling and immobilization via copper-free click chemistry. <i>Chemical Communications</i> , 2012, 48, 1431-1433.	2.2	24
59	Caging of Carbonyl Compounds as Photolabile (2,5-Dihydroxyphenyl)ethylene Glycol Acetals. <i>Journal of Organic Chemistry</i> , 2009, 74, 1802-1804.	1.7	23
60	Facile Quenching and Spatial Patterning of Cylooctynes via Strain-Promoted Alkyneâ€“Azide Cycloaddition of Inorganic Azides. <i>Bioconjugate Chemistry</i> , 2017, 28, 1560-1565.	1.8	23
61	Dual-Bioorthogonal Molecular Tool: â€œClick-to-Releaseâ€“and â€œDouble-Clickâ€“Reactivity on Small Molecules and Material Surfaces. <i>Bioconjugate Chemistry</i> , 2019, 30, 1140-1149.	1.8	23
62	Towards Photoswitchable Enediyne Antibiotics: Single and Two-Photon Triggering of Bergman Cyclization. <i>Current Topics in Medicinal Chemistry</i> , 2008, 8, 460-469.	1.0	22
63	Synthesis and Unusual Reactivity of N-Tosyl-4,5-benzoozacyclodeca-2,6-diyne, Yneamino-Containing Enediyne. <i>Journal of the American Chemical Society</i> , 2007, 129, 12062-12063.	6.6	21
64	A Clickable and Photocleavable Lipid Analogue for Cell Membrane Delivery and Release. <i>Bioconjugate Chemistry</i> , 2015, 26, 1021-1031.	1.8	21
65	Amino Substituted Bisketenes:Â Generation, Structure, and Reactivity. <i>Journal of Organic Chemistry</i> , 2007, 72, 1951-1956.	1.7	20
66	Photolabile Protection of 1,2- and 1,3-Diols with Salicylaldehyde Derivatives. <i>Organic Letters</i> , 2008, 10, 5277-5280.	2.4	20
67	Artificial Membrane Fusion Triggered by Strain-Promoted Alkyneâ€“Azide Cycloaddition. <i>Bioconjugate Chemistry</i> , 2017, 28, 923-932.	1.8	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. <i>Journal of the American Chemical Society</i> , 2001, 123, 2681-2682.	6.6	19
69	Photochemical Triggering of the Bergman and Myers - Saito Cyclizations. <i>Australian Journal of Chemistry</i> , 2010, 63, 1099.	0.5	18
70	Decomposition of 2-diazo-1,3-diketones: Stereocontrol of the mechanism.. <i>Tetrahedron Letters</i> , 1992, 33, 4483-4486.	0.7	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. <i>Journal of the American Chemical Society</i> , 2003, 125, 12872-12880.	6.6	15
72	[¹⁸ F]ODIBO: a prosthetic group for bioorthogonal radiolabeling of macromolecules via strain-promoted alkyneâ€“azide cycloaddition. <i>Organic and Biomolecular Chemistry</i> , 2018, 16, 363-366.	1.5	15

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73	Stereochemistry and thermal stability of diazodiketones. <i>Journal of the Chemical Society Perkin Transactions II</i> , 1993, , 1791.	0.9	14
74	The 2-Oxocyclohexanecarboxylic Acid Keto \rightleftharpoons Enol System in Aqueous Solution. <i>Journal of the American Chemical Society</i> , 2003, 125, 6478-6484.	6.6	14
75	The 2-Oxocyclopentanecarboxylic Acid Keto \rightleftharpoons Enol System in Aqueous Solution: Generation of the Enol by Hydration of an Acylketene. <i>Journal of the American Chemical Society</i> , 1997, 119, 11183-11190.	6.6	13
76	Flash Photolytic Investigation of 4-Diazoisothiochroman-3-one in Aqueous Solution: Observation of a Short-Lived Carboxylic Acid Enol. <i>Journal of the American Chemical Society</i> , 1999, 121, 11330-11335.	6.6	13
77	An acetylene zipper \rightleftharpoons Sonogashira reaction sequence for the efficient synthesis of conjugated arylalkadiynols. <i>Tetrahedron Letters</i> , 2013, 54, 2235-2238.	0.7	11
78	Photochemical Ring Opening of 7-Benzoyl- and 7-Methoxycarbonyldibenzonorcaradienes. Competing 1,2-Hydrogen Shift and Cyclization Reactions of 1,3-Diradicals. <i>Organic Letters</i> , 2001, 3, 1885-1888.	2.4	9
79	Structure and Photochemistry of 18-Diazo-1,4,7,10,13,16-hexaoxacyclonadeca-17,19-dione and Its Sodium and Potassium Complexes. Control of the Ground-State Conformation of 2-Diazo-1,3-dicarbonyl Fragment via Host \rightleftharpoons Guest Complexation. <i>Journal of Organic Chemistry</i> , 2005, 70, 9867-9873.	1.7	9
80	The 2-Oxocyclobutanecarboxylic Acid Keto \rightleftharpoons Enol System in Aqueous Solution: A Remarkable Acid-Strengthening Effect of the Cyclobutane Ring. <i>Journal of Organic Chemistry</i> , 2006, 71, 4460-4467.	1.7	9
81	Wolff rearrangement of β -alkynyl α -diazo β -ketoesters: light-induced acetylene \rightleftharpoons allene isomerization and its use for activation of enediyne. <i>Journal of Physical Organic Chemistry</i> , 2011, 24, 969-975.	0.9	9
82	9-Aryl-9-xanthenols: a convenient platform for the design of fluorimetric and colorimetric pH indicators. <i>Organic and Biomolecular Chemistry</i> , 2012, 10, 9214.	1.5	9
83	Preparation and photophysical properties of a caged kynurenine. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2012, 22, 2734-2737.	1.0	9
84	The efficiency of ^{18}F labelling of a prostate specific membrane antigen ligand <i>via</i> strain-promoted azide \rightleftharpoons alkyne reaction: reaction speed <i>versus</i> hydrophilicity. <i>Chemical Communications</i> , 2018, 54, 7810-7813.	2.2	9
85	The acid dissociation constant of triphenylethenethiol, a simple thioenol, and that of its oxygen-enol analog. <i>Canadian Journal of Chemistry</i> , 1998, 76, 657-661.	0.6	8
86	Photoactivatable Fluorescein Derivatives Caged with a (3-Hydroxy-2-naphthalenyl)methyl Group. <i>Journal of Organic Chemistry</i> , 2014, 79, 7665-7671.	1.7	8
87	Development of Bispecific NT-PSMA Heterodimer for Prostate Cancer Imaging: A Potential Approach to Address Tumor Heterogeneity. <i>Bioconjugate Chemistry</i> , 2019, 30, 1314-1322.	1.8	8
88	Bichromophoric fluorescent photolabile protecting group for alcohols and carboxylic acids. <i>Photochemical and Photobiological Sciences</i> , 2012, 11, 518-521.	1.6	7
89	Photo-Click-Facilitated Screening Platform for the Development of Hetero-Bivalent Agents with High Potency. <i>Journal of Organic Chemistry</i> , 2020, 85, 5771-5777.	1.7	6
90	Photo-cleavable analog of BAPTA for the fast and efficient release of Ca^{2+} . <i>Chemical Communications</i> , 2017, 53, 5598-5601.	2.2	4

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91	Acid-catalyzed hydrolysis of phenyldiazoacetic acid. Effect of an α -diazo group on carboxylic acid acidity. <i>Journal of Physical Organic Chemistry</i> , 1995, 8, 552-558.	0.9	3
92	Access to 2,3-bis(buta-1,3-diyanyl)pyridines. <i>Mendeleev Communications</i> , 2011, 21, 19-20.	0.6	3
93	Refining of Particulates at Stimuli-Responsive Interfaces: Label-Free Sorting and Isolation. <i>Angewandte Chemie - International Edition</i> , 2021, , .	7.2	3
94	Ultrafast transient absorption spectroscopy of the photodecarbonylation of photo-oxadibenzocyclooctyne (photo-ODIBO). <i>Journal of Chemical Physics</i> , 2021, 154, 074302.	1.2	1
95	Femtosecond photodecarbonylation of photo-ODIBO studied by stimulated Raman spectroscopy and density functional theory. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 25637-25648.	1.3	1
96	Photoswitchable Eneynes: Use of Cyclopropanone as Photocleavable Masking Group for the Ene-yne Triple Bond.. <i>ChemInform</i> , 2005, 36, no.	0.1	0
97	Frontispiece: "Shine & Click" Photo-Induced Interfacial Unmasking of Strained Alkynes on Small Water-Soluble Gold Nanoparticles. <i>Chemistry - A European Journal</i> , 2017, 23, .	1.7	0
98	Refining of Particulates at Stimuli-Responsive Interfaces: Label-Free Sorting and Isolation. <i>Angewandte Chemie</i> , 0, , e202110990.	1.6	0