Davide Ravelli

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8235008/publications.pdf

Version: 2024-02-01

111 papers	9,724 citations	57758 44 h-index	37204 96 g-index
140 all docs	140 docs citations	140 times ranked	6902 citing authors

#	Article	IF	Citations
1	Photocatalysis. A multi-faceted concept for green chemistry. Chemical Society Reviews, 2009, 38, 1999.	38.1	920
2	Carbonâ€“Carbon Bond Forming Reactions via Photogenerated Intermediates. Chemical Reviews, 2016, 116, 9850-9913.	47.7	867
3	Photoorganocatalysis. What for?. Chemical Society Reviews, 2013, 42, 97-113.	38.1	790
4	Photocatalysis for the Formation of the Câˆ’C Bond. Chemical Reviews, 2007, 107, 2725-2756.	47.7	746
5	Hydrogen Atom Transfer (HAT): A Versatile Strategy for Substrate Activation in Photocatalyzed Organic Synthesis. European Journal of Organic Chemistry, 2017, 2017, 2056-2071.	2.4	507
6	Direct Photocatalyzed Hydrogen Atom Transfer (HAT) for Aliphatic Câ€“H Bonds Elaboration. Chemical Reviews, 2022, 122, 1875-1924.	47.7	442
7	Site-Selective Câ€“H Functionalization by Decatungstate Anion Photocatalysis: Synergistic Control by Polar and Steric Effects Expands the Reaction Scope. ACS Catalysis, 2018, 8, 701-713.	11.2	313
8	C(sp ³)â€“H functionalizations of light hydrocarbons using decatungstate photocatalysis in flow. Science, 2020, 369, 92-96.	12.6	263
9	Decatungstate Anion for Photocatalyzed â€œWindow Ledgeâ€•Reactions. Accounts of Chemical Research, 2016, 49, 2232-2242.	15.6	244
10	Dyes as Visible Light Photoredox Organocatalysts. ChemCatChem, 2012, 4, 169-171.	3.7	227
11	Selective C(sp³)âˆ’H Aerobic Oxidation Enabled by Decatungstate Photocatalysis in Flow. Angewandte Chemie - International Edition, 2018, 57, 4078-4082.	13.8	179
12	Photoinduced Multicomponent Reactions. Angewandte Chemie - International Edition, 2016, 55, 15476-15484.	13.8	174
13	Photocatalytic hydrogen atom transfer: the philosopher's stone for late-stage functionalization?. Green Chemistry, 2020, 22, 3376-3396.	9.0	157
14	Atomâ€Economical Synthesis of Unsymmetrical Ketones through Photocatalyzed Cï£¿H Activation of Alkanes and Coupling with CO and Electrophilic Alkenes. Angewandte Chemie - International Edition, 2011, 50, 1869-1872.	13.8	151
15	Photogenerated acyl/alkoxycarbonyl/carbamoyl radicals for sustainable synthesis. Green Chemistry, 2019, 21, 748-764.	9.0	142
16	Photocatalytic Cï£¿H Activation by Hydrogenâ€Atom Transfer in Synthesis. ChemCatChem, 2015, 7, 1516-1523.	3.7	140
17	Efficient Câ€“H/Câ€“N and Câ€“H/Câ€“COâ€“N Conversion via Decatungstate-Photoinduced Alkylation of Diisopropyl Azodicarboxylate. Organic Letters, 2013, 15, 2554-2557.	4.6	137
18	Sunlight photocatalyzed regioselective Î²-alkylation and acylation of cyclopentanones. Chemical Science, 2014, 5, 2893-2898.	7.4	129

#	Article	IF	Citations
19	Versatile cross-dehydrogenative coupling of heteroaromatics and hydrogen donors via decatungstate photocatalysis. Chemical Communications, 2017, 53, 2335-2338.	4.1	125
20	Unraveling the Key Features of the Reactive State of Decatungstate Anion in Hydrogen Atom Transfer (HAT) Photocatalysis. ACS Catalysis, 2016, 6, 7174-7182.	11.2	124
21	Solar light-driven photocatalyzed alkylations. Chemistry on the window ledge. Chemical Communications, 2009, , 7351.	4.1	123
22	Merging Photocatalysis with Electrochemistry: The Dawn of a new Alliance in Organic Synthesis. Angewandte Chemie - International Edition, 2019, 58, 17508-17510.	13.8	100
23	Acyl Radicals from Acylsilanes: Photoredox-Catalyzed Synthesis of Unsymmetrical Ketones. ACS Catalysis, 2018, 8, 304-309.	11.2	97
24	Visible Light Uranyl Photocatalysis: Direct Câ€“H to Câ€“C Bond Conversion. ACS Catalysis, 2019, 9, 3054-3058.	11.2	84
25	Decatungstateâ€Photocatalyzed Siâ^'H/Câ^'H Activation in Silyl Hydrides: Hydrosilylation of Electronâ€Poor Alkenes. ChemCatChem, 2015, 7, 3350-3357.	3.7	80
26	Benzoyl radicals from (hetero)aromatic aldehydes. Decatungstate photocatalyzed synthesis of substituted aromatic ketones. Organic and Biomolecular Chemistry, 2010, 8, 4158.	2.8	72
27	(Hetero)aromatics from dienynes, enediynes and enyneâ€“allenes. Chemical Society Reviews, 2016, 45, 4364-4390.	38.1	70
28	Photochemical technologies assessed: the case of rose oxide. Green Chemistry, 2011, 13, 1876.	9.0	69
29	Decatungstate As Photoredox Catalyst: Benzylation of Electron-Poor Olefins. Organic Letters, 2012, 14, 4218-4221.	4.6	67
30	Photoelectrochemical cross-dehydrogenative coupling of benzothiazoles with strong aliphatic Câ€“H bonds. Chemical Communications, 2021, 57, 4424-4427.	4.1	67
31	Decatungstate Photocatalyzed Acylations and Alkylations in Flow via Hydrogen Atom Transfer. Advanced Synthesis and Catalysis, 2015, 357, 3687-3695.	4.3	65
32	Tetrabutylammonium Decatungstate (Chemo)selective Photocatalyzed, Radical Cï£¿H Functionalization in Amides. Advanced Synthesis and Catalysis, 2008, 350, 2209-2214.	4.3	64
33	Smooth Photocatalyzed Benzylation of Electrophilic Olefins via Decarboxylation of Arylacetic Acids. Journal of Organic Chemistry, 2016, 81, 7102-7109.	3.2	63
34	Smooth Photocatalytic Preparation of 2â€Substituted 1,3â€Benzodioxoles. Chemistry - A European Journal, 2011, 17, 572-579.	3.3	60
35	Alkoxy substituted imidazolium-based ionic liquids as electrolytes for lithium batteries. Journal of Power Sources, 2013, 235, 142-147.	7.8	58
36	Wavelength dependence and wavelength selectivity in photochemical reactions. Photochemical and Photobiological Sciences, 2019, 18, 2094-2101.	2.9	56

#	Article	IF	Citations
37	Vinylpyridines as Building Blocks for the Photocatalyzed Synthesis of Alkylpyridines. Chemistry - A European Journal, 2017, 23, 6527-6530.	3.3	55
38	Decatungstate as Direct Hydrogen Atom Transfer Photocatalyst for SOMOphilic Alkynylation. Organic Letters, 2021, 23, 2243-2247.	4.6	55
39	A Tinâ€Free, Radical Photocatalyzed Addition to Vinyl Sulfones. Advanced Synthesis and Catalysis, 2011, 353, 3295-3300.	4.3	54
40	Multi-walled carbon nanotubes as the gas chromatographic stationary phase: Role of their functionalization in the analysis of aliphatic alcohols and esters. Journal of Chromatography A, 2010, 1217, 7275-7281.	3.7	53
41	Photocatalyzed Site-Selective Câ€“H to Câ€“C Conversion of Aliphatic Nitriles. Organic Letters, 2015, 17, 1292-1295.	4.6	53
42	Reagent-dictated site selectivity in intermolecular aliphatic Câ€“H functionalizations using nitrogen-centered radicals. Chemical Science, 2018, 9, 5360-5365.	7.4	53
43	Novel composite polybenzimidazole-based proton exchange membranes as efficient and sustainable separators for microbial fuel cells. Journal of Power Sources, 2017, 348, 57-65.	7.8	50
44	Alkoxy radicals generation: facile photocatalytic reduction of N-alkoxyazinium or azolium salts. Chemical Communications, 2019, 55, 3029-3032.	4.1	48
45	Photocatalytic Synthesis of Oxetane Derivatives by Selective Cï£¿H Activation. Advanced Synthesis and Catalysis, 2014, 356, 2781-2786.	4.3	45
46	Selective C(sp³)â^'H Aerobic Oxidation Enabled by Decatungstate Photocatalysis in Flow. Angewandte Chemie, 2018, 130, 4142-4146.	2.0	45
47	Decatungstate Photocatalyzed Benzylation of Alkenes with Alkylaromatics. Advanced Synthesis and Catalysis, 2013, 355, 2891-2899.	4.3	42
48	Visible Light Photocatalysis. A Green Choice?. Current Organic Chemistry, 2013, 17, 2366-2373.	1.6	40
49	Direct Decarboxylative Functionalization of Carboxylic Acids via Oâ€“H Hydrogen Atom Transfer. Journal of the American Chemical Society, 2020, 142, 44-49.	13.7	40
50	Identifying Amidyl Radicals for Intermolecular Câ€“H Functionalizations. Journal of Organic Chemistry, 2019, 84, 12983-12991.	3.2	38
51	Cooperative Polar/Steric Strategy in Achieving Siteâ€Selective Photocatalyzed C(sp³)â^'H Functionalization. Chemistry - A European Journal, 2017, 23, 8615-8618.	3.3	37
52	Photoinduzierte Mehrkomponentenreaktionen. Angewandte Chemie, 2016, 128, 15702-15711.	2.0	36
53	The Dark Side of Photocatalysis: One Thousand Ways to Close the Cycle. European Journal of Organic Chemistry, 2020, 2020, 2783-2806.	2.4	35
54	Regioâ€•and Stereoselectivity in the Decatungstate Photocatalyzed Alkylation of Alkenes by Alkylcyclohexanes. Chemistry - A European Journal, 2009, 15, 7949-7957.	3.3	34

#	Article	IF	Citations
55	PEGylated carbon nanotubes: preparation, properties and applications. RSC Advances, 2013, 3, 13569.	3.6	34
56	Flow Synthesis of Substituted Î³â€Lactones by Consecutive Photocatalytic/Reductive Reactions. Advanced Synthesis and Catalysis, 2014, 356, 753-758.	4.3	33
57	Pyrrolidinium-based Ionic Liquids: Aquatic Ecotoxicity, Biodegradability, and Algal Subinhibitory Stimulation. ACS Sustainable Chemistry and Engineering, 2015, 3, 1860-1865.	6.7	32
58	Predicting the UV spectrum of polyoxometalates by TDâ€DFT. Journal of Computational Chemistry, 2011, 32, 2983-2987.	3.3	31
59	Photocatalyzed Site-Selective C(sp³)â€“H Functionalization of Alkylpyridines at Non-Benzylic Positions. Organic Letters, 2017, 19, 6436-6439.	4.6	31
60	Green chemistry: state of the art through an analysis of the literature. Green Chemistry Letters and Reviews, 2010, 3, 105-113.	4.7	30
61	Site-selectivity in TBADT-photocatalyzed C(sp³)â€“H Functionalization of Saturated Alcohols and Alkanes. Chemistry Letters, 2018, 47, 207-209.	1.3	30
62	Photoorganocatalysis in Organic Synthesis. Catalytic Science Series, 2019, , .	0.0	30
63	Bio-based crotonic acid from polyhydroxybutyrate: synthesis and photocatalyzed hydroacylation. Green Chemistry, 2021, 23, 3420-3427.	9.0	29
64	Electronic and EPR spectra of the species involved in [W10O32]4â^' photocatalysis. A relativistic DFT investigation. Physical Chemistry Chemical Physics, 2013, 15, 2890.	2.8	28
65	Photokatalyse und Elektrochemie: Ein neues BÃ¼ndnis in der organischen Synthese. Angewandte Chemie, 2019, 131, 17670-17672.	2.0	28
66	Sunlight decatungstate photoinduced trifluoromethylations of (hetero)aromatics and electron-poor olefins. Photochemical and Photobiological Sciences, 2017, 16, 1375-1380.	2.9	26
67	Straightforward Electrochemical Sulfonylation of Arenes and Aniline Derivatives using Sodium Sulfinates. ChemElectroChem, 2019, 6, 4450-4455.	3.4	26
68	Photocatalytic One-Pot Synthesis of Homoallyl Ketones via a Norrish Type I Reaction of Cyclopentanones. Journal of Organic Chemistry, 2015, 80, 9365-9369.	3.2	25
69	Photoredox-Catalyzed Generation of Acetonyl Radical in Flow: Theoretical Investigation and Synthetic Applications. ACS Catalysis, 2019, 9, 2493-2500.	11.2	25
70	Î±,nâ€Didehydrotoluenes by Photoactivation of (Chlorobenzyl)trimethylsilanes: An Alternative to Enyneâ€“Allenes Cyclization. Angewandte Chemie - International Edition, 2012, 51, 8577-8580.	13.8	24
71	Photochemical synthesis: Using light to build Câ€“C bonds under mild conditions. Comptes Rendus Chimie, 2017, 20, 261-271.	0.5	23
72	Antimonyâ€“Oxo Porphyrins as Photocatalysts for Redox-Neutral Câ€“H to Câ€“C Bond Conversion. ACS Catalysis, 2020, 10, 9057-9064.	11.2	23

#	Article	IF	Citations
73	Titanium dioxide photocatalysis: An assessment of the environmental compatibility for the case of the functionalization of heterocyclics. Applied Catalysis B: Environmental, 2010, 99, 442-447.	20.2	22
74	Precursor-Dependent Photocatalytic Activity of Carbon Dots. Molecules, 2020, 25, 101.	3.8	22
75	Designing radical chemistry by visible light-promoted homolysis. Trends in Chemistry, 2022, 4, 305-317.	8.5	21
76	Photocatalytic Isocyanide-Based Multicomponent Domino Cascade toward the Stereoselective Formation of Iminofurans. Journal of Organic Chemistry, 2020, 85, 1981-1990.	3.2	20
77	Photocatalyzed syntheses of phenanthrenes and their aza-analogues. A review. Beilstein Journal of Organic Chemistry, 2020, 16, 1476-1488.	2.2	19
78	Flow Metalâ€Free Arï¿C Bond Formation via Photogenerated Phenyl Cations. Advanced Synthesis and Catalysis, 2016, 358, 1164-1172.	4.3	18
79	Oneâ€Step Decatungstateâ€Photomediated PEGylation of Singleâ€Walled Carbon Nanotubes. ChemPlusChem, 2012, 77, 210-216.	2.8	17
80	Energy and Molecules from Photochemical/Photocatalytic Reactions. An Overview. Molecules, 2015, 20, 1527-1542.	3.8	17
81	Electrochemistry and analytical determination of aripiprazole and octoclothepin at glassy carbon electrode. Journal of Electroanalytical Chemistry, 2013, 711, 1-7.	3.8	16
82	Efficiency and Selectivity Aspects in the Câ€“H Functionalization of Aliphatic Oxygen Heterocycles by Photocatalytic Hydrogen Atom Transfer. Synlett, 2019, 30, 803-808.	1.8	16
83	Acetalization Allows the Photoheterolysis of the Arâ€“Cl Bond in Chlorobenzaldehydes and Chloroacetophenones. Journal of Organic Chemistry, 2012, 77, 9094-9101.	3.2	15
84	Conditions and Edges for the Photochemical Generation of Short-Lived Aryl Cations: A Computational Approach. Synlett, 2015, 26, 471-478.	1.8	12
85	Photocatalytic generation of ligated boryl radicals from tertiary amine-borane complexes: An emerging tool in organic synthesis. Chem Catalysis, 2022, 2, 957-966.	6.1	12
86	From Phenyl Chlorides to Î±,n-Didehydrotoluenes via Phenyl Cations. A CPCMâ€“CASMP2 Investigation. Journal of Organic Chemistry, 2013, 78, 3814-3820.	3.2	11
87	Methoxy-Substituted Î±,n-Didehydrotoluenes. Photochemical Generation and Polar vs Diradical Reactivity. Journal of the American Chemical Society, 2014, 136, 13874-13881.	13.7	11
88	Revising the Role of a Dioxirane as an Intermediate in the Uncatalyzed Hydroperoxidation of Cyclohexanone in Water. Journal of Organic Chemistry, 2015, 80, 6425-6431.	3.2	11
89	Photogenerated Î±,n-Didehydrotoluenes from Chlorophenylacetic Acids at Physiological pH. Journal of Organic Chemistry, 2015, 80, 852-858.	3.2	10
90	Singlet vs Triplet Reactivity of Photogenerated Î±,n-Didehydrotoluenes. Journal of Organic Chemistry, 2017, 82, 6592-6603.	3.2	10

#	Article	IF	Citations
91	A biomass-derived polyhydroxyalkanoate biopolymer as safe and environmental-friendly skeleton in highly efficient gel electrolytes for lithium batteries. Electrochimica Acta, 2017, 247, 63-70.	5.2	10
92	Aromatic Aldehydes as Energyâ€Transfer Photoorganocatalysts. ChemCatChem, 2015, 7, 735-737.	3.7	9
93	Voltammetric Determination of Binding Constant and Stoichiometry of Albumin (Human, Bovine,) Tj ETQq1 1 0.784314 rgBT /Overlock	6.5	9
94	Competing Pathways in the Photogeneration of Didehydrotoluenes from (Trimethylsilylmethyl)aryl Sulfonates and Phosphates. Chemistry - A European Journal, 2014, 20, 17572-17578.	3.3	8
95	Multi-Step Continuous Flow Synthesis of Î²/Î³-Substituted Ketones. ChemPhotoChem, 2018, 2, 847-850.	3.0	8
96	Photocatalyzed Generation of Nitrosocarbonyl Intermediates Under Solar Light Irradiation. European Journal of Organic Chemistry, 2020, 2020, 1443-1447.	2.4	7
97	Application of Visible and Solar Light in Organic Synthesis. Lecture Notes in Quantum Chemistry II, 2016, , 281-342.	0.3	6
98	Design Consideration of Continuous-Flow Photoreactors. , 2017, , 1-36.		6
99	Catalyst-free [2â€‰+â€‰2] photocycloadditions between benzils and olefins under visible light. Photochemical and Photobiological Sciences, 2022, 21, 695-703.	2.9	6
100	Smooth photogeneration of Î±,n-didehydrotoluenes (DHTs). Pure and Applied Chemistry, 2013, 85, 1479-1486.	1.9	5
101	Spectroscopic characterization of photoaccumulated radical anions: a litmus test to evaluate the efficiency of photoinduced electron transfer (PET) processes. Beilstein Journal of Organic Chemistry, 2013, 9, 800-808.	2.2	5
102	Significance of TiO2 Photocatalysis for Green Chemistry. Journal of Advanced Oxidation Technologies, 2011, 14, .	0.5	3
103	Sugar-Assisted Photogeneration of Didehydrotoluenes from Chlorobenzylphosphonic Acids. Journal of Organic Chemistry, 2017, 82, 12162-12172.	3.2	3
104	A tan for molecules: photocatalyzed synthesis with direct sunlight. Rendiconti Lincei, 2019, 30, 485-495.	2.2	2
105	Substituent Effects on NMR Spectroscopy of 2,2-Dimethylchroman-4-one Derivatives: Experimental and Theoretical Studies. Molecules, 2020, 25, 2061.	3.8	2
106	CHAPTER 11. New Synthetic Routes in Heterogeneous Photocatalysis. RSC Energy and Environment Series, 2016, , 303-344.	0.5	2
107	Diradicals Photogeneration from Chloroarylâ€Substituted Carboxylic Acids. Chemistry - A European Journal, 2022, 28, .	3.3	2
108	Photocatalytic Fluorination Reactions. , 2019, , 183-221.		0

#	Article	IF	Citations
109	2.6 Generation of Carbon-Centered Radicals by Photochemical Methods. , 2021, , .		0
110	Aromatics and Cyanoaromatics. Catalytic Science Series, 2019, , 71-111.	0.0	0
111	A special issue dedicated to Angelo Albini on the occasion of his 75th birthday. Photochemical and Photobiological Sciences, 2022, , 1.	2.9	0