Caterina Fusco

List of Publications by Year
in descending order

81	2,108	257101 24	253896 43
papers	citations	h-index	g-index

94	94	94	1505
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Oxidations by methyl(trifluoromethyl)dioxirane. 2. Oxyfunctionalization of saturated hydrocarbons. Journal of the American Chemical Society, 1989, 111, 6749-6757.	6.6	293
2	A Novel Approach to the Efficient Oxygenation of Hydrocarbons under Mild Conditions. Superior Oxo Transfer Selectivity Using Dioxiranes. Accounts of Chemical Research, 2006, 39, 1-9.	7.6	159
3	Oxidations by methyl(trifluoromethyl)dioxirane. 5. Conversion of alcohols into carbonyl compounds. Journal of the American Chemical Society, 1991, 113, 2205-2208.	6.6	79
4	Epoxidation and Oxygen Insertion Into Alkane Ch Bonds by Dioxirane Do Not Involve Detectable Radical Pathways. Chemistry - A European Journal, 1997, 3, 105-109.	1.7	79
5	Oxidations by methyl(trifluoromethyl)dioxirane. 3. Selective polyoxyfunctionalization of adamantane. Tetrahedron Letters, 1990, 31, 3067-3070.	0.7	72
6	Oxidation of acetals, an orthoester, and ethers by dioxiranes through Î±-CH insertion. Tetrahedron Letters, 1992, 33, 4225-4228.	0.7	62
7	Oxyfunctionalization of Nonnatural Targets by Dioxiranes. Selective Oxidation of Centropolyindans. Journal of the American Chemical Society, 1994, 116, 2375-2381.	6.6	61
8	Selective oxidation of optically active sec,sec-1,2-diols by dioxiranes. A practical method for the synthesis of homochiral .alpha.-hydroxy ketones in high optical purity. Journal of Organic Chemistry, 1993, 58, 3600-3601.	1.7	60
9	Oxidations by methyl(trifluoromethyl)dioxirane. 4.1 oxyfunctionalization of aromatic hydrocarbons. Tetrahedron Letters, 1990, 31, 6097-6100.	0.7	57
10	Photoreduction of Carbon Dioxide to Formic Acid in Aqueous Suspension: A Comparison between Phthalocyanine/TiO2 and Porphyrin/TiO2 Catalysed Processes. Molecules, 2015, 20, 396-415.	1.7	51
11	Oxidation of alkynes by dioxiranes. Tetrahedron Letters, 1992, 33, 7929-7932.	0.7	48
12	On the triggering of free radical reactivity of dimethyldioxirane. Tetrahedron Letters, 1996, 37, 249-252.	0.7	47
13	Turning lipophilic phthalocyanines/TiO2 composites into efficient photocatalysts for the conversion of CO2 into formic acid under UVâ€“vis light irradiation. Applied Catalysis A: General, 2014, 481, 169-172.	2.2	44
14	Selective oxidation of tertiary-secondary vic-diols to Î±-hydroxy ketones by dioxiranes. Tetrahedron Letters, 1993, 34, 4559-4562.	0.7	41
15	Oxidation of catechol and of 2,6-di-tert-butylphenol by dioxiranes. Tetrahedron Letters, 1991, 32, 5445-5448.	0.7	39
16	Oxyfunctionalization of Non-Natural Targets by Dioxiranes. 3.1Efficient Oxidation of Buckminsterfullerene C60with Methyl(trifluoromethyl)dioxirane. Journal of Organic Chemistry, 1999, 64, 8363-8368.	1.7	38
17	Oxyfunctionalization of Non-Natural Targets by Dioxiranes. 5. Selective Oxidation of Hydrocarbons Bearing Cyclopropyl Moieties1. Journal of Organic Chemistry, 2003, 68, 7806-7810.	1.7	35
18	Oxyfunctionalization of Non-Natural Targets by Dioxiranes. 2. Selective Bridgehead Dihydroxylation of Fenestrindane1. Journal of Organic Chemistry, 1996, 61, 8681-8684.	1.7	32

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19	Concerning the Reactivity of Dioxiranes. Observations from Experiments and Theory. Journal of the American Chemical Society, 2008, 130, 1197-1204.	6.6	32
20	Catalytic Activity of Silicon Nanowires Decorated with Gold and Copper Nanoparticles Deposited by Pulsed Laser Ablation. Nanomaterials, 2018, 8, 78.	1.9	32
21	Dioxirane Epoxidations of 1,1-Disubstituted Ethylenes. Probing for Radical Pathways by Computations and Experiments. Journal of Organic Chemistry, 1998, 63, 8565-8569.	1.7	30
22	Selective oxidation of O-isopropylidene derivatives of diols to 2-hydroxy ketones employing dioxiranes. Tetrahedron Letters, 1996, 37, 115-118.	0.7	29
23	On the hydroxylation of bicyclo[2.1.0]pentane using dioxiranes. Tetrahedron Letters, 2001, 42, 7087-7090.	0.7	28
24	Concerning the Efficient Conversion of Epoxy Alcohols into Epoxy Ketones Using Dioxiranes. Journal of Organic Chemistry, 2004, 69, 8510-8513.	1.7	27
25	Concerning Synthesis of Ring-A Fluorinated Anthracyclines. The Dioxirane Shunt. Synthetic Communications, 2003, 33, 3009-3016.	1.1	26
26	Concerning Selectivity in the Oxidation of Peptides by Dioxiranes. Further Insight into the Effect of Carbamate Protecting Groups. Journal of Organic Chemistry, 2010, 75, 4812-4816.	1.7	26
27	High-yield synthesis of nitriles by oxidation of aldehyde N,N-dimethylhydrazones with dimethyldioxirane. Tetrahedron Letters, 1998, 39, 2009-2012.	0.7	25
28	Oxyfunctionalization of Non-Natural Targets by Dioxiranes. 4.1Efficient Oxidation of Binor S Using Methyl(trifluoromethyl)dioxirane. Journal of Organic Chemistry, 2001, 66, 9063-9066.	1.7	24
29	ZnO/Ionic Liquid Catalyzed Biodiesel Production from Renewable and Waste Lipids as Feedstocks. Catalysts, 2019, 9, 71.	1.6	24
30	Selective Synthesis of Hydroxy Analogues of Valinomycin using Dioxiranes. Organic Letters, 2011, 13, 5096-5099.	2.4	23
31	Tunable Epoxidation of Singleâ€Walled Carbon Nanotubes by Isolated Methyl(trifluoromethyl)dioxirane. European Journal of Organic Chemistry, 2014, 2014, 1666-1671.	1.2	23
32	Regio- and chemoselective epoxidation of fluorinated monoterpenes and sesquiterpenes by dioxiranes. Tetrahedron, 1993, 49, 6299-6308.	1.0	22
33	Synthesis and Reactivity of Manganese Tricarbonyl Complexes of the Centropolyindanes 10-Methyltribenzotriquinacene and Fenestrindane. Organometallics, 2000, 19, 2233-2236.	1.1	22
34	Antitumor Potential of Conjugable Valinomycins Bearing Hydroxyl Sites: In Vitro Studies. ACS Medicinal Chemistry Letters, 2013, 4, 1189-1192.	1.3	22
35	Direct regio- and stereoselective synthesis of squalene 2,3;22,23-dioxide using dioxiranes. Tetrahedron Letters, 2005, 46, 8459-8462.	0.7	21
36	Selective Hydroxylation of Methane by Dioxiranes under Mild Conditions. Organic Letters, 2011, 13, 2142-2144.	2.4	21

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37	Dioxiraneâ€Mediated Heterogeneous Epoxidations with Potassium Caroate: A Solid Catalyst Bearing Anchored Ketone Moieties. European Journal of Organic Chemistry, 2012, 2012, 4616-4621.	1.2	21
38	Siteâ€dependent biological activity of valinomycin analogs bearing derivatizable hydroxyl sites. Journal of Peptide Science, 2013, 19, 751-757.	0.8	21
39	Heterolytic (2â€‰e) vs Homolytic (1â€‰e) Oxidation Reactivity: Nâˆ’H versus Câˆ’H Switch in the Oxidation of Lactams by Dioxirans. Chemistry - A European Journal, 2017, 23, 259-262.	1.7	21
40	Oxidative cleavage of lactams in water using dioxiranes: an expedient and environmentally-safe route to ï‰-nitro acids. Tetrahedron Letters, 2013, 54, 515-517.	0.7	20
41	Chemo- and diastereoselectivities in the oxidation of cyclopentenols with dimethyldioxirane and methyl(trifluoromethyl)dioxirane. Tetrahedron Letters, 1999, 40, 8023-8027.	0.7	19
42	One-Pot Conversion of Epoxidized Soybean Oil (ESO) into Soy-Based Polyurethanes by MoCl2O2 Catalysis. Molecules, 2017, 22, 333.	1.7	19
43	Continued Progress towards Efficient Functionalization of Natural and Nonâ€natural Targets under Mild Conditions: Oxygenation by Câˆ’H Bond Activation with Dioxirane. Chemistry - A European Journal, 2019, 25, 12003-12017.	1.7	17
44	Oxyfunctionalization of Non-Natural Targets by Dioxiranes. 6. On the Selective Hydroxylation of Cubane. Organic Letters, 2009, 11, 3574-3577.	2.4	16
45	Preparation and Characterization of Soybean Oil-Based Polyurethanes for Digital Doming Applications. Materials, 2017, 10, 848.	1.3	13
46	Selective oxidation of acetylenic 1,4-diols with dioxiranes in comparison with the methyltrioxorheniumâ€“hydrogen peroxide oxidant. Tetrahedron Letters, 2004, 45, 8575-8578.	0.7	11
47	TiO2@PEI-Grafted-MWCNTs Hybrids Nanocomposites Catalysts for CO2ÂPhotoreduction. Materials, 2018, 11, 307.	1.3	11
48	Oxidation of natural targets by dioxiranes. Part 6: on the direct regio- and site-selective oxyfunctionalization of estrone and of 5Î±-androstane steroid derivatives. Tetrahedron Letters, 2008, 49, 5614-5617.	0.7	10
49	A new synthetic approach to oxidation organocatalysts supported on Merrifield resin using plasma-enhanced chemical vapor deposition. Applied Catalysis A: General, 2014, 470, 132-139.	2.2	10
50	Epoxidation of Multiâ€Walled Carbon Nanotubes by Organocatalytic Oxidation. European Journal of Organic Chemistry, 2015, 2015, 3063-3068.	1.2	10
51	Dioxomolybdenum(VI) Complexes with Salicylamide Ligands: Synthesis, Structure, and Catalysis in the Epoxidation of Olefins under Eco-Friendly Conditions. European Journal of Inorganic Chemistry, 2019, 2019, 221-229.	1.0	10
52	Valorization of cigarette butts for synthesis of levulinic acid as top value-added chemicals. Scientific Reports, 2021, 11, 15775.	1.6	10
53	Oxidation-proof microemulsions: Microstructure and reactivity in the presence of dioxiranes. Journal of Colloid and Interface Science, 2013, 408, 138-144.	5.0	9
54	Dioxirane-mediated Metal-free Oxidations of Target Molecules Containing Unsaturated Carbons. Current Organic Chemistry, 2015, 19, 45-61.	0.9	9

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55	Characterization of isolated 1-aza-adamantan-4-one (C9H13NO) from microwave, millimeter-wave and infrared spectroscopy supported by electronic structure calculations. Journal of Molecular Spectroscopy, 2017, 338, 6-14.	0.4	9
56	Methanolysis of epoxidized soybean oil in continuous flow conditions. Industrial Crops and Products, 2017, 109, 1-7.	2.5	8
57	Epoxidation of Carbon Nanocapsules: Decoration of Single-Walled Carbon Nanotubes Filled with Metal Halides. Nanomaterials, 2018, 8, 137.	1.9	8
58	Concerning Synthesis of New Biobased Polycarbonates with Curcumin in Replacement of Bisphenol A and Recycled Diphenyl Carbonate as Example of Circular Economy. Polymers, 2021, 13, 361.	2.0	8
59	Stereoselective dioxirane hydroxylations and the synthesis of tripod boronic acid esters. Tetrahedron Letters, 2007, 48, 3575-3578.	0.7	7
60	Deep Control of Linear Oligomerization of Glycerol Using Lanthanum Catalyst on Mesoporous Silica Gel. Catalysts, 2020, 10, 1170.	1.6	7
61	Synthesis, High-Resolution Infrared Spectroscopy, and Vibrational Structure of Cubane, C₈H₈. Journal of Physical Chemistry A, 2016, 120, 4418-4428.	1.1	6
62	Steel slag as low-cost catalyst for artificial photosynthesis to convert CO2 and water into hydrogen and methanol. Scientific Reports, 2022, 12, .	1.6	6
63	Preparation of Biowax Esters in Continuous Flow Conditions. ACS Omega, 2019, 4, 12286-12292.	1.6	5
64	Steel Slag as New Catalyst for the Synthesis of Fames from Soybean Oil. Catalysts, 2021, 11, 619.	1.6	5
65	Reactivity of 1,3-dimethylimidazolium-2-carboxylate with dimethylcarbonate at high temperature: Unexpected 2-ethyl-functionalisation of the imidazolium moiety and employment of the NHC-CO2/dimethylcarbonate system in a base promoted reaction. Catalysis Communications, 2014, 46, 94-97.	1.6	4
66	Synthesis and Biological Evaluation of a Valinomycin Analog Bearing a Pentafluorophenyl Active Ester Moiety. Journal of Organic Chemistry, 2015, 80, 12646-12650.	1.7	4
67	Heterogenization of Ketone Catalyst for Epoxidation by Low Pressure Plasma Fluorination of Silica Gel Supports. Molecules, 2017, 22, 2099.	1.7	4
68	Ionicâ€Liquid Controlled Nitration of Double Bond: Highly Selective Synthesis of Nitrostyrenes and Benzonitriles. European Journal of Organic Chemistry, 2020, 2020, 6012-6018.	1.2	4
69	Stereoselective Epoxidation of Cyclic Dienes and Trienes by Dioxiranes. Journal of Heterocyclic Chemistry, 2014, 51, 1482-1486.	1.4	3
70	A new expeditious synthesis of the core scaffold of salvianolic acid F trough a one-pot sequential Heck coupling catalyzed by palladium nanoparticles in ionic liquids. Journal of Organometallic Chemistry, 2022, 958, 122193.	0.8	3
71	Green Procedure for One-Pot Synthesis of Azelaic Acid Derivatives Using Metal Catalysis. Recent Innovations in Chemical Engineering, 2019, 11, 185-191.	0.2	2
72	Direct Synthesis of ESBO Derivatives-¹⁸O Labelled with Dioxirane. Scientific World Journal, The, 2013, 2013, 1-7.	0.8	1

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73	Selective Oxidation of Alcohols by Dioxiranes. Studies in Surface Science and Catalysis, 1991, , 147-154.	1.5	0
74	Selective Oxidation of Acetylenic 1,4-Diols with Dioxiranes in Comparison with the Methyltrioxorhenium?Hydrogen Peroxide Oxidant.. ChemInform, 2005, 36, no.	0.1	0
75	Concerning the Efficient Conversion of Epoxy Alcohols into Epoxy Ketones Using Dioxiranes.. ChemInform, 2005, 36, no.	0.1	0
76	A Silica-Supported Trifluoromethyl Ketone with KHSO5 for Epoxidation. Synfacts, 2012, 8, 1271-1271.	0.0	0
77	Evaluating the NOx Storage Catalysts (NSC) Aging: A Preliminary Analytical Study with Electronic Microscopy. Applied Sciences (Switzerland), 2017, 7, 1059.	1.3	0
78	Frontispiece: Continued Progress towards Efficient Functionalization of Natural and Nonâ€natural Targets under Mild Conditions: Oxygenation by Câ^'H Bond Activation with Dioxirane. Chemistry - A European Journal, 2019, 25, .	1.7	0
79	Insights into Pinacol Rearrangement: Oxidative versus Acidâ€Catalyzed Mechanism. ChemistrySelect, 2021, 6, 10238-10242.	0.7	0
80	Ab-initio Investigation of Unexpected Aspects of Hydroxylation of Diketopiperazines by Reaction with Dioxiranes. Communications in Computer and Information Science, 2016, , 139-145.	0.4	0
81	Biobased Approach for Synthesis of Polymers and Sustainable Formulation of Industrial Hardeners. Coatings, 2022, 12, 361.	1.2	0