Edward Clennan

List of Publications by Year
in descending order

80 papers	2,487 citations	218677 26 h-index	223800 46 g-index
83 all docs	83 docs citations	83 times ranked	2187 citing authors

#	Article	IF	Citations
1	Advances in singlet oxygen chemistry. Tetrahedron, 2005, 61, 6665-6691.	1.9	407
2	New Mechanistic and Synthetic Aspects of Singlet Oxygen Chemistry. Tetrahedron, 2000, 56, 9151-9179.	1.9	223
3	Persulfoxide:Â Key Intermediate in Reactions of Singlet Oxygen with Sulfides. Accounts of Chemical Research, 2001, 34, 875-884.	15.6	189
4	Reaction of Organic Sulfides with Singlet Oxygen. A Revised Mechanism. Journal of the American Chemical Society, 1998, 120, 4439-4449.	13.7	134
5	Properties and Reactions of Singlet Dioxygen. , 1995, , 105-140.		99
6	Viologen embedded zeolites. Coordination Chemistry Reviews, 2004, 248, 477-492.	18.8	73
7	Solvent effects on the ability of amines to physically quench singlet oxygen as determined by time-resolved infrared emission studies. Journal of Organic Chemistry, 1989, 54, 3581-3584.	3.2	60
8	Effect of Alcohols on the Photooxidative Behavior of Diethyl Sulfide. Journal of Organic Chemistry, 1996, 61, 4793-4797.	3.2	46
9	Steric and electronic effects on the conformations and singlet oxygen ene regiochemistries of substituted tetramethylethylenes. The origin of the geminal effect. Journal of the American Chemical Society, 1990, 112, 5193-5199.	13.7	44
10	Mechanistic Organic Chemistry in a Microreactor. Zeolite-Controlled Photooxidations of Organic Sulfides. Journal of Organic Chemistry, 2002, 67, 9368-9378.	3.2	43
11	Reactions of an allylic sulfide, sulfoxide, and sulfone with singlet oxygen. The observation of a remarkable diastereoselective oxidation. Journal of the American Chemical Society, 1989, 111, 5787-5792.	13.7	40
12	Substituent-Dictated Partitioning of Intermediates on the Sulfide Singlet Oxygen Reaction Surface. A New Mechanism for Oxidative Câ˜S Bond Cleavage in Î±-Hydroperoxy Sulfides. Journal of the American Chemical Society, 2001, 123, 4966-4973.	13.7	39
13	A New Experimental Protocol for Intrazeolite Photooxidations. The First Product-Based Estimate of an Upper Limit for the Intrazeolite Singlet Oxygen Lifetime. Journal of the American Chemical Society, 2002, 124, 11236-11237.	13.7	38
14	Remote participation during photooxidation at sulfur. Evidence for sulfurane intermediates. Journal of Organic Chemistry, 1992, 57, 4477-4487.	3.2	37
15	Photooxidations of sulfenic acid derivatives 2. A remarkable solvent effect on the reactions of singlet oxygen with disulfides. Tetrahedron Letters, 1994, 35, 4723-4726.	1.4	37
16	Geometry-Dependent Quenching of Singlet Oxygen by Dialkyl Disulfides. Journal of the American Chemical Society, 1997, 119, 9081-9082.	13.7	37
17	The Reactions of O2(1Î"g) with Anancomeric 1,3-Dithianes. The First Experimental Evidence in Support of a Hydroperoxy Sulfonium Ylide as a Precursor to Sulfoxide on the Sulfide Singlet Oxygen Reaction Surface. Journal of Organic Chemistry, 1999, 64, 5620-5625.	3.2	35
18	Photooxidations in zeolites. Part 2: A new mechanistic model for reaction selectivity in singlet oxygen ene reactions in zeolitic media. Tetrahedron Letters, 1999, 40, 5275-5278.	1.4	34

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19	Conformationally Induced Electrostatic Stabilization of Persulfoxides:Â A New Suggestion for Inhibition of Physical Quenching of Singlet Oxygen by Remote Functional Groups. Journal of the American Chemical Society, 2005, 127, 11819-11826.	13.7	34
20	RECENT PROGRESS IN THE SYNTHESIS, PROPERTIES AND REACTIONS OF TRISULFANES AND THEIR OXIDES. Organic Preparations and Procedures International, 1998, 30, 551-600.	1.3	33
21	Organic Reactions in Zeolites. 1. Photooxidations of Sulfides in Methylene Blue Doped Zeolite Y. Journal of the American Chemical Society, 1999, 121, 2915-2916.	13.7	33
22	Photochemical Reactions in the Interior of a Zeolite. Part 5: The Origin of the Zeolite Induced Regioselectivity in the Singlet Oxygen Ene Reaction. Tetrahedron, 2000, 56, 6945-6950.	1.9	33
23	Comparison of the photooxidations of 1,5-dithiacyclooctane, 1,4-dithiane, and pentamethylene sulfide. Another example of remote participation during photooxidation at sulfur?. Journal of the American Chemical Society, 1992, 114, 3021-3027.	13.7	29
24	Zeolite-Promoted Oxidations of 1,1-Diarylethylenes. Organic Letters, 2003, 5, 4979-4982.	4.6	29
25	Experimental and Computational Studies of Nuclear Substituted 1,1â€˜-Dimethyl-2,2â€˜-Bipyridinium Tetrafluoroborates. Journal of Physical Chemistry A, 2007, 111, 13567-13574.	2.5	29
26	Synthesis, Structure, and Photochemical Behavior of [5]Heli-viologen Isomers. Journal of Organic Chemistry, 2016, 81, 5474-5486.	3.2	27
27	Oxygen-17 isotopic tracer evidence for the formation of a sulfurane intermediate during sulfide photooxidation. Journal of the American Chemical Society, 1990, 112, 4044-4046.	13.7	26
28	The Reactions of Sulfides and Sulfenic Acid Derivatives with Singlet Oxygen. Sulfur Reports, 1996, 19, 171-214.	0.4	26
29	Pyrylogens: Synthesis, Structural, Electrochemical, and Photophysical Characterization of a New Class of Electron Transfer Sensitizers. Journal of the American Chemical Society, 2008, 130, 7552-7553.	13.7	26
30	Photooxidation of Sulfenic Acid Derivatives. 1. Sulfenamides. The Surprising Behavior of a New Class of Photooxidation Substrates. Journal of the American Chemical Society, 1994, 116, 809-810.	13.7	25
31	Reaction of Singlet Oxygen with Thietane. A Novel Example of a Self-Catalyzed Reaction Which Provides Evidence for a Thiadioxirane Intermediate. Journal of the American Chemical Society, 1995, 117, 9800-9803.	13.7	25
32	A New Mechanism for Oxidative Câ^'S Bond Cleavage during Reactions of Singlet Oxygen with Organic Sulfides:Â Electronically Dictated Reaction Selectivity in the Persulfoxide Intermediate. Journal of the American Chemical Society, 2000, 122, 1834-1835.	13.7	25
33	Photooxidation of Sulfenic Acid Derivatives. 4. Reactions of Singlet Oxygen with Sulfenamides. Journal of the American Chemical Society, 1995, 117, 4218-4227.	13.7	24
34	Syntheses, Characterizations, and Properties of Electronically Perturbed 1,1â€˜-Dimethyl-2,2â€˜-bipyridinium Tetrafluoroborates. Journal of Organic Chemistry, 2006, 71, 315-319.	3.2	23
35	Temperature, solvent, and substituent effects on the singlet oxidations of allylic phenyl sulfoxides, sulfones, and sulfides. Journal of the American Chemical Society, 1989, 111, 8212-8218.	13.7	22
36	Role of Sulfide Radical Cations in Electron Transfer Promoted Molecular Oxygenations at Sulfur. Journal of the American Chemical Society, 2008, 130, 4057-4068.	13.7	21

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37	Photophysical and Electrochemical Characterization of a Helical Viologen, <i>N</i>,<i>N</i>â€²-Dimethyl-5,10-diaza[5]helicene. Organic Letters, 2014, 16, 4610-4613.	4.6	20
38	The reactions of singlet oxygen with Î²-chlorosulfides. The role of hydroperoxy sulfonium ylides in the oxidative destruction of chemical warfare simulants. Tetrahedron Letters, 1999, 40, 6519-6522.	1.4	19
39	Intrazeolite Photooxidations of Electron-Poor Alkenes. Journal of Organic Chemistry, 2002, 67, 3975-3978.	3.2	19
40	17O NMR spectra of 2-substituted and 2,5-di-substituted furans. The inapplicability of the hammett LFER to correlate chemical shifts. Magnetic Resonance in Chemistry, 1985, 23, 985-987.	1.9	16
41	Kinetic implications of remote participation during photooxidation at sulfur. Journal of Organic Chemistry, 1991, 56, 5251-5252.	3.2	16
42	Photooxidations of Sulfenic Acid Derivatives. 5. The Reaction of Singlet Oxygen with Ethyl Phenyl Sulfenate. Journal of Organic Chemistry, 1995, 60, 6444-6447.	3.2	16
43	Reactions of Bis(p-methoxyphenyl)trisulfane and Its Oxides with Dimethyldioxirane and (Trifluoromethyl)methyldioxirane. Journal of Organic Chemistry, 1996, 61, 7911-7917.	3.2	16
44	The First Example of a Singlet Oxygen Induced Double Bond Migration during Sulfide Photooxidation. Experimental Evidence for Sulfone Formation via a Hydroperoxy Sulfonium Ylide. Journal of Organic Chemistry, 2002, 67, 1036-1037.	3.2	16
45	Synthesis, computational, and photophysical characterization of diaza-embedded [4]helicenes and pseudo[4]helicenes and their pyridinium and viologen homologues. Tetrahedron, 2017, 73, 508-518.	1.9	15
46	A comparison of the ene reactions of singlet oxygen and triazolinediones with alkyl substituted tetramethylethylenes.. Tetrahedron Letters, 1990, 31, 6759-6762.	1.4	14
47	Experimental andab InitioComputational Evidence for New Peroxidic Intermediates (Iminopersulfinic) Tj ETQq1 1 0.784314 rgBT /Overlo American Chemical Society, 1997, 119, 4380-4387.	13.7	14
48	Relative Reactivities of Tethered Functional Groups in the Interior of a Zeolite. Organic Letters, 2000, 2, 437-440.	4.6	13
49	Experimental and Computational Evidence for the Formation of Iminopersulfinic Acids. Journal of Organic Chemistry, 1998, 63, 3397-3402.	3.2	12
50	The hydroperoxysulfonium ylide. An aberration or a ubiquitous intermediate?. Tetrahedron, 2006, 62, 10724-10728.	1.9	12
51	A Comparison of Intrazeolite and Solution Singlet Oxygen Ene Reactions of Allylic Alcohols. Photochemistry and Photobiology, 2006, 82, 1226.	2.5	12
52	Trapping of peroxidic intermediates with sulfur and phosphorus centered electrophiles. Heteroatom Chemistry, 1998, 9, 51-56.	0.7	10
53	A Novel Zeolite-Induced Population of a Planar Viologen Conformation. New Viologen Charge Transfer Complexes and Alkene/Viologen/Zeolite Arrays. Journal of Physical Chemistry B, 2004, 108, 4673-4678.	2.6	9
54	Syntheses and Properties of the New Electron Transfer Sensitizers 4,2â€²-Pyrylogens. Organic Letters, 2009, 11, 685-688.	4.6	9

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55	Isotope Effects as Mechanistic Probes in Solution and in Intrazeolite Photooxygenations. The Formation of a Hydroperoxysulfonium Ylide. Journal of Organic Chemistry, 2003, 68, 5174-5179.	3.2	8
56	A GCâ€"MS Analysis of an SN2 Reaction for the Organic Laboratory. Journal of Chemical Education, 2005, 82, 1676.	2.3	8
57	Natural Bond Orbital Analyses of Persulfoxide Stabilization by Remote Functional Groups. The Conformationally Induced Electrostatic Stabilization Sulfide Photooxygenation Mechanism. Journal of Organic Chemistry, 2006, 71, 1247-1250.	3.2	8
58	Dehydration of Methylcyclohexanol Isomers in the Undergraduate Organic Laboratory and Product Analysis by Gas Chromatographyâ^'Mass Spectroscopy (GCâ^'MS). Journal of Chemical Education, 2011, 88, 646-648.	2.3	8
59	Origin of the Preferential Formation of Helicenes in Mallory Photocyclizations. Temperature as a Tool to Influence Reaction Regiochemistry. Journal of Organic Chemistry, 2019, 84, 817-830.	3.2	8
60	Spontaneous oxidation of a sulfide in zeolite CaY: the unprecedented reaction of a sulfide radical cation with oxygen. Chemical Communications, 1999, , 2261-2262.	4.1	7
61	Photooxygenation of 1,5-Thiaselenocane. Journal of Organic Chemistry, 2008, 73, 8587-8590.	3.2	7
62	Synthesis, photophysical, and electrochemical properties of the sulfur analogs of the new 4,4â€²-pyrylogen electron transfer sensitizers. Journal of Sulfur Chemistry, 2009, 30, 212-224.	2.0	7
63	Dioxa-syn- and -anti-sesquinorbornenes. Singlet oxidation of exocyclic s-cis-1,3-butadienes. Journal of Organic Chemistry, 1987, 52, 3483-3485.	3.2	6
64	Computational and experimental evidence for the first direct spectroscopic detection of the pyrylogen neutral redox partner. Photochemical and Photobiological Sciences, 2010, 9, 796-800.	2.9	6
65	Synthesis, reactivity, and sulfide quenching of helical viologens. Phosphorus, Sulfur and Silicon and the Related Elements, 2017, 192, 222-226.	1.6	6
66	First experimental evidence for the formation of a silicate anion by intramolecular addition of a persulfoxide to a trimethylsiloxy group. Tetrahedron Letters, 1998, 39, 6827-6830.	1.4	5
67	A new free and immobilized pyrylogen electron transfer sensitizer. Tetrahedron Letters, 2010, 51, 1249-1251.	1.4	5
68	Hydrolytic Stability ofN-Methyl-2,6-dimesityl-4,4â€²-Pyrylogen Bis-tetrafluoroborate. Journal of Organic Chemistry, 2011, 76, 7175-7179.	3.2	5
69	Synthesis, Characterization, Photophysics and Photochemistry of Pyrylogen Electron Transfer Sensitizers. Photochemistry and Photobiology, 2014, 90, 344-357.	2.5	5
70	Mechanisms of oxygenations in zeolites. Advances in Physical Organic Chemistry, 2007, 42, 225-269.	0.5	4
71	Conformationally induced electrostatic stabilization (CIES) of persulfoxides. A comparison to homologous sulfoxides. Heteroatom Chemistry, 2007, 18, 591-599.	0.7	4
72	Synthesis, structural, electrochemical, and photophysical properties of 4,2â€²â€‐thiopyrylogens â€" a novel class of sensitizers for photoinduced electron transfer reactions. Journal of Physical Organic Chemistry, 2011, 24, 22-28.	1.9	4

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73	Viologen embedded polyaromatic hydrocarbons (VPAH2+): synthesis, computational, photophysical, and electrochemical characterizations of 3,8-diazaphenanthrenyl viologens. Tetrahedron Letters, 2015, 56, 5591-5594.	1.4	4
74	The origin of the sulfone in photooxidations involving sulfurane intermediates. Heteroatom Chemistry, 1993, 4, 197-201.	0.7	3
75	Aromatic Endoperoxides^{â€}. Photochemistry and Photobiology, 2023, 99, 204-220.	2.5	3
76	Regiochemistry and substituent effects on pyrylogen and thiopyrylogen stability and electronic character. Canadian Journal of Chemistry, 2015, 93, 414-421.	1.1	1
77	Computational and cyclic voltammetry studies of high effective-molarity assisted reversible reductions of [4]- and [5]heli-viologens: Potential building blocks for new materials. Tetrahedron, 2019, 75, 2965-2970.	1.9	1
78	Discovering Electronic Effects of Substituents in Nitrations of Benzene Derivatives Using GCâ€“MS Analysis. Journal of Chemical Education, 2007, 84, 1679.	2.3	0
79	Photooxygenations of Sulfur Compounds. , 2012, , 789-808.		0
80	A Computational Physical Organic Study of a Torque, Lock, and Propagate Approach and Validation with the Synthesis of Configurationally Stable Firstâ€Generation Heliâ€Twisted Acenes.. European Journal of Organic Chemistry, 0, , .	2.4	0