Trevor A Hamlin

List of Publications by Year
in descending order

102 papers	2,820 citations	172207 29 h-index	243296 44 g-index
133 all docs	133 docs citations	133 times ranked	1897 citing authors

#	Article	IF	Citations
1	Bâ€ÐNA Structure and Stability: The Role of Nucleotide Composition and Order. ChemistryOpen, 2022, 11, e202100231.	0.9	9
2	Bifunctional Iminophosphorane-Catalyzed Enantioselective Sulfa-Michael Addition to Unactivated Î±,Î²-Unsaturated Amides. Journal of the American Chemical Society, 2022, 144, 1006-1015.	6.6	24
3	C(spⁿ)â^'X (n=1â€“3) Bond Activation by Palladium. Chemistry - A European Journal, 2022, 28, .	1.7	7
4	A New Organocatalytic Desymmetrization Reaction Enables the Enantioselective Total Synthesis of Madangamine E. Journal of the American Chemical Society, 2022, 144, 1407-1415.	6.6	15
5	Bâ€ÐNA Structure and Stability: The Role of Nucleotide Composition and Order. ChemistryOpen, 2022, 11, e202200013.	0.9	0
6	Rational design of iron catalysts for C â€“ X bond activation. Journal of Computational Chemistry, 2022, , .	1.5	7
7	How Solvation Influences the S_N2 versus E2 Competition. Journal of Organic Chemistry, 2022, 87, 1805-1813.	1.7	26
8	How Ionization Catalyzes Dielsâ€Alder Reactions. Chemistry - A European Journal, 2022, 28, .	1.7	5
9	Câ^'X Bond Activation by Palladium: Steric Shielding versus Steric Attraction. Chemistry - A European Journal, 2022, 28, .	1.7	11
10	Front Cover: How Ionization Catalyzes Dielsâ€Alder Reactions (Chem. Eur. J. 40/2022). Chemistry - A European Journal, 2022, 28, .	1.7	0
11	S_N2 versus S_N2â€² Competition. Journal of Organic Chemistry, 2022, 87, 8892-8901.	1.7	9
12	Bifunctional Hydrogen Bond Donorâ€Catalyzed Dielsâ€“Alder Reactions: Origin of Stereoselectivity and Rate Enhancement. Chemistry - A European Journal, 2021, 27, 5180-5190.	1.7	37
13	How Oriented External Electric Fields Modulate Reactivity. Chemistry - A European Journal, 2021, 27, 5683-5693.	1.7	37
14	On the Origin of Regioselectivity in Palladiumâ€Catalyzed Oxidation of Glucosides. European Journal of Organic Chemistry, 2021, 2021, 632-636.	1.2	14
15	Dipolar repulsion in Î±-halocarbonyl compounds revisited. Physical Chemistry Chemical Physics, 2021, 23, 20883-20891.	1.3	4
16	How metallylenes activate small molecules. Chemical Science, 2021, 12, 4526-4535.	3.7	17
17	The pnictogen bond: a quantitative molecular orbital picture. Physical Chemistry Chemical Physics, 2021, 23, 13842-13852.	1.3	39
18	A bifunctional iminophosphorane squaramide catalyzed enantioselective synthesis of hydroquinazolinesviaintramolecular aza-Michael reaction to Î±,Î²-unsaturated esters. Chemical Science, 2021, 12, 6064-6072.	3.7	21

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19	Chemical reactivity from an activation strain perspective. Chemical Communications, 2021, 57, 5880-5896.	2.2	69
20	A Quantitative Molecular Orbital Perspective of the Chalcogen Bond. ChemistryOpen, 2021, 10, 391-401.	0.9	32
21	How Lewis Acids Catalyze Ring-Openings of Cyclohexene Oxide. Journal of Organic Chemistry, 2021, 86, 3565-3573.	1.7	28
22	The Gauche Effect in XCH₂CH₂X Revisited. ChemPhysChem, 2021, 22, 641-648.	1.0	17
23	1,1,4,4-Tetracyanobutadiene-Functionalized Anthracenes: Regioselectivity of Cycloadditions in the Synthesis of Small Near-IR Dyes. Organic Letters, 2021, 23, 2007-2012.	2.4	30
24	How the Lewis Base F^{â€“}Catalyzes the 1,3-Dipolar Cycloaddition between Carbon Dioxide and Nitrilimines. Journal of Organic Chemistry, 2021, 86, 4320-4325.	1.7	17
25	Chalcogen bonds: Hierarchical ab initio benchmark and density functional theory performance study. Journal of Computational Chemistry, 2021, 42, 688-698.	1.5	21
26	The Pauli Repulsion-Lowering Concept in Catalysis. Accounts of Chemical Research, 2021, 54, 1972-1981.	7.6	75
27	Not Carbon sâ€“p Hybridization, but Coordination Number Determines Câ^'H and Câ^'C Bond Length. Chemistry - A European Journal, 2021, 27, 7074-7079.	1.7	24
28	A Quantitative Molecular Orbital Perspective of the Chalcogen Bond. ChemistryOpen, 2021, 10, 390-390.	0.9	1
29	8 Energy decomposition analysis in the context of quantitative molecular orbital theory. , 2021, , 199-212.		49
30	Palladiumâ€Catalyzed Cascade to Benzoxepins by Using Vinylâ€Substituted Donorâ€“Acceptor Cyclopropanes. Angewandte Chemie - International Edition, 2021, 60, 14410-14414.	7.2	36
31	Palladiumâ€Catalyzed Cascade to Benzoxepins by Using Vinylâ€Substituted Donorâ€“Acceptor Cyclopropanes. Angewandte Chemie, 2021, 133, 14531-14535.	1.6	6
32	Lewis Acidâ€Catalyzed Dielsâ€Alder Reactions: Reactivity Trends across the Periodic Table. Chemistry - A European Journal, 2021, 27, 10610-10620.	1.7	26
33	General Pyrrolidine Synthesis via Iridium-Catalyzed Reductive Azomethine Ylide Generation from Tertiary Amides and Lactams. ACS Catalysis, 2021, 11, 7489-7497.	5.5	27
34	Origin of the Î±â€Effect in S_N2 Reactions. Angewandte Chemie, 2021, 133, 21008-21016.	1.6	16
35	Origin of the Î±â€Effect in S_N2 Reactions. Angewandte Chemie - International Edition, 2021, 60, 20840-20848.	7.2	47
36	InnenrÃ¼cktitelbild: Origin of the Î±â€Effect in S_N2 Reactions (Angew. Chem. 38/2021). Angewandte Chemie, 2021, 133, 21239-21239.	1.6	0

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37	Boron Tunneling in the â€œWeakâ€•Bondâ€Stretch Isomerization of Nâ”B Lewis Adducts. ChemPhysChem, 2021, 22, 1857-1862.	1.0	4
38	Switchable, Reagentâ€Controlled Diastereodivergent Photocatalytic Carbocyclisation of Imineâ€Derived Î±â€Amino Radicals. Angewandte Chemie, 2021, 133, 24318.	1.6	6
39	Switch From Pauliâ€Lowering to LUMOâ€Lowering Catalysis in BrÃ¸nsted Acidâ€Catalyzed Azaâ€Dielsâ€Alder Reactions. ChemistryOpen, 2021, 10, 784-789.	0.9	6
40	Switchable, Reagentâ€Controlled Diastereodivergent Photocatalytic Carbocyclisation of Imineâ€Derived Î±â€Amino Radicals. Angewandte Chemie - International Edition, 2021, 60, 24116-24123.	7.2	23
41	How Divalent Cations Interact with the Internal Channel Site of Guanine Quadruplexes. ChemPhysChem, 2021, 22, 2286-2296.	1.0	13
42	How Lewis Acids Catalyze Ene Reactions. European Journal of Organic Chemistry, 2021, 2021, 5275-5283.	1.2	12
43	Radical Scavenging Potential of the Phenothiazine Scaffold: A Computational Analysis. ChemMedChem, 2021, 16, 3763-3771.	1.6	9
44	Origin of asynchronicity in Dielsâ€“Alder reactions. Physical Chemistry Chemical Physics, 2021, 23, 20095-20106.	1.3	23
45	The Chemical Bond: When Atom Size Instead of Electronegativity Difference Determines Trend in Bond Strength. Chemistry - A European Journal, 2021, 27, 15616-15622.	1.7	26
46	How Divalent Cations Interact with the Internal Channel Site of Guanine Quadruplexes. ChemPhysChem, 2021, 22, 2265-2265.	1.0	5
47	Understanding chemical reactivity using the activation strain model. Nature Protocols, 2020, 15, 649-667.	5.5	188
48	Distortionâ€Controlled Redshift of Organic Dye Molecules. Chemistry - A European Journal, 2020, 26, 2080-2093.	1.7	12
49	Ligandâ€Mediated Regioselective Rhodiumâ€Catalyzed Benzotriazoleâ€“Allene Coupling: Mechanistic Exploration and Quantum Chemical Analysis. Chemistry - A European Journal, 2020, 26, 2342-2348.	1.7	16
50	S_N2 versus E2 Competition of F^{â€“}and PH₂^{â€“}Revisited. Journal of Organic Chemistry, 2020, 85, 14087-14093.	1.7	22
51	Nature and Strength of Lewis Acid/Base Interaction in Boron and Nitrogen Trihalides. Chemistry - an Asian Journal, 2020, 15, 4043-4054.	1.7	28
52	A Unified Framework for Understanding Nucleophilicity and Protophilicity in the S_N2/E2 Competition. Chemistry - A European Journal, 2020, 26, 15538-15548.	1.7	38
53	Regioselectivity of Epoxide Ringâ€Openings via S_N2 Reactions Under Basic and Acidic Conditions. European Journal of Organic Chemistry, 2020, 2020, 3822-3828.	1.2	40
54	Dual catalytic enantioselective desymmetrization of allene-tethered cyclohexanones. Chemical Science, 2020, 11, 7444-7450.	3.7	11

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55	Performance of TDDFT Vertical Excitation Energies of Coreâ€Substituted Naphthalene Diimides. Journal of Computational Chemistry, 2020, 41, 1448-1455.	1.5	21
56	Understanding the 1,3â€Dipolar Cycloadditions of Allenes. Chemistry - A European Journal, 2020, 26, 11529-11539.	1.7	20
57	Origin of rate enhancement and asynchronicity in iminium catalyzed Dielsâ€“Alder reactions. Chemical Science, 2020, 11, 8105-8112.	3.7	55
58	Diastereoselective Synthesis of Î²-Lactams by Ligand-Controlled Stereodivergent Intramolecular Tsujiâ€“Trost Allylation. Journal of Organic Chemistry, 2020, 85, 9566-9584.	1.7	13
59	How Alkali Cations Catalyze Aromatic Dielsâ€Alder Reactions. Chemistry - an Asian Journal, 2020, 15, 1167-1174.	1.7	19
60	How Lewis Acids Catalyze Dielsâ€“Alder Reactions. Angewandte Chemie, 2020, 132, 6260-6265.	1.6	42
61	How Lewis Acids Catalyze Dielsâ€“Alder Reactions. Angewandte Chemie - International Edition, 2020, 59, 6201-6206.	7.2	113
62	Ambident Nucleophilic Substitution: Understanding Nonâ€HSAB Behavior through Activation Strain and Conceptual DFT Analyses. Chemistry - A European Journal, 2020, 26, 3884-3893.	1.7	23
63	Elucidating the Trends in Reactivity of Azaâ€1,3â€Dipolar Cycloadditions. European Journal of Organic Chemistry, 2019, 2019, 378-386.	1.2	37
64	Computational and NMR Studies on the Complexation of Lithium Ion to 8â€Crownâ€4. ChemPhysChem, 2019, 20, 2103-2109.	1.0	15
65	One-Step Assembly of Functionalized Morpholinones and 1,4-Oxazepane-3-ones via [3 + 3]- and [3 + 4]-Annulation of Aza-Oxyallyl Cation and Amphoteric Compounds. Journal of Organic Chemistry, 2019, 84, 15255-15266.	1.7	33
66	Diels-Alder reactivities of cycloalkenediones with tetrazine. Journal of Molecular Modeling, 2019, 25, 33.	0.8	11
67	Lewis acid catalyzed annulation of spirocyclic donorâ€“acceptor cyclopropanes with exo-heterocyclic olefins: access to highly functionalized bis-spirocyclopentane oxindole frameworks. Chemical Communications, 2019, 55, 7069-7072.	2.2	26
68	PyFrag 2019â€”Automating the exploration and analysis of reaction mechanisms. Journal of Computational Chemistry, 2019, 40, 2227-2233.	1.5	57
69	Dual Activation of Aromatic Dielsâ€“Alder Reactions. Chemistry - A European Journal, 2019, 25, 9902-9912.	1.7	16
70	Nucleophilic substitution at di- and triphosphates: leaving group ability of phosphate versus diphosphate. Electronic Structure, 2019, 1, 024001.	1.0	4
71	Wie Dihalogene Michaelâ€Additionsreaktionen katalysieren. Angewandte Chemie, 2019, 131, 9015-9020.	1.6	20
72	How Dihalogens Catalyze Michael Addition Reactions. Angewandte Chemie - International Edition, 2019, 58, 8922-8926.	7.2	90

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73	Structural Distortion of Cycloalkynes Influences Cycloaddition Rates both by Strain and Interaction Energies. Chemistry - A European Journal, 2019, 25, 6342-6348.	1.7	49
74	Understanding the differences between iron and palladium in cross-coupling reactions. Physical Chemistry Chemical Physics, 2019, 21, 9651-9664.	1.3	12
75	Chemoselectivity of Tertiary Azides in Strainâ€Promoted Alkyneâ€Azide Cycloadditions. Chemistry - A European Journal, 2019, 25, 754-758.	1.7	43
76	Nucleophilic Substitution in Solution: Activation Strain Analysis of Weak and Strong Solvent Effects. Chemistry - A European Journal, 2018, 24, 5927-5938.	1.7	53
77	How Mg²⁺ ions lower the S_N2@P barrier in enzymatic triphosphate hydrolysis. Chemical Communications, 2018, 54, 3448-3451.	2.2	16
78	Origins of the Endo and Exo Selectivities in Cyclopropenone, Iminocyclopropene, and Triafulvene Dielsâ€“Alder Cycloadditions. Journal of Organic Chemistry, 2018, 83, 3164-3170.	1.7	38
79	Trifluoromethyl Vinyl Sulfide: A Building Block for the Synthesis of CF₃S-Containing Isoxazolidines. Journal of Organic Chemistry, 2018, 83, 1779-1789.	1.7	18
80	Nucleophilic Substitution (S_N2): Dependence on Nucleophile, Leaving Group, Central Atom, Substituents, and Solvent. ChemPhysChem, 2018, 19, 1248-1248.	1.0	3
81	Nucleophilic Substitution (S_N2): Dependence on Nucleophile, Leaving Group, Central Atom, Substituents, and Solvent. ChemPhysChem, 2018, 19, 1315-1330.	1.0	138
82	Nature and strength of chalcogenâ€“Ï€ bonds. Physical Chemistry Chemical Physics, 2018, 20, 27592-27599.	1.3	23
83	Factors Controlling the Dielsâ€“Alder Reactivity of Heteroâ€1,3â€Butadienes. ChemistryOpen, 2018, 7, 995-1004.	0.9	22
84	A methodology for the photocatalyzed radical trifluoromethylation of indoles: A combined experimental and computational study. Journal of Fluorine Chemistry, 2018, 214, 94-100.	0.9	18
85	B-DNA model systems in non-terran bio-solvents: implications for structure, stability and replication. Physical Chemistry Chemical Physics, 2017, 19, 16969-16978.	1.3	25
86	Role of Orbital Interactions and Activation Strain (Distortion Energies) on Reactivities in the Normal and Inverse Electron-Demand Cycloadditions of Strained and Unstrained Cycloalkenes. Journal of Organic Chemistry, 2017, 82, 8668-8675.	1.7	59
87	Macrocycles All Aflutter: Substitution at an Allylic Center Reveals the Conformational Dynamics of [13]â€Macrodilactones. Chemistry - an Asian Journal, 2017, 12, 2623-2633.	1.7	5
88	Rules of Macrocycle Topology: A [13]â€Macrodilactone Case Study. Chemistry - A European Journal, 2016, 22, 6001-6011.	1.7	9
89	A combined computational and experimental investigation of the oxidative ring-opening of cyclic ethers by oxoammonium cations. Organic and Biomolecular Chemistry, 2016, 14, 3883-3888.	1.5	16
90	Real-time Monitoring of Reactions Performed Using Continuous-flow Processing: The Preparation of 3-Acetylcoumarin as an Example. Journal of Visualized Experiments, 2015, , .	0.2	2

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91	Toward a Unified Mechanism for Oxoammonium Salt-Mediated Oxidation Reactions: A Theoretical and Experimental Study Using a Hydride Transfer Model. Journal of Organic Chemistry, 2015, 80, 8150-8167.	1.7	55
92	Delocalization of Charge and Electron Density in the Humulyl Cationâ€"Implications for Terpene Biosynthesis. Journal of Organic Chemistry, 2015, 80, 4046-4053.	1.7	14
93	Oxoammonium Salt Oxidations of Alcohols in the Presence of Pyridine Bases. Journal of Organic Chemistry, 2014, 79, 1055-1067.	1.7	69
94	Methylenation of Perfluoroalkyl Ketones using a Peterson Olefination Approach. Journal of Organic Chemistry, 2014, 79, 1145-1155.	1.7	42
95	A Continuous-Flow Approach to 3,3,3-Trifluoromethylpropenes: Bringing Together Grignard Addition, Peterson Elimination, Inline Extraction, and Solvent Switching. Organic Process Research and Development, 2014, 18, 1253-1258.	1.3	37
96	1,3-Î³-Silyl-elimination in electron-deficient cationic systems. Chemical Science, 2014, 5, 3983.	3.7	20
97	9. Incorporation of continuous-flow processing into the undergraduate teaching laboratory: key concepts and two case studies. , 2014, , 259-276.		0
98	Dehydrogenation of Perfluoroalkyl KetÂones by Using a Recyclable Oxoammonium Salt. European Journal of Organic Chemistry, 2013, 2013, 3658-3661.	1.2	27
99	Raman spectroscopy as a tool for monitoring mesoscale continuous-flow organic synthesis: Equipment interface and assessment in four medicinally-relevant reactions. Beilstein Journal of Organic Chemistry, 2013, 9, 1843-1852.	1.3	30
100	Oxidation of Î±-Trifluoromethyl Alcohols Using a Recyclable Oxoammonium Salt. Journal of Organic Chemistry, 2012, 77, 8131-8141.	1.7	66
101	Palladiumâ€Catalyzed Activation of Carbonâ€"Halogen Bonds: Electrostaticsâ€Controlled Reactivity. European Journal of Organic Chemistry, 0, , .	1.2	4
102	How Ionization Catalyzes Dielsâ€"Alder Reactions. Chemistry - A European Journal, 0, , .	1.7	0