Mark S Taylor

List of Publications by Citations

86 papers	7,876 citations	37 h-index	88 g-index
93 ext. papers	8,602 ext. citations	9.2 avg, IF	6.79 L-index

#	Paper	IF	Citations
86	Asymmetric catalysis by chiral hydrogen-bond donors. *Angewandte Chemie - International Edition*, **2006**, 45, 1520-43	16.4	1603
85	Highly enantioselective catalytic acyl-pictet-spengler reactions. *Journal of the American Chemical Society*, **2004**, 126, 10558-9	16.4	539
84	Asymmetrische Katalyse durch chirale Wasserstoffbrückendonoren. *Angewandte Chemie*, **2006**, 118, 1550-1573	3.6	529
83	Halogen bonding in solution: thermodynamics and applications. *Chemical Society Reviews*, **2013**, 42, 1667-80	58.9	455
82	Thermodynamics of halogen bonding in solution: substituent, structural, and solvent effects. *Journal of the American Chemical Society*, **2010**, 132, 1646-53	16.4	308
81	Highly enantioselective conjugate additions to alpha,beta-unsaturated ketones catalyzed by a (salen)Al complex. *Journal of the American Chemical Society*, **2005**, 127, 1313-7	16.4	308
80	Anion receptors composed of hydrogen- and halogen-bond donor groups: modulating selectivity with combinations of distinct noncovalent interactions. *Journal of the American Chemical Society*, **2011**, 133, 10559-67	16.4	267
79	Enantioselective Michael additions to alpha,beta-unsaturated imides catalyzed by a Salen-Al complex. *Journal of the American Chemical Society*, **2003**, 125, 11204-5	16.4	248
78	Enantioselective thiourea-catalyzed acyl-mannich reactions of isoquinolines. *Angewandte Chemie - International Edition*, **2005**, 44, 6700-4	16.4	242
77	A tridentate halogen-bonding receptor for tight binding of halide anions. *Angewandte Chemie - International Edition*, **2010**, 49, 1674-7	16.4	213
76	Borinic acid-catalyzed regioselective acylation of carbohydrate derivatives. *Journal of the American Chemical Society*, **2011**, 133, 3724-7	16.4	200
75	Chalcogen bonding in solution: interactions of benzotelluradiazoles with anionic and uncharged Lewis bases. *Journal of the American Chemical Society*, **2015**, 137, 4126-33	16.4	185
74	Regioselective activation of glycosyl acceptors by a diarylborinic acid-derived catalyst. *Journal of the American Chemical Society*, **2011**, 133, 13926-9	16.4	161
73	Regioselective, borinic acid-catalyzed monoacylation, sulfonylation and alkylation of diols and carbohydrates: expansion of substrate scope and mechanistic studies. *Journal of the American Chemical Society*, **2012**, 134, 8260-7	16.4	155
72	Organoboron Acids and Their Derivatives as Catalysts for Organic Synthesis. *ACS Catalysis*, **2013**, 3, 945-962	13.1	121
71	Site-Selective Functionalization of Hydroxyl Groups in Carbohydrate Derivatives. *Chemical Reviews*, **2018**, 118, 11457-11517	68.1	117
70	Anion recognition by a bidentate chalcogen bond donor. *Chemical Communications*, **2016**, 52, 9881-4	5.8	113

69	Catalysis based on reversible covalent interactions of organoboron compounds. *Accounts of Chemical Research*, **2015**, 48, 295-305	24.3	102
68	Measurements of weak halogen bond donor abilities with tridentate anion receptors. *Chemical Communications*, **2010**, 46, 9025-7	5.8	101
67	N,NTdiarylsquaramides: general, high-yielding synthesis and applications in colorimetric anion sensing. *Journal of Organic Chemistry*, **2010**, 75, 3983-92	4.2	101
66	Regioselective alkylation of carbohydrate derivatives catalyzed by a diarylborinic acid derivative. *Organic Letters*, **2011**, 13, 3090-3	6.2	96
65	Anion recognition based on halogen, chalcogen, pnictogen and tetrel bonding. *Coordination Chemistry Reviews*, **2020**, 413, 213270	23.2	85
64	Correlations between computation and experimental thermodynamics of halogen bonding. *Journal of Organic Chemistry*, **2012**, 77, 3483-91	4.2	84
63	Borinic Acid Catalyzed Stereo- and Regioselective Couplings of Glycosyl Methanesulfonates. *Journal of the American Chemical Society*, **2016**, 138, 11058-66	16.4	83
62	Halogen bonding between anions and iodoperfluoroorganics: solution-phase thermodynamics and multidentate-receptor design. *Chemistry - A European Journal*, **2013**, 19, 2050-8	4.8	83
61	Boron-catalyzed direct aldol reactions of pyruvic acids. *Organic Letters*, **2009**, 11, 5486-9	6.2	74
60	Asymmetric catalysis in complex target synthesis. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 5368-73	11.5	74
59	Organoboron-catalyzed regio- and stereoselective formation of 2-deoxyglycosidic linkages. *Organic Letters*, **2014**, 16, 3604-7	6.2	69
58	Anion detection by a fluorescent poly(squaramide): self-assembly of anion-binding sites by polymer aggregation. *Angewandte Chemie - International Edition*, **2011**, 50, 2059-62	16.4	69
57	Synthesis of cardiac glycoside analogs by catalyst-controlled, regioselective glycosylation of digitoxin. *Organic Letters*, **2013**, 15, 1358-61	6.2	65
56	Polymers for anion recognition and sensing. *Macromolecular Rapid Communications*, **2012**, 33, 21-34	4.8	64
55	Catalyst-Controlled Regioselective Reactions of Carbohydrate Derivatives. *Synthesis*, **2012**, 44, 3421-3431	2.9	60
54	Site-Selective and Stereoselective C-H Alkylations of Carbohydrates via Combined Diarylborinic Acid and Photoredox Catalysis. *Journal of the American Chemical Society*, **2019**, 141, 5149-5153	16.4	58
53	9-Hetero-10-boraanthracene-derived borinic acidcatalysts for regioselective activation of polyols. *Chemical Science*, **2013**, 4, 3298	9.4	55
52	Solution-phase self-assembly of complementary halogen bonding polymers. *Journal of the American Chemical Society*, **2015**, 137, 5080-6	16.4	47

51	Applications of organoboron compounds in carbohydrate chemistry and glycobiology: analysis, separation, protection, and activation. *Carbohydrate Research*, **2013**, 381, 112-22	2.9	43
50	Boronic esters as protective groups in carbohydrate chemistry: processes for acylation, silylation and alkylation of glycoside-derived boronates. *Organic and Biomolecular Chemistry*, **2016**, 15, 132-143	3.9	39
49	Regioselective silylation of pyranosides using a boronic acid/Lewis base co-catalyst system. *Organic and Biomolecular Chemistry*, **2013**, 11, 5409-12	3.9	36
48	Site-Selective, Copper-Mediated O-Arylation of Carbohydrate Derivatives. *Journal of the American Chemical Society*, **2017**, 139, 15515-15521	16.4	35
47	Borinic Acids: A Neglected Class of Organoboron Compounds for Recognition of Diols in Aqueous Solution. *Australian Journal of Chemistry*, **2011**, 64, 1466	1.2	33
46	Self-Assembly of Polymer Nanostructures through Halogen Bonding Interactions of an Iodoperfluoroarene-Functionalized Polystyrene Derivative. *Macromolecules*, **2017**, 50, 3807-3817	5.5	29
45	Carbon–carbon bond-forming reactions of α-carbonyl carbocations: exploration of a reversed-polarity equivalent of enolate chemistry. *Tetrahedron*, **2011**, 67, 7586-7592	2.4	27
44	Boronic acid/Brønsted acid co-catalyst systems for the synthesis of 2H-chromenes from phenols and α,β-unsaturated carbonyls. *Organic and Biomolecular Chemistry*, **2016**, 14, 6703-11	3.9	26
43	Structure and energetics of gas phase halogen-bonding in mono-, bi-, and tri-dentate anion receptors as studied by BIRD. *Physical Chemistry Chemical Physics*, **2013**, 15, 7638-47	3.6	24
42	Synthesis of benzannulated heterocycles by twofold Suzuki-Miyaura couplings of cyclic diarylborinic acids. *Organic and Biomolecular Chemistry*, **2014**, 12, 1391-4	3.9	23
41	Sequential Functionalizations of Carbohydrates Enabled by Boronic Esters as Switchable Protective/Activating Groups. *Journal of Organic Chemistry*, **2017**, 82, 8777-8791	4.2	23
40	Site-selective redox isomerizations of furanosides using a combined arylboronic acid/photoredox catalyst system. *Chemical Science*, **2020**, 11, 1531-1537	9.4	22
39	Boronic Acids as Phase-Transfer Reagents for Fischer Glycosidations in Low-Polarity Solvents. *Journal of Organic Chemistry*, **2017**, 82, 11406-11417	4.2	21
38	Molecular recognition: The ITs have it. *Nature Chemistry*, **2014**, 6, 1029-31	17.6	21
37	Catalyst-controlled polycondensation of glycerol with diacyl chlorides: linear polyesters from a trifunctional monomer. *Chemical Science*, **2017**, 8, 7106-7111	9.4	21
36	Organoboron-Promoted Regioselective Glycosylations in the Synthesis of a Saponin-Derived Pentasaccharide from Spergularia ramosa. *Journal of Organic Chemistry*, **2015**, 80, 8501-10	4.2	20
35	Borinic Acid Catalyzed, Regioselective Chloroacylations and Chlorosulfonylations of 2,3-Epoxy Alcohols. *Organic Letters*, **2015**, 17, 3482-5	6.2	18
34	Reversible covalent interactions of α-aminoboronic acids with carbohydrate derivatives. *Chemical Communications*, **2017**, 53, 1809-1812	5.8	16

33	P-Stereogenic Aminophosphines: Preparation and Applications in Enantioselective Organocatalysis. *Journal of Organic Chemistry*, **2017**, 82, 3173-3182	4.2	16
32	Neutral Chiral Tetrakis-Iodo-Triazole Halogen-Bond Donor for Chiral Recognition and Enantioselective Catalysis. *Chemistry - A European Journal*, **2021**, 27, 2315-2320	4.8	16
31	Borinic acid-catalyzed stereo- and site-selective synthesis of glycosylceramides. *Chemical Communications*, **2017**, 53, 5978-5980	5.8	13
30	A versatile synthesis of chiral aminophosphines. *Organic and Biomolecular Chemistry*, **2016**, 14, 5665-72	3.9	13
29	Borinic Acid-Catalyzed, Regioselective Ring Opening of 3,4-Epoxy Alcohols. *Organic Letters*, **2018**, 20, 5375-5379	6.2	13
28	Halogen bonding and interactions in the solid-state structure of a butadiynylene-linked bis(iodoperfluoroarene). *CrystEngComm*, **2013**, 15, 3097	3.3	13
27	Mechanism of an Organoboron-Catalyzed Domino Reaction: Kinetic and Computational Studies of Borinic Acid-Catalyzed Regioselective Chloroacylation of 2,3-Epoxy Alcohols. *Journal of Organic Chemistry*, **2017**, 82, 1085-1095	4.2	12
26	Structure Activity Relationships for Anion-Responsive Poly(squaramides): Support for an Analyte-Induced Noncovalent Polymer Cross-Linking Mechanism. *Macromolecules*, **2013**, 46, 6439-6450	5.5	12
25	Anion Detection by a Fluorescent Poly(squaramide): Self-Assembly of Anion-Binding Sites by Polymer Aggregation. *Angewandte Chemie*, **2011**, 123, 2107-2110	3.6	11
24	Borinic Acid/Halide Co-catalyzed Semipinacol Rearrangements of 2,3-Epoxy Alcohols. *Organic Letters*, **2018**, 20, 5327-5331	6.2	10
23	Exploring the construction of multicompartmental micelles by halogen bonding of complementary macromolecules. *Faraday Discussions*, **2017**, 203, 285-299	3.6	10
22	Diarylborinic Acid-Catalyzed, Site-Selective Sulfation of Carbohydrate Derivatives. *Journal of Organic Chemistry*, **2019**, 84, 900-908	4.2	10
21	Dehydrative glycosidations of 2-deoxysugar derivatives catalyzed by an arylboronic ester. *Carbohydrate Research*, **2018**, 470, 42-49	2.9	10
20	Catalyst-Controlled, Regioselective Reactions of Carbohydrate Derivatives. *Topics in Current Chemistry*, **2016**, 372, 125-55		9
19	Borinic Acid-Catalyzed Regioselective Ring-Opening of 3,4- and 2,3-Epoxy Alcohols with Halides. *Advanced Synthesis and Catalysis*, **2020**, 362, 398-403	5.6	9
18	Rhodium-Catalyzed Tandem Isomerization Allylation: From Diallyl Carbonates to Quaternary Aldehydes. *ACS Catalysis*, **2019**, 9, 11808-11812	13.1	8
17	Synthesis of Ketodeoxysugars from Acylated Pyranosides Using Photoredox Catalysis and Hydrogen Atom Transfer. *ACS Catalysis*, **2021**, 11, 11171-11179	13.1	8
16	Anion Recognition in Solution via Halogen Bonding. *Topics in Current Chemistry*, **2015**, 359, 27-48		7

15	Diarylborinic Acid-Catalyzed Regioselective Ring Openings of Epoxy Alcohols with Pyrazoles, Imidazoles, Triazoles, and Other Nitrogen Heterocycles. *Organic Letters*, **2021**, 23, 7049-7054	6.2	6
14	Boronic acid-promoted site-selective Fischer esterifications of sugar alcohols. *Green Chemistry*, **2019**, 21, 5363-5367	10	5
13	Recent advances in the direct -arylation of carbohydrates. *Organic and Biomolecular Chemistry*, **2021**, 19, 514-524	3.9	5
12	A Nonlinear Ordinary Differential Equation for Generating Graphical Rate Equations from Concentration Versus Time Data. *Topics in Catalysis*, **2017**, 60, 554-563	2.3	4
11	Site- and Stereoselective C-H Alkylations of Carbohydrates Enabled by Cooperative Photoredox, Hydrogen Atom Transfer, and Organotin Catalysis. *Organic Letters*, **2021**, 23, 5180-5185	6.2	4
10	Copper-mediated anomeric O-arylation with organoboron reagents. *Organic and Biomolecular Chemistry*, **2019**, 17, 5671-5674	3.9	3
9	Photocatalytic, site-selective oxidations of carbohydrates. *Chemical Communications*, **2021**, 57, 12135-12138	5.5	3
8	Site-Selective, Organoboron-Catalyzed Polymerization of Pyranosides: Access to Sugar-Derived Polyesters with Tunable Properties. *Macromolecules*, **2020**, 53, 8192-8201	5.5	3
7	Chiral phosphine ligand libraries based on the Bull□ames three-component supramolecular assembly. *Supramolecular Chemistry*, **2019**, 31, 190-202	1.8	3
6	Regioselective Glycosylation Methods **2017**, 231-253		2
5	The halogen bond in solution: general discussion. *Faraday Discussions*, **2017**, 203,	3.6	2
4	Borinic Acid Catalyzed Regioselective -Alkylation of Azoles.. *Journal of Organic Chemistry*, **2022**,	4.2	2
3	Beyond the halogen bond: general discussion. *Faraday Discussions*, **2017**, 203, 227-244	3.6	1
2	Solid-state chemistry and applications: general discussion. *Faraday Discussions*, **2017**, 203, 459-483	3.6	1
1	Thermodynamics of Halogen Bonding in Solution **2021**, 43-82		