

Milton R Smith Iii

List of Publications by Year in descending order

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50276

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81
docs citations

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times ranked

5623
citing authors

#	ARTICLE	IF	CITATIONS
1	Remarkably Selective Iridium Catalysts for the Elaboration of Aromatic C-H Bonds. <i>Science</i> , 2002, 295, 305-308.	12.6	1,032
2	Recent Advances and Challenges of Electrocatalytic N ₂ Reduction to Ammonia. <i>Chemical Reviews</i> , 2020, 120, 5437-5516.	47.7	718
3	Stereoselective Polymerization of a Racemic Monomer with a Racemic Catalyst: A Direct Preparation of the Polylactic Acid Stereocomplex from Racemic Lactide. <i>Journal of the American Chemical Society</i> , 2000, 122, 1552-1553.	13.7	383
4	Steric and Chelate Directing Effects in Aromatic Borylation. <i>Journal of the American Chemical Society</i> , 2000, 122, 12868-12869.	13.7	369
5	Stoichiometric and Catalytic C-Bond Formation from Unactivated Hydrocarbons and Boranes. <i>Journal of the American Chemical Society</i> , 1999, 121, 7696-7697.	13.7	341
6	C-H Activation/Borylation/Oxidation: A One-Pot Unified Route To Meta-Substituted Phenols Bearing Ortho-/Para-Directing Groups. <i>Journal of the American Chemical Society</i> , 2003, 125, 7792-7793.	13.7	308
7	Ir-Catalyzed Functionalization of 2-Substituted Indoles at the 7-Position: A Nitrogen-Directed Aromatic Borylation. <i>Journal of the American Chemical Society</i> , 2006, 128, 15552-15553.	13.7	258
8	Sterically Directed Functionalization of Aromatic C-H Bonds: A Selective Borylation Ortho to Cyano Groups in Arenes and Heterocycles. <i>Journal of the American Chemical Society</i> , 2005, 127, 10539-10544.	13.7	236
9	Synthesis, Structure, and Reactivity of η^2 -Diketiminato Aluminum Complexes. <i>Organometallics</i> , 1998, 17, 3070-3076.	2.3	203
10	High-Throughput Optimization of Ir-Catalyzed C-H Borylation: A Tutorial for Practical Applications. <i>Journal of the American Chemical Society</i> , 2013, 135, 7572-7582.	13.7	194
11	Reactivity of Organoplatinum Complexes with C ₆ H ₄ O ₂ B-BO ₂ C ₆ H ₄ : Syntheses of a Platinum Diboryl Complex with, and without, Metathesis of Boron-Boron and Metal-Carbon Bonds. <i>Journal of the American Chemical Society</i> , 1995, 117, 4403-4404.	13.7	190
12	Clickable Polyglycolides: Tunable Synthons for Thermoresponsive, Degradable Polymers. <i>Macromolecules</i> , 2008, 41, 1937-1944.	4.8	172
13	A Traceless Directing Group for C-H Borylation. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 12915-12919.	13.8	168
14	Outer-Sphere Direction in Iridium C-H Borylation. <i>Journal of the American Chemical Society</i> , 2012, 134, 11350-11353.	13.7	167
15	Mechanistic Investigation of Stoichiometric Alkyne Insertion into Pt-B Bonds and Related Chemistry Bearing on the Catalytic Diborylation of Alkynes Mediated by Platinum(II) Diboryl Complexes. <i>Organometallics</i> , 1996, 15, 5155-5165.	2.3	165
16	Regioselective Aromatic Borylation in an Inert Solvent. <i>Organic Letters</i> , 2001, 3, 2831-2833.	4.6	151
17	Silyl Phosphorus and Nitrogen Donor Chelates for Homogeneous Ortho Borylation Catalysis. <i>Journal of the American Chemical Society</i> , 2014, 136, 14345-14348.	13.7	149
18	Catalytic borylation of methane. <i>Science</i> , 2016, 351, 1424-1427.	12.6	147

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19	Efficient Olefin Diboration by a Base-Free Platinum Catalyst. <i>Organometallics</i> , 1997, 16, 2757-2759.	2.3	143
20	Ir-Catalyzed ortho-Borylation of Phenols Directed by Substrate-Ligand Electrostatic Interactions: A Combined Experimental/in Silico Strategy for Optimizing Weak Interactions. <i>Journal of the American Chemical Society</i> , 2017, 139, 7864-7871.	13.7	131
21	Preparation of monomeric (Me ₅ C ₅) ₂ VO and (Me ₅ C ₅) ₂ Ti(O)(L) and their decomposition to (Me ₅ C ₅) ₄ M ₄ (μ ₃ -O) ₆ . <i>Journal of the American Chemical Society</i> , 1993, 115, 7049-7050.	13.7	127
22	A π-Donor Spectrochemical Series for X in (Me ₅ C ₅) ₂ TiX, and η ² -Agostic Interactions in X = Et and N(Me)Ph. <i>Journal of the American Chemical Society</i> , 1996, 118, 1719-1728.	13.7	116
23	Electronic effects in iridium C-H borylations: insights from unencumbered substrates and variation of boryl ligand substituents. <i>Chemical Communications</i> , 2010, 46, 7724.	4.1	104
24	Five- and Six-Coordinate Group 4 Compounds Stabilized by η ² -Ketiminato and Diketiminato Ligands: Syntheses and Comparisons between Solid-State and Solution Structures. <i>Inorganic Chemistry</i> , 1999, 38, 5964-5977.	4.0	99
25	Glass Transitions in Polylactides. <i>Polymer Reviews</i> , 2008, 48, 64-84.	10.9	98
26	Boc Groups as Protectors and Directors for Ir-Catalyzed C-H Borylation of Heterocycles. <i>Journal of Organic Chemistry</i> , 2009, 74, 9199-9201.	3.2	98
27	Water-Soluble Thermoresponsive Polylactides. <i>Macromolecules</i> , 2008, 41, 318-324.	4.8	96
28	Synthesis of Polymandelide: A Degradable Polylactide Derivative with Polystyrene-like Properties. <i>Macromolecules</i> , 2007, 40, 6040-6047.	4.8	92
29	Syntheses and Structures of Five-Coordinate Zirconium Alkyl Complexes Supported by Diketiminato Ligands. <i>Organometallics</i> , 1999, 18, 1693-1698.	2.3	88
30	Electrolysis of liquid ammonia for hydrogen generation. <i>Energy and Environmental Science</i> , 2015, 8, 2775-2781.	30.8	88
31	Para-Selective, Iridium-Catalyzed C-H Borylations of Sulfated Phenols, Benzyl Alcohols, and Anilines Directed by Ion-Pair Electrostatic Interactions. <i>Journal of the American Chemical Society</i> , 2019, 141, 15483-15487.	13.7	88
32	Homogeneous electrocatalytic oxidation of ammonia to N ₂ under mild conditions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 2849-2853.	7.1	87
33	Synthesis of endo-Cp ₂ TaH ₂ (BO ₂ C ₆ H ₄) and exo-Cp ₂ TaH ₂ (BO ₂ C ₆ H ₄): Regioisomers of the First Tantalum Boryl Complexes. <i>Journal of the American Chemical Society</i> , 1994, 116, 10811-10812.	13.7	82
34	Iridium-catalyzed borylation of thiophenes: versatile, synthetic elaboration founded on selective C-H functionalization. <i>Tetrahedron</i> , 2008, 64, 6103-6114.	1.9	82
35	Group 5 Metallocene Complexes as Models for Metal-Mediated Hydroboration: Synthesis of a Reactive Borane Adduct, endo-Cp* ₂ Nb(H ₂ BO ₂ C ₆ H ₄), via Hydroboration of Coordinated Olefins. <i>Journal of the American Chemical Society</i> , 1997, 119, 9699-9708.	13.7	78
36	Syntheses and reactions of hydrazine and diazene complexes of tungsten. The first example of monodentate coordination of diazene. <i>Journal of the American Chemical Society</i> , 1993, 115, 8638-8642.	13.7	74

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37	Selective molecular oxygen oxidation of thio ethers to sulfoxides catalyzed by cerium(IV). <i>Journal of the American Chemical Society</i> , 1988, 110, 177-180.	13.7	69
38	Synthesis, structure, and reactivity of I^2 -diketiminate boron(III) complexes. <i>Polyhedron</i> , 1999, 18, 2405-2414.	2.2	68
39	Significance of Borane Tuning in Titanium-Catalyzed Borylation Chemistry. <i>Journal of the American Chemical Society</i> , 1997, 119, 2743-2744.	13.7	67
40	Cyclohexyl-Substituted Polyglycolides with High Glass Transition Temperatures. <i>Macromolecules</i> , 2007, 40, 9304-9312.	4.8	65
41	Getting the sterics just right: a five-coordinate iridium trisboryl complex that reacts with C-H bonds at room temperature. <i>Chemical Communications</i> , 2009, , 5731.	4.1	65
42	Facile, Metal-Mediated Dehydrogenative Borylation of Ethylene: Selective Conversion of a Titanium-Bound Olefin to a Vinylboronate Ester. <i>Journal of the American Chemical Society</i> , 1995, 117, 6615-6616.	13.7	61
43	Aromatic Borylation/Amidation/Oxidation: A Rapid Route to 5-Substituted 3-Amidophenols. <i>Organic Letters</i> , 2006, 8, 1411-1414.	4.6	60
44	Harnessing C-H Borylation/Deborylation for Selective Deuteration, Synthesis of Boronate Esters, and Late Stage Functionalization. <i>Journal of Organic Chemistry</i> , 2015, 80, 8341-8353.	3.2	58
45	One-Pot Borylation/Amination Reactions: Syntheses of Arylamine Boronate Esters from Halogenated Arenes. <i>Organic Letters</i> , 2006, 8, 1407-1410.	4.6	54
46	Achieving High Ortho Selectivity in Aniline C-H Borylations by Modifying Boron Substituents. <i>ACS Catalysis</i> , 2018, 8, 6216-6223.	11.2	54
47	A Mechanistic Dichotomy in the Reactions of $\text{Cp}_2\text{M}(\text{CH}_2\text{CHMe})$ (M = Nb, Ta) with Catecholborane: A Generation of Boryl Complexes by Propylene Hydroboration and Propylene Loss. <i>Organometallics</i> , 1999, 18, 235-247.	2.3	43
48	Amphiphilic PEG/alkyl-grafted comb polylactides. <i>Journal of Polymer Science Part A</i> , 2007, 45, 5227-5236.	2.3	38
49	Advances in Metal Boryl and Metal-Mediated B-X Activation Chemistry. <i>Progress in Inorganic Chemistry</i> , 0, , 505-567.	3.0	38
50	Bismuth Acetate as a Catalyst for the Sequential Protodeboronation of Di- and Triborylated Indoles. <i>Organic Letters</i> , 2016, 18, 1554-1557.	4.6	37
51	Neutral square planar cobalt(III) complexes. <i>Journal of the American Chemical Society</i> , 1988, 110, 423-428.	13.7	36
52	Cobalt-Catalyzed C-H Borylation of Alkyl Arenes and Heteroarenes Including the First Selective Borylations of Secondary Benzylic C-H Bonds. <i>Organometallics</i> , 2018, 37, 1567-1574.	2.3	34
53	As Precious as Platinum: Iron Nitride for Electrocatalytic Oxidation of Liquid Ammonia. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 16228-16235.	8.0	33
54	C-H Borylation Catalysts that Distinguish Between Similarly Sized Substituents Like Fluorine and Hydrogen. <i>Organic Letters</i> , 2019, 21, 6388-6392.	4.6	33

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55	Synthesis and characterization of a carbon suboxide complex of nickel, (PPh ₃) ₂ Ni(C,C':.eta.2-C3O2). <i>Organometallics</i> , 1991, 10, 361-362.	2.3	29
56	Synthesis and Properties of the Titanaoxacyclobutane Derived from (Me ₅ C ₅) ₂ Ti(O)(L) and Allene. <i>Organometallics</i> , 1996, 15, 1446-1450.	2.3	29
57	A Catalytic Borylation/Dehalogenation Route to <i>o</i> -Fluoro Arylboronates. <i>Organic Letters</i> , 2014, 16, 6072-6075.	4.6	23
58	Reversible Borylene Formation from Ring Opening of Pinacolborane and Other Intermediates Generated from Five-Coordinate Tris-Boryl Complexes: Implications for Catalytic C-H Borylation. <i>Organometallics</i> , 2015, 34, 4732-4740.	2.3	22
59	Stereoselective synthesis of monosubstituted cis-aryldiazenes, NH:NR. <i>Journal of the American Chemical Society</i> , 1988, 110, 4066-4068.	13.7	21
60	Oxidation of methylhydrazine at a metal center. Stereoselective synthesis of cis-methyldiazene, NH = N(CH ₃). <i>Journal of the American Chemical Society</i> , 1989, 111, 8312-8314.	13.7	21
61	Preparation and reactivity of molybdenum hydride and phenyldiazene complexes. <i>Inorganic Chemistry</i> , 1992, 31, 1535-1538.	4.0	18
62	Steric Shielding Effects Induced by Intramolecular C-H...O Hydrogen Bonding: Remote Borylation Directed by Bpin Groups. <i>ACS Catalysis</i> , 2022, 12, 2694-2705.	11.2	14
63	Dextran functionalization enhances nanoparticle-mediated siRNA delivery and silencing. <i>Technology</i> , 2016, 04, 42-54.	1.4	13
64	Reactions of terminal alkynes with cis-phenyldiazene, NH:N(C ₆ H ₅). <i>Journal of the American Chemical Society</i> , 1989, 111, 3764-3765.	13.7	11
65	Divergent Synthesis of 2,3,5-Substituted Thiophenes by C-H Activation/Borylation/Suzuki Coupling. <i>Heterocycles</i> , 2010, 80, 1429.	0.7	9
66	Improved synthesis of electron deficient bipyridines. <i>Tetrahedron Letters</i> , 2016, 57, 2231-2232.	1.4	9
67	Electronic and Structural Comparisons between Iron(II/III) and Ruthenium(II/III) Imide Analogs. <i>Inorganic Chemistry</i> , 2019, 58, 11699-11715.	4.0	8
68	Reactions of [W(NH=NR)(CO) ₂ (PPh ₃) ₂][PF ₆ ⁻] with azide and amines that occur without displacement of the NH=NR ligand. <i>Polyhedron</i> , 1996, 15, 2551-2557.	2.2	6
69	Practical One-Pot C-H Activation/Borylation/Oxidation: Preparation of 3-Bromo-5-methylphenol on a Multigram Scale. <i>Synthesis</i> , 2011, 2011, 857-859.	2.3	5
70	One-Pot Iridium Catalyzed C-H Borylation/Sonogashira Cross-Coupling: Access to Borylated Aryl Alkynes. <i>Molecules</i> , 2020, 25, 1754.	3.8	5
71	Regulation of Osteoblast Gene Expression and Phenotype by Polylactide-fatty Acid Surfaces. <i>Molecular Biology Reports</i> , 2006, 33, 1-12.	2.3	3
72	Merging Iridium-Catalyzed C-H Borylations with Palladium-Catalyzed Cross-Couplings Using Triorganoindium Reagents. <i>Journal of Organic Chemistry</i> , 2022, 87, 751-759.	3.2	3

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73	Amide directed iridium C(sp ³)â€“H borylation catalysis with high N-methyl selectivity. <i>Tetrahedron</i> , 2022, 109, 132578.	1.9	2
74	Gregory L. Hillhouse: His Life, His Art, His Science, and the Rise of â€œDouble Nickelâ€œ. <i>Organometallics</i> , 2015, 34, 4633-4636.	2.3	0
75	Kinetic analysis of the intracellular processing of siRNAs by confocal microscopy. <i>Microscopy</i> (Oxford, England), 2020, 69, 401-407.	1.5	0
76	Modulating Polymer-siRNA Binding Does Not Promote Polyplex-Mediated Silencing. <i>Nucleic Acid Therapeutics</i> , 2021, 31, 229-236.	3.6	0
77	Ammonia euefstics: Electrolytes for liquid energy storage and conversion at room temperature and ambient pressure. <i>Joule</i> , 2022, , .	24.0	0