Aaron K Vannucci

List of Publications by Citations

54 papers	2,852 citations	25 h-index	53 g-index
60 ext. papers	3,126 ext. citations	9.9 avg, IF	5.17 L-index

#	Paper	IF	Citations
54	Molecular Chromophore-Catalyst Assemblies for Solar Fuel Applications. *Chemical Reviews*, **2015**, 115, 13006-49	68.1	352
53	Review of electrochemical studies of complexes containing the Fe2S2 core characteristic of [FeFe]-hydrogenases including catalysis by these complexes of the reduction of acids to form dihydrogen. *Journal of Organometallic Chemistry*, **2009**, 694, 2681-2699	2.3	349
52	Hydrogen generation from weak acids: electrochemical and computational studies of a diiron hydrogenase mimic. *Journal of the American Chemical Society*, **2007**, 129, 12521-30	16.4	308
51	Electrocatalytic water oxidation by a monomeric amidate-ligated Fe(III)-aqua complex. *Journal of the American Chemical Society*, **2014**, 136, 5531-4	16.4	179
50	The role of proton coupled electron transfer in water oxidation. *Energy and Environmental Science*, **2012**, 5, 7704	35.4	175
49	Self-assembled bilayer films of ruthenium(II)/polypyridyl complexes through layer-by-layer deposition on nanostructured metal oxides. *Angewandte Chemie - International Edition*, **2012**, 51, 12782-5	16.4	112
48	Base-enhanced catalytic water oxidation by a carboxylate-bipyridine Ru(II) complex. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 4935-40	11.5	108
47	Crossing the divide between homogeneous and heterogeneous catalysis in water oxidation. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 20918-22	11.5	107
46	Water oxidation by an electropolymerized catalyst on derivatized mesoporous metal oxide electrodes. *Journal of the American Chemical Society*, **2014**, 136, 6578-81	16.4	96
45	Water oxidation intermediates applied to catalysis: benzyl alcohol oxidation. *Journal of the American Chemical Society*, **2012**, 134, 3972-5	16.4	74
44	Synthesis of Diiron Hydrogenase Mimics Bearing Hydroquinone and Related Ligands. Electrochemical and Computational Studies of the Mechanism of Hydrogen Production and the Role of O□H□□S Hydrogen Bonding□*Organometallics*, **2010**, 29, 5330-5340	3.8	69
43	Visible light driven benzyl alcohol dehydrogenation in a dye-sensitized photoelectrosynthesis cell. *Journal of the American Chemical Society*, **2014**, 136, 9773-9	16.4	67
42	Electrochemical Instability of Phosphonate-Derivatized, Ruthenium(III) Polypyridyl Complexes on Metal Oxide Surfaces. *ACS Applied Materials & Interfaces*, **2015**, 7, 9554-62	9.5	66
41	Photoredox-Assisted Reductive Cross-Coupling: Mechanistic Insight into Catalytic Aryl-Alkyl Cross-Couplings. *Journal of Organic Chemistry*, **2017**, 82, 1996-2003	4.2	63
40	Electronic and geometric effects of phosphatriazaadamantane ligands on the catalytic activity of an [FeFe] hydrogenase inspired complex. *Dalton Transactions*, **2010**, 39, 3050-6	4.3	60
39	Hydrogen Generation from Weak Acids: Electrochemical and Computational Studies in the [(□5-C5H5)Fe(CO)2]2 System. *Organometallics*, **2008**, 27, 4671-4679	3.8	55
38	Proton-coupled electron transfer at modified electrodes by multiple pathways. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, E1461-9	11.5	54

37	Rational Synthesis of Metallo-Cations Toward Redox- and Alkaline-Stable Metallo-Polyelectrolytes. *Journal of the American Chemical Society*, **2020**, 142, 1083-1089	16.4	52
36	One-electron activation of water oxidation catalysis. *Journal of the American Chemical Society*, **2014**, 136, 6854-7	16.4	48
35	Thermodynamics of the Metal–Hydrogen Bonds in (η5-C5H5)M(CO)2H (M = Fe, Ru, Os). *Organometallics*, **2011**, 30, 3444-3447	3.8	44
34	Redox-Active Corannulene Buckybowls in a Crystalline Hybrid Scaffold. *Angewandte Chemie - International Edition*, **2016**, 55, 2195-9	16.4	40
33	Self-assembled bilayers on indium-tin oxide (SAB-ITO) electrodes: a design for chromophore-catalyst photoanodes. *Inorganic Chemistry*, **2012**, 51, 8637-9	5.1	32
32	Nonaqueous Electrocatalytic Oxidation of the Alkylaromatic Ethylbenzene by a Surface Bound RuV(O) Catalyst. *ACS Catalysis*, **2012**, 2, 716-719	13.1	31
31	Photoelectron spectroscopy of dithiolatodiironhexacarbonyl models for the active site of [FeFe] hydrogenases: Insight into the reorganization energy of the "rotated" structure in the enzyme. *Journal of Molecular Structure*, **2008**, 890, 281-288	3.4	30
30	Hierarchical Corannulene-Based Materials: Energy Transfer and Solid-State Photophysics. *Angewandte Chemie - International Edition*, **2017**, 56, 4525-4529	16.4	26
29	Nickel Dual Photoredox Catalysis for the Synthesis of Aryl Amines. *Organometallics*, **2018**, 37, 1468-1472	3.8	22
28	Low temperature selective hydrodeoxygenation of model lignin monomers from a homogeneous palladium catalyst. *Catalysis Today*, **2018**, 302, 146-150	5.3	16
27	Recent advancements in the development of molecular organic photocatalysts. *Organic and Biomolecular Chemistry*, **2021**, 19, 4816-4834	3.9	15
26	UV-irradiation of self-assembled triphenylamines affords persistent and regenerable radicals. *Chemical Science*, **2019**, 10, 2670-2677	9.4	14
25	Redox-Active Corannulene Buckybowls in a Crystalline Hybrid Scaffold. *Angewandte Chemie*, **2016**, 128, 2235-2239	3.6	14
24	Guest Inclusion Modulates Concentration and Persistence of Photogenerated Radicals in Assembled Triphenylamine Macrocycles. *Journal of the American Chemical Society*, **2020**, 142, 502-511	16.4	14
23	A Molecular/Heterogeneous Nickel Catalyst for Suzuki–Miyaura Coupling. *Organometallics*, **2019**, 38, 2007-2014	3.8	12
22	Photocatalytic Oxidative Coupling of Arylamines for the Synthesis of Azoaromatics and the Role of O in the Mechanism. *Journal of the American Chemical Society*, **2021**, 143, 2938-2943	16.4	12
21	A Dual Threat: Redox-Activity and Electronic Structures of Well-Defined Donor-Acceptor Fulleretic Covalent-Organic Materials. *Angewandte Chemie - International Edition*, **2020**, 59, 6000-6006	16.4	11
20	New insights into solvolysis and reorganization energy from gas-phase, electrochemical, and theoretical studies of oxo-Tp*Mo(V) molecules. *Inorganic Chemistry*, **2009**, 48, 8856-62	5.1	11

19	Selective N1-Acylation of Indazoles with Acid Anhydrides Using an Electrochemical Approach. *Organic Letters*, **2019**, 21, 457-460	6.2	11
18	Hierarchical Corannulene-Based Materials: Energy Transfer and Solid-State Photophysics. *Angewandte Chemie*, **2017**, 129, 4596-4600	3.6	10
17	Bis-Cyclometalated Iridium Complexes Containing 4,4'-Bis(phosphonomethyl)-2,2'-bipyridine Ligands: Photophysics, Electrochemistry, and High-Voltage Dye-Sensitized Solar Cells. *Inorganic Chemistry*, **2020**, 59, 6351-6358	5.1	10
16	Mild synthesis of silyl ethers via potassium carbonate catalyzed reactions between alcohols and hydrosilanes. *Organic and Biomolecular Chemistry*, **2018**, 16, 3415-3418	3.9	10
15	Self-Assembled Bilayer Films of Ruthenium(II)/Polypyridyl Complexes through Layer-by-Layer Deposition on Nanostructured Metal Oxides. *Angewandte Chemie*, **2012**, 124, 12954-12957	3.6	10
14	Silica Supported Molecular Palladium Catalyst for Selective Hydrodeoxygenation of Aromatic Compounds under Mild Conditions. *ACS Catalysis*, **2019**, 9, 9060-9071	13.1	9
13	Transition-Metal-Free and Base-Free Electrosynthesis of 1H-Substituted Benzimidazoles. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 690-695	8.3	9
12	Phosphine-Substituted (η5-Pentadienyl) Manganese Carbonyl Complexes: Geometric Structures, Electronic Structures, and Energetic Properties of the Associative Substitution Mechanism, Including Isolation of the Slipped η3-Pentadienyl Associative Intermediate. *Organometallics*, **2014**, 33, 278-288	3.8	8
11	Electrochemical anion pool synthesis of amides with concurrent benzyl ester synthesis. *Green Chemistry*, **2019**, 21, 3165-3171	10	7
10	Structural, electrochemical and photophysical properties of an exocyclic di-ruthenium complex and its application as a photosensitizer. *Dalton Transactions*, **2016**, 45, 9601-7	4.3	6
9	A Series of Green Light Absorbing Organic Photosensitizers Capable of Oxidative Quenching Photocatalysis. *ChemPhotoChem*, **2021**, 5, 51-57	3.3	5
8	Determining the Catalyst Properties That Lead to High Activity and Selectivity for Catalytic Hydrodeoxygenation with Ruthenium Pincer Complexes. *Organometallics*, **2020**, 39, 662-669	3.8	4
7	Catalysis of Electrochemical Reduction of Weak Acids to Produce H2: Role of O-H… Hydrogen Bonding. *Phosphorus, Sulfur and Silicon and the Related Elements*, **2011**, 186, 1288-1292	1	4
6	A Dual Threat: Redox-Activity and Electronic Structures of Well-Defined Donor–Acceptor Fulleretic Covalent-Organic Materials. *Angewandte Chemie*, **2020**, 132, 6056-6062	3.6	3
5	Assembled triphenylamine -urea macrocycles: exploring photodriven electron transfer from host to guests. *Physical Chemistry Chemical Physics*, **2021**, 23, 23953-23960	3.6	2
4	Immobilization of molecular catalysts on solid supports via atomic layer deposition for chemical synthesis in sustainable solvents. *Green Chemistry*, **2021**, 23, 9523-9533	10	1
3	"Broken-hearted" carbon bowl electron shuttle reaction: energetics and electron coupling. *Chemical Science*, **2021**, 12, 6600-6606	9.4	1
2	Determining the active catalytic palladium species under hydrodeoxygenation conditions. *Journal of Organometallic Chemistry*, **2021**, 944, 121848	2.3	

List of Publications

1	Titelbild: Redox-Active Corannulene Buckybowls in a Crystalline Hybrid Scaffold (Angew. Chem. 6/2016). *Angewandte Chemie*, **2016**, 128, 1963-1963	3.6