Steven H Bergens

List of Publications by Year
in descending order

58 papers	2,380 citations	186209 28 h-index	206029 48 g-index
61 all docs	61 docs citations	61 times ranked	1918 citing authors

#	Article	IF	Citations
1	Industrial Synthesis of (+)-cis-Methyl Dihydrojasmonate by Enantioselective Catalytic Hydrogenation; Identification of the Precatalyst [Ru((â˜)-Me-DuPHOS)(H)(Î·6-1,3,5-cyclooctatriene)](BF4). Angewandte Chemie - International Edition, 2000, 39, 1992-1995.	7.2	152
2	A Highly Active Catalyst for the Hydrogenation of Amides to Alcohols and Amines. Angewandte Chemie - International Edition, 2011, 50, 10377-10380.	7.2	132
3	An Unexpected Possible Role of Base in Asymmetric Catalytic Hydrogenations of Ketones. Synthesis and Characterization of Several Key Catalytic Intermediates. Journal of the American Chemical Society, 2006, 128, 13700-13701.	6.6	130
4	In Situ Observations of Water Production and Distribution in an Operating H2/O2 PEM Fuel Cell Assembly Using 1H NMR Microscopy. Journal of the American Chemical Society, 2004, 126, 11436-11437.	6.6	122
5	A Rutheniumâ˜'Dihydrogen Putative Intermediate in Ketone Hydrogenation. Journal of the American Chemical Society, 2005, 127, 4152-4153.	6.6	112
6	Facile Bifunctional Addition of Lactones and Esters at Low Temperatures. The First Intermediates in Lactone/Ester Hydrogenations. Organometallics, 2009, 28, 2349-2351.	1.1	105
7	Direct Observations of the Metalâ˜'Ligand Bifunctional Addition Step in an Enantioselective Ketone Hydrogenation. Journal of the American Chemical Society, 2008, 130, 11979-11987.	6.6	100
8	A direct 2-propanol polymer electrolyte fuel cell. Journal of Power Sources, 2003, 124, 12-17.	4.0	95
9	<i>Base-Catalyzed</i> Bifunctional Addition to Amides and Imides at Low Temperature. A New Pathway for Carbonyl Hydrogenation. Journal of the American Chemical Society, 2013, 135, 8578-8584.	6.6	72
10	Experimental Investigations of a Partial Ruâ€"O Bond during the Metalâ€"Ligand Bifunctional Addition in Noyori-Type Enantioselective Ketone Hydrogenation. Journal of the American Chemical Society, 2011, 133, 9666-9669.	6.6	71
11	The Use of1H NMR Microscopy to Study Proton-Exchange Membrane Fuel Cells. ChemPhysChem, 2006, 7, 67-75.	1.0	69
12	[Ru((R)-2,2â€˜-bis(diphenylphosphino)-1,1â€˜-binaphthyl)(H)(MeCN)(THF)2](BF4), a Catalyst System for Hydrosilylation of Ketones and for Isomerization, Intramolecular Hydrosilylation, and Hydrogenation of Olefins. Organometallics, 1996, 15, 3782-3784.	1.1	64
13	Desymmetrization of <i>meso</i>-Cyclic Imides via Enantioselective Monohydrogenation. Journal of the American Chemical Society, 2010, 132, 12832-12834.	6.6	64
14	Insights into the Distribution of Water in a Self-Humidifying H2/O2Proton-Exchange Membrane Fuel Cell Using1H NMR Microscopy. Journal of the American Chemical Society, 2006, 128, 14192-14199.	6.6	61
15	The First Complete Identification of a Diastereomeric Catalystâ˜'Substrate (Alkoxide) Species in an Enantioselective Ketone Hydrogenation. Mechanistic Investigations. Journal of the American Chemical Society, 2002, 124, 3680-3691.	6.6	55
16	The First Structure Determination of a Possible Intermediate in Ruthenium 2,2â€˜-Bis(diphenylphosphino)-1,1â€˜-binaphthyl Catalyzed Hydrogenation with a Prochiral Group Bound to Ruthenium. Stoichiometric Reaction of a Chiral Rutheniumâ˜'Carbon Bond with Dihydrogen Gas. Journal of the American Chemical Society, 1997, 119, 2940-2941.	6.6	51
17	Deposition of Ru Adatoms on Pt Using Organometallic Chemistry:Â Catalysts for Electrooxidation of MeOH and Adsorbed Carbon Monoxide. Journal of Physical Chemistry B, 1998, 102, 193-199.	1.2	47
18	Ptâ€"Ruadatom nanoparticles as anode catalysts for direct methanol fuel cells. Journal of Power Sources, 2004, 134, 170-180.	4.0	47

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19	The influence of membrane electrode assembly water content on the performance of a polymer electrolyte membrane fuel cell as investigated by 1H NMR microscopy. Physical Chemistry Chemical Physics, 2007, 9, 1850.	1.3	44
20	Use of hydrogenâ€“deuterium exchange for contrast in 1H NMR microscopy investigations of an operating PEM fuel cell. Journal of Power Sources, 2007, 173, 86-95.	4.0	44
21	Electro-oxidation of 2-propanol on platinum in alkaline electrolytes. Journal of Power Sources, 2006, 161, 761-767.	4.0	42
22	Catalytic hydrogenation of functionalized amides under basic and neutral conditions. Catalysis Science and Technology, 2015, 5, 1181-1186.	2.1	41
23	Highly Enantioselective Hydrogenation of Amides via Dynamic Kinetic Resolution Under Low Pressure and Room Temperature. Journal of the American Chemical Society, 2017, 139, 3065-3071.	6.6	40
24	The First Structure Determination of a Diastereomeric Hydridoâ^'Olefin Putative Intermediate in Catalytic Enantioselective Hydrogenation. Organometallics, 1999, 18, 3709-3714.	1.1	39
25	In situ quantification of the in-plane water content in the NafionÂ® membrane of an operating polymer-electrolyte membrane fuel cell using 1H micro-magnetic resonance imaging experiments. Journal of Power Sources, 2010, 195, 7316-7322.	4.0	37
26	Mechanistic Investigations of an Enantioselective Hydrogenation Catalyzed by a Rutheniumâ^'BINAP Complex. 1. Stoichiometric and Catalytic Labeling Studies. Organometallics, 1998, 17, 2228-2240.	1.1	35
27	A liquid electrolyte alkaline direct 2-propanol fuel cell. Journal of Power Sources, 2010, 195, 7196-7201.	4.0	32
28	Hydrogenation of Ru(1,5-cyclooctadiene)(Î·3-C3H5)2 over Black Platinum. A Low-Temperature Reactive Deposition of Submonolayer Quantities of Ruthenium Atoms on Platinum with Real Time Control over Surface Stoichiometry. Journal of the American Chemical Society, 1997, 119, 3543-3549.	6.6	28
29	A nonelectrochemical reductive deposition of ruthenium adatoms onto nanoparticle platinum: anode catalysts for a series of direct methanol fuel cells. Electrochimica Acta, 2003, 48, 4021-4031.	2.6	27
30	A ruthenium catalyst that does not require an Nâ€“H ligand to achieve high enantioselectivity for hydrogenation of an alkyl-aryl ketone. Chemical Communications, 2003, , 750-751.	2.2	27
31	Electro-oxidation of 2-propanol and acetone over platinum, platinumâ€“ruthenium, and ruthenium nanoparticles in alkaline electrolytes. Journal of Power Sources, 2008, 185, 222-225.	4.0	27
32	Active, Simple Iridiumâ€“Copper Hydrous Oxide Electrocatalysts for Water Oxidation. Journal of Physical Chemistry C, 2017, 121, 5480-5486.	1.5	27
33	A Reusable Polymeric Asymmetric Hydrogenation Catalyst Made by Ring-Opening Olefin Metathesis Polymerization. Organometallics, 2004, 23, 1484-1486.	1.1	26
34	A Highly Reusable Rhodium Catalyst-Organic Framework for the Intramolecular Cycloisomerization of 1,6-Enynes. Organic Letters, 2011, 13, 3522-3525.	2.4	25
35	Simple Aqueous Preparation of High Activity and Stability NiFe Hydrous Oxide Catalysts for Water Oxidation. ACS Sustainable Chemistry and Engineering, 2017, 5, 1106-1112.	3.2	24
36	Surface-Directed Deposition of Platinum Nanostructures on Graphite by Chemical Vapor Deposition. Langmuir, 2000, 16, 5837-5840.	1.6	19

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37	Deposition of Ru Adatoms on Pt Using Organometallic Chemistry: Electroâ€oxidation of Methanol, Ethanol, 1,2â€Ethanediol, and Dâ€Glucose over a Surface Optimized for Oxidation of Methanol. Journal of the Electrochemical Society, 1998, 145, 4182-4185.	1.3	18
38	A Highly Reusable Catalyst for Enantioselective Ketone Hydrogenation. Catalystâˆ'Organic Frameworks by Alternating ROMP Assembly. Organometallics, 2007, 26, 1571-1574.	1.1	16
39	Solvent-free isomerization of allylic alcohols catalyzed by a rhodium catalyst-organic framework. RSC Advances, 2012, 2, 3473.	1.7	15
40	Modular Construction of Photoanodes with Covalently Bonded Ru- and Ir-Polypyridyl Visible Light Chromophores. ACS Applied Materials & Interfaces, 2018, 10, 24533-24542.	4.0	15
41	An Alternate Route to the Active Chiral Hydrogenation Catalysts [Ru(bisphosphine)(H)(solvent)3]+:Â Synthesis, Characterization, and Catalytic Evaluation. Organometallics, 2004, 23, 4564-4568.	1.1	14
42	Substrate effects on the mechanism of enantioselective hydrogenation using ruthenium bis(phosphine) complexes as catalyst: A mechanistic investigation of the hydrogenation of Î±,Î²-unsaturated acids and esters based on deuterium labeling studies. Inorganica Chimica Acta, 2006, 359, 2760-2770.	1.2	14
43	Application of [Ru((R)-BINAP)(MeCN)(1-3:5,6-Î·-C8H11)](BF4) as a catalyst precursor for enantioselective hydrogenations. Canadian Journal of Chemistry, 1998, 76, 1447-1456.	0.6	13
44	Low Pt-loading Niâ€"Pt and Pt deposits on Ni: Preparation, activity and investigation of electronic properties. Journal of Power Sources, 2011, 196, 7470-7480.	4.0	13
45	An organometallic deposition of ruthenium adatoms on platinum that self poisons at a specific surface composition.. Journal of Electroanalytical Chemistry, 2002, 533, 91-100.	1.9	12
46	Carbazoleâ€"Cyanobenzene Dyes Electrografted to Carbon or Indium-Doped Tin Oxide Supports for Visible Light-Driven Photoanodes and Olefin Isomerizations. ACS Applied Materials & Interfaces, 2021, 13, 17745-17752.	4.0	12
47	An unexpected, self-regulating codeposition of nickel and platinum forming deposits with surfaces enriched in platinum. Journal of Power Sources, 2009, 194, 298-302.	4.0	10
48	Structural and activity comparison of self-limiting versus traditional Pt electro-depositions on nanopillar Ni films. Journal of Power Sources, 2013, 222, 533-541.	4.0	10
49	(R)- and (S)-1,3-Bis(diphenylphosphino)-2- ((diphenylphosphino)methyl)-1-phenylpropane ((R)- and) Tj ETQq1 1 0.784314 rgBT /Overlo That Is Restrained to One Helical Conformation upon Coordination to a Rhodium(I) Metal Center. Organometallics, 1997, 16, 1890-1896.	1.1	9
50	Enantioselective Hydrogenations of Esters with Dynamic Kinetic Resolution. ACS Catalysis, 2019, 9, 6111-6117.	5.5	9
51	Glancing angle deposited Ni nanopillars coated with conformal, thin layers of Pt by a novel electrodeposition: Application to the oxygen reduction reaction. Electrochimica Acta, 2015, 151, 537-543.	2.6	4
52	Solid-phase synthesis and photoactivity of Ru-polypyridyl visible light chromophores bonded through carbon to semiconductor surfaces. Dalton Transactions, 2020, 49, 10173-10184.	1.6	4
53	Stereochemistry at carbon upon protonolysis of a late transition metal-alkyl bond: a reaction of relevance to catalytic enantioselective hydrogenation of olefins. Canadian Journal of Chemistry, 2001, 79, 1019-1025.	0.6	3
54	Preparation and Study of Reusable Polymerized Catalysts for Ester Hydrogenation. ACS Omega, 2019, 4, 12212-12221.	1.6	3

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55	Second Order Dependence on the Surface Fraction of Pt in Ptâ€”Ru_{adatom} of the Oxidation of 2-PrOH in Base. Journal of Physical Chemistry C, 2015, 119, 27212-27219.	1.5	2
56	Oxygen reduction over dealloyed Pt layers on glancing angle deposited Ni nanostructures. Electrochimica Acta, 2015, 176, 620-626.	2.6	2
57	A Fortuitous, Mild Catalytic Carbonâ€"Carbon Bond Hydrogenolysis by a Phosphine-Free Catalyst. Australian Journal of Chemistry, 2016, 69, 561.	0.5	2
58	Polycationic Rhâ€"JosiPhos Polymers Supported on Phosphotungstic Acid/Al₂O₃ by Multiple Electrostatic Attractions. ACS Catalysis, 2022, 12, 2034-2044.	5.5	2