Katherine B Holt

List of Publications by Year
in descending order

60 papers	3,147 citations	159585 30 h-index	149698 56 g-index
62 all docs	62 docs citations	62 times ranked	4529 citing authors

#	ARTICLE	IF	CITATIONS
1	Refining Energy Levels in ReS₂ Nanosheets by Lowâ€Valent Transitionâ€Metal Doping for Dualâ€Boosted Electrochemical Ammonia/Hydrogen Production. Advanced Functional Materials, 2020, 30, 1907376.	14.9	99
2	Investigations into the mechanism of copper-mediated Glaserâ€"Hay couplings using electrochemical techniques. Faraday Discussions, 2019, 220, 269-281.	3.2	7
3	Synthesis, Molecular Structures and Electrochemical Investigations of [FeFe]â€Hydrogenase Biomimics [Fe₂(CO)_{6â€<i>n</i>}(EPh₃)<i>_n</i>(Âµâ€edt)] (E = P, As, Sb;) Tj ETQq1 1 0.784	2.0	17
4	Models of the iron-only hydrogenase enzyme: structure, electrochemistry and catalytic activity of Fe₂(CO)₃(Î¼-dithiolate)(Î¼,Îº¹,Îº²-triphos). Dalton Transactions, 2019, 48, 6174-6190.	3.3	31
5	In Situ Determination of pH at Nanostructured Carbon Electrodes Using IR Spectroscopy. Materials, 2019, 12, 4044.	2.9	0
6	Electrochemical synthesis of copper(<scp>i</scp>) acetylides <i>via</i> simultaneous copper ion and catalytic base electrogeneration for use in click chemistry. RSC Advances, 2019, 9, 29300-29304.	3.6	8
7	Electrochemical Fouling of Dopamine and Recovery of Carbon Electrodes. Analytical Chemistry, 2018, 90, 1408-1416.	6.5	84
8	Electrochemical preparation and applications of copper(<scp>i</scp>) acetylides: a demonstration of how electrochemistry can be used to facilitate sustainability in homogeneous catalysis. Green Chemistry, 2018, 20, 5474-5478.	9.0	14
9	Insight into the Nature of Iron Sulfide Surfaces During the Electrochemical Hydrogen Evolution and CO₂ Reduction Reactions. ACS Applied Materials & Interfaces, 2018, 10, 32078-32085.	8.0	33
10	Acid deprotonation driven by cation migration at biased graphene nanoflake electrodes. Chemical Communications, 2017, 53, 2351-2354.	4.1	12
11	Electrocatalytic proton reduction by [Fe(CO) 2 (Îº 2 -dppv)(Îº 1 -SAr) 2] (dppv = cis) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 342	2.2	5
12	Copper complexes with dissymmetrically substituted bis(thiosemicarbazone) ligands as a basis for PET radiopharmaceuticals: control of redox potential and lipophilicity. Dalton Transactions, 2017, 46, 14612-14630.	3.3	15
13	In situ spectroscopic monitoring of CO₂ reduction at copper oxide electrode. Faraday Discussions, 2017, 197, 517-532.	3.2	37
14	Nanodiamonds on tetrahedral amorphous carbon significantly enhance dopamine detection and cell viability. Biosensors and Bioelectronics, 2017, 88, 273-282.	10.1	41
15	Biomimetics of the [FeFe]-hydrogenase enzyme: Identification of kinetically favoured apical-basal [Fe2(CO)4(Î¼-H){Îº2-Ph2PC(Me2)PPh2}(Î¼-pdt)]+ as a proton-reduction catalyst. Journal of Organometallic Chemistry, 2016, 812, 247-258.	1.8	54
16	Hydrogenase biomimetics with redox-active ligands: Electrocatalytic proton reduction by [Fe2(CO)4(Îº2-diamine)(Î¼-edt)] (diamine = 2,2â€²-bipy, 1,10-phen). Polyhedron, 2016, 116, 127-135.	2.2	36
17	Solventâ€"surface interactions between nanodiamond and ethanol studied with in situ infrared spectroscopy. Diamond and Related Materials, 2016, 61, 7-13.	3.9	31
18	The influence of acidic edge groups on the electrochemical performance of graphene nanoflakes. Journal of Electroanalytical Chemistry, 2015, 753, 28-34.	3.8	10

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19	Reduction of Carbon Dioxide to Formate at Low Overpotential Using a Superbase Ionic Liquid. Angewandte Chemie - International Edition, 2015, 54, 14164-14168.	13.8	134
20	Surface redox chemistry and mechanochemistry of insulating polystyrene nanospheres. Physical Chemistry Chemical Physics, 2015, 17, 1837-1846.	2.8	14
21	Electrocatalytic proton reduction catalysed by the low-valent tetrairon-oxo cluster [Fe₄(CO)₁₀(Îº²-dppn)(Î¼₄-O)]^{2âˆ'} [dppn = 1,1â€²-bis(diphenylphosphino)naphthalene]. Dalton Transactions, 2015, 44, 5160-5169.	3.3	11
22	Bio-inspired CO₂conversion by iron sulfide catalysts under sustainable conditions. Chemical Communications, 2015, 51, 7501-7504.	4.1	188
23	Role of surface contaminants, functionalities, defects and electronic structure: general discussion. Faraday Discussions, 2014, 172, 365-395.	3.2	1
24	Hydrogenase biomimetics: Fe₂(CO)₄(Î¼-dppf)(Î¼-pdt) (dppf =) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 547 Td Chemical Communications, 2014, 50, 945-947.	4.1	105
25	Electrochemical characterisation of graphene nanoflakes with functionalised edges. Faraday Discussions, 2014, 172, 293-310.	3.2	32
26	Nanodiamond surface redox chemistry: influence of physicochemical properties on catalytic processes. Faraday Discussions, 2014, 172, 349-364.	3.2	37
27	Bioinspired Hydrogenase Models: The Mixed-Valence Triiron Complex [Fe₃(CO)₇(Î¼-edt)₂] and Phosphine Derivatives [Fe₃(CO)_{7â€"<i>x</i>}(PPh₃)_{<i>x</i>}(Î¼-edt)₂] (<i>x</i> = 1, 2) and [Fe₃(CO)₅(Îº²-diphosphine)(Î¼-edt)₂] as Proton Reduction Catalysts. Organometallics, 2014, 33, 1356-1366.	2.3	22
28	Models of the iron-only hydrogenase: a comparison of chelate and bridge isomers of Fe2(CO)4{Ph2PN(R)PPh2}(Î¼-pdt) as proton-reduction catalysts. Dalton Transactions, 2013, 42, 6775.	3.3	111
29	Fluorinated models of the iron-only hydrogenase: An electrochemical study of the influence of an electron-withdrawing bridge on the proton reduction overpotential and catalyst stability. Journal of Electroanalytical Chemistry, 2013, 703, 14-22.	3.8	23
30	Multimetallic Complexes and Functionalized Nanoparticles Based on Oxygen- and Nitrogen-Donor Combinations. Inorganic Chemistry, 2013, 52, 4700-4713.	4.0	18
31	Redox transformations at nanodiamond surfaces revealed by in situ infrared spectroscopy. Chemical Communications, 2011, 47, 12140.	4.1	22
32	Bio-inspired hydrogenase models: mixed-valence triion complexes as proton reduction catalysts. Chemical Communications, 2011, 47, 11222.	4.1	23
33	Free radical facilitated damage of ungual keratin. Free Radical Biology and Medicine, 2010, 49, 865-871.	2.9	8
34	Astroelectrochemistry: the role of redox reactions in cosmic dust chemistry. Physical Chemistry Chemical Physics, 2010, 12, 3072.	2.8	12
35	Undoped diamond nanoparticles: origins of surface redox chemistry. Physical Chemistry Chemical Physics, 2010, 12, 2048.	2.8	53
36	Soap film electrochemistry. Electrochemistry Communications, 2009, 11, 1226-1229.	4.7	10

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37	Scanning Electrochemical Microscopy Studies of Redox Processes at Undoped Nanodiamond Surfaces. Journal of Physical Chemistry C, 2009, 113, 2761-2770.	3.1	32
38	Focused Ion Beam Fabrication of Boron-Doped Diamond Ultramicroelectrodes. Analytical Chemistry, 2009, 81, 5663-5670.	6.5	35
39	Electrochemistry of Undoped Diamond Nanoparticles: Accessing Surface Redox States. Journal of the American Chemical Society, 2009, 131, 11272-11273.	13.7	54
40	Bimetallic complexes based on carboxylate and xanthate ligands: Synthesis and electrochemical investigations. Dalton Transactions, 2009, , 7891.	3.3	24
41	Multimetallic Assemblies Using Piperazine-Based Dithiocarbamate Building Blocks. Inorganic Chemistry, 2008, 47, 9642-9653.	4.0	101
42	Redox properties of undoped 5 nm diamond nanoparticles. Physical Chemistry Chemical Physics, 2008, 10, 303-310.	2.8	80
43	Hot filament chemical vapour deposition of diamond ultramicroelectrodes. Physical Chemistry Chemical Physics, 2007, 9, 5469.	2.8	14
44	Clarke oxygen microelectrode. , 2007, , 243-249.		1
45	Diamond at the nanoscale: applications of diamond nanoparticles from cellular biomarkers to quantum computing. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2007, 365, 2845-2861.	3.4	174
46	Fabrication of Boron-Doped Diamond Ultramicroelectrodes for Use in Scanning Electrochemical Microscopy Experiments. Analytical Chemistry, 2007, 79, 2556-2561.	6.5	40
47	Diamond ultramicroelectrodes. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 2940-2944.	1.8	5
48	Using Scanning Electrochemical Microscopy (SECM) to Measure the Electron-Transfer Kinetics of Cytochrome c Immobilized on a COOH-Terminated Alkanethiol Monolayer on a Gold Electrode. Langmuir, 2006, 22, 4298-4304.	3.5	34
49	Fabrication and Characterisation of Diamond Ultramicroelectrodes of Diameter < 25 Microns for use in Electroanalysis, Sensing and Imaging Applications. ECS Transactions, 2006, 3, 37-45.	0.5	3
50	Interaction of Silver(I) Ions with the Respiratory Chain of Escherichia coli:â€‰ An Electrochemical and Scanning Electrochemical Microscopy Study of the Antimicrobial Mechanism of Micromolar Ag+. Biochemistry, 2005, 44, 13214-13223.	2.5	688
51	Scanning Electrochemical Microscopy and Conductive Probe Atomic Force Microscopy Studies of Hydrogen-Terminated Boron-Doped Diamond Electrodes with Different Doping Levels. Journal of Physical Chemistry B, 2004, 108, 15117-15127.	2.6	180
52	Anodic activity of boron-doped diamond electrodes in bleaching processes: effects of ultrasound and surface states. New Journal of Chemistry, 2003, 27, 698-703.	2.8	23
53	Scanning Electrochemical Microscopy. 49. Gas-Phase Scanning Electrochemical Microscopy Measurements with a Clark Oxygen Ultramicroelectrode. Analytical Chemistry, 2003, 75, 5071-5079.	6.5	34
54	Abrasive stripping voltammetry of silver and tin at boron-doped diamond electrodes. Diamond and Related Materials, 2002, 11, 646-650.	3.9	27

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55	Reactions of xenon difluoride and atomic hydrogen at chemical vapour deposited diamond surfaces. Surface Science, 2001, 488, 335-345.	1.9	14
56	Mechanistic aspects of the sonoelectrochemical degradation of the reactive dye Procion Blue at boron-doped diamond electrodes. Diamond and Related Materials, 2001, 10, 662-666.	3.9	33
57	Microwave activation of electrochemical processes: enhanced PbO2 electrodeposition, stripping and electrocatalysis. Journal of Solid State Electrochemistry, 2001, 5, 313-318.	2.5	24
58	Microwave-Enhanced Anodic Stripping Detection of Lead in a River Sediment Sample. A Mercury-Free Procedure Employing a Boron-Doped Diamond Electrode. Electroanalysis, 2001, 13, 831-835.	2.9	60
59	Sonoelectrochemistry at platinum and boron-doped diamond electrodes: achieving â€˜fast mass transportâ€™ for â€˜slow diffusersâ€™. Journal of Electroanalytical Chemistry, 2001, 513, 94-99.	3.8	30
60	Lead Dioxide Deposition and Electrocatalysis at Highly Boron-Doped Diamond Electrodes in the Presence of Ultrasound. Journal of the Electrochemical Society, 2001, 148, E66.	2.9	36