Katherine B Holt

List of Publications by Year
in descending order

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

#	Article	IF	Citations
1	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
2	Bio-inspired CO₂conversion by iron sulfide catalysts under sustainable conditions. Chemical Communications, 2015, 51, 7501-7504.	4.1	188
3	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
4	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
5	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
6	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
7	Hydrogenase biomimetics: Fe₂(CO)₄(Î¼-dppf)(Î¼-pdt) (dppf =) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf Chemical Communications, 2014, 50, 945-947.	4.1	105
8	Multimetallic Assemblies Using Piperazine-Based Dithiocarbamate Building Blocks. Inorganic Chemistry, 2008, 47, 9642-9653.	4.0	101
9	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
10	Electrochemical Fouling of Dopamine and Recovery of Carbon Electrodes. Analytical Chemistry, 2018, 90, 1408-1416.	6.5	84
11	Redox properties of undoped 5 nm diamond nanoparticles. Physical Chemistry Chemical Physics, 2008, 10, 303-310.	2.8	80
12	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
13	Electrochemistry of Undoped Diamond Nanoparticles: Accessing Surface Redox States. Journal of the American Chemical Society, 2009, 131, 11272-11273.	13.7	54
14	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
15	Undoped diamond nanoparticles: origins of surface redox chemistry. Physical Chemistry Chemical Physics, 2010, 12, 2048.	2.8	53
16	Nanodiamonds on tetrahedral amorphous carbon significantly enhance dopamine detection and cell viability. Biosensors and Bioelectronics, 2017, 88, 273-282.	10.1	41
17	Fabrication of Boron-Doped Diamond Ultramicroelectrodes for Use in Scanning Electrochemical Microscopy Experiments. Analytical Chemistry, 2007, 79, 2556-2561.	6.5	40
18	Nanodiamond surface redox chemistry: influence of physicochemical properties on catalytic processes. Faraday Discussions, 2014, 172, 349-364.	3.2	37

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19	In situ spectroscopic monitoring of CO₂ reduction at copper oxide electrode. Faraday Discussions, 2017, 197, 517-532.	3.2	37
20	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
21	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
22	Focused Ion Beam Fabrication of Boron-Doped Diamond Ultramicroelectrodes. Analytical Chemistry, 2009, 81, 5663-5670.	6.5	35
23	Scanning Electrochemical Microscopy. 49. Gas-Phase Scanning Electrochemical Microscopy Measurements with a Clark Oxygen Ultramicroelectrode. Analytical Chemistry, 2003, 75, 5071-5079.	6.5	34
24	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
25	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
26	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
27	Scanning Electrochemical Microscopy Studies of Redox Processes at Undoped Nanodiamond Surfaces. Journal of Physical Chemistry C, 2009, 113, 2761-2770.	3.1	32
28	Electrochemical characterisation of graphene nanoflakes with functionalised edges. Faraday Discussions, 2014, 172, 293-310.	3.2	32
29	Solventâ€“surface interactions between nanodiamond and ethanol studied with in situ infrared spectroscopy. Diamond and Related Materials, 2016, 61, 7-13.	3.9	31
30	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
31	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
32	Abrasive stripping voltammetry of silver and tin at boron-doped diamond electrodes. Diamond and Related Materials, 2002, 11, 646-650.	3.9	27
33	Microwave activation of electrochemical processes: enhanced PbO2 electrodeposition, stripping and electrocatalysis. Journal of Solid State Electrochemistry, 2001, 5, 313-318.	2.5	24
34	Bimetallic complexes based on carboxylate and xanthate ligands: Synthesis and electrochemical investigations. Dalton Transactions, 2009, , 7891.	3.3	24
35	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
36	Bio-inspired hydrogenase models: mixed-valence triion complexes as proton reduction catalysts. Chemical Communications, 2011, 47, 11222.	4.1	23

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37	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
38	Redox transformations at nanodiamond surfaces revealed by in situ infrared spectroscopy. Chemical Communications, 2011, 47, 12140.	4.1	22
39	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
40	Multimetallic Complexes and Functionalized Nanoparticles Based on Oxygen- and Nitrogen-Donor Combinations. Inorganic Chemistry, 2013, 52, 4700-4713.	4.0	18
41	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
42	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
43	Reactions of xenon difluoride and atomic hydrogen at chemical vapour deposited diamond surfaces. Surface Science, 2001, 488, 335-345.	1.9	14
44	Hot filament chemical vapour deposition of diamond ultramicroelectrodes. Physical Chemistry Chemical Physics, 2007, 9, 5469.	2.8	14
45	Surface redox chemistry and mechanochemistry of insulating polystyrene nanospheres. Physical Chemistry Chemical Physics, 2015, 17, 1837-1846.	2.8	14
46	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
47	Astroelectrochemistry: the role of redox reactions in cosmic dust chemistry. Physical Chemistry Chemical Physics, 2010, 12, 3072.	2.8	12
48	Acid deprotonation driven by cation migration at biased graphene nanoflake electrodes. Chemical Communications, 2017, 53, 2351-2354.	4.1	12
49	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
50	Soap film electrochemistry. Electrochemistry Communications, 2009, 11, 1226-1229.	4.7	10
51	The influence of acidic edge groups on the electrochemical performance of graphene nanoflakes. Journal of Electroanalytical Chemistry, 2015, 753, 28-34.	3.8	10
52	Free radical facilitated damage of ungual keratin. Free Radical Biology and Medicine, 2010, 49, 865-871.	2.9	8
53	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
54	Investigations into the mechanism of copper-mediated Glaserâ€“Hay couplings using electrochemical techniques. Faraday Discussions, 2019, 220, 269-281.	3.2	7

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55	Diamond ultramicroelectrodes. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 2940-2944.	1.8	5
56	Electrocatalytic proton reduction by [Fe(CO) 2 (Î² 2 -dppv)(Î² 1 -SAr) 2] (dppv = cis) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 702 Td (-1,2-b	2.2	5
57	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
58	Clarke oxygen microelectrode. , 2007, , 243-249.		1
59	Role of surface contaminants, functionalities, defects and electronic structure: general discussion. Faraday Discussions, 2014, 172, 365-395.	3.2	1
60	In Situ Determination of pH at Nanostructured Carbon Electrodes Using IR Spectroscopy. Materials, 2019, 12, 4044.	2.9	0