

Jillian L Dempsey

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6921695/publications.pdf>

Version: 2024-02-01

86
papers

7,008
citations

117453

34
h-index

58464

82
g-index

88
all docs

88
docs citations

88
times ranked

8046
citing authors

#	ARTICLE	IF	CITATIONS
1	The ligand-to-metal charge transfer excited state of [Re(dmpe) ₃] ²⁺ . <i>Photosynthesis Research</i> , 2022, 151, 155-161.	1.6	4
2	Mixed Tin-Titanium Oxides by Atomic Layer Deposition on Planar Substrates: Physical and Electronic Structure. <i>Applied Surface Science</i> , 2022, 573, 151564.	3.1	2
3	A compendium and meta-analysis of flatband potentials for TiO ₂ , ZnO, and SnO ₂ semiconductors in aqueous media. <i>Chemical Physics Reviews</i> , 2022, 3, .	2.6	9
4	Unraveling Changes to PbS Nanocrystal Surfaces Induced by Thiols. <i>Chemistry of Materials</i> , 2022, 34, 1710-1721.	3.2	12
5	Ultrathin Tin-Doped Titanium Oxide by Atomic Layer Deposition on a Mesoporous Substrate: Physical/Electronic Structure, Spectroelectrochemistry, and Interfacial Charge Transfer. <i>Journal of Physical Chemistry C</i> , 2022, 126, 5265-5282.	1.5	2
6	Assessment of Photoreleasable Linkers and Light-Capturing Antennas on a Photoresponsive Cobalamin Scaffold. <i>Journal of Organic Chemistry</i> , 2022, 87, 5076-5084.	1.7	3
7	Role of Axial Ligation in Gating the Reactivity of Dimethylplatinum(III) Diimine Radical Cations. <i>Organometallics</i> , 2021, 40, 333-345.	1.1	0
8	Molecular-Level Insight into Semiconductor Nanocrystal Surfaces. <i>Journal of the American Chemical Society</i> , 2021, 143, 1251-1266.	6.6	61
9	Redox-Induced Structural Reorganization Dictates Kinetics of Cobalt(III) Hydride Formation via Proton-Coupled Electron Transfer. <i>Journal of the American Chemical Society</i> , 2021, 143, 3393-3406.	6.6	24
10	A Vision for Sustainable Energy: The Center for Hybrid Approaches in Solar Energy to Liquid Fuels (CHASE). <i>Electrochemical Society Interface</i> , 2021, 30, 65-68.	0.3	6
11	Revealing the Molecular Identity of Defect Sites on PbS Quantum Dot Surfaces with Redox-Active Chemical Probes. <i>Chemistry of Materials</i> , 2021, 33, 2655-2665.	3.2	11
12	Interfacial Electron Transfer through Ultrathin ALD TiO _x Layers: A Comparative Study of TiO ₂ /TiO _x and SnO ₂ /TiO _x Core/Shell Nanocrystals. <i>Journal of Physical Chemistry C</i> , 2021, 125, 12937-12959.	1.5	4
13	Determining the Overpotential of Electrochemical Fuel Synthesis Mediated by Molecular Catalysts: Recommended Practices, Standard Reduction Potentials, and Challenges. <i>ChemElectroChem</i> , 2021, 8, 4161-4180.	1.7	31
14	Effects of Ligand Shell Composition on Surface Reduction in PbS Quantum Dots. <i>Chemistry of Materials</i> , 2021, 33, 8612-8622.	3.2	10
15	A stable dye-sensitized photoelectrosynthesis cell mediated by a NiO overlayer for water oxidation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 12564-12571.	3.3	32
16	Enabling Aqueous NiO Photocathodes by Passivating Surface Sites That Facilitate Proton-Coupled Charge Transfer. <i>ACS Applied Energy Materials</i> , 2020, 3, 10702-10713.	2.5	10
17	Quantitative Effects of Disorder on Chemically Modified Amorphous Carbon Electrodes. <i>ACS Applied Energy Materials</i> , 2020, 3, 8038-8047.	2.5	8
18	Redox mediators accelerate electrochemically-driven solubility cycling of molecular transition metal complexes. <i>Chemical Science</i> , 2020, 11, 9836-9851.	3.7	10

#	ARTICLE	IF	CITATIONS
19	Tunneling and Thermally Activated Electron Transfer in Dye-Sensitized SnO ₂ TiO ₂ Core Shell Nanostructures. <i>Journal of Physical Chemistry C</i> , 2020, 124, 25148-25159.	1.5	10
20	Checking in with Women Materials Scientists During a Global Pandemic: May 2020. <i>Chemistry of Materials</i> , 2020, 32, 4859-4862.	3.2	3
21	Mechanistic basis for tuning iridium hydride photochemistry from H ₂ evolution to hydride transfer hydrodechlorination. <i>Chemical Science</i> , 2020, 11, 6442-6449.	3.7	14
22	Mapping the Topology of PbS Nanocrystals through Displacement Isotherms of Surface-Bound Metal Oleate Complexes. <i>Chemistry of Materials</i> , 2020, 32, 2561-2571.	3.2	48
23	Analysis of multi-electron, multi-step homogeneous catalysis by rotating disc electrode voltammetry: theory, application, and obstacles. <i>Analyst</i> , The, 2020, 145, 1258-1278.	1.7	10
24	Electrosynthetic Route to Cyclopentadienyl Rhenium Hydride Complexes Enabled by Electrochemical Investigations of their Redox-Induced Formation. <i>Organometallics</i> , 2020, 39, 1730-1743.	1.1	3
25	Atomic layer deposition of SnO _x onto mesoporous, nanocrystalline TiO ₂ and SnO ₂ thin films. <i>Polyhedron</i> , 2019, 171, 433-447.	1.0	9
26	Celebrating the Year of the Periodic Table: Emerging Investigators in Inorganic Chemistry. <i>Inorganic Chemistry</i> , 2019, 58, 10433-10435.	1.9	0
27	Delayed photoacidity produced through the triplet-triplet annihilation of a neutral pyranine derivative. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 16353-16358.	1.3	2
28	The Chemistry Women Mentorship Network (ChemWMN): A Tool for Creating Critical Mass in Academic Chemistry. <i>Inorganic Chemistry</i> , 2019, 58, 12493-12496.	1.9	14
29	The Chemistry Women Mentorship Network (ChemWMN): A Tool for Creating Critical Mass in Academic Chemistry. <i>ACS Central Science</i> , 2019, 5, 1625-1629.	5.3	3
30	The Chemistry Women Mentorship Network (ChemWMN): A Tool for Creating Critical Mass in Academic Chemistry. <i>Chemistry of Materials</i> , 2019, 31, 8239-8242.	3.2	1
31	On decomposition, degradation, and voltammetric deviation: the electrochemist's field guide to identifying precatalyst transformation. <i>Chemical Society Reviews</i> , 2019, 48, 2927-2945.	18.7	92
32	How a highly driven reaction hits the brakes. <i>Science</i> , 2019, 364, 436-437.	6.0	5
33	Decoding Proton-Coupled Electron Transfer with Potential-pK _a Diagrams: Applications to Catalysis. <i>Inorganic Chemistry</i> , 2019, 58, 6647-6658.	1.9	20
34	Proton-Coupled Electron Transfer Kinetics for the Photoinduced Generation of a Cobalt(III)-Hydride Complex. <i>Inorganic Chemistry</i> , 2019, 58, 16510-16517.	1.9	11
35	Impact of Background Oxygen Pressure on the Pulsed-Laser Deposition of ZnO Nanolayers and on Their Corresponding Performance as Electron Acceptors in PbS Quantum-Dot Solar Cells. <i>ACS Applied Nano Materials</i> , 2019, 2, 767-777.	2.4	6
36	Electron-Promoted X-Type Ligand Displacement at CdSe Quantum Dot Surfaces. <i>Nano Letters</i> , 2019, 19, 1151-1157.	4.5	32

#	ARTICLE	IF	CITATIONS
37	Bathochromic Shifts in Rhenium Carbonyl Dyes Induced through Destabilization of Occupied Orbitals. <i>Inorganic Chemistry</i> , 2018, 57, 5389-5399.	1.9	42
38	A Practical Beginner's Guide to Cyclic Voltammetry. <i>Journal of Chemical Education</i> , 2018, 95, 197-206.	1.1	2,137
39	Interfacial electron transfer yields in dye-sensitized NiO photocathodes correlated to excited-state dipole orientation of ruthenium chromophores. <i>Canadian Journal of Chemistry</i> , 2018, 96, 865-874.	0.6	11
40	PCET2018 Highlights: Proton-Coupled Electron Transfers for Energy Conversion Strategies. <i>ACS Energy Letters</i> , 2018, 3, 2477-2479.	8.8	3
41	Switching between Stepwise and Concerted Proton-Coupled Electron Transfer Pathways in Tungsten Hydride Activation. <i>Journal of the American Chemical Society</i> , 2018, 140, 14655-14669.	6.6	36
42	Exchange equilibria of carboxylate-terminated ligands at PbS nanocrystal surfaces. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 23649-23655.	1.3	29
43	Decoding Proton-Coupled Electron Transfer with Potential-pKa Diagrams. <i>Inorganic Chemistry</i> , 2017, 56, 1225-1231.	1.9	68
44	Identification of an Electrode-Adsorbed Intermediate in the Catalytic Hydrogen Evolution Mechanism of a Cobalt Dithiolene Complex. <i>Inorganic Chemistry</i> , 2017, 56, 1988-1998.	1.9	29
45	Excited-State Proton-Coupled Electron Transfer: Different Avenues for Promoting Proton/Electron Movement with Solar Photons. <i>ACS Energy Letters</i> , 2017, 2, 1246-1256.	8.8	79
46	Cultivating Advanced Technical Writing Skills through a Graduate-Level Course on Writing Research Proposals. <i>Journal of Chemical Education</i> , 2017, 94, 696-702.	1.1	15
47	Electrochemical and spectroscopic methods for evaluating molecular electrocatalysts. <i>Nature Reviews Chemistry</i> , 2017, 1, .	13.8	178
48	Reaction Parameters Influencing Cobalt Hydride Formation Kinetics: Implications for Benchmarking H ₂ -Evolution Catalysts. <i>Journal of the American Chemical Society</i> , 2017, 139, 239-244.	6.6	100
49	Hop to It. <i>Biochemistry</i> , 2017, 56, 5623-5624.	1.2	1
50	When Electrochemistry Met Methane: Rapid Catalyst Oxidation Fuels Hydrocarbon Functionalization. <i>ACS Central Science</i> , 2017, 3, 1137-1139.	5.3	10
51	Influence of Proton Acceptors on the Proton-Coupled Electron Transfer Reaction Kinetics of a Ruthenium-Tyrosine Complex. <i>Journal of Physical Chemistry B</i> , 2017, 121, 10530-10542.	1.2	15
52	Enhanced Performance in PbS Quantum Dots Solar Cells via Pulsed Laser Deposited ZnO Layer. , 2017, , .		0
53	Gains and Losses in PbS Quantum Dot Solar Cells with Submicron Periodic Grating Structures. <i>Journal of Physical Chemistry C</i> , 2016, 120, 8005-8013.	1.5	6
54	Reaction Pathways of Hydrogen-Evolving Electrocatalysts: Electrochemical and Spectroscopic Studies of Proton-Coupled Electron Transfer Processes. <i>ACS Catalysis</i> , 2016, 6, 3644-3659.	5.5	117

#	ARTICLE	IF	CITATIONS
55	Growth and Post-Deposition Treatments of SrTiO ₃ Films for Dye-Sensitized Photoelectrosynthesis Cell Applications. ACS Applied Materials & Interfaces, 2016, 8, 12282-12290.	4.0	12
56	Reactivity of Proton Sources with a Nickel Hydride Complex in Acetonitrile: Implications for the Study of Fuel-Forming Catalysts. Inorganic Chemistry, 2016, 55, 5079-5087.	1.9	40
57	Linear Free Energy Relationships in the Hydrogen Evolution Reaction: Kinetic Analysis of a Cobaloxime Catalyst. ACS Catalysis, 2016, 6, 3326-3335.	5.5	89
58	Proton-Coupled Electron Transfer Reactions with Photometric Bases Reveal Free Energy Relationships for Proton Transfer. Journal of Physical Chemistry B, 2016, 120, 7896-7905.	1.2	11
59	Quantifying Ligand Exchange Reactions at CdSe Nanocrystal Surfaces. Chemistry of Materials, 2016, 28, 4762-4770.	3.2	154
60	Synthesis and electrochemical characterization of a tridentate Schiff-base ligated Fe(II) complex. Polyhedron, 2016, 114, 200-204.	1.0	10
61	Qualitative extension of the ECâ€² Zone Diagram to a molecular catalyst for a multi-electron, multi-substrate electrochemical reaction. Dalton Transactions, 2016, 45, 9970-9976.	1.6	37
62	Ligand steals spotlight from metal to orchestrate hydrogen production. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 478-479.	3.3	7
63	Charge Recombination Dynamics in Sensitized SnO ₂ /TiO ₂ Core/Shell Photoanodes. Journal of Physical Chemistry C, 2015, 119, 28353-28360.	1.5	59
64	Disparity in Optical Charge Generation and Recombination Processes in Upright and Inverted PbS Quantum-Dot Solar Cells. Journal of Physical Chemistry C, 2015, 119, 4606-4611.	1.5	1
65	Metal hydrides find the sweet spot. Nature Chemistry, 2015, 7, 101-102.	6.6	7
66	Electrode initiated proton-coupled electron transfer to promote degradation of a nickel(ⁱⁱ) coordination complex. Chemical Science, 2015, 6, 2827-2834.	3.7	55
67	Potential-Dependent Electrocatalytic Pathways: Controlling Reactivity with p <i>K_a</i> for Mechanistic Investigation of a Nickel-Based Hydrogen Evolution Catalyst. Journal of the American Chemical Society, 2015, 137, 13371-13380.	6.6	69
68	Electrochemical hydrogenation of a homogeneous nickel complex to form a surface adsorbed hydrogen-evolving species. Chemical Communications, 2015, 51, 5290-5293.	2.2	47
69	Ferromagnetic excited-state Mn ^{II} dimers in Zn ₂ in Zn ₂ quantum dots observed by time-resolved magnetophotoluminescence. Physical Review B, 2014, 89, .	1.1	40
70	Synthesis and photophysical characterization of porphyrin and porphyrinâ€Ru(ii) polypyridyl chromophoreâ€catalyst assemblies on mesoporous metal oxides. Chemical Science, 2014, 5, 3115.	3.7	56
71	Electrochemical Reduction of Brønsted Acids by Glassy Carbon in Acetonitrileâ€Implications for Electrocatalytic Hydrogen Evolution. Inorganic Chemistry, 2014, 53, 8350-8361.	1.9	211
72	Photo-induced Proton-Coupled Electron Transfer Reactions of Acridine Orange: Comprehensive Spectral and Kinetics Analysis. Journal of the American Chemical Society, 2014, 136, 12221-12224.	6.6	67

#	ARTICLE	IF	CITATIONS
73	Theoretical Modeling of Low-Energy Electronic Absorption Bands in Reduced Cobaloximes. <i>ChemPhysChem</i> , 2014, 15, 2951-2958.	1.0	11
74	Evaluation of Homogeneous Electrocatalysts by Cyclic Voltammetry. <i>Inorganic Chemistry</i> , 2014, 53, 9983-10002.	1.9	403
75	Revealing the Relationship between Semiconductor Electronic Structure and Electron Transfer Dynamics at Metal Oxide-Chromophore Interfaces. <i>Journal of Physical Chemistry C</i> , 2013, 117, 25259-25268.	1.5	45
76	Photoconductive ZnO films with embedded quantum dot or ruthenium dye sensitizers. <i>APL Materials</i> , 2013, 1, .	2.2	4
77	Catalytic hydrogen evolution from a covalently linked dicobaloxime. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 15589-15593.	3.3	102
78	Redox reactivity of photogenerated osmium(ii) complexes. <i>Dalton Transactions</i> , 2011, 40, 10633.	1.6	6
79	Kinetics of Electron Transfer Reactions of H ₂ -Evolving Cobalt Diglyoxime Catalysts. <i>Journal of the American Chemical Society</i> , 2010, 132, 1060-1065.	6.6	187
80	Proton-Coupled Electron Flow in Protein Redox Machines. <i>Chemical Reviews</i> , 2010, 110, 7024-7039.	23.0	270
81	Mechanism of H ₂ Evolution from a Photogenerated Hydridocobaloxime. <i>Journal of the American Chemical Society</i> , 2010, 132, 16774-16776.	6.6	211
82	Hydrogen Evolution Catalyzed by Cobaloximes. <i>Accounts of Chemical Research</i> , 2009, 42, 1995-2004.	7.6	946
83	Long-Lived and Efficient Emission from Mononuclear Amidophosphine Complexes of Copper. <i>Inorganic Chemistry</i> , 2007, 46, 7244-7246.	1.9	102
84	A RhII-AuII Bimetallic Core with a Direct Metal-Metal Bond. <i>Inorganic Chemistry</i> , 2007, 46, 2362-2364.	1.9	47
85	Oxygen and hydrogen photocatalysis by two-electron mixed-valence coordination compounds. <i>Coordination Chemistry Reviews</i> , 2005, 249, 1316-1326.	9.5	103
86	Molecular Chemistry of Consequence to Renewable Energy. <i>Inorganic Chemistry</i> , 2005, 44, 6879-6892.	1.9	200