M Kyle Brennaman

List of Publications by Year
in descending order

61 papers	5,464 citations	33 h-index (126907)	61 g-index (123424)
63 all docs	63 docs citations	63 times ranked	5284 citing authors

#	Article	IF	Citations
1	A Semiconductorâ€Mediatorâ€Catalyst Artificial Photosynthetic System for Photoelectrochemical Water Oxidation. Chemistry - A European Journal, 2022, 28, e202102630.	3.3	4
2	Dye-Sensitized Nonstoichiometric Strontium Titanate Coreâ€"Shell Photocathodes for Photoelectrosynthesis Applications. ACS Applied Materials & Interfaces, 2021, 13, 15261-15269.	8.0	5
3	Ruthenium Dyes, Charge Transfer, and the Sun. ECS Meeting Abstracts, 2021, MA2021-01, 1812-1812.	0.0	0
4	Organic Chromophores Designed for Hole Injection into Wide-Band-Gap Metal Oxides for Solar Fuel Applications. Chemistry of Materials, 2020, 32, 8158-8168.	6.7	12
5	Photophysical characterization of new osmium (II) photocatalysts for hydrohalic acid splitting. Journal of Chemical Physics, 2020, 153, 054307.	3.0	5
6	Ultrafast Relaxations in Ruthenium Polypyridyl Chromophores Determined by Stochastic Kinetics Simulations. Journal of Physical Chemistry B, 2020, 124, 5971-5985.	2.6	13
7	A Silicon-Based Heterojunction Integrated with a Molecular Excited State in a Water-Splitting Tandem Cell. Journal of the American Chemical Society, 2019, 141, 10390-10398.	13.7	34
8	Binary molecular-semiconductor pâ€"n junctions for photoelectrocatalytic CO2 reduction. Nature Energy, 2019, 4, 290-299.	39.5	149
9	Stabilization of Ruthenium(II) Polypyridyl Chromophores on Mesoporous TiO₂ Electrodes: Surface Reductive Electropolymerization and Silane Chemistry. ACS Central Science, 2019, 5, 506-514.	11.3	15
10	Stable Molecular Surface Modification of Nanostructured, Mesoporous Metal Oxide Photoanodes by Silane and Click Chemistry. ACS Applied Materials & Interfaces, 2019, 11, 4560-4567.	8.0	18
11	Charge Transfer from Upconverting Nanocrystals to Semiconducting Electrodes: Optimizing Thermodynamic Outputs by Electronic Energy Transfer. Journal of the American Chemical Society, 2019, 141, 463-471.	13.7	19
12	A High-Valent Metal-Oxo Species Produced by Photoinduced One-Electron, Two-Proton Transfer Reactivity. Inorganic Chemistry, 2018, 57, 486-494.	4.0	28
13	Synthesis and Photophysical Properties of a Covalently Linked Porphyrin Chromophoreâ€"Ru(II) Water Oxidation Catalyst Assembly on SnO₂ Electrodes. Journal of Physical Chemistry C, 2018, 122, 13455-13461.	3.1	11
14	Direct photoactivation of a nickel-based, water-reduction photocathode by a highly conjugated supramolecular chromophore. Energy and Environmental Science, 2018, 11, 447-455.	30.8	23
15	Controlling Vertical and Lateral Electron Migration Using a Bifunctional Chromophore Assembly in Dye-Sensitized Photoelectrosynthesis Cells. Journal of the American Chemical Society, 2018, 140, 6493-6500.	13.7	48
16	Light-Driven Water Splitting in the Dye-Sensitized Photoelectrosynthesis Cell. Green Chemistry and Sustainable Technology, 2018, , 229-257.	0.7	6
17	A Molecular Silane-Derivatized Ru(II) Catalyst for Photoelectrochemical Water Oxidation. Journal of the American Chemical Society, 2018, 140, 15062-15069.	13.7	29
18	Completing a Charge Transport Chain for Artificial Photosynthesis. Journal of the American Chemical Society, 2018, 140, 9823-9826.	13.7	20

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19	Optical Intramolecular Electron Transfer in Opposite Directions through the Same Bridge That Follows Different Pathways. Journal of the American Chemical Society, 2018, 140, 7176-7186.	13.7	27
20	Pathways Following Electron Injection: Medium Effects and Cross-Surface Electron Transfer in a Ruthenium-Based, Chromophoreâ€“Catalyst Assembly on TiO₂. Journal of Physical Chemistry C, 2018, 122, 13017-13026.	3.1	10
21	Excited-State Decay Pathways of Tris(bidentate) Cyclometalated Ruthenium(II) Compounds. Inorganic Chemistry, 2017, 56, 13579-13592.	4.0	36
22	Water Photo-oxidation Initiated by Surface-Bound Organic Chromophores. Journal of the American Chemical Society, 2017, 139, 16248-16255.	13.7	52
23	Chromophore-Catalyst Assembly for Water Oxidation Prepared by Atomic Layer Deposition. ACS Applied Materials & Interfaces, 2017, 9, 39018-39026.	8.0	32
24	Ultrafast Recombination Dynamics in Dye-Sensitized SnO₂/TiO₂ Core/Shell Films. Journal of Physical Chemistry Letters, 2016, 7, 5297-5301.	4.6	41
25	Synthesis, Electrochemistry, and Excited-State Properties of Three Ru(II) Quaterpyridine Complexes. Journal of Physical Chemistry A, 2016, 120, 1845-1852.	2.5	8
26	Efficient Photochemical Dihydrogen Generation Initiated by a Bimetallic Self-Quenching Mechanism. Journal of the American Chemical Society, 2016, 138, 13509-13512.	13.7	40
27	Direct observation of light-driven, concerted electronâ€“proton transfer. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 11106-11109.	7.1	27
28	Finding the Way to Solar Fuels with Dye-Sensitized Photoelectrosynthesis Cells. Journal of the American Chemical Society, 2016, 138, 13085-13102.	13.7	317
29	Polymerâ€Based Ruthenium(II) Polypyridyl Chromophores on TiO₂ for Solar Energy Conversion. Chemistry - an Asian Journal, 2016, 11, 1257-1267.	3.3	25
30	Phosphonate-Derivatized Porphyrins for Photoelectrochemical Applications. ACS Applied Materials & Interfaces, 2016, 8, 3853-3860.	8.0	29
31	Disentangling the Physical Processes Responsible for the Kinetic Complexity in Interfacial Electron Transfer of Excited Ru(II) Polypyridyl Dyes on TiO₂. Journal of the American Chemical Society, 2016, 138, 4426-4438.	13.7	84
32	An aqueous, organic dye derivatized SnO₂/TiO₂ core/shell photoanode. Journal of Materials Chemistry A, 2016, 4, 2969-2975.	10.3	89
33	Visible photoelectrochemical water splitting into H ₂ and O ₂ in a dye-sensitized photoelectrosynthesis cell. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 5899-5902.	7.1	136
34	Molecular Chromophoreâ€“Catalyst Assemblies for Solar Fuel Applications. Chemical Reviews, 2015, 115, 13006-13049.	47.7	412
35	Artificial photosynthesis: Where are we now? Where can we go?. Journal of Photochemistry and Photobiology C: Photochemistry Reviews, 2015, 25, 32-45.	11.6	158
36	Ultrafast, Light-Induced Electron Transfer in a Perylene Diimide Chromophore-Donor Assembly on TiO₂. Journal of Physical Chemistry Letters, 2015, 6, 4736-4742.	4.6	20

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37	Controlling Ground and Excited State Properties through Ligand Changes in Ruthenium Polypyridyl Complexes. Inorganic Chemistry, 2014, 53, 5637-5646.	4.0	53
38	Driving Force Dependent, Photoinduced Electron Transfer at Degenerately Doped, Optically Transparent Semiconductor Nanoparticle Interfaces. Journal of the American Chemical Society, 2014, 136, 15869-15872.	13.7	43
39	Stabilization of Ruthenium(II) Polypyridyl Chromophores on Nanoparticle Metal-Oxide Electrodes in Water by Hydrophobic PMMA Overlayers. Journal of the American Chemical Society, 2014, 136, 13514-13517.	13.7	70
40	Visible Light Driven Benzyl Alcohol Dehydrogenation in a Dye-Sensitized Photoelectrosynthesis Cell. Journal of the American Chemical Society, 2014, 136, 9773-9779.	13.7	80
41	Rapid energy transfer in non-porous metalâ€“organic frameworks with caged Ru(bpy)32+ chromophores: oxygen trapping and luminescence quenching. Journal of Materials Chemistry A, 2013, 1, 14982.	10.3	62
42	Revealing the Relationship between Semiconductor Electronic Structure and Electron Transfer Dynamics at Metal Oxideâ€“Chromophore Interfaces. Journal of Physical Chemistry C, 2013, 117, 25259-25268.	3.1	45
43	Solar water splitting in a molecular photoelectrochemical cell. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 20008-20013.	7.1	203
44	A Sensitized Nb₂O₅ Photoanode for Hydrogen Production in a Dye-Sensitized Photoelectrosynthesis Cell. Chemistry of Materials, 2013, 25, 122-131.	6.7	66
45	Visualization of cation diffusion at the TiO2 interface in dye sensitized photoelectrosynthesis cells (DSPEC). Energy and Environmental Science, 2013, 6, 1240.	30.8	25
46	Distance Dependence of Intrahelix Ru^{II}* to Os^{II} Polypyridyl Excited-State Energy Transfer in Oligoproline Assemblies. Journal of Physical Chemistry B, 2013, 117, 6352-6363.	2.6	10
47	Accumulation of Multiple Oxidative Equivalents at a Single Site by Cross-Surface Electron Transfer on TiO₂. Journal of the American Chemical Society, 2013, 135, 11587-11594.	13.7	68
48	Photoinduced Electron Transfer in a Chromophoreâ€“Catalyst Assembly Anchored to TiO₂. Journal of the American Chemical Society, 2012, 134, 19189-19198.	13.7	116
49	Selfâ€Assembled Bilayer Films of Ruthenium(II)/Polypyridyl Complexes through Layerâ€byâ€Layer Deposition on Nanostructured Metal Oxides. Angewandte Chemie - International Edition, 2012, 51, 12782-12785.	13.8	118
50	Hybrid 3D graphene and aligned carbon nanofiber array architectures. RSC Advances, 2012, 2, 8965.	3.6	20
51	Photostability of Phosphonate-Derivatized, Ru^{II} Polypyridyl Complexes on Metal Oxide Surfaces. ACS Applied Materials & Interfaces, 2012, 4, 1462-1469.	8.0	157
52	Structureâ€“Property Relationships in Phosphonate-Derivatized, Ru^{II} Polypyridyl Dyes on Metal Oxide Surfaces in an Aqueous Environment. Journal of Physical Chemistry C, 2012, 116, 14837-14847.	3.1	156
53	Interfacial Dynamics and Solar Fuel Formation in Dyeâ€Sensitized Photoelectrosynthesis Cells. ChemPhysChem, 2012, 13, 2882-2890.	2.1	41
54	Competing Pathways in the <i>photo-</i>Proton-Coupled Electron Transfer Reduction of		

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55	Photoinduced Stepwise Oxidative Activation of a Chromophoreâ€“Catalyst Assembly on TiO₂. Journal of Physical Chemistry Letters, 2011, 2, 1808-1813.	4.6	93
56	Interfacial Electron Transfer Dynamics for [Ru(bpy)₂((4,4â€²-PO₃H₂)₂bpy)]²⁺ Sensitized TiO₂ in a Dye-Sensitized Photoelectrosynthesis Cell: Factors Influencing Efficiency and Dynamics. Journal of Physical Chemistry C, 2011, 115, 7081-7091.	3.1	56
57	Interfacial Electron Transfer Dynamics Following Laser Flash Photolysis of [Ru(bpy)₂((4,4â€²â€PO₃H₂)₂bpy)]²⁺ in TiO₂ Nanoparticle Films in Aqueous Environments. ChemSusChem, 2011, 4, 216-227.	6.8	71
58	Making solar fuels by artificial photosynthesis. Pure and Applied Chemistry, 2011, 83, 749-768.	1.9	123
59	Making Oxygen with Ruthenium Complexes. Accounts of Chemical Research, 2009, 42, 1954-1965.	15.6	788
60	Excited-State Quenching by Proton-Coupled Electron Transfer. Journal of the American Chemical Society, 2007, 129, 6968-6969.	13.7	104
61	Chemical Approaches to Artificial Photosynthesis. 2. Inorganic Chemistry, 2005, 44, 6802-6827.	4.0	887