Animesh Nayak

List of Publications by Year
in descending order

35 papers	1,189 citations	394421 19 h-index	377865 34 g-index
39 all docs	39 docs citations	39 times ranked	1858 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	Excited-State Dynamics and Nonlinear Optical Properties of Hyperpolarizable Chromophores Based on Conjugated Bis(terpyridyl)Ru(II) and Palladium and Platinum Porphyrinic Components: Impact of Heavy Metals upon Supermolecular Electro-Optic Properties. Inorganic Chemistry, 2021, 60, 15404-15412.	4.0	2
4	Influence of Surface and Structural Variations in Donorâ€"Acceptorâ€"Donor Sensitizers on Photoelectrocatalytic Water Splitting. ACS Applied Materials & Interfaces, 2021, 13, 47499-47510.	8.0	3
5	<i>De Novo</i> Design, Solution Characterization, and Crystallographic Structure of an Abiological Mnâ€"Porphyrin-Binding Protein Capable of Stabilizing a Mn(V) Species. Journal of the American Chemical Society, 2021, 143, 252-259.	13.7	19
6	Electron-Withdrawing Boron Dipyrromethene Dyes As Visible Light Absorber/Sensitizers on Semiconductor Oxide Surfaces. ACS Applied Materials & Interfaces, 2020, 12, 7768-7776.	8.0	23
7	Excitation energy-dependent photocurrent switching in a single-molecule photodiode. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 16198-16203.	7.1	10
8	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
9	Crossing the bridge from molecular catalysis to a heterogenous electrode in electrocatalytic water oxidation. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 11153-11158.	7.1	17
10	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
11	Steering CO ₂ electroreduction toward ethanol production by a surface-bound Ru polypyridyl carbene catalyst on N-doped porous carbon. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 26353-26358.	7.1	55
12	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
13	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
14	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
15	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
16	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
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	Stabilized photoanodes for water oxidation by integration of organic dyes, water oxidation catalysts, and electron-transfer mediators. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 8523-8528.	7.1	37

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19	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
20	Fluoropolymerâ€Stabilized Chromophoreâ€“Catalyst Assemblies in Aqueous Buffer Solutions for Waterâ€Oxidation Catalysis. ChemSusChem, 2017, 10, 2380-2384.	6.8	14
21	Modulating Hole Transport in Multilayered Photocathodes with Derivatized p-Type Nickel Oxide and Molecular Assemblies for Solar-Driven Water Splitting. Journal of Physical Chemistry Letters, 2017, 8, 4374-4379.	4.6	47
22	Layer-by-Layer Molecular Assemblies for Dye-Sensitized Photoelectrosynthesis Cells Prepared by Atomic Layer Deposition. Journal of the American Chemical Society, 2017, 139, 14518-14525.	13.7	55
23	Large Hyperpolarizabilities at Telecommunication-Relevant Wavelengths in Donorâ€“Acceptorâ€“Donor Nonlinear Optical Chromophores. ACS Central Science, 2016, 2, 954-966.	11.3	48
24	Growth and Post-Deposition Treatments of SrTiO₃ Films for Dye-Sensitized Photoelectrosynthesis Cell Applications. ACS Applied Materials & Interfaces, 2016, 8, 12282-12290.	8.0	12
25	Phosphonate-Derivatized Porphyrins for Photoelectrochemical Applications. ACS Applied Materials & Interfaces, 2016, 8, 3853-3860.	8.0	29
26	Analysis of Homogeneous Water Oxidation Catalysis with Collectorâ€“Generator Cells. Inorganic Chemistry, 2016, 55, 512-517.	4.0	16
27	An aqueous, organic dye derivatized SnO₂/TiO₂ core/shell photoanode. Journal of Materials Chemistry A, 2016, 4, 2969-2975.	10.3	89
28	Synthesis and photophysical characterization of porphyrin and porphyrinâ€“Ru(ii) polypyridyl chromophoreâ€“catalyst assemblies on mesoporous metal oxides. Chemical Science, 2014, 5, 3115.	7.4	56
29	Single catalyst electrocatalytic reduction of CO₂in water to H₂+CO syngas mixtures with water oxidation to O₂. Energy and Environmental Science, 2014, 7, 4007-4012.	30.8	120
30	Design of Coupled Porphyrin Chromophores with Unusually Large Hyperpolarizabilities. Journal of Physical Chemistry C, 2012, 116, 9724-9733.	3.1	33
31	The Roles of Molecular Structure and Effective Optical Symmetry in Evolving Dipolar Chromophoric Building Blocks to Potent Octopolar Nonlinear Optical Chromophores. Journal of the American Chemical Society, 2011, 133, 2884-2896.	13.7	54
32	Near IR nonlinear absorption of an organic supermolecule [Invited]. Optical Materials Express, 2011, 1, 1383.	3.0	16
33	Supermolecular-Chromophore-Sensitized Near-Infrared-to-Visible Photon Upconversion. Journal of the American Chemical Society, 2010, 132, 14203-14211.	13.7	131
34	Molecular Symmetry and Solutionâ€Phase Structure Interrogated by Hyperâ€Rayleigh Depolarization Measurements: Elaborating Highly Hyperpolarizable <i>D</i>₂â€Symmetric Chromophores. Angewandte Chemie - International Edition, 2008, 47, 2978-2981.	13.8	59
35	Tetrazine derived mononuclear RuII(acac)2(L) (1), [RuII(bpy)2(L)](ClO4)2 (2) and [RuII(bpy)(L)2](ClO4)2 (3) (L=3-amino-6-(3,5-dimethylpyrazol-1-yl)-1,2,4,5-tetrazine, acac=acetylacetonate, bpy=2,2â€²-bipyridine): syntheses, structures, spectra and redox properties. Polyhedron, 2005, 24, 333-342.	2.2	17