Milan Sykora

List of Publications by Year
in descending order

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55 papers	4,392 citations	126907 33 h-index	155660 55 g-index
55 all docs	55 docs citations	55 times ranked	5853 citing authors

#	Article	IF	Citations
1	Two types of luminescence blinking revealed by spectroelectrochemistry of single quantum dots. Nature, 2011, 479, 203-207.	27.8	659
2	Seven Excitons at a Cost of One:Â Redefining the Limits for Conversion Efficiency of Photons into Charge Carriers. Nano Letters, 2006, 6, 424-429.	9.1	464
3	Effect of Air Exposure on Surface Properties, Electronic Structure, and Carrier Relaxation in PbSe Nanocrystals. ACS Nano, 2010, 4, 2021-2034.	14.6	230
4	Metasurface Broadband Solar Absorber. Scientific Reports, 2016, 6, 20347.	3.3	220
5	Apparent Versus True Carrier Multiplication Yields in Semiconductor Nanocrystals. Nano Letters, 2010, 10, 2049-2057.	9.1	214
6	Photoinduced Charge Transfer between CdSe Nanocrystal Quantum Dots and Ruâ˜Polypyridine Complexes. Journal of the American Chemical Society, 2006, 128, 9984-9985.	13.7	208
7	High-Efficiency Carrier Multiplication and Ultrafast Charge Separation in Semiconductor Nanocrystals Studied via Time-Resolved Photoluminescenceâ€. Journal of Physical Chemistry B, 2006, 110, 25332-25338.	2.6	184
8	Raman spectroscopy of bottom-up synthesized graphene quantum dots: size and structure dependence. Nanoscale, 2019, 11, 16571-16581.	5.6	176
9	Size-Dependent Intrinsic Radiative Decay Rates of Silicon Nanocrystals at Large Confinement Energies. Physical Review Letters, 2008, 100, 067401.	7.8	147
10	High-Temperature Refractory Metasurfaces for Solar Thermophotovoltaic Energy Harvesting. Nano Letters, 2018, 18, 7665-7673.	9.1	140
11	Photochemical energy storage in a spatially organized zeolite-based photoredox system. Nature, 1997, 387, 162-164.	27.8	113
12	CdSe Quantum-Dot-Sensitized Solar Cell with â¼100% Internal Quantum Efficiency. ACS Nano, 2010, 4, 6377-6386.	14.6	110
13	Spectroscopic Signatures of Photocharging due to Hot-Carrier Transfer in Solutions of Semiconductor Nanocrystals under Low-Intensity Ultraviolet Excitation. ACS Nano, 2010, 4, 6087-6097.	14.6	87
14	Hybrid Photovoltaics Based on Semiconductor Nanocrystals and Amorphous Silicon. Nano Letters, 2009, 9, 1235-1241.	9.1	81
15	Mimicking the antenna-electron transfer properties of photosynthesis. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 7687-7691.	7.1	80
16	Sensitization of TiO2 by Phosphonate-Derivatized Proline Assemblies. Inorganic Chemistry, 1999, 38, 3665-3669.	4.0	76
17	Synthetic Manipulation of Excited State Decay Pathways in a Series of Ruthenium(II) Complexes Containing Bipyrazine and Substituted Bipyridine Ligands. Inorganic Chemistry, 1995, 34, 5852-5856.	4.0	65
18	Electrogenerated Chemiluminescence in SiO2Solâ˜Gel Polymer Composites. Chemistry of Materials, 1999, 11, 1186-1189.	6.7	60

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19	Spectrally resolved energy transfer using quantum dot donors: Ensemble and single-molecule photoluminescence studies. Physical Review B, 2006, 73, .	3.2	60
20	Evidence for Through-Space Electron Transfer in the Distance Dependence of Normal and Inverted Electron Transfer in Oligoproline Arrays. Journal of the American Chemical Society, 2004, 126, 14506-14514.	13.7	59
21	On the Nature and Extent of Intermolecular Interactions between Entrapped Complexes of Ru(bpy)32+in Zeolite Y. Journal of Physical Chemistry B, 1999, 103, 309-320.	2.6	57
22	Effect of deprotonation on absorption and emission spectra of Ru(ii)-bpy complexes functionalized with carboxyl groups. Physical Chemistry Chemical Physics, 2010, 12, 8902.	2.8	56
23	One-Pot Synthesis and Characterization of a Chromophoreâ^'Donorâ^'Acceptor Assembly. Inorganic Chemistry, 2000, 39, 71-75.	4.0	48
24	Giant PbSe/CdSe/CdSe Quantum Dots: Crystal-Structure-Defined Ultrastable Near-Infrared Photoluminescence from Single Nanocrystals. Journal of the American Chemical Society, 2017, 139, 11081-11088.	13.7	48
25	Size-Dependent Electronic Properties of Uniform Ensembles of Strongly Confined Graphene Quantum Dots. Journal of Physical Chemistry Letters, 2019, 10, 953-959.	4.6	47
26	Hydrogen-Bonding Interactions in the Active Sites of Cytochrome P450cam and Its Site-Directed Mutants. Journal of the American Chemical Society, 2001, 123, 269-278.	13.7	44
27	A Synthetic Strategy for the Construction of Zeolite-Entrapped Organized Molecular Assemblies. Preparation and Photophysical Characterization of Interacting Adjacent Cage Dyads Comprised of Two Polypyridine Complexes of Ru(II). Journal of the American Chemical Society, 1998, 120, 3490-3498.	13.7	43
28	Formation of Assemblies Comprising Ruâ€“Polypyridine Complexes and CdSe Nanocrystals Studied by ATR-FTIR Spectroscopy and DFT Modeling. Langmuir, 2011, 27, 8377-8383.	3.5	42
29	Synthesis and Excited-State Properties of a Novel Ruthenium Nucleoside:Â 5-[Ru(bpy)2(4-m-4â€˜-pa-bpy)]2+-2â€˜-deoxyuridine. Inorganic Chemistry, 1999, 38, 2411-2415.	4.0	38
30	Using shape to turn off blinking for two-colour multiexciton emission in CdSe/CdS tetrapods. Nature Communications, 2017, 8, 15083.	12.8	37
31	Photoinduced Electron Transfer in an Oligodeoxynucleotide Duplex:Â Observation of the Electron-Transfer Intermediate. Journal of Physical Chemistry B, 2000, 104, 7574-7576.	2.6	36
32	Solid-Phase Synthesis and Photophysical Properties of DNA Labeled at the Nucleobase with Ru(bpy)2(4-m-4â€˜-pa-bpy)2+. Inorganic Chemistry, 1999, 38, 5999-6002.	4.0	34
33	Role of Solventâ€“Oxygen Ion Pairs in Photooxidation of CdSe Nanocrystal Quantum Dots. ACS Nano, 2012, 6, 2371-2377.	14.6	33
34	Molecular Energy Transfer across Oxide Surfaces. Journal of Physical Chemistry B, 2001, 105, 8895-8904.	2.6	32
35	Automated Solid-Phase DNA Synthesis and Photophysical Properties of Oligonucleotides Labeled at the 5â€˜-Terminus with Ru(bpy)32+. Inorganic Chemistry, 1999, 38, 3922-3925.	4.0	31
36	Elucidating the Energy- and Electron-Transfer Dynamics of Photon Upconversion in Self-Assembled Bilayers. Journal of Physical Chemistry C, 2017, 121, 19690-19698.	3.1	31

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37	Automated Solid-Phase Synthesis and Photophysical Properties of Oligodeoxynucleotides Labeled at 5â€˜-Aminothymidine with Ru(bpy)2(4-m-4â€˜-cam-bpy)2+. Inorganic Chemistry, 2000, 39, 2500-2504.	4.0	26
38	Electronic Properties and Structure of Assemblies of CdSe Nanocrystal Quantum Dots and Ruâ€Polypyridine Complexes Probed by Steady State and Timeâ€Resolved Photoluminescence. Advanced Functional Materials, 2011, 21, 3159-3168.	14.9	26
39	Multiphoton, Multielectron Transfer Photochemistry in a Soluble Polymer. Inorganic Chemistry, 1999, 38, 2705-2708.	4.0	25
40	Electrochromic Graphene Molecules. ACS Nano, 2015, 9, 4043-4049.	14.6	22
41	PbS/CdS Quantum Dot Room-Temperature Single-Emitter Spectroscopy Reaches the Telecom O and S Bands via an Engineered Stability. ACS Nano, 2021, 15, 575-587.	14.6	22
42	Resonance Raman Investigation of Cyanide Ligated Beef Liver and Aspergillus niger Catalases. Journal of Biological Chemistry, 1995, 270, 10449-10460.	3.4	21
43	Thermal stability of a eutectic mixture of bis(2,2-dinitropropyl) acetal and formal: Part B. Degradation mechanisms under water and high humidity environments. Polymer Degradation and Stability, 2016, 130, 338-347.	5.8	21
44	Resonance Raman and time-resolved resonance Raman studies of complexes of divalent ruthenium with bipyridine and 4,4â€²-bipyrimidine ligands. Journal of Raman Spectroscopy, 1997, 28, 933-938.	2.5	19
45	SiO2 Solâˆ’Gel Composite Films Containing Redox-Active, Polypyridylâˆ’Ruthenium Polymers. Inorganic Chemistry, 1999, 38, 3596-3597.	4.0	17
46	In Situ Synthesis of Graphene Molecules on TiO₂: Application in Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2014, 6, 20473-20478.	8.0	16
47	Intragranular Phase Proton Conduction in Crystalline Sn_{1â€“x}In_xP₂O₇ (x = 0 and 0.1). Journal of Physical Chemistry C, 2017, 121, 23896-23905.	3.1	15
48	Electropolymerization of Vinylbipyridine Complexes of Ruthenium(II) and Osmium(II) in SiO2 Solâˆ’Gel Films. Inorganic Chemistry, 2005, 44, 3396-3404.	4.0	14
49	Elucidating the Role of the Metal Linking Ion on the Excited State Dynamics of Self-Assembled Bilayers. Journal of Physical Chemistry C, 2018, 122, 9835-9842.	3.1	13
50	Role of Interface Chemistry in Opening New Radiative Pathways in InP/CdSe Giant Quantum Dots with Blinkingâ€Suppressed Twoâ€Color Emission. Advanced Functional Materials, 2019, 29, 1809111.	14.9	13
51	The Frenkel exciton Hamiltonian for functionalized Ru(II)â€“bpy complexes. Journal of Luminescence, 2011, 131, 1739-1746.	3.1	12
52	Effect of organic passivation on photoinduced electron transfer across the quantum dot/TiO2 interface. Chemical Communications, 2011, 47, 6437.	4.1	10
53	Effect of Surface Immobilization on Intramolecular and Intermolecular Electron Transfer in a Chromophoreâˆ’Donorâˆ’Acceptor Assembly. Journal of Physical Chemistry B, 2005, 109, 1499-1504.	2.6	5
54	Vibrational spectra of aquadioxotetra; peroxodivanadates(V) M2[V2O2(O2)4(H2O)]Â·xH2O (M = N(CH3)4,) Tj ETQq0 0 0 rgBT /Overloc	1.0	4

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55	Layerâ€byâ€Layer Fabrication of Nanowire Sensitized Solar Cells: Geometryâ€Independent Integration. Advanced Functional Materials, 2014, 24, 6843-6852.	14.9	1