

Hirendra N Ghosh

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Ultrafast Electron Transfer Dynamics from Molecular Adsorbates to Semiconductor Nanocrystalline Thin Films. <i>Journal of Physical Chemistry B</i> , 2001, 105, 4545-4557.	1.2	594
2	Femtosecond IR Study of Excited-State Relaxation and Electron-Injection Dynamics of Ru(dcbpy) ₂ (NCS) ₂ in Solution and on Nanocrystalline TiO ₂ and Al ₂ O ₃ Thin Films. <i>Journal of Physical Chemistry B</i> , 1999, 103, 3110-3119.	1.2	385
3	Dynamics of Electron Injection in Nanocrystalline Titanium Dioxide Films Sensitized with [Ru(4,4'-dicarboxy-2,2'-bipyridine) ₂ (NCS) ₂] by Infrared Transient Absorption. <i>Journal of Physical Chemistry B</i> , 1998, 102, 6455-6458.	1.2	292
4	Evidences of hot excited state electron injection from sensitizer molecules to TiO ₂ nanocrystalline thin films. <i>Research on Chemical Intermediates</i> , 2001, 27, 393-406.	1.3	284
5	Direct Observation of Ultrafast Electron Injection from Coumarin 343 to TiO ₂ Nanoparticles by Femtosecond Infrared Spectroscopy. <i>Journal of Physical Chemistry B</i> , 1998, 102, 6482-6486.	1.2	196
6	Interfacial Electron Transfer between Fe(II)(CN) ₆ ⁴⁻ and TiO ₂ Nanoparticles: A Direct Electron Injection and Nonexponential Recombination. <i>Journal of Physical Chemistry B</i> , 1998, 102, 10208-10215.	1.2	181
7	Phenol- and Catechol-Based Ruthenium(II) Polypyridyl Complexes as Colorimetric Sensors for Fluoride Ions. <i>Inorganic Chemistry</i> , 2007, 46, 5576-5584.	1.9	152
8	Charge recombination reactions in photoexcited fullerene C ₆₀ -amine complexes studied by picosecond pump probe spectroscopy. <i>Journal of the American Chemical Society</i> , 1993, 115, 11722-11727.	6.6	136
9	Emission from the Charge Transfer State of Xanthene Dye-Sensitized TiO ₂ Nanoparticles: A New Approach to Determining Back Electron Transfer Rate and Verifying the Marcus Inverted Regime. <i>Journal of Physical Chemistry B</i> , 2001, 105, 7000-7008.	1.2	132
10	Effect of Particle Size on the Reactivity of Quantum Size ZnO Nanoparticles and Charge-Transfer Dynamics with Adsorbed Catechols. <i>Langmuir</i> , 2003, 19, 3006-3012.	1.6	126
11	Exciton Energy and Charge Transfer in Porphyrin Aggregate/Semiconductor (TiO ₂) Composites. <i>Journal of Physical Chemistry Letters</i> , 2012, 3, 1877-1884.	2.1	113
12	Ultrafast Charge Carrier Relaxation and Charge Transfer Dynamics of CdTe/CdS Core-Shell Quantum Dots as Studied by Femtosecond Transient Absorption Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2010, 114, 1460-1466.	1.5	111
13	Optical and Photochemical Properties of Sodium Dodecylbenzenesulfonate (DBS)-Capped TiO ₂ Nanoparticles Dispersed in Nonaqueous Solvents. <i>Langmuir</i> , 2003, 19, 505-508.	1.6	109
14	Strongly Coupled Ruthenium Polypyridyl Complexes for Efficient Electron Injection in Dye-Sensitized Semiconductor Nanoparticles. <i>Journal of Physical Chemistry B</i> , 2005, 109, 15445-15453.	1.2	109
15	Ultrafast Intermolecular Hydrogen Bond Dynamics in the Excited State of Fluorenone. <i>Journal of Physical Chemistry A</i> , 2005, 109, 8693-8704.	1.1	100
16	Efficient Electron Injection from Twisted Intramolecular Charge Transfer (TICT) State of 7-Diethyl amino coumarin 3-carboxylic Acid (D-1421) Dye to TiO ₂ Nanoparticle. <i>Journal of Physical Chemistry A</i> , 2002, 106, 2545-2553.	1.1	98
17	Dynamics of Interfacial Electron Transfer from Photoexcited Quinizarin (Qz) into the Conduction Band of TiO ₂ and Surface States of ZrO ₂ Nanoparticles. <i>Journal of Physical Chemistry B</i> , 2004, 108, 4775-4783.	1.2	95
18	Ultrafast Relaxation Dynamics in Graphene Oxide: Evidence of Electron Trapping. <i>Journal of Physical Chemistry C</i> , 2011, 115, 19110-19116.	1.5	95

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19	Aggregation of C70 in Solvent Mixtures. <i>The Journal of Physical Chemistry</i> , 1996, 100, 9439-9443.	2.9	88
20	Dynamics of Back-Electron Transfer Processes of Strongly Coupled Triphenyl Methane Dyes Adsorbed on TiO ₂ Nanoparticle Surface as Studied by Fast and Ultrafast Visible Spectroscopy. <i>Journal of Physical Chemistry B</i> , 2001, 105, 12786-12796.	1.2	87
21	Slow Back Electron Transfer in Surface-Modified TiO ₂ Nanoparticles Sensitized by Alizarin. <i>Journal of Physical Chemistry B</i> , 2004, 108, 1701-1707.	1.2	85
22	Interfacial Electron Transfer between the Photoexcited Porphyrin Molecule and TiO ₂ Nanoparticles: A Effect of Catecholate Binding. <i>Journal of Physical Chemistry B</i> , 2006, 110, 9012-9021.	1.2	80
23	Efficient Photosensitizing Capabilities and Ultrafast Carrier Dynamics of Doped Carbon Dots. <i>Journal of the American Chemical Society</i> , 2019, 141, 15413-15422.	6.6	74
24	Charge Separation by Indirect Bandgap Transitions in CdS/ZnSe Type-II Core/Shell Quantum Dots. <i>Journal of Physical Chemistry C</i> , 2013, 117, 10901-10908.	1.5	71
25	Ultrafast Charge Transfer Dynamics in Photoexcited CdTe Quantum Dot Decorated on Graphene. <i>Journal of Physical Chemistry C</i> , 2012, 116, 16271-16275.	1.5	68
26	Polaron-Mediated Slow Carrier Cooling in a Type-1 3D/0D CsPbBr ₃ @Cs ₄ PbBr ₆ Core-Shell Perovskite System. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 5302-5311.	2.1	66
27	Charge carrier dynamics in thiol capped CdTe quantum dots. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 4210.	1.3	65
28	Photoinduced ultrafast charge separation in colloidal 2-dimensional CdSe/CdS-Au hybrid nanoplatelets and corresponding application in photocatalysis. <i>Nanoscale</i> , 2016, 8, 15802-15812.	2.8	63
29	Interfacial Electron-Transfer Dynamics on TiO ₂ and ZrO ₂ Nanoparticle Surface Sensitized by New Catechol Derivatives of Os(II)-polypyridyl Complexes: A Monitoring by Charge-Transfer Emission. <i>Journal of Physical Chemistry C</i> , 2008, 112, 2918-2926.	1.5	62
30	Ultrafast Charge Carrier Delocalization in CdSe/CdS Quasi-Type II and CdS/CdSe Inverted Type I Core-Shell: A Structural Analysis through Carrier-Quenching Study. <i>Journal of Physical Chemistry C</i> , 2015, 119, 26202-26211.	1.5	62
31	The Effect of Heavy Atoms on Photoinduced Electron Injection from Nonthermalized and Thermalized Donor States of M ^{II} -Polypyridyl (M=Ru/Os) Complexes to Nanoparticulate TiO ₂ Surfaces: An Ultrafast Time-Resolved Absorption Study. <i>Chemistry - A European Journal</i> , 2010, 16, 611-619.	1.7	60
32	Electron Trap to Electron Storage Center in Specially Aligned Mn-Doped CdSe d-Dot: A Step Forward in the Design of Higher Efficient Quantum-Dot Solar Cell. <i>Journal of Physical Chemistry Letters</i> , 2014, 5, 2836-2842.	2.1	58
33	Sub-Picosecond IR Study of the Reactive Intermediate in an Alkane C-H Bond Activation Reaction by CpRh(CO) ₂ . <i>Organometallics</i> , 1998, 17, 3417-3419.	1.1	57
34	Ultrafast Hole Transfer in CdSe/ZnTe Type II Core-Shell Nanostructure. <i>Journal of Physical Chemistry C</i> , 2011, 115, 1428-1435.	1.5	54
35	Ultrafast Hole- and Electron-Transfer Dynamics in CdS-Dibromofluorescein (DBF) Supersensitized Quantum Dot Solar Cell Materials. <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 4020-4025.	2.1	53
36	Evidence of Multiple Electron Injection and Slow Back Electron Transfer in Alizarin-Sensitized Ultrasmall TiO ₂ Particles. <i>Journal of Physical Chemistry C</i> , 2009, 113, 3593-3599.	1.5	51

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37	Multiple Charge Transfer Dynamics in Colloidal CsPbBr ₃ Perovskite Quantum Dots Sensitized Molecular Adsorbate. <i>Journal of Physical Chemistry C</i> , 2016, 120, 18348-18354.	1.5	51
38	Effect of Surface Modification on Back Electron Transfer Dynamics of Dibromo Fluorescein Sensitized TiO ₂ Nanoparticles. <i>Langmuir</i> , 2004, 20, 1430-1435.	1.6	48
39	Subpicosecond Exciton Dynamics and Biexcitonic Feature in Colloidal CuInS ₂ Nanocrystals: Role of In ²⁺ Cu Antisite Defects. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 3458-3465.	2.1	45
40	Slow Electron Cooling Dynamics Mediated by Electron-Hole Decoupling in Highly Luminescent CdS _x Se _{1-x} Alloy Quantum Dots. <i>Journal of Physical Chemistry C</i> , 2015, 119, 10785-10792.	1.5	41
41	Ultrafast Carrier Dynamics of the Exciton and Trion in MoS ₂ Monolayers Followed by Dissociation Dynamics in Au@MoS ₂ 2D Heterointerfaces. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 3057-3063.	2.1	41
42	Twisting Dynamics in the Excited Singlet State of Michler's Ketone. <i>Journal of Physical Chemistry A</i> , 2006, 110, 3432-3446.	1.1	38
43	Effect of Surface States on Charge-Transfer Dynamics in Type II CdTe/ZnTe Core-Shell Quantum Dots: A Femtosecond Transient Absorption Study. <i>Journal of Physical Chemistry C</i> , 2011, 115, 12335-12342.	1.5	38
44	Interfacial Electron Transfer Dynamics Involving a New Bis-Thiocyanate Ruthenium(II)-Polypyridyl Complex, Coupled Strongly to Nanocrystalline TiO ₂ , through a Pendant Catecholate Functionality. <i>Journal of Physical Chemistry C</i> , 2009, 113, 7970-7977.	1.5	37
45	Exciton-Coupled Charge-Transfer Dynamics in a Porphyrin Aggregate/TiO ₂ Complex. <i>Chemistry - A European Journal</i> , 2011, 17, 3458-3464.	1.7	37
46	Ultrafast Hole/Electron Transfer Dynamics in a CdSe Quantum Dot Sensitized by Pyrogallol Red: A Super-Sensitization System. <i>Journal of Physical Chemistry C</i> , 2014, 118, 16358-16365.	1.5	37
47	Hot-electron transfer from the semiconductor domain to the metal domain in CdSe@CdS{Au} nano-heterostructures. <i>Nanoscale</i> , 2017, 9, 9723-9731.	2.8	37
48	Photophysics and Ultrafast Relaxation Dynamics of the Excited States of Dimethylaminobenzophenone. <i>Journal of Physical Chemistry A</i> , 2004, 108, 2583-2597.	1.1	36
49	Lattice-Strain-Induced Slow Electron Cooling Due to Quasi-Type-II Behavior in Type-I CdTe/ZnS Nanocrystals. <i>Journal of Physical Chemistry C</i> , 2015, 119, 8410-8416.	1.5	36
50	S2 Fluorescence and Ultrafast Relaxation Dynamics of the S2 and S1 States of a Ketocyanine Dye. <i>Journal of Physical Chemistry A</i> , 2005, 109, 6836-6846.	1.1	35
51	Ultrafast Intramolecular Electronic Energy-Transfer Dynamics in a Bichromophoric Molecule. <i>Journal of Physical Chemistry A</i> , 2004, 108, 7843-7852.	1.1	34
52	Extensive Reduction in Back Electron Transfer in Twisted Intramolecular Charge-Transfer (TICT) Coumarin Dye-Sensitized TiO ₂ Nanoparticles/Film: A Femtosecond Transient Absorption Study. <i>Chemistry - A European Journal</i> , 2014, 20, 3510-3519.	1.7	34
53	Efficient Charge Separation in TiO ₂ Films Sensitized with Ruthenium(II)-Polypyridyl Complexes: Hole Stabilization by Ligand-Localized Charge-Transfer States. <i>Chemistry - A European Journal</i> , 2011, 17, 1561-1568.	1.7	33
54	Unusually Slow Electron Cooling to Charge-Transfer State in Gradient CdTeSe Alloy Nanocrystals Mediated through Mn Atom. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 1359-1367.	2.1	33

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55	Hot Charge Carrier Extraction from Semiconductor Quantum Dots. <i>Journal of Physical Chemistry C</i> , 2018, 122, 17586-17600.	1.5	33
56	Concurrent Ultrafast Electron- and Hole-Transfer Dynamics in CsPbBr ₃ Perovskite and Quantum Dots. <i>ACS Omega</i> , 2018, 3, 2706-2714.	1.6	32
57	Effect of Confinement on the Exciton and Biexciton Dynamics in Perovskite 2D-Nanosheets and 3D-Nanocrystals. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 6344-6352.	2.1	32
58	Micellar extraction assisted fluorometric determination of ultratrace amount of uranium in aqueous samples by novel diglycolamide-capped quantum dot nanosensor. <i>Sensors and Actuators B: Chemical</i> , 2017, 253, 592-602.	4.0	31
59	Defect-Mediated Slow Carrier Recombination and Broad Photoluminescence in Non-Metal-Doped ZnIn ₂ S ₄ Nanosheets for Enhanced Photocatalytic Activity. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 5000-5008.	2.1	31
60	Does Bridging Geometry Influence Interfacial Electron Transfer Dynamics? Case of the Eneiol-TiO ₂ System. <i>Journal of Physical Chemistry C</i> , 2012, 116, 98-103.	1.5	30
61	Hot-Hole Extraction from Quantum Dot to Molecular Adsorbate. <i>Chemistry - A European Journal</i> , 2015, 21, 4405-4412.	1.7	30
62	Size of CdTe Quantum Dots Controls the Hole Transfer Rate in CdTe Quantum Dots-MEHPPV Polymer Nanoparticle Hybrid. <i>Journal of Physical Chemistry C</i> , 2016, 120, 25142-25150.	1.5	30
63	Charge carrier cascade in Type II CdSe-CdTe graded core-shell interface. <i>Journal of Materials Chemistry C</i> , 2013, 1, 2755.	2.7	28
64	Electron-Transfer-Mediated Uranium Detection Using Quasi-Type II Core-Shell Quantum Dots: Insight into Mechanistic Pathways. <i>Langmuir</i> , 2017, 33, 8114-8122.	1.6	28
65	Exciton delocalization and hot hole extraction in CdSe QDs and CdSe/ZnS type 1 core shell QDs sensitized with newly synthesized thiols. <i>Nanoscale</i> , 2016, 8, 1823-1833.	2.8	27
66	Exciton Separation in CdS Supraparticles upon Conjugation with Graphene Sheets. <i>Journal of Physical Chemistry C</i> , 2017, 121, 6581-6588.	1.5	27
67	Concurrent Energy- and Electron-Transfer Dynamics in Photoexcited Mn-Doped CsPbBr ₃ Perovskite Nanoplatelet Architecture. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 302-309.	2.1	27
68	Physicochemical and Photophysical Studies on Porphyrin-Based Donor-Acceptor Systems: Effect of Redox Potentials on Ultrafast Electron-Transfer Dynamics. <i>Journal of Physical Chemistry B</i> , 2007, 111, 9078-9087.	1.2	26
69	On the Role of Hydrogen Bonds in Photoinduced Electron-Transfer Dynamics between 9-Fluorenone and Amine Solvents. <i>Chemistry - A European Journal</i> , 2012, 18, 4930-4937.	1.7	26
70	Super Sensitization: Grand Charge (Hole/Electron) Separation in ATC Dye Sensitized CdSe, CdSe/ZnS Type-I, and CdSe/CdTe Type-II Core-Shell Quantum Dots. <i>Chemistry - A European Journal</i> , 2014, 20, 13305-13313.	1.7	26
71	Enhanced Charge Separation in an Epitaxial Metal-Semiconductor Nanohybrid Material Anchored with an Organic Molecule. <i>Journal of Physical Chemistry C</i> , 2015, 119, 22181-22189.	1.5	26
72	Ultrafast Charge Delocalization Dynamics of Ambient Stable CsPbBr ₃ Nanocrystals Encapsulated in Polystyrene Fiber. <i>Chemistry - A European Journal</i> , 2021, 27, 683-691.	1.7	26

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73	The Role of Hydrogen-Bonding Interactions in the Ultrafast Relaxation Dynamics of the Excited States of 3- and 4-Aminofluorenes. <i>ChemPhysChem</i> , 2009, 10, 2995-3012.	1.0	25
74	Interfacial Electron Transfer Dynamics of Two Newly Synthesized Catecholate Bound Ru(II) Polypyridyl-Based Sensitizers on TiO ₂ Nanoparticle Surface – A Femtosecond Pump Probe Spectroscopic Study. <i>European Journal of Inorganic Chemistry</i> , 2011, 2011, 4187-4197.	1.0	25
75	Photosensitization of nanoparticulate TiO ₂ using a Re(I)-polypyridyl complex: studies on interfacial electron transfer in the ultrafast time domain. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 8192.	1.3	25
76	Tuning Interfacial Charge Separation by Molecular Twist: A New Insight into Coumarin-Sensitized TiO ₂ Films. <i>Journal of Physical Chemistry C</i> , 2014, 118, 10661-10669.	1.5	25
77	Intraband Electron Cooling Mediated Unprecedented Photocurrent Conversion Efficiency of CdS/Se Alloy QDs: Direct Correlation between Electron Cooling and Efficiency. <i>Journal of Physical Chemistry C</i> , 2016, 120, 21309-21316.	1.5	25
78	Chemically clean single-step oxido-reductive synthesis of green luminescent graphene quantum dots as impending electrocatalyst. <i>Carbon</i> , 2016, 109, 517-528.	5.4	25
79	Probing Ultrafast Charge Separation in CZTS/CdS Heterojunctions through Femtosecond Transient Absorption Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2020, 124, 19476-19483.	1.5	25
80	Experimental and Theoretical Study into Interface Structure and Band Alignment of the Cu ₂ Zn _{1-x} Cd _x Sn ₄ Heterointerface for Photovoltaic Applications. <i>ACS Applied Energy Materials</i> , 2020, 3, 5153-5162.	2.5	25
81	Ultrafast Hot Electron Transfer and Trap-State Mediated Charge Carrier Separation toward Enhanced Photocatalytic Activity in g-C ₃ N ₄ /ZnIn ₂ S ₄ Heterostructure. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 11865-11872.	2.1	25
82	Charge-Transfer-Induced Twisting of the Nitro Group. <i>Journal of Physical Chemistry A</i> , 2007, 111, 6122-6126.	1.1	24
83	Involvement of Sub-Bandgap States in Subpicosecond Exciton and Biexciton Dynamics of Ternary AgInS ₂ Nanocrystals. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 3206-3214.	2.1	24
84	Hot Carrier Relaxation in CsPbBr ₃ -Based Perovskites: A Polaron Perspective. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 8765-8776.	2.1	24
85	Sub-picosecond Injection of Electrons from Excited [Ru(2,2'-bipy-4,4'-dicarboxy) ₂ (SCN) ₂] into TiO ₂ Using Transient Mid-Infrared Spectroscopy*. <i>Zeitschrift Fur Physikalische Chemie</i> , 1999, 212, 77-84.	1.4	23
86	Light Harvesting and Photocurrent Generation in a Conjugated Polymer Nanoparticle-Reduced Graphene Oxide Composite. <i>ChemPhysChem</i> , 2017, 18, 1308-1316.	1.0	23
87	Efficient charge transport in surface engineered TiO ₂ nanoparticulate photoanodes leading to improved performance in quantum dot sensitized solar cells. <i>Solar Energy</i> , 2019, 181, 195-202.	2.9	23
88	Fast Polaron Formation and Low Carrier Mobility in Defect-Free Polyhedral CsPbBr ₃ Perovskite Nanocrystals. <i>ACS Photonics</i> , 2022, 9, 969-978.	3.2	23
89	Synthesis, Characterization, Physicochemical, and Photophysical Studies of Redox Switchable NIR Dye Derived from a Ruthenium-Dioxolene-Porphyrin System. <i>Inorganic Chemistry</i> , 2005, 44, 2414-2425.	1.9	22
90	Recent Progress of Electron Storage Mn Center in Doped Nanocrystals. <i>Journal of Physical Chemistry C</i> , 2019, 123, 10703-10719.	1.5	22

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91	Ultrafast Plasmon Dynamics and Hole-Phonon Coupling in NIR Active Nonstoichiometric Semiconductor Plasmonic Cu _{2-x} S Nanocrystals. <i>Journal of Physical Chemistry C</i> , 2019, 123, 28401-28410.	1.5	22
92	Temperature-Dependent Interplay of Polaron Formation and Hot Carrier Cooling Dynamics in CsPbBr ₃ Nanocrystals: Role of Carrier-Phonon Coupling Strength. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 6206-6213.	2.1	22
93	Sequential Energy and Electron Transfer in Polynuclear Complex Sensitized TiO ₂ Nanoparticles. <i>Journal of Physical Chemistry Letters</i> , 2012, 3, 1543-1548.	2.1	21
94	Ultrafast Electron Injection, Hole Transfer, and Charge Recombination Dynamics in CdSe QD Super-Sensitized Re(I)-Polypyridyl Complexes with Catechol and Resorcinol Moiety: Effect of Coupling. <i>Journal of Physical Chemistry C</i> , 2015, 119, 3522-3529.	1.5	21
95	Density functional investigation and some optical experiments on dye-sensitized quantum dots. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 28683-28696.	1.3	21
96	Electrochemical Evaluation of Dopant Energetics and the Modulation of Ultrafast Carrier Dynamics in Cu-Doped CdSe Nanocrystals. <i>Journal of Physical Chemistry C</i> , 2017, 121, 27233-27240.	1.5	21
97	Ternary Metal Chalcogenides: Into the Exciton and Biexciton Dynamics. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 6227-6238.	2.1	21
98	Boosting the Efficiency of Quantum Dot-Sensitized Solar Cells through Formation of the Cation-Exchanged Hole Transporting Layer. <i>Langmuir</i> , 2018, 34, 50-57.	1.6	20
99	Effect of Molecular Structure on Interfacial Electron Transfer Dynamics of 7-N,N-Dimethyl Coumarin 4-Acetic Acid (DMACA) and 7-Hydroxy Coumarin 4-Acetic Acid (HCA) Sensitized TiO ₂ and ZrO ₂ Nanoparticles. <i>Journal of Physical Chemistry B</i> , 2004, 108, 12489-12496.	1.2	19
100	Efficient luminescence and photocatalytic behaviour in ultrafine TiO ₂ particles synthesized by arrested precipitation. <i>Journal of Materials Chemistry</i> , 2009, 19, 3523.	6.7	19
101	Ultrafast Forward and Backward Electron Transfer Dynamics of Coumarin 337 in Hydrogen-Bonded Anilines As Studied with Femtosecond UV-Pump/IR-Probe Spectroscopy. <i>Journal of Physical Chemistry A</i> , 2011, 115, 664-670.	1.1	19
102	Direct Correlation of Excitonics with Efficiency in a Core-Shell Quantum Dot Solar Cell. <i>Chemistry - A European Journal</i> , 2018, 24, 2418-2425.	1.7	19
103	Exploring the Carrier Dynamics in Zinc Oxide-Metal Halide-Based Perovskite Nanostructures: Toward Reduced Dielectric Loss and Improved Photocurrent. <i>Journal of Physical Chemistry C</i> , 2018, 122, 27273-27283.	1.5	19
104	Ultrafast Electron-Transfer and -Trapping Dynamics in the Inter-Band-Gap States of ZrO ₂ Nanoparticles Sensitized by Baicalein. <i>Journal of Physical Chemistry C</i> , 2013, 117, 17531-17539.	1.5	17
105	Ultrafast excited state dynamics of S ₂ and S ₁ states of triphenylmethane dyes. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 16824-16831.	1.3	17
106	Charge Delocalization in the Cascade Band Structure CdS/CdSe and CdS/CdTe Core-Shell Sensitized with Re(I)-Polypyridyl Complex. <i>Journal of Physical Chemistry C</i> , 2016, 120, 10051-10061.	1.5	17
107	Tuning the Charge Carrier Dynamics via Interfacial Alloying in Core/Shell CdTe/ZnSe NCs. <i>Journal of Physical Chemistry C</i> , 2016, 120, 1918-1925.	1.5	17
108	An Insight into the Interface through Excited-State Carrier Dynamics for Promising Enhancement of Power Conversion Efficiency in a Mn-Doped CdZnSSe Gradient Alloy. <i>Chemistry - A European Journal</i> , 2017, 23, 3755-3763.	1.7	17

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109	Exciton Dynamics and Formation Mechanism of MEH-PPV Polymer-Based Nanostructures. <i>Journal of Physical Chemistry C</i> , 2017, 121, 21062-21072.	1.5	17
110	Restriction of Molecular Rotation and Intramolecular Charge Distribution in the Photoexcited State of Coumarin Dyes on Gold Nanoparticle Surface. <i>Journal of Physical Chemistry C</i> , 2015, 119, 2046-2052.	1.5	16
111	Temperature-Dependent Ultrafast Charge Carrier Dynamics in Amorphous and Crystalline Sb ₂ Se ₃ Thin Films. <i>Journal of Physical Chemistry C</i> , 2021, 125, 5197-5206.	1.5	16
112	Interfacing g-C ₃ N ₄ Nanosheets with CdS Nanorods for Enhanced Photocatalytic Hydrogen Evolution: An Ultrafast Investigation. <i>Journal of Physical Chemistry B</i> , 2022, 126, 572-580.	1.2	16
113	Effect of strong coupling on interfacial electron transfer dynamics in dye-sensitized TiO ₂ semiconductor nanoparticles. <i>Journal of Chemical Sciences</i> , 2007, 119, 205-215.	0.7	15
114	Hydrogen Bond and Ligand Dissociation Dynamics in Fluoride Sensing of Re(I)-Polypyridyl Complex. <i>Journal of Physical Chemistry B</i> , 2015, 119, 14952-14958.	1.2	15
115	Inhibiting Interfacial Charge Recombination for Boosting Power Conversion Efficiency in CdSe{Au} Nanohybrid Sensitized Solar Cell. <i>Journal of Physical Chemistry C</i> , 2018, 122, 13277-13284.	1.5	15
116	Correlating Charge-Carrier Dynamics with Efficiency in Quantum-Dot Solar Cells: Can Excitonics Lead to Highly Efficient Devices?. <i>Chemistry - A European Journal</i> , 2019, 25, 692-702.	1.7	15
117	Mechanistic Insights for Photoelectrochemical Ethanol Oxidation on Black Gold Decorated Monoclinic Zirconia. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 9942-9954.	4.0	15
118	Ultrafast Insights into High Energy (C and D) Excitons in Few Layer WS ₂ . <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 6526-6534.	2.1	15
119	Relaxation dynamics in the excited states of a ketocyanine dye probed by femtosecond transient absorption spectroscopy. <i>Journal of Chemical Sciences</i> , 2008, 120, 45-55.	0.7	14
120	Sensitization of TiO ₂ nanoparticles in micro-emulsion by photo-excited dye molecules: A femtosecond transient absorption study. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2009, 204, 209-216.	2.0	14
121	Electron Injection into the Surface States of ZrO ₂ Nanoparticles from Photoexcited Quinizarin and Its Derivatives: A Effect of Surface Modification. <i>Journal of Physical Chemistry B</i> , 2005, 109, 20485-20492.	1.2	13
122	Metal-Ligand Complex-Induced Ultrafast Charge-Carrier Relaxation and Charge-Transfer Dynamics in CdX (X=S, Se, Te) Quantum Dots Sensitized with Nitrocatechol. <i>Chemistry - A European Journal</i> , 2017, 23, 10590-10596.	1.7	13
123	Ultrafast Dynamics and Excited State Deactivation of [Ru(bpy) ₂ Sq] ⁺ and Its Derivatives. <i>Journal of Physical Chemistry B</i> , 2006, 110, 10197-10203.	1.2	12
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