Partha Maity

List of Publications by Year in descending order

81 papers	3,945 citations	136950 32 h-index	128289 60 g-index
82 all docs	82 docs citations	82 times ranked	5543 citing authors

#	Article	IF	Citations
1	Insight into the role of reduced graphene oxide in enhancing photocatalytic hydrogen evolution in disordered carbon nitride. Physical Chemistry Chemical Physics, 2022, 24, 11213-11221.	2.8	9
2	Interface Engineering of Biâ€Fluorescence Molecules for Highâ€Performance Data Encryption and Ultralow UVâ€Light Detection. Advanced Optical Materials, 2022, 10, .	7.3	5
3	Ultrafast transient infrared spectroscopy for probing trapping states in hybrid perovskite films. Communications Chemistry, 2022, 5, .	4.5	14
4	Phonon-Mediated Slow Hot Carrier Dynamics in Lead-Free Cs₃Bi₂I₉ Perovskite Single Crystal. Journal of Physical Chemistry Letters, 2022, 13, 5260-5266.	4.6	12
5	Visible-Light Copper Nanocluster Catalysis for the Câ€“N Coupling of Aryl Chlorides at Room Temperature. Journal of the American Chemical Society, 2022, 144, 12052-12061.	13.7	37
6	Lecithin Capping Ligands Enable Ultrastable Perovskite-Phase CsPbI₃ Quantum Dots for Rec. 2020 Bright-Red Light-Emitting Diodes. Journal of the American Chemical Society, 2022, 144, 13302-13310.	13.7	59
7	Efficient Visibleâ€Light Driven Photothermal Conversion of CO₂ to Methane by Nickel Nanoparticles Supported on Barium Titanate. Advanced Functional Materials, 2021, 31, 2008244.	14.9	60
8	[Cu₂₃(PhSe)₁₆(Ph₃P)₈(H)₆]Â·BF₄: Atomic-Level Insights into Cuboidal Polyhydrido Copper Nanoclusters and Their Quasi-simple Cubic Self-Assembly. , 2021, 3, 90-99.		41
9	Twisted BODIPY derivative: intersystem crossing, electron spin polarization and application as a novel photodynamic therapy reagent. Physical Chemistry Chemical Physics, 2021, 23, 8641-8652.	2.8	40
10	CsMnBr₃: Lead-Free Nanocrystals with High Photoluminescence Quantum Yield and Picosecond Radiative Lifetime. , 2021, 3, 290-297.		86
11	Photothermal Catalysis: Efficient Visibleâ€Light Driven Photothermal Conversion of CO₂ to Methane by Nickel Nanoparticles Supported on Barium Titanate (Adv. Funct. Mater. 8/2021). Advanced Functional Materials, 2021, 31, 2170053.	14.9	3
12	Engineering Bandâ€Type Alignment in CsPbBr₃ Perovskiteâ€Based Artificial Multiple Quantum Wells. Advanced Materials, 2021, 33, e2005166.	21.0	12
13	[Ag₉(1,2-BDT)₆]^{3â€“}: How Square-Pyramidal Building Blocks Self-Assemble into the Smallest Silver Nanocluster. Inorganic Chemistry, 2021, 60, 4306-4312.	4.0	16
14	[Cu₁₅(PPh₃)₆(PET)₁₃]²⁺: a Copper Nanocluster with Crystallization Enhanced Photoluminescence. Small, 2021, 17, e2006839.	10.0	50
15	Dark Self-Healing-Mediated Negative Photoconductivity of a Lead-Free Cs₃Bi₂Cl₉ Perovskite Single Crystal. Journal of Physical Chemistry Letters, 2021, 12, 2286-2292.	4.6	51
16	Manipulation of hot carrier cooling dynamics in two-dimensional Dionâ€“Jacobson hybrid perovskites via Rashba band splitting. Nature Communications, 2021, 12, 3995.	12.8	41
17	Cascade Electron Transfer Induces Slow Hot Carrier Relaxation in CsPbBr₃ Asymmetric Quantum Wells. ACS Energy Letters, 2021, 6, 2602-2609.	17.4	13
18	Observation of Negative Photoconductivity in Lead-Free Cs₃Bi₂Br₉Perovskite Single Crystal. ACS Photonics, 2021, 8, 2473-2480.	6.6	36

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19	Air-Resistant Lead Halide Perovskite Nanocrystals Embedded into Polyimide of Intrinsic Microporosity. Energy Material Advances, 2021, 2021, .	11.0	21
20	Chromophore Orientation-Dependent Photophysical Properties of Pyreneâ€“Naphthalimide Compact Electron Donorâ€“Acceptor Dyads: Electron Transfer and Intersystem Crossing. Journal of Physical Chemistry B, 2021, 125, 9244-9259.	2.6	16
21	Linked Nickel Oxide/Perovskite Interface Passivation for Highâ€Performance Textured Monolithic Tandem Solar Cells. Advanced Energy Materials, 2021, 11, 2101662.	19.5	77
22	There is plenty of room at the top: generation of hot charge carriers and their applications in perovskite and other semiconductor-based optoelectronic devices. Light: Science and Applications, 2021, 10, 174.	16.6	32
23	Tunable Selectivity in CO₂ Photoâ€Thermal Reduction by Perovskiteâ€Supported Pd Nanoparticles. ChemSusChem, 2021, 14, 5525-5533.	6.8	15
24	Linked Nickel Oxide/Perovskite Interface Passivation for Highâ€Performance Textured Monolithic Tandem Solar Cells (Adv. Energy Mater. 40/2021). Advanced Energy Materials, 2021, 11, 2170160.	19.5	2
25	Impact of one step alloying on the carrier relaxation and charge separation dynamics of CdxZn1-xSe graded nanocrystals. Journal of Photochemistry and Photobiology A: Chemistry, 2020, 388, 112131.	3.9	3
26	Sunlight-Driven Biomass Photorefinery for Coproduction of Sustainable Hydrogen and Value-Added Biochemicals. ACS Sustainable Chemistry and Engineering, 2020, 8, 15772-15781.	6.7	43
27	Low-Temperature Crystallization Enables 21.9% Efficient Single-Crystal MAPbI₃ Inverted Perovskite Solar Cells. ACS Energy Letters, 2020, 5, 657-662.	17.4	171
28	Managing grains and interfaces via ligand anchoring enables 22.3%-efficiency inverted perovskite solar cells. Nature Energy, 2020, 5, 131-140.	39.5	894
29	A Titanium Metalâ€“Organic Framework with Visibleâ€Lightâ€Responsive Photocatalytic Activity. Angewandte Chemie, 2020, 132, 13570-13574.	2.0	28
30	A Titanium Metalâ€“Organic Framework with Visibleâ€Lightâ€Responsive Photocatalytic Activity. Angewandte Chemie - International Edition, 2020, 59, 13468-13472.	13.8	84
31	Layer-Dependent Coherent Acoustic Phonons in Two-Dimensional Ruddlesdenâ€“Popper Perovskite Crystals. Journal of Physical Chemistry Letters, 2019, 10, 5259-5264.	4.6	38
32	Impact of the chemical nature and position of spacers on controlling the optical properties of silicon quantum dots. Physical Chemistry Chemical Physics, 2019, 21, 17096-17108.	2.8	3
33	Tuning Hot Carrier Cooling Dynamics by Dielectric Confinement in Two-Dimensional Hybrid Perovskite Crystals. ACS Nano, 2019, 13, 12621-12629.	14.6	96
34	High-speed colour-converting photodetector with all-inorganic CsPbBr3 perovskite nanocrystals for ultraviolet light communication. Light: Science and Applications, 2019, 8, 94.	16.6	225
35	Relationship between the Photocatalytic Hydrogen Ion Reduction and Charge Carrier Dynamics of Pt/Cd_{1â€“x}Ni_xS Catalysts. Journal of Physical Chemistry C, 2019, 123, 24051-24061.	3.1	3
36	Controllable Charge-Transfer Mechanism at Pushâ€“Pull Porphyrin/Nanocarbon Interfaces. Journal of Physical Chemistry C, 2019, 123, 14283-14291.	3.1	10

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37	Assembly of Atomically Precise Silver Nanoclusters into Nanocluster-Based Frameworks. Journal of the American Chemical Society, 2019, 141, 9585-9592.	13.7	132
38	Impressive near-infrared brightness and singlet oxygen generation from strategic lanthanideâ€“porphyrin double-decker complexes in aqueous solution. Light: Science and Applications, 2019, 8, 46.	16.6	33
39	Why are Hot Holes Easier to Extract than Hot Electrons from Methylammonium Lead Iodide Perovskite?. Advanced Energy Materials, 2019, 9, 1900084.	19.5	54
40	Perovskite-Based Artificial Multiple Quantum Wells. Nano Letters, 2019, 19, 3535-3542.	9.1	27
41	High-Speed Ultraviolet-C Photodetector Based on Frequency Down-Converting CsPbBr3 Perovskite Nanocrystals on Silicon Platform. , 2019, , .		1
42	Strategies for extending charge separation in colloidal nanostructured quantum dot materials. Physical Chemistry Chemical Physics, 2019, 21, 23283-23300.	2.8	5
43	Impact of FRET between Molecular Aggregates and Quantum Dots. Chemistry - an Asian Journal, 2019, 14, 597-605.	3.3	7
44	S2 and mixed aggregate state emission of thiophene-BODIPY. Journal of Photochemistry and Photobiology A: Chemistry, 2019, 368, 147-152.	3.9	4
45	Boosted CO2 reduction using ultra-thin TiO2 photocatalyst films on nanocavities. , 2019, , .		0
46	Concurrent Ultrafast Electron- and Hole-Transfer Dynamics in CsPbBr₃ Perovskite and Quantum Dots. ACS Omega, 2018, 3, 2706-2714.	3.5	32
47	Study of the Bulk Charge Carrier Dynamics in Anatase and Rutile TiO₂ Single Crystals by Femtosecond Time-Resolved Spectroscopy. Journal of Physical Chemistry C, 2018, 122, 8925-8932.	3.1	68
48	2D Layered Perovskites: Surface Effect on 2D Hybrid Perovskite Crystals: Perovskites Using an Ethanolamine Organic Layer as an Example (Adv. Mater. 46/2018). Advanced Materials, 2018, 30, 1870351.	21.0	3
49	Extremely reduced dielectric confinement in two-dimensional hybrid perovskites with large polar organics. Communications Physics, 2018, 1, .	5.3	135
50	Ultrathinâ€Film Titania Photocatalyst on Nanocavity for CO 2 Reduction with Boosted Catalytic Efficiencies. Global Challenges, 2018, 2, 1800032.	3.6	7
51	Surface Effect on 2D Hybrid Perovskite Crystals: Perovskites Using an Ethanolamine Organic Layer as an Example. Advanced Materials, 2018, 30, e1804372.	21.0	34
52	Layer-Dependent Rashba Band Splitting in 2D Hybrid Perovskites. Chemistry of Materials, 2018, 30, 8538-8545.	6.7	92
53	Electron Transfer of the Metal/Semiconductor System in Photocatalysis. Journal of Physical Chemistry C, 2018, 122, 16779-16787.	3.1	24
54	Exciton Separation in CdS Supraparticles upon Conjugation with Graphene Sheets. Journal of Physical Chemistry C, 2017, 121, 6581-6588.	3.1	27

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55	The impact of Au doping on the charge carrier dynamics at the interfaces between cationic porphyrin and silver nanoclusters. Chemical Physics Letters, 2017, 683, 393-397.	2.6	8
56	Demonstrating the role of anchoring functionality in interfacial electron transfer dynamics in the newly synthesized BODIPYâ€“TiO₂ nanostructure composite. New Journal of Chemistry, 2017, 41, 5215-5224.	2.8	12
57	Hot-electron transfer from the semiconductor domain to the metal domain in CdSe@CdS{Au} nano-heterostructures. Nanoscale, 2017, 9, 9723-9731.	5.6	37
58	Metalâ€“Ligand Complexâ€Induced Ultrafast Chargeâ€Carrier Relaxation and Chargeâ€Transfer Dynamics in CdX (X=S, Se, Te) Quantum Dots Sensitized with Nitrocatechol. Chemistry - A European Journal, 2017, 23, 10590-10596.	3.3	13
59	Protonâ€Coupled Electronâ€Transfer Processes in Ultrafast Time Domain: Evidence for Effects of Hydrogenâ€Bond Stabilization on Photoinduced Electron Transfer. Chemistry - A European Journal, 2017, 23, 3455-3465.	3.3	11
60	Comprehensive Study of All-Solid-State Z-Scheme Photocatalytic Systems of ZnO/Pt/CdZnS. ACS Omega, 2017, 2, 4828-4837.	3.5	38
61	Molecular behavior of zero-dimensional perovskites. Science Advances, 2017, 3, e1701793.	10.3	187
62	Effect of Molecular Coupling on Ultrafast Electronâ€Transfer and Chargeâ€Recombination Dynamics in a Wideâ€Gap ZnS Nanoaggregate Sensitized by Triphenyl Methane Dyes. ChemPhysChem, 2016, 17, 724-730.	2.1	3
63	Charge Delocalization in the Cascade Band Structure CdS/CdSe and CdS/CdTe Coreâ€“Shell Sensitized with Re(I)â€“Polypyridyl Complex. Journal of Physical Chemistry C, 2016, 120, 10051-10061.	3.1	17
64	Intraband Electron Cooling Mediated Unprecedented Photocurrent Conversion Efficiency of CdS_xSe_{1â€“x} Alloy QDs: Direct Correlation between Electron Cooling and Efficiency. Journal of Physical Chemistry C, 2016, 120, 21309-21316.	3.1	25
65	Multiple Charge Transfer Dynamics in Colloidal CsPbBr₃ Perovskite Quantum Dots Sensitized Molecular Adsorbate. Journal of Physical Chemistry C, 2016, 120, 18348-18354.	3.1	51
66	Tuning the Charge Carrier Dynamics via Interfacial Alloying in Core/Shell CdTe/ZnSe NCs. Journal of Physical Chemistry C, 2016, 120, 1918-1925.	3.1	17
67	Lattice-Strain-Induced Slow Electron Cooling Due to Quasi-Type-II Behavior in Type-I CdTe/ZnS Nanocrystals. Journal of Physical Chemistry C, 2015, 119, 8410-8416.	3.1	36
68	Ultrafast Electron Injection, Hole Transfer, and Charge Recombination Dynamics in CdSe QD Super-Sensitized Re(I)â€“Polypyridyl Complexes with Catechol and Resorcinol Moiety: Effect of Coupling. Journal of Physical Chemistry C, 2015, 119, 3522-3529.	3.1	21
69	Slow Electron Cooling Dynamics of Highly Luminescent CdSxSe1-x Alloy Quantum Dot. Springer Proceedings in Physics, 2015, , 275-278.	0.2	1
70	Restriction of Molecular Rotation and Intramolecular Charge Distribution in the Photoexcited State of Coumarin Dyes on Gold Nanoparticle Surface. Journal of Physical Chemistry C, 2015, 119, 2046-2052.	3.1	16
71	Restriction of Molecular Twisting on a Gold Nanoparticle Surface. Chemistry - A European Journal, 2015, 21, 5704-5708.	3.3	8
72	Slow Electron Cooling Dynamics Mediated by Electronâ€“Hole Decoupling in Highly Luminescent CdS_xSe_{1â€“x} Alloy Quantum Dots. Journal of Physical Chemistry C, 2015, 119, 10785-10792.	3.1	41

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73	Subpicosecond Exciton Dynamics and Biexcitonic Feature in Colloidal CuInS₂ Nanocrystals: Role of Inâ€“Cu Antisite Defects. Journal of Physical Chemistry Letters, 2015, 6, 3458-3465.	4.6	45
74	Enhanced Charge Separation in an Epitaxial Metalâ€“Semiconductor Nanohybrid Material Anchored with an Organic Molecule. Journal of Physical Chemistry C, 2015, 119, 22181-22189.	3.1	26
75	Ultrafast Charge Carrier Delocalization in CdSe/CdS Quasi-Type II and CdS/CdSe Inverted Type I Coreâ€“Shell: A Structural Analysis through Carrier-Quenching Study. Journal of Physical Chemistry C, 2015, 119, 26202-26211.	3.1	62
76	Cascading electron and hole transfer dynamics in a CdS/CdTe coreâ€“shell sensitized with bromo-pyrogallol red (Br-PGR): slow charge recombination in type II regime. Nanoscale, 2015, 7, 2698-2707.	5.6	51
77	Super Sensitization: Grand Charge (Hole/Electron) Separation in ATC Dye Sensitized CdSe, CdSe/ZnS Typeâ€I, and CdSe/CdTe Typeâ€II Coreâ€“Shell Quantum Dots. Chemistry - A European Journal, 2014, 20, 13305-13313.	3.3	26
78	Extensive Reduction in Back Electron Transfer in Twisted Intramolecular Chargeâ€Transfer (TICT) Coumarinâ€Dyeâ€Sensitized TiO₂ Nanoparticles/Film: A Femtosecond Transient Absorption Study. Chemistry - A European Journal, 2014, 20, 3510-3519.	3.3	34
79	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. Journal of Physical Chemistry Letters, 2014, 5, 2836-2842.	4.6	58
80	Ultrafast Hole- and Electron-Transfer Dynamics in CdSâ€“Dibromofluorescein (DBF) Supersensitized Quantum Dot Solar Cell Materials. Journal of Physical Chemistry Letters, 2013, 4, 4020-4025.	4.6	53
81	Ultrafast Electron-Transfer and -Trapping Dynamics in the Inter-Band-Gap States of ZrO₂ Nanoparticles Sensitized by Baicalein. Journal of Physical Chemistry C, 2013, 117, 17531-17539.	3.1	17