

Jochen Feldmann

List of Publications by Year in descending order

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86
papers

10,233
citations

66343

42
h-index

58581

82
g-index

90
all docs

90
docs citations

90
times ranked

13337
citing authors

#	ARTICLE	IF	CITATIONS
1	Quantum Size Effect in Organometal Halide Perovskite Nanoplatelets. Nano Letters, 2015, 15, 6521-6527.	9.1	785
2	Redox shuttle mechanism enhances photocatalytic H ₂ generation on Ni-decorated CdS nanorods. Nature Materials, 2014, 13, 1013-1018.	27.5	739
3	State of the Art and Prospects for Halide Perovskite Nanocrystals. ACS Nano, 2021, 15, 10775-10981.	14.6	705
4	Highly Luminescent Cesium Lead Halide Perovskite Nanocrystals with Tunable Composition and Thickness by Ultrasonication. Angewandte Chemie - International Edition, 2016, 55, 13887-13892.	13.8	615
5	Highly Emissive Colloidal CdSe/CdS Heterostructures of Mixed Dimensionality. Nano Letters, 2003, 3, 1677-1681.	9.1	579
6	Hierarchical assembly of metal nanoparticles, quantum dots and organic dyes using DNA origami scaffolds. Nature Nanotechnology, 2014, 9, 74-78.	31.5	417
7	Boosting Tunable Blue Luminescence of Halide Perovskite Nanoplatelets through Postsynthetic Surface Trap Repair. Nano Letters, 2018, 18, 5231-5238.	9.1	382
8	Carbon Dots: A Unique Fluorescent Cocktail of Polycyclic Aromatic Hydrocarbons. Nano Letters, 2015, 15, 6030-6035.	9.1	369
9	Challenges and Prospects in Solar Water Splitting and CO ₂ Reduction with Inorganic and Hybrid Nanostructures. ACS Catalysis, 2018, 8, 3602-3635.	11.2	365
10	All-in-one visible-light-driven water splitting by combining nanoparticulate and molecular co-catalysts on CdS nanorods. Nature Energy, 2018, 3, 862-869.	39.5	356
11	Tuning the Optical Properties of Perovskite Nanoplatelets through Composition and Thickness by Ligand-Assisted Exfoliation. Advanced Materials, 2016, 28, 9478-9485.	21.0	276
12	Exciton Recycling in Graded Gap Nanocrystal Structures. Nano Letters, 2004, 4, 1599-1603.	9.1	267
13	From Precursor Powders to CsPbX ₃ Perovskite Nanowires: One-Pot Synthesis, Growth Mechanism, and Oriented Self-Assembly. Angewandte Chemie - International Edition, 2017, 56, 13887-13892.	13.8	249
14	Urea-Modified Carbon Nitrides: Enhancing Photocatalytic Hydrogen Evolution by Rational Defect Engineering. Advanced Energy Materials, 2017, 7, 1602251.	19.5	238
15	Tracking the Source of Carbon Dot Photoluminescence: Aromatic Domains versus Molecular Fluorophores. Nano Letters, 2017, 17, 7710-7716.	9.1	236
16	Effect of nitrogen atom positioning on the trade-off between emissive and photocatalytic properties of carbon dots. Nature Communications, 2017, 8, 1401.	12.8	208
17	Energy transfer with semiconductor nanocrystals. Journal of Materials Chemistry, 2009, 19, 1208-1221.	6.7	204
18	Hole scavenger redox potentials determine quantum efficiency and stability of Pt-decorated CdS nanorods for photocatalytic hydrogen generation. Applied Physics Letters, 2012, 100, .	3.3	202

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19	Single gold nanostars enhance Raman scattering. <i>Applied Physics Letters</i> , 2009, 94, .	3.3	185
20	Colloidal CdS nanorods decorated with subnanometer sized Pt clusters for photocatalytic hydrogen generation. <i>Applied Physics Letters</i> , 2010, 97, .	3.3	176
21	Advances in Quantum-Confined Perovskite Nanocrystals for Optoelectronics. <i>Advanced Energy Materials</i> , 2017, 7, 1700267.	19.5	176
22	Spontaneous Self-Assembly of Perovskite Nanocrystals into Electronically Coupled Supercrystals: Toward Filling the Green Gap. <i>Advanced Materials</i> , 2018, 30, e1801117.	21.0	163
23	Light-Induced Cation Exchange for Copper Sulfide Based CO ₂ Reduction. <i>Journal of the American Chemical Society</i> , 2015, 137, 14007-14010.	13.7	132
24	Hybrid Colloidal Heterostructures of Anisotropic Semiconductor Nanocrystals Decorated with Noble Metals: Synthesis and Function. <i>Advanced Functional Materials</i> , 2011, 21, 1547-1556.	14.9	117
25	Identifying and Reducing Interfacial Losses to Enhance Color-Pure Electroluminescence in Blue-Emitting Perovskite Nanoplatelet Light-Emitting Diodes. <i>ACS Energy Letters</i> , 2019, 4, 1181-1188.	17.4	115
26	Electron Transfer Rate vs Recombination Losses in Photocatalytic H ₂ Generation on Pt-Decorated CdS Nanorods. <i>ACS Energy Letters</i> , 2016, 1, 1137-1142.	17.4	110
27	Oriented Thin Films of Electroactive Triphenylene Catecholate-Based Two-Dimensional Metal-Organic Frameworks. <i>ACS Nano</i> , 2019, 13, 6711-6719.	14.6	101
28	Spontaneous Crystallization of Perovskite Nanocrystals in Nonpolar Organic Solvents: A Versatile Approach for their Shape-Controlled Synthesis. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 16558-16562.	13.8	96
29	Accelerated Carrier Relaxation through Reduced Coulomb Screening in Two-Dimensional Halide Perovskite Nanoplatelets. <i>ACS Nano</i> , 2018, 12, 10151-10158.	14.6	89
30	Using Polar Alcohols for the Direct Synthesis of Cesium Lead Halide Perovskite Nanorods with Anisotropic Emission. <i>ACS Nano</i> , 2019, 13, 8237-8245.	14.6	84
31	Chemical Cutting of Perovskite Nanowires into Single-Photon Emissive Low-Aspect-Ratio CsPbX ₃ (X=Cl, Br, I) Nanorods. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 16094-16098.	13.8	79
32	Pyrite nanocrystals: shape-controlled synthesis and tunable optical properties via reversible self-assembly. <i>Journal of Materials Chemistry</i> , 2011, 21, 17946.	6.7	72
33	Templated-Assembly of CsPbBr ₃ Perovskite Nanocrystals into 2D Photonic Supercrystals with Amplified Spontaneous Emission. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 17750-17756.	13.8	72
34	Manganese-Doping-Induced Quantum Confinement within Host Perovskite Nanocrystals through Ruddlesden-Popper Defects. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 6794-6799.	13.8	72
35	Resonantly enhanced multiple exciton generation through below-band-gap multi-photon absorption in perovskite nanocrystals. <i>Nature Communications</i> , 2018, 9, 1518.	12.8	71
36	An Optically Controlled Microscale Elevator Using Plasmonic Janus Particles. <i>ACS Photonics</i> , 2015, 2, 491-496.	6.6	62

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37	Transfer of Direct to Indirect Bound Excitons by Electron Intervalley Scattering in Cs ₂ AgBiBr ₆ Double Perovskite Nanocrystals. ACS Nano, 2020, 14, 5855-5861.	14.6	58
38	Coherent vibrational dynamics reveals lattice anharmonicity in organic-inorganic halide perovskite nanocrystals. Nature Communications, 2021, 12, 2629.	12.8	58
39	Starke Lumineszenz in Nanokristallen aus Caesiumbleihalogenid-Perowskit mit durchstimmbarer Zusammensetzung und Dicke mittels Ultraschalldispersion. Angewandte Chemie, 2016, 128, 14091-14096.	2.0	54
40	Optical and Thermophoretic Control of Janus Nanoparticle Injection into Living Cells. Nano Letters, 2018, 18, 7935-7941.	9.1	54
41	Enhancing Single-Nanoparticle Surface-Chemistry by Plasmonic Overheating in an Optical Trap. Nano Letters, 2012, 12, 4647-4650.	9.1	51
42	Reversible control of current across lipid membranes by local heating. Scientific Reports, 2016, 6, 22686.	3.3	44
43	Tuning the optical bandgap in layered hybrid perovskites through variation of alkyl chain length. APL Materials, 2019, 7, .	5.1	43
44	Optical Nanoparticle Sorting Elucidates Synthesis of Plasmonic Nanotriangles. ACS Nano, 2016, 10, 3614-3621.	14.6	39
45	Spin Polarization Dynamics of Free Charge Carriers in CsPbI ₃ Nanocrystals. Nano Letters, 2020, 20, 4724-4730.	9.1	32
46	Quantum-Dot-Sensitized Solar Cells with Water-Soluble and Air-Stable PbS Quantum Dots. Journal of Physical Chemistry C, 2014, 118, 5142-5149.	3.1	31
47	Chemically Synthesized Carbon Nanorods with Dual Polarized Emission. ACS Nano, 2019, 13, 12024-12031.	14.6	31
48	Phase Behavior and Substitution Limit of Mixed Cesium-Formamidinium Lead Triiodide Perovskites. Chemistry of Materials, 2020, 32, 2282-2291.	6.7	30
49	Layer-by-layer depositions of polyelectrolyte/CdTe nanocrystal films controlled by electric fields. Journal of Materials Chemistry, 2002, 12, 1775-1778.	6.7	29
50	Cation exchange synthesis and optoelectronic properties of type II CdTe-Cu ₂ xTe nano-heterostructures. Journal of Materials Chemistry C, 2014, 2, 3189.	5.5	29
51	Migration of Constituent Protons in Hybrid Organic-Inorganic Perovskite Triggers Intrinsic Doping. Journal of the American Chemical Society, 2017, 139, 16462-16465.	13.7	29
52	Preferential Orientation of Crystals Induced by Incorporation of Organic Ligands in Mixed-Dimensional Hybrid Perovskite Films. Advanced Optical Materials, 2018, 6, 1701311.	7.3	28
53	Fast Electron and Slow Hole Relaxation in InP-Based Colloidal Quantum Dots. ACS Nano, 2019, 13, 14408-14415.	14.6	25
54	Interfacial Manganese Doping in CsPbBr ₃ Nanoplatelets by Employing a Molecular Shuttle. Angewandte Chemie - International Edition, 2022, 61, .	13.8	25

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55	Combined Optical and Chemical Control of a Microsized Photofueled Janus Particle. <i>Small</i> , 2016, 12, 2854-2858.	10.0	23
56	Exciton Diffusion Lengths and Dissociation Rates in CsPbBr ₃ Nanocrystal/Fullerene Composites: Layer-by-Layer versus Blend Structures. <i>Advanced Optical Materials</i> , 2019, 7, 1801776.	7.3	23
57	Photobase effect for just-in-time delivery in photocatalytic hydrogen generation. <i>Nature Communications</i> , 2020, 11, 5179.	12.8	23
58	Thickness-Dependence of Exciton/Exciton Annihilation in Halide Perovskite Nanoplatelets. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 5361-5366.	4.6	23
59	Time-Resolved Förster Energy Transfer from Individual Semiconductor Nanoantennae to Single Dye Molecules. <i>Journal of Physical Chemistry C</i> , 2007, 111, 11511-11515.	3.1	22
60	Optically Induced Coherent Phonons in Bismuth Oxide (BiOI) Nanoplatelets. <i>Nano Letters</i> , 2021, 21, 7887-7893.	9.1	22
61	Excitons and narrow bands determine the optical properties of cesium bismuth halides. <i>Physical Review B</i> , 2019, 100, .	3.2	21
62	Single molecule spectroscopy of oligofluorenes: how molecular length influences polymorphism. <i>Applied Physics A: Materials Science and Processing</i> , 2009, 95, 61-66.	2.3	20
63	Trans-membrane Fluorescence Enhancement by Carbon Dots: Ionic Interactions and Energy Transfer. <i>Nano Letters</i> , 2019, 19, 3886-3891.	9.1	18
64	Strong Band Gap Blueshift in Copper (I) Oxide Semiconductor via Bioinspired Route. <i>Advanced Functional Materials</i> , 2020, 30, 1910405.	14.9	17
65	Efficient energy transfer in layered hybrid organic/inorganic nanocomposites: A dual function of semiconductor nanocrystals. <i>Applied Physics Letters</i> , 2010, 96, 083109.	3.3	16
66	Photonic Crystal Nanocavities Containing Plasmonic Nanoparticles Assembled Using a Laser Printing Technique. <i>Advanced Optical Materials</i> , 2013, 1, 946-951.	7.3	16
67	Direct optical monitoring of flow generated by bacterial flagellar rotation. <i>Applied Physics Letters</i> , 2014, 104, 093701.	3.3	14
68	Real-Time Electron and Hole Transport Dynamics in Halide Perovskite Nanowires. <i>Nano Letters</i> , 2019, 19, 8701-8707.	9.1	14
69	Size Effects on Photocatalytic H ₂ Generation with CdSe/CdS Core-Shell Nanocrystals. <i>Zeitschrift Fur Physikalische Chemie</i> , 2015, 229, 205-219.	2.8	13
70	Strong Quantum Confinement Effects and Chiral Excitons in Bio-Inspired ZnO/Amino Acid Cocrystals. <i>Journal of Physical Chemistry C</i> , 2018, 122, 6348-6356.	3.1	13
71	Energetic disorder limits energy transfer in semiconductor nanocrystal/DNA dye conjugates. <i>Applied Physics Letters</i> , 2009, 95, 143101.	3.3	11
72	Bioinspired Molecular Bridging in a Hybrid Perovskite Leads to Enhanced Stability and Tunable Properties. <i>Advanced Functional Materials</i> , 2020, 30, 2005136.	14.9	10

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73	A Multi-Layer Device for Light-Triggered Hydrogen Production from Alkaline Methanol. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 26694-26701.	13.8	8
74	Mixed Mercaptocarboxylic Acid Shells Provide Stable Dispersions of InPZnS/ZnSe/ZnS Multishell Quantum Dots in Aqueous Media. <i>Nanomaterials</i> , 2020, 10, 1858.	4.1	6
75	Template-basierte Herstellung von 2D-photonischen Superkristallen mit verstärkter spontaner Emission aus CsPbBr ₃ Perowskit-Nanokristallen. <i>Angewandte Chemie</i> , 2020, 132, 17903-17909.	2.0	6
76	Facile Synthesis of FAPbI ₃ Nanorods. <i>Nanomaterials</i> , 2020, 10, 72.	4.1	5
77	Contactless and spatially structured cooling by directing thermal radiation. <i>Scientific Reports</i> , 2021, 11, 16209.	3.3	5
78	Disorder and Confinement Effects to Tune the Optical Properties of Amino Acid Doped Cu ₂ O Crystals. <i>Advanced Functional Materials</i> , 2022, 32, .	14.9	4
79	Analyzing the Movement of the Nauplius & Artemia salina; by Optical Tracking of Plasmonic Nanoparticles. <i>Journal of Visualized Experiments</i> , 2014, , .	0.3	3
80	Excessive Increase in the Optical Band Gap of Near-Infrared Semiconductor Lead (II) Sulfide via the Incorporation of Amino Acids. <i>Advanced Optical Materials</i> , 0, , 2200203.	7.3	3
81	Solution-grown CdTe nanowires: Self-assembly, optical properties and strong temperature dependent electronic coupling. , 2010, , .		1
82	Laser shooting single gold nanoparticles - a novel lithographic strategy. , 2011, , .		1
83	A Multi-Layer Device for Light-Triggered Hydrogen Production from Alkaline Methanol. <i>Angewandte Chemie</i> , 2021, 133, 26898-26905.	2.0	1
84	Optically Induced Coherent Phonons in Bismuth Oxide (BiOI) Nanoplatelets. , 0, , .		0
85	Spin Polarization Dynamics of Free Charge Carriers in CsPbI ₃ Nanocrystals. , 0, , .		0
86	Fast Electron and Slow Hole Relaxation in InP-Based Colloidal Quantum Dots. , 0, , .		0