

Marcus Scheele

List of Publications by Year in descending order

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63
papers

3,283
citations

257357

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65
all docs

65
docs citations

65
times ranked

5470
citing authors

#	ARTICLE	IF	CITATIONS
1	Colloidal Nanocrystals with Molecular Metal Chalcogenide Surface Ligands. <i>Science</i> , 2009, 324, 1417-1420.	6.0	962
2	Hydroxylation of the surface of PbS nanocrystals passivated with oleic acid. <i>Science</i> , 2014, 344, 1380-1384.	6.0	404
3	Synthesis and Thermoelectric Characterization of Bi ₂ Te ₃ Nanoparticles. <i>Advanced Functional Materials</i> , 2009, 19, 3476-3483.	7.8	308
4	Semiconductor Nanocrystals Functionalized with Antimony Telluride Zintl Ions for Nanostructured Thermoelectrics. <i>Journal of the American Chemical Society</i> , 2010, 132, 6686-6695.	6.6	149
5	Determination of the Quantum Dot Band Gap Dependence on Particle Size from Optical Absorbance and Transmission Electron Microscopy Measurements. <i>ACS Nano</i> , 2012, 6, 9021-9032.	7.3	138
6	Direct Work Function Measurement by Gas Phase Photoelectron Spectroscopy and Its Application on PbS Nanoparticles. <i>Nano Letters</i> , 2013, 13, 6176-6182.	4.5	128
7	ZT Enhancement in Solution-Grown Sb ₂ (<i>x</i>)Bi _{<i>x</i>} Te ₃ Nanoplatelets. <i>ACS Nano</i> , 2010, 4, 4283-4291.	7.3	122
8	Solution-Processed Two-Dimensional Ultrathin InSe Nanosheets. <i>Chemistry of Materials</i> , 2016, 28, 1728-1736.	3.2	113
9	Thermoelectric Properties of Lead Chalcogenide Core-Shell Nanostructures. <i>ACS Nano</i> , 2011, 5, 8541-8551.	7.3	108
10	Efficient Redox Isomerization of Allylic Alcohols under Mild Conditions Catalyzed by Arene-Ruthenium(II) Complexes. <i>Organometallics</i> , 2006, 25, 4846-4849.	1.1	63
11	Quantifying Angular Correlations between the Atomic Lattice and the Superlattice of Nanocrystals Assembled with Directional Linking. <i>Nano Letters</i> , 2017, 17, 3511-3517.	4.5	47
12	Coupled organic-inorganic nanostructures (COIN). <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 97-111.	1.3	45
13	Probing the Interaction of Single Nanocrystals with Inorganic Capping Ligands: Time-Resolved Fluorescence from CdSe-CdS Quantum Dots Capped with Chalcogenidometalates. <i>Journal of the American Chemical Society</i> , 2012, 134, 18366-18373.	6.6	44
14	PbS Nanoparticles Capped with Tetrathiafulvalenetetracarboxylate: Utilizing Energy Level Alignment for Efficient Carrier Transport. <i>ACS Nano</i> , 2014, 8, 2532-2540.	7.3	41
15	Prospects of Coupled Organic-Inorganic Nanostructures for Charge and Energy Transfer Applications. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 1152-1175.	7.2	39
16	Phosphine-Stabilized Digermavinylidene. <i>Journal of the American Chemical Society</i> , 2019, 141, 3424-3429.	6.6	34
17	Structure, transport and photoconductance of PbS quantum dot monolayers functionalized with a copper phthalocyanine derivative. <i>Chemical Communications</i> , 2017, 53, 1700-1703.	2.2	33
18	Monitoring Self-Assembly and Ligand Exchange of PbS Nanocrystal Superlattices at the Liquid/Air Interface in Real Time. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 739-744.	2.1	33

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19	Nonmonotonic Size Dependence in the Hole Mobility of Methoxide-Stabilized PbSe Quantum Dot Solids. <i>ACS Nano</i> , 2013, 7, 6774-6781.	7.3	32
20	Toward Conductive Mesocrystalline Assemblies: PbS Nanocrystals Cross-Linked with Tetrathiafulvalene Dicarboxylate. <i>Chemistry of Materials</i> , 2015, 27, 8105-8115.	3.2	32
21	Structural order enhances charge carrier transport in self-assembled Au-nanoclusters. <i>Nature Communications</i> , 2020, 11, 6188.	5.8	32
22	Site-Specific Ligand Interactions Favor the Tetragonal Distortion of PbS Nanocrystal Superlattices. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 22526-22533.	4.0	31
23	Chiral phosphonite, phosphite and phosphoramidite $\hat{1}$ -6-arene-ruthenium(ii) complexes: application to the kinetic resolution of allylic alcohols. <i>Dalton Transactions</i> , 2010, 39, 7780.	1.6	27
24	Revealing Grain Boundaries and Defect Formation in Nanocrystal Superlattices by Nanodiffraction. <i>Small</i> , 2019, 15, e1904954.	5.2	26
25	Angular X-ray Cross-Correlation Analysis (AXCCA): Basic Concepts and Recent Applications to Soft Matter and Nanomaterials. <i>Materials</i> , 2019, 12, 3464.	1.3	20
26	Structure-Transport Correlation Reveals Anisotropic Charge Transport in Coupled PbS Nanocrystal Superlattices. <i>Advanced Materials</i> , 2020, 32, 2002254.	11.1	19
27	To Be or not to Be: Band-Like Transport in Quantum Dot Solids. <i>Zeitschrift Fur Physikalische Chemie</i> , 2015, 229, 167-178.	1.4	18
28	The role of the density of interface states in interfacial energy level alignment of PTCDA. <i>Organic Electronics</i> , 2017, 49, 249-254.	1.4	18
29	Spatially resolved fluorescence of caesium lead halide perovskite supercrystals reveals quasi-atomic behavior of nanocrystals. <i>Nature Communications</i> , 2022, 13, 892.	5.8	15
30	Surface Functionalization with Copper Tetraaminophthalocyanine Enables Efficient Charge Transport in Indium Tin Oxide Nanocrystal Thin Films. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 14197-14206.	4.0	14
31	Understanding the Formation of Conductive Mesocrystalline Superlattices with Cubic PbS Nanocrystals at the Liquid/Air Interface. <i>Journal of Physical Chemistry C</i> , 2019, 123, 1519-1526.	1.5	14
32	Ultrafast Charge Transfer and Upconversion in Zinc $\hat{1}$ -tetraaminophthalocyanine-Functionalized PbS Nanostructures Probed by Transient Absorption Spectroscopy. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 14061-14065.	7.2	12
33	Electron-Conducting PbS Nanocrystal Superlattices with Long-Range Order Enabled by Terthiophene Molecular Linkers. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 24708-24714.	4.0	12
34	Dye-Sensitized Ternary Copper Chalcogenide Nanocrystals: Optoelectronic Properties, Air Stability, and Photosensitivity. <i>Chemistry of Materials</i> , 2019, 31, 2443-2449.	3.2	12
35	Tunable Charge Transport in Hybrid Superlattices of Indium Tin Oxide Nanocrystals and Metal Phthalocyanines- Toward Sensing Applications. <i>Advanced Materials Interfaces</i> , 2018, 5, 1701623.	1.9	11
36	Substrate Effects on the Bandwidth of CdSe Quantum Dot Photodetectors. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 47954-47961.	4.0	10

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37	Opportunities and challenges for electrochemistry in studying the electronic structure of nanocrystals. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 8992-9001.	1.3	9
38	Sub-nanosecond Intrinsic Response Time of PbS Nanocrystal IR-Photodetectors. <i>Nano Letters</i> , 2022, 22, 2809-2816.	4.5	9
39	Quantum Efficiency Enhancement of Lead-Halide Perovskite Nanocrystal LEDs by Organic Lithium Salt Treatment. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 28985-28996.	4.0	9
40	Revealing Structure and Crystallographic Orientation of Soft Epitaxial Assembly of Nanocrystals by Grazing Incidence X-ray Scattering. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 6324-6330.	2.1	8
41	Correlated, Dual-Beam Optical Gating in Coupled Organic-Inorganic Nanostructures. <i>Angewandte Chemie</i> , 2018, 130, 11733-11737.	1.6	7
42	Electronically Coupled, Two-Dimensional Assembly of Cu _{1.1} S Nanodiscs for Selective Vapor Sensing Applications. <i>Journal of Physical Chemistry C</i> , 2018, 122, 23720-23727.	1.5	7
43	Correlated, Dual-Beam Optical Gating in Coupled Organic-Inorganic Nanostructures. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 11559-11563.	7.2	7
44	Fast, Infrared-Active Optical Transistors Based on Dye-Sensitized CdSe Nanocrystals. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 48271-48280.	4.0	7
45	Ultrafast Charge Transfer and Upconversion in Zinc Tetraaminophthalocyanine-Functionalized PbS Nanostructures Probed by Transient Absorption Spectroscopy. <i>Angewandte Chemie</i> , 2017, 129, 14249-14253.	1.6	6
46	Heteroatom Cycloaddition at the (BN) ₂ Bay Region of Dibenzoperylene. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 15798-15802.	7.2	6
47	Emergent properties in supercrystals of atomically precise nanoclusters and colloidal nanocrystals. <i>Chemical Communications</i> , 2022, 58, 6998-7017.	2.2	6
48	Towards Photo-Switchable Transport in Quantum Dot Solids. <i>Zeitschrift Fur Physikalische Chemie</i> , 2017, 231, 135-146.	1.4	4
49	Simultaneous positive and negative optical patterning with dye-sensitized CdSe quantum dots. <i>Journal of Chemical Physics</i> , 2019, 151, 141102.	1.2	4
50	Fabrication of nanocrystal superlattice microchannels by soft-lithography for electronic measurements of single-crystalline domains. <i>Nanotechnology</i> , 2020, 31, 405302.	1.3	4
51	Periodic Fluorescence Variations of CdSe Quantum Dots Coupled to Aryleneethynyls with Aggregation-Induced Emission. <i>ACS Nano</i> , 2021, 15, 480-488.	7.3	4
52	Evidence for Photo-Switchable Carrier Mobilities in Blends of PbS Nanocrystals and Photochromic Dithienylcyclopentene Derivatives. <i>Zeitschrift Fur Physikalische Chemie</i> , 2018, 232, 1369-1381.	1.4	3
53	<i>In situ</i> formation of electronically coupled superlattices of Cu _{1.1} S nanodiscs at the liquid/air interface. <i>Chemical Communications</i> , 2019, 55, 4805-4808.	2.2	3
54	A neutron scattering perspective on the structure, softness and dynamics of the ligand shell of PbS nanocrystals in solution. <i>Chemical Science</i> , 2020, 11, 8875-8884.	3.7	3

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55	Heteroatom Cycloaddition at the (BN) 2 Bay Region of Dibenzoperylene. <i>Angewandte Chemie</i> , 2021, 133, 15932-15936.	1.6	3
56	Mitigating the photodegradation of all-inorganic mixed-halide perovskite nanocrystals by ligand exchange. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 10944-10951.	1.3	3
57	Porphyrin Functionalization of CsPbBr ₂ /SiO ₂ Core-Shell Nanocrystals Enhances the Stability and Efficiency in Electroluminescent Devices. <i>Advanced Optical Materials</i> , 2022, 10, 2101945.	3.6	2
58	Perspektiven gekoppelter organisch-änonorganischer Nanostrukturen für Ladungs- und Energietransferanwendungen. <i>Angewandte Chemie</i> , 2021, 133, 1168-1194.	1.6	1
59	Coupled Organic-Inorganic Nanostructures with Mixed Organic Linker Molecules. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 37483-37493.	4.0	1
60	Short-range organization and photophysical properties of CdSe quantum dots coupled with aryleneethynylenes. <i>Nanotechnology</i> , 2022, 33, 230001.	1.3	1
61	Colloidal nanostructures as building blocks for macroscopic thermoelectric materials with electron-crystal phonon-glass properties. <i>Materials Research Society Symposia Proceedings</i> , 2010, 1267, 1.	0.1	0
62	Chemiresistive Properties of a Novel Composite Comprised of ITO-Nanoparticles and 1,8-Diaminooctane. <i>Proceedings (mdpi)</i> , 2018, 2, .	0.2	0
63	The Devil is in the Details: Tailoring the Surface Chemistry of Perovskite Nanocrystals for Novel Optoelectronic Devices. , 0, , .		0