Sarbajit Banerjee

List of Publications by Year
in descending order

239 papers	10,190 citations	26610 56 h-index	43868 91 g-index
245 all docs	245 docs citations	245 times ranked	12780 citing authors

#	Article	IF	Citations
1	Zeta-Potential Measurements of Surfactant-Wrapped Individual Single-Walled Carbon Nanotubes. Journal of Physical Chemistry C, 2007, 111, 13684-13690.	1.5	348
2	Synthesis and Characterization of Carbon Nanotubeâˆ’Nanocrystal Heterostructures. Nano Letters, 2002, 2, 195-200.	4.5	343
3	Rational Chemical Strategies for Carbon Nanotube Functionalization. Chemistry - A European Journal, 2003, 9, 1898-1908.	1.7	299
4	Large-Scale Synthesis of Single-Crystalline Perovskite Nanostructures. Journal of the American Chemical Society, 2003, 125, 15718-15719.	6.6	281
5	Large-Area Chemically Modified Graphene Films: Electrophoretic Deposition and Characterization by Soft X-ray Absorption Spectroscopy. Chemistry of Materials, 2009, 21, 3905-3916.	3.2	265
6	Humic Acid-Induced Silver Nanoparticle Formation Under Environmentally Relevant Conditions. Environmental Science & Technology, 2011, 45, 3895-3901.	4.6	265
7	Rational Sidewall Functionalization and Purification of Single-Walled Carbon Nanotubes by Solution-Phase Ozonolysis. Journal of Physical Chemistry B, 2002, 106, 12144-12151.	1.2	228
8	Formation of Magnesium Dendrites during Electrodeposition. ACS Energy Letters, 2019, 4, 375-376.	8.8	221
9	Purification strategies and purity visualization techniques for single-walled carbon nanotubes. Journal of Materials Chemistry, 2006, 16, 141-154.	6.7	210
10	Depressed Phase Transition in Solution-Grown VO₂ Nanostructures. Journal of the American Chemical Society, 2009, 131, 8884-8894.	6.6	194
11	In Situ Quantum Dot Growth on Multiwalled Carbon Nanotubes. Journal of the American Chemical Society, 2003, 125, 10342-10350.	6.6	164
12	Structural Characterization, Optical Properties, and Improved Solubility of Carbon Nanotubes Functionalized with Wilkinson's Catalyst. Journal of the American Chemical Society, 2002, 124, 8940-8948.	6.6	162
13	Ligand Control of Growth, Morphology, and Capping Structure of Colloidal CdSe Nanorods. Chemistry of Materials, 2007, 19, 2573-2580.	3.2	159
14	Hydrothermal synthesis of perovskite nanotubesElectronic supplementary information (ESI) available: energy-dispersive X-ray spectroscopy (EDAX) of the TiO2, BaTiO3 and SrTiO3 nanotubes: (a) TiO2, (b) BaTiO3 and (c) SrTiO3. See http://www.rsc.org/suppdata/cc/b2/b210633g/. Chemical Communications, 2003, , 408-409.	2.2	157
15	Interactions of Aqueous Ag⁺ with Fulvic Acids: Mechanisms of Silver Nanoparticle Formation and Investigation of Stability. Environmental Science & Technology, 2013, 47, 757-764.	4.6	156
16	Near-Edge X-ray Absorption Fine Structure Spectroscopy as a Tool for Investigating Nanomaterials. Small, 2006, 2, 26-35.	5.2	152
17	Microscopic and Nanoscale Perspective of the Metalâˆ’Insulator Phase Transitions of VO₂: Some New Twists to an Old Tale. Journal of Physical Chemistry Letters, 2011, 2, 745-758.	2.1	139
18	Selective Metallic Tube Reactivity in the Solution-Phase Osmylation of Single-Walled Carbon Nanotubes. Journal of the American Chemical Society, 2004, 126, 2073-2081.	6.6	137

#	Article	IF	Citations
19	Solubilization of Oxidized Single-Walled Carbon Nanotubes in Organic and Aqueous Solvents through Organic Derivatization. Nano Letters, 2002, 2, 1215-1218.	4.5	131
20	Functionalization of Carbon Nanotubes with a Metal-Containing Molecular Complex. Nano Letters, 2002, 2, 49-53.	4.5	130
21	Reversible Mg-Ion Insertion in a Metastable One-Dimensional Polymorph of V2O5. CheM, 2018, 4, 564-585.	5.8	126
22	Barium titanate nanocrystals and nanocrystal thin films: Synthesis, ferroelectricity, and dielectric properties. Journal of Applied Physics, 2006, 100, 034316.	1.1	120
23	Distinctive finite size effects on the phase diagram and metalâ€“insulator transitions of tungsten-doped vanadium(iv) oxide. Journal of Materials Chemistry, 2011, 21, 5580.	6.7	120
24	Mapping polaronic states and lithiation gradients in individual V2O5 nanowires. Nature Communications, 2016, 7, 12022.	5.8	115
25	Imaging local electronic corrugations and doped regions in graphene. Nature Communications, 2011, 2, 372.	5.8	111
26	Demonstration of Diameter-Selective Reactivity in the Sidewall Ozonation of SWNTs by Resonance Raman Spectroscopy. Nano Letters, 2004, 4, 1445-1450.	4.5	99
27	Ligand-Mediated Modulation of Layer Thicknesses of Perovskite Methylammonium Lead Bromide Nanoplatelets. Chemistry of Materials, 2016, 28, 6909-6916.	3.2	89
28	Ozonized single-walled carbon nanotubes investigated using NEXAFS spectroscopyElectronic supplementary information (ESI) available: experimental details of NEXAFS measurements and data processing. See http://www.rsc.org/suppdata/cc/b3/b315390h/. Chemical Communications, 2004, , 772.	2.2	85
29	The effects of monovalent and divalent cations on the stability of silver nanoparticles formed from direct reduction of silver ions by Suwannee River humic acid/natural organic matter. Science of the Total Environment, 2012, 441, 277-289.	3.9	85
30	Topochemically De-Intercalated Phases of V₂O₅ as Cathode Materials for Multivalent Intercalation Batteries: A First-Principles Evaluation. Chemistry of Materials, 2016, 28, 5611-5620.	3.2	84
31	Finite size effects on the structural progression induced by lithiation of V2O5: a combined diffraction and Raman spectroscopy study. Journal of Materials Chemistry A, 2013, 1, 15265.	5.2	80
32	Defining Diffusion Pathways in Intercalation Cathode Materials: Some Lessons from V₂O₅ on Directing Cation Traffic. ACS Energy Letters, 2018, 3, 915-931.	8.8	79
33	Mapping mechanisms and growth regimes of magnesium electrodeposition at high current densities. Materials Horizons, 2020, 7, 843-854.	6.4	77
34	Near-Edge X-ray Absorption Fine Structure Investigations of Order in Carbon Nanotube-Based Systemsâ€. Journal of Physical Chemistry B, 2005, 109, 8489-8495.	1.2	76
35	An electronic structure perspective of graphene interfaces. Nanoscale, 2014, 6, 3444.	2.8	76
36	Transformers: the changing phases of low-dimensional vanadium oxide bronzes. Chemical Communications, 2015, 51, 5181-5198.	2.2	75

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37	Traversing Energy Landscapes Away from Equilibrium: Strategies for Accessing and Utilizing Metastable Phase Space. Journal of Physical Chemistry C, 2018, 122, 25709-25728.	1.5	75
38	Surface Chemistry and Structure of Purified, Ozonized, Multiwalled Carbon Nanotubes Probed by NEXAFS and Vibrational Spectroscopies. ChemPhysChem, 2004, 5, 1416-1422.	1.0	73
39	Observation of Fano asymmetry in Raman spectra of SrTiO3 and CaxSr1â^'xTiO3 perovskite nanocubes. Applied Physics Letters, 2006, 89, 223130.	1.5	72
40	Elucidating the Influence of Local Structure Perturbations on the Metalâ€"Insulator Transitions of V_{1â€"<i>x</i>}Mo_{<i>x</i>}O₂ Nanowires: Mechanistic Insights from an X-ray Absorption Spectroscopy Study. Journal of Physical Chemistry C, 2012, 116, 3728-3736.	1.5	66
41	Influence of ligand shell ordering on dimensional confinement of cesium lead bromide (CsPbBr₃) perovskite nanoplatelets. Journal of Materials Chemistry C, 2017, 5, 8810-8818.	2.7	66
42	Soft X-ray Absorption Spectroscopy Studies of the Electronic Structure Recovery of Graphene Oxide upon Chemical Defunctionalization. Journal of Physical Chemistry C, 2012, 116, 20591-20599.	1.5	65
43	Evaluation of Multivalent Cation Insertion in Single- and Double-Layered Polymorphs of V₂O₅. ACS Applied Materials & Interfaces, 2017, 9, 23756-23765.	4.0	64
44	Effectiveness of zinc oxide-assisted photocatalysis for concerned constituents in reclaimed wastewater: 1,4-Dioxane, trihalomethanes, antibiotics, antibiotic resistant bacteria (ARB), and antibiotic resistance genes (ARGs). Science of the Total Environment, 2019, 649, 1189-1197.	3.9	64
45	Precise positioning of single-walled carbon nanotubes by ac dielectrophoresis. Journal of Vacuum Science & Technology B, 2006, 24, 3173.	1.3	62
46	Natural Organic Matter-Mediated Phase Transfer of Quantum Dots in the Aquatic Environment. Environmental Science & Technology, 2009, 43, 677-682.	4.6	62
47	Hybrid nanostructured coatings for corrosion protection of base metals: a sustainability perspective. Materials Research Express, 2015, 2, 032001.	0.8	62
48	Near Edge X-ray Absorption Fine Structure Spectroscopy Studies of Single-Crystalline V₂O₅ Nanowire Arrays. Journal of Physical Chemistry C, 2009, 113, 7639-7645.	1.5	60
49	VO2 nanosheets exhibiting a well-defined metalâ€"insulator phase transition. Journal of Materials Chemistry, 2009, 19, 2968.	6.7	60
50	Substrate Hybridization and Rippling of Graphene Evidenced by Near-Edge X-ray Absorption Fine Structure Spectroscopy. Journal of Physical Chemistry Letters, 2010, 1, 1247-1253.	2.1	60
51	X-ray absorption spectroscopy studies of electronic structure recovery and nitrogen local structure upon thermal reduction of graphene oxide in an ammonia environment. RSC Advances, 2014, 4, 634-644.	1.7	60
52	An in Situ Sulfidation Approach for the Integration of MoS₂ Nanosheets on Carbon Fiber Paper and the Modulation of Its Electrocatalytic Activity by Interfacing with <i>n</i>C₆₀. ACS Catalysis, 2016, 6, 6246-6254.	5.5	60
53	Shape-Controlled Synthesis of Well-Defined Matlockite LnOCl (Ln: La, Ce, Gd, Dy) Nanocrystals by a Novel Non-Hydrolytic Approach. Inorganic Chemistry, 2011, 50, 5539-5544.	1.9	59
54	On chemical bonding and electronic structure of grapheneâ€"metal contacts. Chemical Science, 2013, 4, 494-502.	3.7	59

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55	Real-time atomistic observation of structural phase transformations in individual hafnia nanorods. Nature Communications, 2017, 8, 15316.	5.8	59
56	Mechanism of the Electrophoretic Deposition of CdSe Nanocrystal Films:â€‰ Influence of the Nanocrystal Surface and Charge. Journal of Physical Chemistry C, 2008, 112, 162-171.	1.5	58
57	Temperature and voltage driven tunable metal-insulator transition in individual<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mi mathvariant="normal">W</mml:mi><mml:mrow><mml:mi>x</mml:mi></mml:mrow></mml:msub></mml:mrow></mml:math>V<mml:m xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow /><mml:mrow><mml:mn>1</mml:mn><mml:mo>â^'</mml:mo><mml:mi>x</mml:mi></mml:mrow></mml:msub></mml:mrow></mml:m	1.1	53
58	Atomic Origins of Monoclinic-Tetragonal (Rutile) Phase Transition in Doped VO₂ Nanowires. Nano Letters, 2015, 15, 7179-7188.	4.5	52
59	Vanadium K-Edge X-ray Absorption Spectroscopy as a Probe of the Heterogeneous Lithiation of V₂O₅: First-Principles Modeling and Principal Component Analysis. Journal of Physical Chemistry C, 2016, 120, 23922-23932.	1.5	52
60	Graphene oxide and functionalized multi walled carbon nanotubes as epoxy curing agents: a novel synthetic approach to nanocomposites containing active nanostructured fillers. RSC Advances, 2014, 4, 49264-49272.	1.7	51
61	Catalytic Growth of Singleâ€Crystalline V₂O₅ Nanowire Arrays. Small, 2009, 5, 1025-1029.	5.2	50
62	Inside and Outside: X-ray Absorption Spectroscopy Mapping of Chemical Domains in Graphene Oxide. Journal of Physical Chemistry Letters, 2013, 4, 3144-3151.	2.1	48
63	Scalable Hydrothermal Synthesis of Free-Standing VO₂ Nanowires in the M1 Phase. ACS Applied Materials & Interfaces, 2014, 6, 15726-15732.	4.0	48
64	Routes Towards Separating Metallic and Semiconducting Nanotubes. Journal of Nanoscience and Nanotechnology, 2005, 5, 841-855.	0.9	47
65	Mechanistic Evaluation of Li_{<i>x</i>}O_{<i>y</i>} Formation on Î´-MnO₂ in Nonaqueous Liâ€"Air Batteries. ACS Applied Materials & Interfaces, 2016, 8, 23028-23036.	4.0	46
66	Grapheneâ€"ferromagnet interfaces: hybridization, magnetization and charge transfer. Nanoscale, 2013, 5, 1902.	2.8	45
67	Synthesis, Structural Characterization, and Electronic Structure of Single-Crystalline CuxV2O5 Nanowires. Inorganic Chemistry, 2009, 48, 3145-3152.	1.9	44
68	Designing catalysts for water splitting based on electronic structure considerations. Electronic Structure, 2020, 2, 023001.	1.0	43
69	Single-Nanowire Raman Microprobe Studies of Doping-, Temperature-, and Voltage-Induced Metalâ€"Insulator Transitions of W_{<i>x</i>}V_{1â€"<i>x</i>}O₂ Nanowires. ACS Nano, 2011, 5, 8861-8867.	7.3	42
70	Emptying and filling a tunnel bronze. Chemical Science, 2015, 6, 1712-1718.	3.7	42
71	Elucidating the Mechanistic Origins of Photocatalytic Hydrogen Evolution Mediated by MoS₂/CdS Quantum-Dot Heterostructures. ACS Applied Materials & Interfaces, 2020, 12, 43728-43740.	4.0	42
72	Synthesis, Spectroscopic Characterization, and Observation of Massive Metalâ€"Insulator Transitions in Nanowires of a Nonstoichiometric Vanadium Oxide Bronze. Nano Letters, 2010, 10, 2448-2453.	4.5	41

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73	Mapping the electrocatalytic activity of MoS₂ across its amorphous to crystalline transition. Journal of Materials Chemistry A, 2017, 5, 5129-5141.	5.2	41
74	Viscoplastic and Granular Behavior in Films of Colloidal Nanocrystals. Physical Review Letters, 2007, 98, 026103.	2.9	40
75	Machine Learning-Directed Navigation of Synthetic Design Space: A Statistical Learning Approach to Controlling the Synthesis of Perovskite Halide Nanoplatelets in the Quantum-Confined Regime. Chemistry of Materials, 2019, 31, 3281-3292.	3.2	40
76	An X-ray Absorption Spectroscopy Study of the Cathodic Discharge of Ag₂VO₂PO₄: Geometric and Electronic Structure Characterization of Intermediate phases and Mechanistic Insights. Journal of Physical Chemistry C, 2011, 115, 14437-14447.	1.5	39
77	Mapping Catalytically Relevant Edge Electronic States of MoS₂. ACS Central Science, 2018, 4, 493-503.	5.3	39
78	Ligand-Directed Stabilization of Ternary Phases: Synthetic Control of Structural Dimensionality in Solution-Grown Cesium Lead Bromide Nanocrystals. Chemistry of Materials, 2018, 30, 6144-6155.	3.2	39
79	Building Brain-Inspired Logic Circuits from Dynamically Switchable Transition-Metal Oxides. Trends in Chemistry, 2019, 1, 711-726.	4.4	39
80	Investigating the structure of boron nitride nanotubes by near-edge X-ray absorption fine structure (NEXAFS) spectroscopy. Physical Chemistry Chemical Physics, 2005, 7, 1103.	1.3	38
81	Postsynthetic Route for Modifying the Metalâ€"Insulator Transition of VO₂ by Interstitial Dopant Incorporation. Chemistry of Materials, 2017, 29, 5401-5412.	3.2	36
82	Effect of crystallite geometries on electrochemical performance of porous intercalation electrodes by multiscale operando investigation. Nature Materials, 2022, 21, 217-227.	13.3	35
83	Raman Microprobe Analysis of Elastic Strain and Fracture in Electrophoretically Deposited CdSe Nanocrystal Films. Nano Letters, 2006, 6, 175-180.	4.5	34
84	Near-edge x-ray absorption fine structure spectroscopy study of nitrogen incorporation in chemically reduced graphene oxide. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2013, 31, .	0.6	33
85	Hole Extraction by Design in Photocatalytic Architectures Interfacing CdSe Quantum Dots with Topochemically Stabilized Tin Vanadium Oxide. Journal of the American Chemical Society, 2018, 140, 17163-17174.	6.6	33
86	Contrasting 1D tunnel-structured and 2D layered polymorphs of V₂O₅: relating crystal structure and bonding to band gaps and electronic structure. Physical Chemistry Chemical Physics, 2016, 18, 15798-15806.	1.3	32
87	Differences in Soil Mobility and Degradability between Water-Dispersible CdSe and CdSe/ZnS Quantum Dots. Environmental Science & Technology, 2011, 45, 6343-6349.	4.6	31
88	From Grignard's reagents to well-defined Mg nanostructures: distinctive electrochemical and solution reduction routes. Chemical Communications, 2012, 48, 5169.	2.2	30
89	Hybrid Nanocomposite Films Comprising Dispersed VO₂ Nanocrystals: A Scalable Aqueous-Phase Route to Thermochromic Fenestration. ACS Applied Materials & Interfaces, 2017, 9, 38887-38900.	4.0	30
90	Interactions of Lanthanide Complexes with Oxidized Single-Walled Carbon Nanotubes. Chemistry of Materials, 2004, 16, 1855-1863.	3.2	29

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91	A VO-seeded approach for the growth of star-shaped VO2 and V2O5 nanocrystals: facile synthesis, structural characterization, and elucidation of electronic structure. CrystEngComm, 2011, 13, 5328.	1.3	29
92	In situ near-edge x-ray absorption fine structure spectroscopy investigation of the thermal defunctionalization of graphene oxide. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2012, 30, 061206.	0.6	29
93	Ferroelastic Domain Organization and Precursor Control of Size in Solution-Grown Hafnium Dioxide Nanorods. ACS Nano, 2014, 8, 4678-4688.	7.3	29
94	Stabilizing metastable tetragonal HfO₂ using a non-hydrolytic solution-phase route: ligand exchange as a means of controlling particle size. Chemical Science, 2016, 7, 4930-4939.	3.7	29
95	The Middle Road Less Taken: Electronic-Structure-Inspired Design of Hybrid Photocatalytic Platforms for Solar Fuel Generation. Accounts of Chemical Research, 2019, 52, 645-655.	7.6	29
96	Nonhydrolytic Synthesis and Electronic Structure of Ligand-Capped CeO2âˆ’Î´ and CeOCl Nanocrystals. Journal of Physical Chemistry C, 2009, 113, 14126-14134.	1.5	28
97	Charge Disproportionation and Voltageâ€Induced Metalâ€“Insulator Transitions Evidenced in Î²â€Pb_{<i>x</i>}V₂O₅ Nanowires. Advanced Functional Materials, 2013, 23, 153-160.	7.8	28
98	Partitioning of hydrophobic CdSe quantum dots into aqueous dispersions of humic substances: Influence of capping-group functionality on the phase-transfer mechanism. Journal of Colloid and Interface Science, 2010, 348, 119-128.	5.0	27
99	Colossal above-room-temperature metalâ€“insulator switching of a Wadsley-type tunnel bronze. Chemical Communications, 2011, 47, 4484.	2.2	27
100	Orthogonal Wettability of Hierarchically Textured Metal Meshes as a Means of Separating Water/Oil Emulsions. Advanced Engineering Materials, 2017, 19, 1600808.	1.6	27
101	Tortuosity but Not Percolation: Design of Exfoliated Graphite Nanocomposite Coatings for Extended Corrosion Protection of Aluminum Alloys. ACS Applied Nano Materials, 2019, 2, 3100-3116.	2.4	27
102	Effective Piezoelectric Response of Substrate-Integrated ZnO Nanowire Array Devices on Galvanized Steel. ACS Applied Materials & Interfaces, 2013, 5, 10650-10657.	4.0	26
103	Lithiation across interconnected V₂O₅ nanoparticle networks. Journal of Materials Chemistry A, 2017, 5, 20141-20152.	5.2	26
104	In-situ measurements of stress evolution in composite sulfur cathodes. Energy Storage Materials, 2019, 16, 491-497.	9.5	26
105	In situ Resource Utilization and Reconfiguration of Soils Into Construction Materials for the Additive Manufacturing of Buildings. Frontiers in Materials, 2020, 7, .	1.2	26
106	Carbon nanotube/carbon nanofiber growth from industrial by-product gases on low- and high-alloy steels. Carbon, 2012, 50, 4722-4731.	5.4	25
107	Directional Charge Transfer Mediated by Mid-Gap States: A Transient Absorption Spectroscopy Study of CdSe Quantum Dot/Î²-Pb_{0.33}V₂O₅ Heterostructures. Journal of Physical Chemistry C, 2016, 120, 5221-5232.	1.5	25
108	Two-Dimensional Graphene as a Matrix for MALDI Imaging Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2015, 26, 1963-1966.	1.2	24

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109	Modeling of phase separation across interconnected electrode particles in lithium-ion batteries. RSC Advances, 2017, 7, 41254-41264.	1.7	24
110	Mitigating Cation Diffusion Limitations and Intercalation-Induced Framework Transitions in a 1D Tunnel-Structured Polymorph of V₂O₅. Chemistry of Materials, 2017, 29, 10386-10397.	3.2	24
111	Chemo-mechanical degradation in V₂O₅ thin film cathodes of Li-ion batteries during electrochemical cycling. Journal of Materials Chemistry A, 2019, 7, 23922-23930.	5.2	24
112	Navigating the design space of inorganic materials synthesis using statistical methods and machine learning. Dalton Transactions, 2020, 49, 11480-11488.	1.6	24
113	A full palette: Crystal chemistry, polymorphism, synthetic strategies, and functional applications of lanthanide oxyhalides. Journal of Solid State Chemistry, 2019, 270, 569-592.	1.4	23
114	Atomic Hourglass and Thermometer Based on Diffusion of a Mobile Dopant in VO₂. Journal of the American Chemical Society, 2020, 142, 15513-15526.	6.6	23
115	Selective electrochemical reactivity of rutile<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>VO</mml:mi><mml:mn>2</mml:mn></mml:msub></m the suppression of metal-insulator transition. Physical Review B, 2016, 93, .	1.1	22
116	Alkoxy functionalized benzothiadiazole based donorâ€“acceptor conjugated copolymers for organic field-effect transistors. Journal of Materials Chemistry C, 2021, 9, 5113-5123.	2.7	22
117	Effects of ozonolysis and subsequent growth of quantum dots on the electrical properties of freestanding single-walled carbon nanotube films. Chemical Physics Letters, 2007, 442, 354-359.	1.2	21
118	Reversible Interconversion of a Divalent Vanadium Bronze between Î´ and Î² Quasi-1D Structures. Inorganic Chemistry, 2012, 51, 5264-5269.	1.9	21
119	Oriented Electrophoretic Deposition of GdOCl Nanoplatelets. Journal of Physical Chemistry B, 2013, 117, 1585-1591.	1.2	21
120	Functionalized Tetrapodal ZnO Membranes Exhibiting Superoleophobic and Superhydrophilic Character for Water/Oil Separation Based on Differential Wettability. Energy & Fuels, 2019, 33, 5024-5034.	2.5	21
121	Imperfect surface order and functionalization in vertical carbon nanotube arrays probed by near edge X-ray absorption fine structure spectroscopy (NEXAFS). Physical Chemistry Chemical Physics, 2006, 8, 5038.	1.3	20
122	AOT dispersed single-walled carbon nanotubes for transistor device application. Materials Letters, 2008, 62, 843-845.	1.3	20
123	Controlled dielectrophoretic assembly of carbon nanotubes using real-time electrical detection. Applied Physics Letters, 2009, 94, .	1.5	20
124	Integrating Î²-Pb_{0.33}V₂O₅ Nanowires with CdSe Quantum Dots: Toward Nanoscale Heterostructures with Tunable Interfacial Energetic Offsets for Charge Transfer. Chemistry of Materials, 2015, 27, 2468-2479.	3.2	20
125	Ligand-Mediated Control of Dislocation Dynamics and Resulting Particle Morphology of GdOCl Nanocrystals. Small, 2015, 11, 329-334.	5.2	20
126	Modulating the Hysteresis of an Electronic Transition: Launching Alternative Transformation Pathways in the Metalâ€“Insulator Transition of Vanadium(IV) Oxide. Chemistry of Materials, 2018, 30, 214-224.	3.2	20

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127	Photodegradation of fluorotelomer carboxylic 5:3 acid and perfluorooctanoic acid using zinc oxide. Environmental Pollution, 2018, 243, 637-644.	3.7	20
128	An Atomic View of Cation Diffusion Pathways from Singleâ€Crystal Topochemical Transformations. Angewandte Chemie - International Edition, 2020, 59, 16385-16392.	7.2	20
129	A chemo-mechanical damage model at large deformation: numerical and experimental studies on polycrystalline energy materials. International Journal of Solids and Structures, 2021, 228, 111099.	1.3	20
130	Fracture in electrophoretically deposited CdSe nanocrystal films. Journal of Applied Physics, 2009, 105, .	1.1	19
131	Nanostructured Magnesium Composite Coatings for Corrosion Protection of Low-Alloy Steels. Industrial & Engineering Chemistry Research, 2014, 53, 18873-18883.	1.8	19
132	Separating electric field and thermal effects across the metal-insulator transition in vanadium oxide nanobeams. Applied Physics Letters, 2015, 107, .	1.5	19
133	Intercalation-Induced Exfoliation and Thickness-Modulated Electronic Structure of a Layered Ternary Vanadium Oxide. Chemistry of Materials, 2017, 29, 3285-3294.	3.2	19
134	Roadblocks in Cation Diffusion Pathways: Implications of Phase Boundaries for Li-Ion Diffusivity in an Intercalation Cathode Material. ACS Applied Materials & Interfaces, 2018, 10, 30901-30911.	4.0	19
135	Stabilization of Agâ€“Au Bimetallic Nanocrystals in Aquatic Environments Mediated by Dissolved Organic Matter: A Mechanistic Perspective. Environmental Science & Technology, 2018, 52, 7269-7278.	4.6	19
136	Solution-processable porous graphitic carbon from bottom-up synthesis and low-temperature graphitization. Chemical Science, 2021, 12, 8438-8444.	3.7	19
137	Selective Borohydride Reduction Using Functionalized Atomic Force Microscopy Tips. Langmuir, 2002, 18, 5055-5057.	1.6	18
138	Curvature-Induced Modification of Mechano-Electrochemical Coupling and Nucleation Kinetics in a Cathode Material. Matter, 2020, 3, 1754-1773.	5.0	18
139	Precursor control of crystal structure and stoichiometry in twin metal oxide nanocrystals. CrystEngComm, 2009, 11, 841.	1.3	17
140	Electronic Phase Transitions of Î´-Ag_{<i>x</i>}V₂O₅ Nanowires: Interplay between Geometric and Electronic Structures. Journal of Physical Chemistry C, 2014, 118, 21235-21243.	1.5	17
141	Striping modulations and strain gradients within individual particles of a cathode material upon lithiation. Materials Horizons, 2018, 5, 486-498.	6.4	17
142	Incorporation of Hydroxyethylcellulose-Functionalized Halloysite as a Means of Decreasing the Thermal Conductivity of Oilwell Cement. Scientific Reports, 2018, 8, 16149.	1.6	17
143	Chemically inert covalently networked triazole-based solid polymer electrolytes for stable all-solid-state lithium batteries. Journal of Materials Chemistry A, 2019, 7, 19691-19695.	5.2	17
144	A Substrate-Integrated and Scalable Templated Approach Based on Rusted Steel for the Fabrication of Polypyrrole Nanotube Arrays. ACS Applied Materials & Interfaces, 2011, 3, 1238-1244.	4.0	16

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145	Quantum dots exhibit less bioaccumulation than free cadmium and selenium in the earthworm <i>Eisenia andrei</i>. Environmental Toxicology and Chemistry, 2013, 32, 1288-1294.	2.2	16
146	Biomimetic Plastronic Surfaces for Handling of Viscous Oil. Energy & Fuels, 2017, 31, 9337-9344.	2.5	16
147	Toward High-Precision Control of Transformation Characteristics in VO₂ through Dopant Modulation of Hysteresis. Journal of Physical Chemistry C, 2020, 124, 21223-21231.	1.5	16
148	Synthesis, characterization, and finite size effects on electrical transport of nanoribbons of the charge density wave conductor NbSe₃. Nanotechnology, 2011, 22, 485201.	1.3	15
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