Feng Xu

List of Publications by Year
in descending order

53 papers	2,553 citations	331538 21 h-index	189801 50 g-index
54 all docs	54 docs citations	54 times ranked	5062 citing authors

#	Article	IF	Citations
1	Spongy Graphene as a Highly Efficient and Recyclable Sorbent for Oils and Organic Solvents. Advanced Functional Materials, 2012, 22, 4421-4425.	7.8	925
2	Solution-derived ZnOnanostructures for photoanodes of dye-sensitized solar cells. Energy and Environmental Science, 2011, 4, 818-841.	15.6	243
3	Enhanced photocatalytic activity of hierarchical ZnO nanoplate-nanowire architecture as environmentally safe and facilely recyclable photocatalyst. Nanoscale, 2011, 3, 5020.	2.8	148
4	Ultrathin Bismuth Nanosheets for Stable Na-Ion Batteries: Clarification of Structure and Phase Transition by in Situ Observation. Nano Letters, 2019, 19, 1118-1123.	4.5	124
5	Ultrafast Preparation of Black Phosphorus Quantum Dots for Efficient Humidity Sensing. Chemistry - A European Journal, 2016, 22, 7357-7362.	1.7	114
6	In situ observation of nickel as an oxidizable electrode material for the solid-electrolyte-based resistive random access memory. Applied Physics Letters, 2013, 102, .	1.5	65
7	In situ TEM probing of crystallization form-dependent sodiation behavior in ZnO nanowires for sodium-ion batteries. Nano Energy, 2016, 30, 771-779.	8.2	57
8	Hollow SnO2 microspheres for high-efficiency bilayered dye sensitized solar cell. RSC Advances, 2012, 2, 7384.	1.7	52
9	Visualization of lithium-ion transport and phase evolution within and between manganese oxide nanorods. Nature Communications, 2017, 8, 15400.	5.8	52
10	All electrochemical fabrication of MoS₂/graphene counter electrodes for efficient dye-sensitized solar cells. RSC Advances, 2016, 6, 34546-34552.	1.7	50
11	Bimetallic Nanoparticle Oxidation in Three Dimensions by Chemically Sensitive Electron Tomography and in Situ Transmission Electron Microscopy. ACS Nano, 2018, 12, 7866-7874.	7.3	49
12	New Insights into Electrochemical Lithiation/Delithiation Mechanism of Î±-MoO₃ Nanobelt by in Situ Transmission Electron Microscopy. ACS Applied Materials & Interfaces, 2016, 8, 9170-9177.	4.0	48
13	Confining TiO2 Nanotubes in PECVD-Enabled Graphene Capsules Toward Ultrafast K-Ion Storage: In Situ TEM/XRD Study and DFT Analysis. Nano-Micro Letters, 2020, 12, 123.	14.4	48
14	Atomic structure and migration dynamics of MoS2/LixMoS2 interface. Nano Energy, 2018, 48, 560-568.	8.2	42
15	Identifying the Conversion Mechanism of NiCo₂O₄ during Sodiationâ€“Desodiation Cycling by In Situ TEM. Advanced Functional Materials, 2017, 27, 1606163.	7.8	39
16	Defect-Laden MoSe₂Quantum Dots Made by Turbulent Shear Mixing as Enhanced Electrocatalysts. Small, 2017, 13, 1700565.	5.2	31
17	In situ interface engineering for probing the limit of quantum dot photovoltaic devices. Nature Nanotechnology, 2019, 14, 950-956.	15.6	30
18	Electrically driven cation exchange for in situ fabrication of individual nanostructures. Nature Communications, 2017, 8, 14889.	5.8	29

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19	Nitrogen-based gas molecule adsorption of monolayer phosphorene under metal functionalization. Scientific Reports, 2019, 9, 12498.	1.6	25
20	In situ TEM visualization of superior nanomechanical flexibility of shear-exfoliated phosphorene. Nanoscale, 2016, 8, 13603-13610.	2.8	23
21	Wrinkle networks in exfoliated multilayer graphene and other layered materials. Carbon, 2020, 156, 24-30.	5.4	23
22	Deeply Exploring Anisotropic Evolution toward Large-Scale Growth of Monolayer ReS₂. ACS Applied Materials & Interfaces, 2020, 12, 2862-2870.	4.0	21
23	Sulfide-Fixed Intrinsic Porous NiCoP for Boosting High Capacitance and Long-Term Stability. , 2021, 3, 1016-1024.		21
24	Unveiling the microscopic origin of asymmetric phase transformations in (de)sodiated Sb2Se3 with in situ transmission electron microscopy. Nano Energy, 2020, 77, 105299.	8.2	20
25	In Situ Visualization of Structural Evolution and Fissure Breathing in (De)lithiated H₂V₃O₈ Nanorods. ACS Energy Letters, 2019, 4, 2081-2090.	8.8	19
26	Observing the Growth of Pb₃O₄ Nanocrystals by in Situ Liquid Cell Transmission Electron Microscopy. ACS Applied Materials & Interfaces, 2019, 11, 24478-24484.	4.0	18
27	Facet-induced coordination competition for highly ordered CsPbBr3 nanoplatelets with strong polarized emission. Nano Research, 2022, 15, 502-509.	5.8	18
28	Ultrafast electrochemical preparation of graphene/CoS nanosheet counter electrodes for efficient dye-sensitized solar cells. RSC Advances, 2015, 5, 85822-85830.	1.7	16
29	A Stable CaV₄O₉ÂAnode Promises Nearâ€Zero Volume Change and Highâ€Capacity Lithium Storage. Advanced Energy Materials, 2021, 11, 2003612.	10.2	16
30	In Situ Visualization of Interfacial Sodium Transport and Electrochemistry between Fewâ€Layer Phosphorene. Small Methods, 2019, 3, 1900061.	4.6	15
31	Cu-doped CoS2 polyhedrons with high catalytic activity and long-term stability. Science China Materials, 2020, 63, 1337-1344.	3.5	15
32	Armor-like passivated CsPbBr₃ quantum dots: boosted stability with hand-in-hand ligands and enhanced performance of nuclear batteries. Journal of Materials Chemistry A, 2021, 9, 8772-8781.	5.2	13
33	Understanding the Ensemble of Growth Behaviors of Sub-10-nm Silver Nanorods Using in Situ Liquid Cell Transmission Electron Microscopy. Journal of Physical Chemistry C, 2019, 123, 21257-21264.	1.5	12
34	Spring-Like Pseudoelectroelasticity of Monocrystalline Cu₂S Nanowire. Nano Letters, 2018, 18, 5070-5077.	4.5	11
35	Lattice-resolution visualization of anisotropic sodiation degrees and revelation of sodium storage mechanisms in todorokite-type MnO2 with in-situ TEM. Energy Storage Materials, 2021, 37, 345-353.	9.5	11
36	Modification of the Interlayer Coupling and Chemical Reactivity of Multilayer Graphene through Wrinkle Engineering. Chemistry of Materials, 2021, 33, 2506-2515.	3.2	10

#	Article	IF	Citations
37	In-situ TEM revisiting NH4V4O10 to unveil the unknown sodium storage mechanism as an anode material. Nano Energy, 2021, 87, 106182.	8.2	10
38	Stable field emission lamps based on well-aligned BaO nanowires. RSC Advances, 2014, 4, 22246.	1.7	9
39	In Situ Liquid Cell Transmission Electron Microscopy Investigation on the Dissolution-Regrowth Mechanism Dominating the Shape Evolution of Silver Nanoplates. Crystal Growth and Design, 2021, 21, 1314-1322.	1.4	9
40	In situ investigation of the mechanical properties of nanomaterials by transmission electron microscopy. Acta Mechanica Sinica/Lixue Xuebao, 2012, 28, 1513-1527.	1.5	8
41	Synthesis and luminescence properties of ternary complexes of Sm x Tb1â^'x (TTA)3Phen nanoparticles and their surface modification. Journal of Materials Science, 2013, 48, 5309-5315.	1.7	8
42	Simultaneous atomic-level visualization and high precision photocurrent measurements on photoelectric devices by in situ TEM. RSC Advances, 2018, 8, 948-953.	1.7	7
43	Unravelling the shell growth pathways of Auâ€"Ag coreâ€"shell nanoparticles by in situ liquid cell transmission electron microscopy. Nanoscale, 2021, 13, 3136-3143.	2.8	7
44	Design and 3D modeling investigation of a microfluidic electrode array for electrical impedance measurement of single yeast cells. Electrophoresis, 2021, 42, 1996-2009.	1.3	7
45	Investigation of daughter cell dissection coincidence of single budding yeast cells immobilized in microfluidic traps. Analytical and Bioanalytical Chemistry, 2021, 413, 2181-2193.	1.9	5
46	A high-throughput microfluidic diploid yeast long-term culturing (DYLC) chip capable of bud reorientation and concerted daughter dissection for replicative lifespan determination. Journal of Nanobiotechnology, 2022, 20, 171.	4.2	5
47	Hybrid single/poly-crystalline ZnO nanoawl arrays: facile synthesis and enhanced field emission properties. RSC Advances, 2012, 2, 11601.	1.7	4
48	Atomic Modulation Engineering of Hexagon-Shaped CeO₂ Nanocrystals by In Situ Sculpturing of an Electron Beam. Journal of Physical Chemistry C, 2020, 124, 17006-17014.	1.5	3
49	Large Gap Two-Dimensional Topological Insulators with the Significant Rashba Effect in Ethynyl and Methyl Functionalized PbSn Monolayers. Journal of Physical Chemistry Letters, 2021, 12, 12202-12209.	2.1	3
50	Low Temperature Casting of Graphene with High Compressive Strength (Adv. Mater. 37/2012). Advanced Materials, 2012, 24, 5123-5123.	11.1	2
51	Low temperature casting of graphene into various 3-D shapes. , 2013, , .		0
52	Graphene as dry adhesive interacting with semiconductor substrates. , 2013, , .		0
53	In-situ Probe of Lithium-ion Transport and Phase Evolution Within and Between Silver Hollandite Nanorods. Microscopy and Microanalysis, 2018, 24, 1516-1517.	0.2	0