Xujie Lu

List of Publications by Citations

98 papers	6,491 citations	40 h-index	80 g-index
110 ext. papers	7,444 ext. citations	9.6 avg, IF	5.79 L-index

#	Paper	IF	Citations
98	Improved-Performance Dye-Sensitized Solar Cells Using Nb-Doped TiO2 Electrodes: Efficient Electron Injection and Transfer. *Advanced Functional Materials*, **2010**, 20, 509-515	15.6	473
97	Aqueous Li-ion battery enabled by halogen conversion-intercalation chemistry in graphite. *Nature*, **2019**, 569, 245-250	50.4	378
96	Core-shell nanostructured "black" rutile titania as excellent catalyst for hydrogen production enhanced by sulfur doping. *Journal of the American Chemical Society*, **2013**, 135, 17831-8	16.4	370
95	Low-Cost High-Energy Potassium Cathode. *Journal of the American Chemical Society*, **2017**, 139, 2164-2167	16.4	366
94	Hybrid Polymer/Garnet Electrolyte with a Small Interfacial Resistance for Lithium-Ion Batteries. *Angewandte Chemie - International Edition*, **2017**, 56, 753-756	16.4	341
93	Effective nonmetal incorporation in black titania with enhanced solar energy utilization. *Energy and Environmental Science*, **2014**, 7, 967	35.4	317
92	Pressure-Induced Phase Transformation, Reversible Amorphization, and Anomalous Visible Light Response in Organolead Bromide Perovskite. *Journal of the American Chemical Society*, **2015**, 137, 11144-9	16.4	226
91	Mastering the interface for advanced all-solid-state lithium rechargeable batteries. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 13313-13317	11.5	193
90	Fluorine-Doped Antiperovskite Electrolyte for All-Solid-State Lithium-Ion Batteries. *Angewandte Chemie - International Edition*, **2016**, 55, 9965-8	16.4	155
89	Black brookite titania with high solar absorption and excellent photocatalytic performance. *Journal of Materials Chemistry A*, **2013**, 1, 9650	13	150
88	Phase-controlled synthesis of cobalt sulfides for lithium ion batteries. *ACS Applied Materials & Interfaces*, **2012**, 4, 4246-50	9.5	150
87	NaMV(PO) (M = Mn, Fe, Ni) Structure and Properties for Sodium Extraction. *Nano Letters*, **2016**, 16, 7836-7841	11.5	146
86	Core□shell structured hollow SnO2□polypyrrole nanocomposite anodes with enhanced cyclic performance for lithium-ion batteries. *Nano Energy*, **2014**, 6, 73-81	17.1	141
85	Enhanced electron transport in Nb-doped TiO2 nanoparticles via pressure-induced phase transitions. *Journal of the American Chemical Society*, **2014**, 136, 419-26	16.4	139
84	Durable and Efficient Hollow Porous Oxide Spinel Microspheres for Oxygen Reduction. *Joule*, **2018**, 2, 337-348	27.8	138
83	Enhanced Structural Stability and Photo Responsiveness of CH NH SnI Perovskite via Pressure-Induced Amorphization and Recrystallization. *Advanced Materials*, **2016**, 28, 8663-8668	24	134
82	Antiperovskite LiOCl Superionic Conductor Films for Solid-State Li-Ion Batteries. *Advanced Science*, **2016**, 3, 1500359	13.6	120

81	Graphene/Fe2O3/SnO2 ternary nanocomposites as a high-performance anode for lithium ion batteries. *ACS Applied Materials & Interfaces*, **2013**, 5, 8607-14	9.5	114
80	A general preparation strategy for hybrid TiO2 hierarchical spheres and their enhanced solar energy utilization efficiency. *Advanced Materials*, **2010**, 22, 3719-22	24	99
79	Li-rich anti-perovskite Li3OCl films with enhanced ionic conductivity. *Chemical Communications*, **2014**, 50, 11520-2	5.8	95
78	Treatment of wastewater containing azo dye reactive brilliant red X-3B using sequential ozonation and upflow biological aerated filter process. *Journal of Hazardous Materials*, **2009**, 161, 241-5	12.8	95
77	Large-scale preparation of highly conductive three dimensional graphene and its applications in CdTe solar cells. *Journal of Materials Chemistry*, **2011**, 21, 17366		84
76	Textile wastewater reuse as an alternative water source for dyeing and finishing processes: A case study. *Desalination*, **2010**, 258, 229-232	10.3	84
75	Improved visible-light photocatalysis of nano-Bi2Sn2O7 with dispersed s-bands. *Journal of Materials Chemistry*, **2011**, 21, 3872		82
74	Conducting Interface in Oxide Homojunction: Understanding of Superior Properties in Black TiO2. *Nano Letters*, **2016**, 16, 5751-5	11.5	77
73	Green Emitting Single-Crystalline Bulk Assembly of Metal Halide Clusters with Near-Unity Photoluminescence Quantum Efficiency. *ACS Energy Letters*, **2019**, 4, 1579-1583	20.1	73
72	In situ growth of a MoSe2/Mo counter electrode for high efficiency dye-sensitized solar cells. *Chemical Communications*, **2014**, 50, 4475-7	5.8	69
71	Hybrid Polymer/Garnet Electrolyte with a Small Interfacial Resistance for Lithium-Ion Batteries. *Angewandte Chemie*, **2017**, 129, 771-774	3.6	66
70	Heat transport enhancement of thermal energy storage material using graphene/ceramic composites. *Carbon*, **2014**, 75, 314-321	10.4	61
69	Low-temperature rapid synthesis of high-quality pristine or boron-doped graphenevia Wurtz-type reductive coupling reaction. *Journal of Materials Chemistry*, **2011**, 21, 10685		60
68	Reaction mechanism studies towards effective fabrication of lithium-rich anti-perovskites Li3OX (X= Cl, Br). *Solid State Ionics*, **2016**, 284, 14-19	3.3	58
67	Pressure-induced dramatic changes in organic-inorganic halide perovskites. *Chemical Science*, **2017**, 8, 6764-6776	9.4	57
66	One-step high-temperature solvothermal synthesis of TiO2/sulfide nanocomposite spheres and their solar visible-light applications. *ACS Applied Materials & Interfaces*, **2012**, 4, 306-11	9.5	56
65	Pressure-induced amorphization in single-crystal Ta2O5 nanowires: a kinetic mechanism and improved electrical conductivity. *Journal of the American Chemical Society*, **2013**, 135, 13947-53	16.4	49
64	Reaching 90% Photoluminescence Quantum Yield in One-Dimensional Metal Halide CNHPbBr by Pressure-Suppressed Nonradiative Loss. *Journal of the American Chemical Society*, **2020**, 142, 16001-16006	16.4	49

63	Reuse of printing and dyeing wastewater in processess assessed by pilot-scale test using combined biological process and sub-filter technology. *Journal of Cleaner Production*, **2009**, 17, 111-114	10.3	48
62	Dielectric Constant Controlled Solvothermal Synthesis of a TiO2 Photocatalyst with Tunable Crystallinity: A Strategy for Solvent Selection. *European Journal of Inorganic Chemistry*, **2009**, 2009, 2789-2795	2.3	46
61	Mesoporous hollow TiO2 microspheres with enhanced photoluminescence prepared by a smart amino acid template. *Journal of Materials Chemistry*, **2011**, 21, 4888		44
60	Crystallinity control on photocatalysis and photoluminescence of TiO2-based nanoparticles. *Journal of Alloys and Compounds*, **2010**, 496, 234-240	5.7	42
59	Antiperovskites with Exceptional Functionalities. *Advanced Materials*, **2020**, 32, e1905007	24	40
58	Treatment of wastewater containing Reactive Brilliant Blue KN-R using TiO/BC composite as heterogeneous photocatalyst and adsorbent. *Chemosphere*, **2018**, 206, 777-783	8.4	40
57	Novel antimonate photocatalysts MSb2O6 (M = Ca, Sr and Ba): a correlation between packing factor and photocatalytic activity. *Physical Chemistry Chemical Physics*, **2009**, 11, 10047-52	3.6	39
56	Pressure-Suppressed Carrier Trapping Leads to Enhanced Emission in Two-Dimensional Perovskite (HA) (GA)Pb I. *Angewandte Chemie - International Edition*, **2020**, 59, 17533-17539	16.4	37
55	Intelligent hydrated-sulfate template assisted preparation of nanoporous TiO(2) spheres and their visible-light application. *ACS Applied Materials & Interfaces*, **2011**, 3, 566-72	9.5	37
54	A one-pot method to grow pyrochlore H4Nb2O7-octahedron-based photocatalyst. *Journal of Materials Chemistry*, **2010**, 20, 1942		36
53	Pressure responses of halide perovskites with various compositions, dimensionalities, and morphologies. *Matter and Radiation at Extremes*, **2020**, 5, 018201	4.7	35
52	Short O-O separation in layered oxide NaCoO enables an ultrafast oxygen evolution reaction. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 23473-23479	11.5	35
51	Ta2O5 nanowires: a novel synthetic method and their solar energy utilization. *Dalton Transactions*, **2012**, 41, 622-7	4.3	34
50	Enhanced Photocurrent of All-Inorganic Two-Dimensional Perovskite CsPbICl via Pressure-Regulated Excitonic Features. *Journal of the American Chemical Society*, **2021**, 143, 2545-2551	16.4	34
49	Colored titania nanocrystals and excellent photocatalysis for water cleaning. *Catalysis Communications*, **2015**, 60, 55-59	3.2	32
48	Directional architecture of graphene/ceramic composites with improved thermal conduction for thermal applications. *Journal of Materials Chemistry A*, **2014**, 2, 2187-2193	13	32
47	Biomolecule-assisted route to prepare titania mesoporous hollow structures. *Chemistry - A European Journal*, **2011**, 17, 11535-41	4.8	32
46	Regulating off-centering distortion maximizes photoluminescence in halide perovskites. *National Science Review*, **2021**, 8, nwaa288	10.8	31

45	Adsorption and photooxidation of pharmaceuticals and personal care products on clay minerals. *Reaction Kinetics, Mechanisms and Catalysis*, **2011**, 104, 61-73	1.6	30
44	Evolution of microstructure, strain and physical properties in oxide nanocomposite films. *Scientific Reports*, **2014**, 4, 5426	4.9	29
43	The production of large bilayer hexagonal graphene domains by a two-step growth process of segregation and surface-catalytic chemical vapor deposition. *Carbon*, **2012**, 50, 2703-2709	10.4	29
42	New facile synthesis of TiO2 hollow sphere with an opening hole and its enhanced rate performance in lithium-ion batteries. *New Journal of Chemistry*, **2013**, 37, 784	3.6	29
41	Non-Aqueous Preparation of High-Crystallinity Hierarchical TiO2 Hollow Spheres with Excellent Photocatalytic Efficiency. *European Journal of Inorganic Chemistry*, **2011**, 2011, 2879-2883	2.3	27
40	Enhanced ionic conductivity with Li7O2Br3 phase in Li3OBr anti-perovskite solid electrolyte. *Applied Physics Letters*, **2016**, 109, 101904	3.4	27
39	Defect Perovskites under Pressure: Structural Evolution of Cs2SnX6 (X = Cl, Br, I). *Journal of Physical Chemistry C*, **2018**, 122, 24004-24013	3.8	26
38	Fluorine-Doped Antiperovskite Electrolyte for All-Solid-State Lithium-Ion Batteries. *Angewandte Chemie*, **2016**, 128, 10119-10122	3.6	22
37	Regulating Exciton-Phonon Coupling to Achieve a Near-Unity Photoluminescence Quantum Yield in One-Dimensional Hybrid Metal Halides. *Advanced Science*, **2021**, 8, e2100786	13.6	21
36	Oxygen content tailored magnetic and electronic properties in cobaltite double perovskite thin films. *Applied Physics Letters*, **2017**, 110, 093102	3.4	18
35	Chemistry Design Towards a Stable Sulfide-Based Superionic Conductor Li Cu Ge S. *Angewandte Chemie - International Edition*, **2019**, 58, 7673-7677	16.4	18
34	Highly tunable properties in pressure-treated two-dimensional Dion-Jacobson perovskites. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 16121-16126	11.5	18
33	Hidden Interface Driven Exchange Coupling in Oxide Heterostructures. *Advanced Materials*, **2017**, 29, 1700672	24	17
32	Room-temperature ferromagnetism in Ti1−xVxO2 nanocrystals synthesized from an organic-free and water-soluble precursor. *Journal of Alloys and Compounds*, **2010**, 499, 160-165	5.7	16
31	One-pot synthesis of BiSbO4 nanophotocatalyst with enhanced visible-light performance. *CrystEngComm*, **2011**, 13, 3920	3.3	15
30	Oxygen vacancy-driven evolution of structural and electrical properties in SrFeO3−δ thin films and a method of stabilization. *Applied Physics Letters*, **2016**, 109, 141906	3.4	15
29	Pressure-Regulated Dynamic Stereochemical Role of Lone-Pair Electrons in Layered BiOS. *Journal of Physical Chemistry Letters*, **2020**, 11, 9702-9707	6.4	14
28	In-situ investigation of pressure effect on structural evolution and conductivity of Na3SbS4 superionic conductor. *Journal of Power Sources*, **2018**, 401, 111-116	8.9	13

27	TiO2 nanotubes grown on graphene sheets as advanced anode materials for high rate lithium ion batteries. *RSC Advances*, **2014**, 4, 36372	3.7	12
26	Bulk moduli and high pressure crystal structure of U3Si2. *Journal of Nuclear Materials*, **2019**, 523, 135-142	3.3	11
25	One-Step Hydrothermal Synthesis of High-Performance Gas-Sensing Crystals CdIn2O4 with Octahedral Shape. *Crystal Growth and Design*, **2012**, 12, 4104-4108	3.5	11
24	Pressure-Suppressed Carrier Trapping Leads to Enhanced Emission in Two-Dimensional Perovskite (HA)2(GA)Pb2I7. *Angewandte Chemie*, **2020**, 132, 17686-17692	3.6	11
23	Suppression of superconductivity and structural phase transitions under pressure in tetragonal FeS. *Scientific Reports*, **2016**, 6, 31077	4.9	10
22	Enhanced ionic conductivity of sulfide-based solid electrolyte by incorporating lanthanum sulfide. *Ceramics International*, **2014**, 40, 15497-15501	5.1	10
21	CuIn(S,Se)(2) thin films prepared from a novel thioacetic acid-based solution and their photovoltaic application. *Physical Chemistry Chemical Physics*, **2014**, 16, 7548-54	3.6	10
20	Pressure-induced large enhancement of Néel temperature and electric polarization in the hexagonal multiferroic Lu0.5Sc0.5FeO3. *Physical Review B*, **2019**, 100,	3.3	10
19	Treatment of Azo Dye-Containing Wastewater Using Integrated Processes. *Handbook of Environmental Chemistry*, **2010**, 133-155	0.8	9
18	TiO2-Based Nanomaterials for Advanced Environmental and Energy-Related Applications. *Journal of Nanomaterials*, **2016**, 2016, 1-3	3.2	8
17	Pressure-induced Lifshitz transition in the type II Dirac semimetal PtTe2. *Science China: Physics, Mechanics and Astronomy*, **2019**, 62, 1	3.6	8
16	Tailoring the photocatalytic activity of layered perovskites by opening the interlayer vacancy via ion-exchange reactions. *CrystEngComm*, **2015**, 17, 8703-8709	3.3	6
15	Pressure-enhanced interplay between lattice, spin, and charge in the mixed perovskite La2FeMnO6. *Physical Review B*, **2019**, 99,	3.3	5
14	Graphite-based N-TiO2 composites photocatalyst for removal of HCHO in water. *Desalination and Water Treatment*, **2015**, 56, 1681-1688		5
13	Phase transition mechanism and bandgap engineering of Sb2S3 at gigapascal pressures. *Communications Chemistry*, **2021**, 4,	6.3	5
12	Study on treatment of aquaculture wastewater using a hybrid constructed wetland. *IOP Conference Series: Earth and Environmental Science*, **2017**, 61, 012015	0.3	4
11	Chemistry Design Towards a Stable Sulfide-Based Superionic Conductor Li4Cu8Ge3S12. *Angewandte Chemie*, **2019**, 131, 7755-7759	3.6	4
10	Study on denitrification of aquaculture wastewater using immobilized microorganism technology **2011**,		3

9	Pressure-induced robust emission in a zero-dimensional hybrid metal halide (C9NH20)6Pb3Br12. *Matter and Radiation at Extremes*, **2021**, 6, 058401	4.7	3
8	Pressure-Enhanced Photocurrent in One-Dimensional SbSI via Lone-Pair Electron Reconfiguration. *Materials*, **2022**, 15, 3845	3.5	3
7	Epitaxial growth and physical properties of ternary nitride thin films by polymer-assisted deposition. *Applied Physics Letters*, **2016**, 109, 081907	3.4	2
6	Excellent Carrier Transport Property of Hybrid Perovskites Sustained under High Pressures. *ACS Energy Letters*, **2022**, 7, 154-161	20.1	2
5	Structural behavior of a stuffed derivative of □quartz, Mg0.5AlSiO4, at high temperature: an in situ synchrotron XRD study. *Physics and Chemistry of Minerals*, **2019**, 46, 717-725	1.6	1
4	Synthesis of Two-Dimensional CsPbX (X = Br and I) with a Stable Structure and Tunable Bandgap by CsPbX Phase Separation.. *Journal of Physical Chemistry Letters*, **2022**, 2555-2562	6.4	1
3	Metallic interface induced by electronic reconstruction in crystalline-amorphous bilayer oxide films. *Science Bulletin*, **2019**, 64, 1567-1572	10.6	0
2	Pressure-Induced Amorphization and Crystallization of Heterophase Pd Nanostructures.. *Small*, **2022**, e2106396	11	0
1	DYNAMIC MEMBRANE TECHNOLOGY FOR PRINTING WASTEWATER REUSE. *International Journal of Modern Physics B*, **2009**, 23, 1943-1948	1.1	