Yanlu Li

List of Publications by Year
in descending order

51	1,163	516215 16	414034 32
papers	citations	h-index	g-index

51	51	51	1135
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Tunable Ultrafast Nonlinear Optical Properties of Graphene/MoS₂ van der Waals Heterostructures and Their Application in Solid-State Bulk Lasers. ACS Nano, 2018, 12, 11376-11385.	7.3	113
2	Metal-free boron carbonitride with tunable boron Lewis acid sites for enhanced nitrogen electroreduction to ammonia. Applied Catalysis B: Environmental, 2021, 283, 119622.	10.8	108
3	Intercalation of organics into layered structures enables superior interface compatibility and fast charge diffusion for dendrite-free Zn anodes. Energy and Environmental Science, 2022, 15, 1682-1693.	15.6	105
4	Transitionâ€Metal Oxynitride: A Facile Strategy for Improving Electrochemical Capacitor Storage. Advanced Materials, 2019, 31, e1806088.	11.1	91
5	Mesoporous Cu2-xSe nanocrystals as an ultrahigh-rate and long-lifespan anode material for sodium-ion batteries. Energy Storage Materials, 2019, 22, 275-283.	9.5	88
6	Weaker Interactions in Zn²⁺ and Organic Ionâ€preâ€intercalated Vanadium Oxide toward Highly Reversible Zincâ€ion Batteries. Energy and Environmental Materials, 2021, 4, 620-630.	7.3	55
7	Oxygen Vacancy Modulation of Bimetallic Oxynitride Anodes toward Advanced Liâ€ion Capacitors. Advanced Functional Materials, 2020, 30, 2000350.	7.8	48
8	Defect complexes in congruent<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">LiNbO</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:math>and their optical signatures. Physical Review B, 2015, 91, .	1.1	45
9	Shuttle confinement of lithium polysulfides in borocarbonitride nanotubes with enhanced performance for lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2020, 8, 296-304.	5.2	40
10	IntrinsicLiNbO3point defects from hybrid density functional calculations. Physical Review B, 2014, 89, .	1.1	36
11	Modeling intrinsic defects in LiNbO₃ within the Slater-Janak transition state model. Journal of Chemical Physics, 2014, 140, 234113.	1.2	33
12	Revisit sodium-storage mechanism of metal selenides in ether-based electrolytes: Electrochemically-driven Cu permeation to the formation of Cu2-xSe. Energy Storage Materials, 2021, 40, 189-196.	9.5	33
13	Comparison of hydrogen vacancies in KDP and ADP crystals: a combination of density functional theory calculations and experiment. Physical Chemistry Chemical Physics, 2019, 21, 6186-6197.	1.3	29
14	Microscopic Properties of Mg in Li and Nb Sites of LiNbO₃ by First-Principle Hybrid Functional: Formation and Related Optical Properties. Journal of Physical Chemistry C, 2017, 121, 8968-8975.	1.5	21
15	Hybrid density functional theory insight into the stability and microscopic properties of Bi-doped <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>LiNbO</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:math> : Lone electron pair effect. Physical Review B, 2017, 96, .	1.1	20
16	Boron Carbonitride Lithium-Ion Capacitors with an Electrostatically Expanded Operating Voltage Window. ACS Applied Materials & Interfaces, 2020, 12, 47425-47434.	4.0	20
17	Oxygen Vacancy-Modified B-/N-Codoped ZnGa₂O₄ Nanospheres with Enhanced Photocatalytic Hydrogen Evolution Performance in the Absence of a Pt Cocatalyst. Journal of Physical Chemistry C, 2018, 122, 10737-10748.	1.5	19
18	Microstructure and defect characteristics of lithium niobate with different Li concentrations. Inorganic Chemistry Frontiers, 2021, 8, 4006-4013.	3.0	18

#	Article	IF	Citations
19	Structural stress and extra optical absorption induced by the intrinsic cation defects in KDP and ADP crystals: a theoretical study. CrystEngComm, 2020, 22, 1962-1969.	1.3	17
20	Graphene Nucleation Preference at CuO Defects Rather Than Cu₂O on Cu(111): A Combination of DFT Calculation and Experiment. ACS Applied Materials & Interfaces, 2018, 10, 43156-43165.	4.0	16
21	Comparison of oxygen vacancy and interstitial oxygen in KDP and ADP crystals from density functional theory calculations. Computational Materials Science, 2020, 182, 109783.	1.4	16
22	Structural stability and electro-elastic property of YCOB crystal annealed in harsh environment. Applied Physics Letters, 2018, 113, .	1.5	15
23	Electrical conduction mechanism of rare-earth calcium oxyborate high temperature piezoelectric crystals. Acta Materialia, 2020, 183, 165-171.	3.8	14
24	Point Defects and Defect-Induced Optical Response in Ternary LiInSe₂ Crystals: First-Principles Insight. Journal of Physical Chemistry C, 2015, 119, 29123-29131.	1.5	12
25	Charge-neutral epitaxial graphene on 6Hâ€“SiC(0001) via FeSi intercalation. Carbon, 2020, 156, 187-193.	5.4	12
26	Roles of CuO and Cu2O in graphene growth on a copper substrate. Applied Surface Science, 2022, 576, 151812.	3.1	12
27	Stability and electronic structure of hydrogen vacancies in ADP: hybrid DFT with vdW correction. RSC Advances, 2018, 8, 6931-6939.	1.7	11
28	Hybrid density functional theory study of vanadium doping in stoichiometric and congruent <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>LiNb</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2019, 99, .	1.1	11
29	Preparation of bilayer graphene utilizing CuO as nucleation sites by CVD method. Journal of Materials Science: Materials in Electronics, 2018, 29, 4495-4502.	1.1	10
30	Doping stability of nonphotorefractive ions in stoichiometric and congruent LiNbO₃. Physical Chemistry Chemical Physics, 2018, 20, 17477-17486.	1.3	9
31	Electrical properties of yttrium calcium oxyborate crystal annealed at high temperature and low oxygen partial pressure. Journal of Materiomics, 2019, 5, 363-371.	2.8	9
32	Critical Role of Water and Oxygen Defects in Câ€“O Scission during CO₂ Reduction on Zn₂GeO₄(010). Langmuir, 2018, 34, 3742-3754.	1.6	8
33	Interaction between Bi Dopants and Intrinsic Defects in LiNbO3 from Local and Hybrid Density Functional Theory Calculations. Inorganic Chemistry, 2019, 58, 3661-3669.	1.9	8
34	Growth, Optical, and Spectroscopic Properties of Pure and Nd³⁺-Doped GdSr₃(PO₄)₃ Crystals with Disordered Structure. Inorganic Chemistry, 2022, 61, 170-177.	1.9	8
35	A Strategy To Prepare High-Quality Monocrystalline Graphene: Inducing Graphene Growth with Seeding Chemical Vapor Deposition and Its Mechanism. ACS Applied Materials & Interfaces, 2020, 12, 1306-1314.	4.0	7
36	Induced growth of quasi-free-standing graphene on SiC substrates. RSC Advances, 2019, 9, 32226-32231.	1.7	6

#	Article	IF	Citations
37	Phase transition regulation and piezoelectric performance optimization of fresnoite crystals for high-temperature acceleration sensing. Journal of Materials Chemistry C, 2021, 10, 180-190.	2.7	6
38	High performance piezoelectric crystal cut designed using LiNbO₃ for high temperature acoustic emission sensing application. CrystEngComm, 2022, 24, 691-697.	1.3	6
39	Origin of Ferroelectric Modification: The Thermal Behavior of Dopant Ions. Crystal Growth and Design, 2018, 18, 4860-4863.	1.4	4
40	Effect of BN seeds on locating and promoting the initial nucleation of graphene on Cu substrate and its mechanism: A theoretical study. Applied Surface Science, 2020, 523, 146469.	3.1	4
41	Role of lone-pair electrons in determining the thermal transport behavior of LiAsS₂: first-principles investigation. CrystEngComm, 2021, 23, 4109-4115.	1.3	4
42	Thermal properties and CW laser performances of pure and Nd doped Bi2ZnB2O7 single crystals. CrystEngComm, 2018, 20, 7094-7099.	1.3	3
43	Theoretical prediction of eliminating the buffer layer and achieving charge neutrality for epitaxial graphene on 6Hâ€“SiC(0001) via boron compound intercalations. Carbon, 2020, 161, 323-330.	5.4	3
44	Double-centers of V,Ceâ€“Codoped LiNbO₃ from Hybrid Density Functional Theory Calculations: Electron Trapping and Excitation between the Defect Levels. Crystal Growth and Design, 2020, 20, 2774-2780.	1.4	2
45	Abnormal lattice occupation of Mo and related polarons in LiNbO3: Hybrid density functional theory investigation. Journal of Materiomics, 2020, 6, 183-191.	2.8	2
46	Effect and Mechanism of Hydrogen-Assisted Sulfur Intercalation for Decoupling Graphene from Cu(1 1) Tj ETQq0 0 0 rgBT /Overlock 10	3.1	2
47	Origin of the abnormal reduction of the dielectric response for ReCOB crystals and its mechanism: theoretical and experimental exploration. Journal of Materials Chemistry C, 2020, 8, 10109-10120.	2.7	1
48	Damage mechanism and electro-elastic stability of LiNbO₃ crystals irradiated with 6 MeV Xe²³⁺. RSC Advances, 2020, 10, 21754-21759.	1.7	1
49	Effects of H2 pre-etching on BN seed morphology and induced graphene synthesis on Cu substrate: A theoretical study. Applied Surface Science, 2021, 537, 148093.	3.1	1
50	Regulation of Electronic Structures to Boost Efficient Nitrogen Fixation: Synergistic Effects between Transition Metals and Boron Nanotubes. ACS Applied Materials & Interfaces, 0, , .	4.0	1
51	Pinning and Anharmonic Phonon Effect of Quasi-Free-Standing Bilayer Epitaxial Graphene on SiC. Nanomaterials, 2022, 12, 346.	1.9	0