

# Xu Liu

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7435540/publications.pdf>

Version: 2024-02-01

44  
papers

2,375  
citations

236833

25  
h-index

254106

43  
g-index

46  
all docs

46  
docs citations

46  
times ranked

3264  
citing authors

#	ARTICLE	IF	CITATIONS
1	Nanoparticle cluster gas sensor: Pt activated SnO <sub>2</sub> nanoparticles for NH <sub>3</sub> detection with ultrahigh sensitivity. <i>Nanoscale</i> , 2015, 7, 14872-14880.	2.8	284
2	Challenges and Strategies for High-Energy Aqueous Electrolyte Rechargeable Batteries. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 598-616.	7.2	272
3	A high response butanol gas sensor based on ZnO hollow spheres. <i>Sensors and Actuators B: Chemical</i> , 2016, 237, 423-430.	4.0	137
4	Operando pH Measurements Decipher H <sup>+</sup> /Zn <sup>2+</sup> Intercalation Chemistry in High-Performance Aqueous Zn/V <sub>2</sub> O <sub>5</sub> Batteries. <i>ACS Energy Letters</i> , 2020, 5, 2979-2986.	8.8	126
5	Acetone sensing performances based on nanoporous TiO <sub>2</sub> synthesized by a facile hydrothermal method. <i>Sensors and Actuators B: Chemical</i> , 2017, 238, 491-500.	4.0	115
6	Calcium vanadate sub-microfibers as highly reversible host cathode material for aqueous zinc-ion batteries. <i>Chemical Communications</i> , 2019, 55, 2265-2268.	2.2	111
7	Combustion synthesis of porous Pt-functionalized SnO <sub>2</sub> sheets for isopropanol gas detection with a significant enhancement in response. <i>Journal of Materials Chemistry A</i> , 2014, 2, 20089-20095.	5.2	106
8	High-Power Na-Ion and K-Ion Hybrid Capacitors Exploiting Cointercalation in Graphite Negative Electrodes. <i>ACS Energy Letters</i> , 2019, 4, 2675-2682.	8.8	88
9	A general nonaqueous sol-gel route to g-C <sub>3</sub> N <sub>4</sub> -coupling photocatalysts: the case of Z-scheme g-C <sub>3</sub> N <sub>4</sub> /TiO <sub>2</sub> with enhanced photodegradation toward RhB under visible-light. <i>Scientific Reports</i> , 2016, 6, 39531.	1.6	85
10	A high-performance n-butanol gas sensor based on ZnO nanoparticles synthesized by a low-temperature solvothermal route. <i>RSC Advances</i> , 2015, 5, 54372-54378.	1.7	74
11	Ni <sub>3</sub> S <sub>2</sub> @Ni foam 3D electrode prepared via chemical corrosion by sodium sulfide and using in hydrazine electro-oxidation. <i>Electrochimica Acta</i> , 2016, 213, 730-739.	2.6	69
12	Ag@ZnO heterostructure nanoparticles with plasmon-enhanced catalytic degradation for Congo red under visible light. <i>RSC Advances</i> , 2015, 5, 34456-34465.	1.7	65
13	The xylene sensing performance of WO <sub>3</sub> decorated anatase TiO <sub>2</sub> nanoparticles as a sensing material for a gas sensor at a low operating temperature. <i>RSC Advances</i> , 2016, 6, 49692-49701.	1.7	53
14	Electrochemical intercalation of anions in graphite for high-voltage aqueous zinc battery. <i>Journal of Power Sources</i> , 2020, 449, 227594.	4.0	52
15	Controllable synthesis and change of emission color from green to orange of ZnO quantum dots using different solvents. <i>New Journal of Chemistry</i> , 2015, 39, 2881-2888.	1.4	50
16	Prototype rechargeable magnesium batteries using ionic liquid electrolytes. <i>Journal of Power Sources</i> , 2019, 423, 52-59.	4.0	48
17	Binder-free NiO@MnO <sub>2</sub> core-shell electrode: Rod-like NiO core prepared through corrosion by oxalic acid and enhanced pseudocapacitance with sphere-like MnO <sub>2</sub> shell. <i>Electrochimica Acta</i> , 2016, 189, 83-92.	2.6	47
18	High-Voltage Operation of a V <sub>2</sub> O <sub>5</sub> Cathode in a Concentrated Gel Polymer Electrolyte for High-Energy Aqueous Zinc Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 15305-15312.	4.0	45

#	ARTICLE	IF	CITATIONS
19	Optical and gas sensing properties of Al-doped ZnO transparent conducting films prepared by sol-gel method under different heat treatments. <i>Ceramics International</i> , 2014, 40, 9931-9939.	2.3	43
20	Niobium Doping Effects on Performance of BaCo <sub>0.7</sub> Fe <sub>0.3</sub> NbO <sub>3</sub> Perovskite. <i>Journal of Physical Chemistry C</i> , 2010, 114, 22338-22345.	1.5	39
21	Unveiling the Intricate Intercalation Mechanism in Manganese Sesquioxide as Positive Electrode in Aqueous Zn-Metal Battery. <i>Advanced Energy Materials</i> , 2021, 11, 2100962.	10.2	39
22	Highly Reversible Sodiation of Tin in Glyme Electrolytes: The Critical Role of the Solid Electrolyte Interphase and Its Formation Mechanism. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 3697-3708.	4.0	37
23	Alkoxy-functionalized ionic liquid electrolytes: understanding ionic coordination of calcium ion speciation for the rational design of calcium electrolytes. <i>Energy and Environmental Science</i> , 2020, 13, 2559-2569.	15.6	36
24	TiO <sub>2</sub> nanoparticles functionalized by Pd nanoparticles for gas-sensing application with enhanced butane response performances. <i>Scientific Reports</i> , 2017, 7, 7692.	1.6	35
25	A one-step nonaqueous sol-gel route to mixed-phase TiO <sub>2</sub> with enhanced photocatalytic degradation of Rhodamine B under visible light. <i>CrystEngComm</i> , 2016, 18, 1964-1975.	1.3	33
26	Butane detection: W-doped TiO <sub>2</sub> nanoparticles for a butane gas sensor with high sensitivity and fast response/recovery. <i>RSC Advances</i> , 2015, 5, 96539-96546.	1.7	26
27	Microstructure and properties of novel SPEEK/PVDF-g-PSSA blends for proton exchange membrane with improved compatibility. <i>RSC Advances</i> , 2015, 5, 69621-69628.	1.7	25
28	Highly Concentrated KTFSA-Glyme Electrolytes for K/Bilayered V <sub>2</sub> O <sub>5</sub> Batteries. <i>Batteries and Supercaps</i> , 2020, 3, 261-267.	2.4	25
29	Portably colorimetric paper sensor based on ZnS quantum dots for semi-quantitative detection of Co <sup>2+</sup> through the measurement of grey level. <i>Sensors and Actuators B: Chemical</i> , 2018, 260, 1068-1075.	4.0	24
30	Grey level replaces fluorescent intensity: Fluorescent paper sensor based on ZnO nanoparticles for quantitative detection of Cu <sup>2+</sup> without photoluminescence spectrometer. <i>Sensors and Actuators B: Chemical</i> , 2018, 255, 2356-2366.	4.0	24
31	An Alternative Charge-Storage Mechanism for High-Performance Sodium-Ion and Potassium-Ion Anodes. <i>ACS Energy Letters</i> , 2021, 6, 915-924.	8.8	21
32	Ag-Functionalized macro-/mesoporous AZO synthesized by solution combustion for VOCs gas sensing application. <i>RSC Advances</i> , 2016, 6, 101304-101312.	1.7	20
33	Glyme-Based Electrolyte for Na/Bilayered V <sub>2</sub> O <sub>5</sub> Batteries. <i>ACS Applied Energy Materials</i> , 2019, 2, 2786-2793.	2.5	20
34	Macro-/nanoporous Al-doped ZnO via self-sustained decomposition of metal-organic complexes for application in degradation of Congo red. <i>Ceramics International</i> , 2016, 42, 18914-18924.	2.3	14
35	Evaluation of counter and reference electrodes for the investigation of Ca battery materials. <i>Journal of Power Sources Advances</i> , 2020, 2, 100008.	2.6	14
36	Wässrige Hochleistungsbatterien: Herausforderungen und Strategien. <i>Angewandte Chemie</i> , 2021, 133, 608-626.	1.6	14

#	ARTICLE	IF	CITATIONS
37	From Water and Ni Foam to a Ni(OH) <sub>2</sub> @Ni Foam Binder-Free Supercapacitor Electrode: A Green Corrosion Route. ChemElectroChem, 2018, 5, 434-444.	1.7	12
38	Cathode-Electrolyte Interphase in a LiTFSI/Tetraglyme Electrolyte Promoting the Cyclability of V <sub>2</sub> O <sub>5</sub> . ACS Applied Materials & Interfaces, 2020, 12, 54782-54790.	4.0	12
39	Simple point contact WO <sub>3</sub> sensor for NO <sub>2</sub> sensing and relevant impedance analysis. International Journal of Minerals, Metallurgy and Materials, 2012, 19, 1142-1148.	2.4	9
40	Potassium sulphate (K <sub>2</sub> SO <sub>4</sub> ) activation of chestnut shell to oxygen-enriched porous carbons with enhanced capacitive properties. International Journal of Energy Research, 2020, 44, 5385-5396.	2.2	8
41	Molecular Insight into Microstructural and Dynamical Heterogeneities in Magnesium Ionic Liquid Electrolytes. Journal of Physical Chemistry Letters, 2022, 13, 105-111.	2.1	8
42	Combustion synthesized hierarchically porous Mn <sub>3</sub> O <sub>4</sub> for catalytic degradation of methyl orange. Canadian Journal of Chemical Engineering, 2017, 95, 643-647.	0.9	6
43	From Water and Ni Foam to a Ni(OH) <sub>2</sub> @Ni Foam Binder-Free Supercapacitor Electrode: A Green Corrosion Route. ChemElectroChem, 2018, 5, 409-409.	1.7	4
44	Facile Preparation of Well-Dispersed GO-SPEEK Composite Membranes by Electrospun for Fuel Cell Applications. Materials Research Society Symposia Proceedings, 2015, 1735, 32.	0.1	0