

# Xiao Tong

## List of Publications by Year in descending order

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71  
papers

2,023  
citations

257450  
24  
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254184  
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72  
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72  
docs citations

72  
times ranked

3848  
citing authors

#	ARTICLE	IF	CITATIONS
1	Sub-50-nm self-assembled nanotextures for enhanced broadband antireflection in silicon solar cells. <i>Nature Communications</i> , 2015, 6, 5963.	12.8	230
2	Role of Chemical Composition in the Enhanced Catalytic Activity of Pt-Based Alloyed Ultrathin Nanowires for the Hydrogen Oxidation Reaction under Alkaline Conditions. <i>ACS Catalysis</i> , 2016, 6, 3895-3908.	11.2	155
3	A single-atom library for guided monometallic and concentration-complex multimetallic designs. <i>Nature Materials</i> , 2022, 21, 681-688.	27.5	145
4	Heterogeneous WS <sub>x</sub> WO <sub>3</sub> Thorn-Bush Nanofiber Electrodes for Sodium-Ion Batteries. <i>ACS Nano</i> , 2016, 10, 3257-3266.	14.6	121
5	The impact of surface composition on the interfacial energetics and photoelectrochemical properties of BiVO <sub>4</sub> . <i>Nature Energy</i> , 2021, 6, 287-294.	39.5	108
6	Polydopamine Surface Coating Synergizes the Antimicrobial Activity of Silver Nanoparticles. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 40067-40077.	8.0	79
7	Modulating the electronic structure of ultrathin layered double hydroxide nanosheets with fluorine: an efficient electrocatalyst for the oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2019, 7, 14483-14488.	10.3	73
8	Guided Evolution of Bulk Metallic Glass Nanostructures: A Platform for Designing 3D Electrocatalytic Surfaces. <i>Advanced Materials</i> , 2016, 28, 1940-1949.	21.0	71
9	Atomic Structure Evolution of Pt-Co Binary Catalysts: Single Metal Sites versus Intermetallic Nanocrystals. <i>Advanced Materials</i> , 2021, 33, e2106371.	21.0	62
10	Anomalous metal segregation in lithium-rich material provides design rules for stable cathode in lithium-ion battery. <i>Nature Communications</i> , 2019, 10, 1650.	12.8	60
11	Thickness-dependent magnetic order in CrI <sub>3</sub> single crystals. <i>Scientific Reports</i> , 2019, 9, 13599.	3.3	47
12	Quaternary Organic Solar Cells Enhanced by Cocrystalline Squaraines with Power Conversion Efficiencies >10%. <i>Advanced Energy Materials</i> , 2016, 6, 1600660.	19.5	46
13	Pt and Pd catalyzed oxidation of Li <sub>2</sub> O <sub>2</sub> and DMSO during Li-O <sub>2</sub> battery charging. <i>Chemical Communications</i> , 2016, 52, 6605-6608.	4.1	45
14	The effect of chemical structure on the stability of physical vapor deposited glasses of 1,3,5-triarylbenzene. <i>Journal of Chemical Physics</i> , 2015, 143, 084506.	3.0	42
15	Mechanical Decoupling of Graphene from Ru(0001) by Interfacial Reaction with Oxygen. <i>Journal of Physical Chemistry C</i> , 2013, 117, 6320-6324.	3.1	41
16	Ultrathin Lutetium Oxide Film as an Epitaxial Hole-blocking Layer for Crystalline Bismuth Vanadate Water Splitting Photoanodes. <i>Advanced Functional Materials</i> , 2018, 28, 1705512.	14.9	40
17	Layer-Dependent Photoinduced Electron Transfer in 0D-2D Lead Sulfide/Cadmium Sulfide-Layered Molybdenum Disulfide Hybrids. <i>ACS Nano</i> , 2019, 13, 8461-8468.	14.6	39
18	Reactivity of a Zirconia-Copper Inverse Catalyst for CO <sub>2</sub> Hydrogenation. <i>Journal of Physical Chemistry C</i> , 2020, 124, 22158-22172.	3.1	37

#	ARTICLE	IF	CITATIONS
19	Synthesis, Characterization, and Stability Studies of Ge-Based Perovskites of Controllable Mixed Cation Composition, Produced with an Ambient Surfactant-Free Approach. <i>ACS Omega</i> , 2019, 4, 18219-18233.	3.5	33
20	Microscopic relaxation channels in materials for superconducting qubits. <i>Communications Materials</i> , 2021, 2, .	6.9	31
21	Correlating the chemical composition and size of various metal oxide substrates with the catalytic activity and stability of as-deposited Pt nanoparticles for the methanol oxidation reaction. <i>Catalysis Science and Technology</i> , 2016, 6, 2435-2450.	4.1	29
22	Nickel-rich Nickel Manganese Cobalt (NMC622) Cathode Lithiation Mechanism and Extended Cycling Effects Using <i>&lt; i&gt;Operando&lt;/i&gt;</i> X-ray Absorption Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2021, 125, 58-73.	3.1	27
23	A New Design Strategy for Observing Lithium Oxide Growth-Evolution Interactions Using Geometric Catalyst Positioning. <i>Nano Letters</i> , 2016, 16, 4799-4806.	9.1	25
24	Highly efficient solid state catalysis by reconstructed (001) Ceria surface. <i>Scientific Reports</i> , 2014, 4, 4627.	3.3	24
25	Development of a New Generation of Stable, Tunable, and Catalytically Active Nanoparticles Produced by the Helium Nanodroplet Deposition Method. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 2910-2914.	4.6	21
26	Understanding Methanol Synthesis on Inverse ZnO/CuO <sub>x</sub> /Cu Catalysts: Stability of CH <sub>3</sub> O Species and Dynamic Nature of the Surface. <i>Journal of Physical Chemistry C</i> , 2021, 125, 6673-6683.	3.1	21
27	Temperature Effect on Photoelectrochemical Water Splitting: A Model Study Based on BiVO <sub>4</sub> Photoanodes. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 61227-61236.	8.0	21
28	Environmentally Friendly Zr-Based Conversion Nanocoatings for Corrosion Inhibition of Metal Surfaces Evaluated by Multimodal X-ray Analysis. <i>ACS Applied Nano Materials</i> , 2019, 2, 1920-1929.	5.0	20
29	Multi-modal surface analysis of porous films under <i>&lt; i&gt;operando&lt;/i&gt;</i> conditions. <i>AIP Advances</i> , 2020, 10, .	1.3	19
30	Solution-Based, Anion-Doping of Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> Nanoflowers for Lithium-Ion Battery Applications. <i>Chemistry - A European Journal</i> , 2020, 26, 9389-9402.	3.3	19
31	Magnetic mixed valent semimetal $\text{EuZnSb}$ with Dirac states in the band structure. <i>Physical Review Research</i> , 2020, 2, .	4.6	18
32	H <sub>2</sub> O Dissociation-Induced Aluminum Oxide Growth on Oxidized Al(111) Surfaces. <i>Langmuir</i> , 2015, 31, 13117-13126.	3.5	17
33	Chemical Strategies for Enhancing Activity and Charge Transfer in Ultrathin Pt Nanowires Immobilized onto Nanotube Supports for the Oxygen Reduction Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 34280-34294.	8.0	16
34	Quinary Defect-Rich Ultrathin Bimetal Hydroxide Nanosheets for Water Oxidation. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 44018-44025.	8.0	15
35	Emergent flat band electronic structure in a VSe <sub>2</sub> /Bi <sub>2</sub> Se <sub>3</sub> heterostructure. <i>Communications Materials</i> , 2021, 2, .	6.9	15
36	New aspects of improving the performance of WO <sub>3</sub> thin films for photoelectrochemical water splitting by tuning the ultrathin depletion region. <i>RSC Advances</i> , 2019, 9, 899-905.	3.6	14

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37	Synthesis, Structural Characterization, and Growth Mechanism of Li <sub>1+x</sub> V <sub>3</sub> O <sub>8</sub> Submicron Fibers for Lithium-Ion Batteries. Crystal Growth and Design, 2018, 18, 2055-2066.	3.0	13
38	Morphology and reactivity of size-selected titanium oxide nanoclusters on Au(111). Journal of Chemical Physics, 2020, 152, 054714.	3.0	12
39	Oxidation of Cyclohexene Catalyzed by Nanoporous Au(Ag) in Liquid Phase. Catalysis Letters, 2017, 147, 442-452.	2.6	11
40	Impact of Charge Voltage on Factors Influencing Capacity Fade in Layered NMC622: Multimodal X-ray and Electrochemical Characterization. ACS Applied Materials & Interfaces, 2021, 13, 50920-50935.	8.0	10
41	Phase transition and electronic structure evolution of MoTe <sub>2</sub> induced by W substitution. Physical Review B, 2018, 98, .	3.0	10
42	Design nanoporous metal thin films via solid state interfacial dealloying. Nanoscale, 2021, 13, 17725-17736.	5.6	9
43	Synthesis and Characterization of Ultrathin FeTe <sub>2</sub> Nanocrystals. ACS Omega, 2021, 6, 10537-10546.	3.5	9
44	Three-dimensional Ising ferrimagnetism of Cr-Fe-Cr trimers in Fe <sub>2</sub> Cr <sub>2</sub> Te <sub>4</sub> . Physical Review B, 2020, 102, .	3.2	8
45	Lanthanum-based double perovskite nanoscale motifs as support media for the methanol oxidation reaction. Catalysis Science and Technology, 2022, 12, 613-629.	4.1	8
46	Low-Oxidized Siloxene Nanosheets with High Capacity, Capacity Retention, and Rate Capability in Lithium-Based Batteries. Advanced Materials Interfaces, 2022, 9, .	3.7	8
47	Interfacial Reactivity of Silicon Electrodes: Impact of Electrolyte Solvent and Presence of Conductive Carbon. ACS Applied Materials & Interfaces, 2022, 14, 20404-20417.	8.0	8
48	Water dissociation on MnO(1 Å-1)/Ag(100). Physical Chemistry Chemical Physics, 2016, 18, 25355-25363.	2.8	7
49	Unraveling the Formation Mechanism of a Hybrid Zr-Based Chemical Conversion Coating with Organic and Copper Compounds for Corrosion Inhibition. ACS Applied Materials & Interfaces, 2021, 13, 5518-5528.	8.0	7
50	Surface structure of mass-selected niobium oxide nanoclusters on Au(111). Nanotechnology, 2021, 32, 475601.	2.6	7
51	Hybrid MoS <sub>2</sub> -Nanosheet/Nanocarbon Heterostructures for Lithium-Ion Batteries. ACS Applied Nano Materials, 2022, 5, 5103-5118.	5.0	7
52	Complete Strain Mapping of Nanosheets of Tantalum Disulfide. ACS Applied Materials & Interfaces, 2020, 12, 43173-43179.	8.0	6
53	Metal-Confining Synthesis of ZnS <sub>2</sub> Monolayer Catalysts for Dinitrogen Electrocatalysis. ACS Catalysis, 2022, 12, 6809-6815.	11.2	6
54	Revisiting heat treatment and surface activation of GaAs photocathodes: In situ studies using scanning tunneling microscopy and photoelectron spectroscopy. Journal of Applied Physics, 2020, 128, 045308.	2.5	5

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55	Electrical and thermal transport in van der Waals magnets $2\text{H}\tilde{\text{a}}^{\text{~}}\text{MxTaS}_2\text{\AA}$ (M=Mn,Co). Physical Review Research, 2022, 4, .	3.6	5
56	X-ray Assisted Scanning Tunneling Microscopy and Its Applications for Materials Science: The First Results on Cu Doped ZrTe3. Crystals, 2019, 9, 588.	2.2	4
57	Thermal transport and mixed valence in ZrTe3 doped with Hf and Se. Applied Physics Letters, 2022, 120, .	3.3	4
58	Atomistic mechanisms of the initial oxidation of stepped $\text{Cu}_{3,3}\text{O}_{4,0}$ . Physical Review B, 2022, 105, .		
59	Transient Oxidation of Cu-5at.%Ni(001): Temperature Dependent Sequential Oxide Formation. Oxidation of Metals, 2013, 79, 303-311.	2.1	3
60	Studying Catalytically Viable Single-Crystalline Metal Oxide Nanorods Using Synchrotron-Based Scanning Hard X-ray Microscopy. Journal of Physical Chemistry C, 2019, 123, 17185-17195.	3.1	3
61	Morphology of Palladium Thin Film Deposited on a Two-Dimensional Bilayer Aluminosilicate. Topics in Catalysis, 2019, 62, 1067-1075.	2.8	3
62	Suppression of thermal conductivity and electronic correlations in $\text{Fe}_{1-x}\text{Ru}_x\text{Sb}_2$ (0) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	3.3	
63	Coupling between bulk thermal defects and surface segregation dynamics. Physical Review B, 2021, 104, .	3.2	3
64	Thin-film synthesis of superconductor-on-insulator A15 vanadium silicide. Scientific Reports, 2021, 11, 2358.	3.3	3
65	Absence of long-range magnetic order in $\text{Fe}_{1-x}\text{Te}_x$ . ( $\text{Fe}_{1-x}\text{Te}_x$ ) Tj ETQq1 1 0 784314 rgBT /Over		
66	Probing the Physicochemical Behavior of Variously Doped $\text{Li}_{4-x}\text{Ti}_5\text{O}_{12}$ Nanoflowers. ACS Physical Chemistry Au, 2022, 2, 331-345.	4.0	2
67	Yttrium-based Double Perovskite Nanorods for Electrocatalysis. ACS Applied Materials & Interfaces, 2022, 14, 30914-30926.	8.0	2
68	Solar Cells: Quaternary Organic Solar Cells Enhanced by Cocrystalline Squaraines with Power Conversion Efficiencies >10% (Adv. Energy Mater. 21/2016). Advanced Energy Materials, 2016, 6, .	19.5	1
69	Characterization of Hazy Morphology on AlInP/GaAs Epitaxial Wafers Grown by Organometallic Vapor-Phase Epitaxy. Journal of Electronic Materials, 2021, 50, 3006-3012.	2.2	1
70	Enhancing CO Oxidation Activity via Tuning a Charge Transfer Between Gold Nanoparticles and Supports. Journal of Physical Chemistry C, 2022, 126, 4836-4844.	3.1	1
71	Electrocatalysts: Guided Evolution of Bulk Metallic Glass Nanostructures: A Platform for Designing 3D Electrocatalytic Surfaces (Adv. Mater. 10/2016). Advanced Materials, 2016, 28, 1902-1902.	21.0	0