

Xiao Liu

List of Publications by Year in descending order

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45
papers

1,114
citations

394286

19
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395590

33
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all docs

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docs citations

46
times ranked

1638
citing authors

#	ARTICLE	IF	CITATIONS
1	Reduction of Surface Residual Lithium Compounds for Single-Crystal LiNi _{0.6} Mn _{0.2} Co _{0.2} O ₂ via Al ₂ O ₃ Atomic Layer Deposition and Post-Annealing. <i>Coatings</i> , 2022, 12, 84.	1.2	7
2	A combined multiscale modeling and experimental study on surface modification of high-volume micro-nanoparticles with atomic accuracy. <i>International Journal of Extreme Manufacturing</i> , 2022, 4, 025101.	6.3	6
3	Alumina nanocoating assisted dispersion stability of permanent violet pigments via atomic layer deposition. <i>Materials Chemistry and Physics</i> , 2022, 282, 125937.	2.0	0
4	A-site cation exfoliation of amorphous SmMn _x O _y oxides for low temperature propane oxidation. <i>Journal of Catalysis</i> , 2022, 409, 59-69.	3.1	17
5	Well-controlled Pt@CeO ₂ @nitrogen doped carbon triple-junction catalysts with enhanced activity and durability for the oxygen reduction reaction. <i>Sustainable Energy and Fuels</i> , 2022, 6, 2989-2995.	2.5	4
6	Progress in enhanced fluidization process for particle coating via atomic layer deposition. <i>Chemical Engineering and Processing: Process Intensification</i> , 2021, 159, 108234.	1.8	14
7	Fe ₃ O ₄ /Co ₃ O ₄ binary oxides as bifunctional electrocatalysts for rechargeable Zn@air batteries by one-pot pyrolysis of zeolitic imidazolate frameworks. <i>Sustainable Energy and Fuels</i> , 2021, 5, 2985-2993.	2.5	6
8	Activation of subnanometric Pt on Cu-modified CeO ₂ via redox-coupled atomic layer deposition for CO oxidation. <i>Nature Communications</i> , 2020, 11, 4240.	5.8	101
9	Highly efficient copper-manganese oxide catalysts with abundant surface vacancies for low-temperature water-gas shift reaction. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 8629-8639.	3.8	9
10	Unravelling the selective growth mechanism of AlO _x with dimethylaluminum isopropoxide as a precursor in atomic layer deposition: a combined theoretical and experimental study. <i>Journal of Materials Chemistry A</i> , 2020, 8, 4308-4317.	5.2	10
11	Catalysts via Atomic Layer Deposition. <i>Molecular Catalysis</i> , 2020, , 69-105.	1.3	1
12	Getting Insights into the Temperature-Specific Active Sites on Platinum Nanoparticles for CO Oxidation: A Combined in Situ Spectroscopic and ab Initio Density Functional Theory Study. <i>ACS Catalysis</i> , 2019, 9, 7759-7768.	5.5	33
13	Unravelling origins of Pd ensembles' activity in CO oxidation via state-to-state microkinetic analysis. <i>Journal of Catalysis</i> , 2019, 371, 276-286.	3.1	12
14	Development of a pair potential for Ta-He system. <i>Computational Materials Science</i> , 2019, 156, 268-272.	1.4	4
15	Tuning the structure of bifunctional Pt/SmMn ₂ O ₅ interfaces for promoted low-temperature CO oxidation activity. <i>Nanoscale</i> , 2019, 11, 8150-8159.	2.8	13
16	Origin of the superior activity of surface doped SmMn ₂ O ₅ mullites for NO oxidation: A first-principles based microkinetic study. <i>Journal of Catalysis</i> , 2018, 359, 122-129.	3.1	41
17	Bifunctional CO oxidation over Mn-mullite anchored Pt sub-nanoclusters via atomic layer deposition. <i>Chemical Science</i> , 2018, 9, 2469-2473.	3.7	33
18	Selective Passivation of Pt Nanoparticles with Enhanced Sintering Resistance and Activity toward CO Oxidation via Atomic Layer Deposition. <i>ACS Applied Nano Materials</i> , 2018, 1, 522-530.	2.4	47

#	ARTICLE	IF	CITATIONS
19	Review Article: Catalysts design and synthesis via selective atomic layer deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2018, 36, .	0.9	91
20	CO oxidation over MO _x (M = Mn, Fe, Co, Ni, Cu) supported on SmMn ₂ O ₅ composite catalysts. Catalysis Science and Technology, 2018, 8, 5490-5497.	2.1	19
21	Ultrathin Zirconia Passivation and Stabilization of Aluminum Nanoparticles for Energetic Nanomaterials via Atomic Layer Deposition. ACS Applied Nano Materials, 2018, 1, 5500-5506.	2.4	19
22	Oxide@Nanotrap@Anchored Platinum Nanoparticles with High Activity and Sintering Resistance by Area@Selective Atomic Layer Deposition. Angewandte Chemie - International Edition, 2017, 56, 1648-1652.	7.2	65
23	Oxide@Nanotrap@Anchored Platinum Nanoparticles with High Activity and Sintering Resistance by Area@Selective Atomic Layer Deposition. Angewandte Chemie, 2017, 129, 1670-1674.	1.6	27
24	Tunable H ₂ binding on alkaline and alkaline earth metals decorated graphene substrates from first-principles calculations. International Journal of Hydrogen Energy, 2017, 42, 10064-10071.	3.8	17
25	Surface passivation of aluminum hydride particles via atomic layer deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2017, 35, .	0.9	24
26	Ultrathin CoOx-modified hematite with low onset potential for solar water oxidation. Physical Chemistry Chemical Physics, 2017, 19, 14178-14184.	1.3	24
27	Effect of exposed facets and oxygen vacancies on the catalytic activity of Pd _x Ce _{1-x} O ₂ catalysts: a combined experimental and theoretical study. Catalysis Science and Technology, 2017, 7, 4462-4469.	2.1	11
28	Nanofence Stabilized Platinum Nanoparticles Catalyst via Facet@Selective Atomic Layer Deposition. Small, 2017, 13, 1700648.	5.2	61
29	Promotional role of La addition in the NO oxidation performance of a SmMn ₂ O ₅ mullite catalyst. Catalysis Science and Technology, 2016, 6, 5580-5589.	2.1	54
30	Atomically Controllable Pd@Pt Core@Shell Nanoparticles towards Preferential Oxidation of CO in Hydrogen Reactions Modulated by Platinum Shell Thickness. ChemCatChem, 2016, 8, 326-330.	1.8	28
31	Fluidized bed coupled rotary reactor for nanoparticles coating via atomic layer deposition. Review of Scientific Instruments, 2015, 86, 075101.	0.6	33
32	A first-principles study of sodium adsorption and diffusion on phosphorene. Physical Chemistry Chemical Physics, 2015, 17, 16398-16404.	1.3	75
33	Density Functional Theory Study of the Oxygen Chemistry and NO Oxidation Mechanism on Low-Index Surfaces of SmMn ₂ O ₅ Mullite. ACS Catalysis, 2015, 5, 4913-4926.	5.5	55
34	Theoretical Study of Li-Doped sp ² @sp ³ Hybrid Carbon Network for Hydrogen Storage. Journal of Physical Chemistry C, 2015, 119, 15831-15838.	1.5	6
35	Tuning the morphology and composition of ultrathin cobalt oxide films via atomic layer deposition. RSC Advances, 2015, 5, 71816-71823.	1.7	23
36	Combined effects of defects and hydroxyl groups on the electronic transport properties of reduced graphene oxide. Applied Physics A: Materials Science and Processing, 2015, 118, 885-892.	1.1	12

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37	Promoted Platinum Catalytic Activity and Thermal Stability with Nano-Scale Cobalt Oxide Coating via Atomic Layer Deposition. ECS Transactions, 2014, 64, 159-166.	0.3	0
38	Surface stabilities and NO oxidation kinetics on hexagonal-phase LaCoO ₃ facets: a first-principles study. Catalysis Science and Technology, 2014, 4, 3687-3696.	2.1	12
39	NO oxidation catalysis on copper doped hexagonal phase LaCoO ₃ : a combined experimental and theoretical study. Physical Chemistry Chemical Physics, 2014, 16, 5106.	1.3	59
40	First-principles study of the structural, energetic and electronic properties of C ₂₀ -carbon nanobuds. Modelling and Simulation in Materials Science and Engineering, 2013, 21, 035006.	0.8	5
41	Theoretical Study of sp ² -sp ³ Hybridized Carbon Network for Li-ion Battery Anode. Journal of Physical Chemistry C, 2013, 117, 4951-4956.	1.5	15
42	Modulation of Dirac points and band-gaps in graphene via periodic fullerene adsorption. AIP Advances, 2013, 3, .	0.6	18
43	Electronic transport properties of atomic scale graphene/metal side contact. Materials Research Society Symposia Proceedings, 2013, 1553, 1.	0.1	0
44	Facet-dependent activity of shape-controlled TiO ₂ supported Au nanoparticles for the water-gas shift reaction. Catalysis Science and Technology, 0, , .	2.1	2
45	Atomic layer deposition for advanced nanomanufacturing. Science China Technological Sciences, 0, , .	2.0	0