Yu Lei

List of Publications by Year in Descending Order

57 papers	3,378 citations	25 h-index	58 g-index
60 ext. papers	3,694 ext. citations	7.7 avg, IF	4.82 L-index

#	Paper	IF	Citations
57	N a□ D 2 Battery **2022**, 153-199		
56	Plasmon-enhanced Catalytic Ozonation for Efficient Removal of Recalcitrant Water Pollutants. *ACS ES&T Engineering*, **2021**, 1, 874-883		4
55	Preparation and cutting performance of nano-scaled Al2O3-coated micro-textured cutting tool prepared by atomic layer deposition. *High Temperature Materials and Processes*, **2021**, 40, 77-86	0.9	3
54	Ultrasonic atomization of titanium isopropoxide at room temperature for TiO2 atomic layer deposition. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2020**, 38, 062405	2.9	2
53	Synergetic effect on catalytic activity and charge transfer in Pt-Pd bimetallic model catalysts prepared by atomic layer deposition. *Journal of Chemical Physics*, **2020**, 152, 024710	3.9	5
52	Gold Catalysts Synthesized Using a Modified Incipient Wetness Impregnation Method for Propylene Epoxidation. *ChemCatChem*, **2020**, 12, 5993-5999	5.2	0
51	Quantification of rhenium oxide dispersion on zeolite: Effect of zeolite acidity and mesoporosity. *Journal of Catalysis*, **2019**, 372, 128-141	7.3	10
50	Structure and reactivity of single site Ti catalysts for propylene epoxidation. *Journal of Catalysis*, **2019**, 377, 419-428	7.3	22
49	Oxidation-Induced Atom Diffusion and Surface Restructuring in Faceted Ternary Pt□Cu□Ni Nanoparticles. *Chemistry of Materials*, **2019**, 31, 1720-1728	9.6	21
48	Mesopore differences between pillared lamellar MFI and MWW zeolites probed by atomic layer deposition of titania and consequences on photocatalysis. *Microporous and Mesoporous Materials*, **2019**, 276, 260-269	5.3	10
47	Tailoring nanopore formation in atomic layer deposited ultrathin films. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2018**, 36, 01A103	2.9	10
46	High-Capacity Sodium Peroxide Based Na□O2 Batteries with Low Charge Overpotential via a Nanostructured Catalytic Cathode. *ACS Energy Letters*, **2018**, 3, 276-277	20.1	11
45	Effects of TiO2 in Low Temperature Propylene Epoxidation Using Gold Catalysts. *Journal of Physical Chemistry C*, **2018**, 122, 1688-1698	3.8	32
44	Atomic layer deposition of molybdenum disulfide films using MoF6 and H2S. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2018**, 36, 01A125	2.9	19
43	Mechanistic insights into the direct propylene epoxidation using Au nanoparticles dispersed on TiO2/SiO2. *Chemical Engineering Science*, **2018**, 191, 169-182	4.4	16
42	Theoretical Studies on the Direct Propylene Epoxidation Using Gold-Based Catalysts: A Mini-Review. *Catalysts*, **2018**, 8, 421	4	12
41	Enhancement of Copper Catalyst Stability for Catalytic Ozonation in Water Treatment Using ALD Overcoating. *ACS Applied Materials & Interfaces*, **2018**, 10, 43323-43326	9.5	8

40	Methoxylation of dihydromyrcene in an intensified fixed bed reactor. *Chemical Engineering Research and Design*, **2017**, 122, 254-262	5.5	5
39	Catalytic consequences of cation and anion substitutions on rate and mechanism of oxidative coupling of methane over hydroxyapatite catalysts. *Fuel*, **2017**, 191, 472-485	7.1	9
38	Increased selectivity for allylic oxidation of cyclohexene using TiO2 modified V2O5/MoO3 catalysts. *Catalysis Communications*, **2017**, 99, 43-48	3.2	9
37	Dense graphene monolith oxygen cathodes for ultrahigh volumetric energy densities. *Energy Storage Materials*, **2017**, 9, 134-139	19.4	17
36	Metallic ion leaching from heterogeneous catalysts: an overlooked effect in the study of catalytic ozonation processes. *Environmental Science: Water Research and Technology*, **2017**, 3, 1143-1151	4.2	17
35	Analysis of the propylene epoxidation mechanism on supported gold nanoparticles. *Chemical Engineering Science*, **2017**, 174, 229-237	4.4	12
34	Tuning external surface of unit-cell thick pillared MFI and MWW zeolites by atomic layer deposition and its consequences on acid-catalyzed reactions. *Journal of Catalysis*, **2016**, 337, 177-187	7.3	37
33	Influences of cation and anion substitutions on oxidative coupling of methane over hydroxyapatite catalysts. *Fuel*, **2016**, 167, 208-217	7.1	28
32	Modeling the atomistic growth behavior of gold nanoparticles in solution. *Nanoscale*, **2016**, 8, 9354-65	7.7	17
31	Combining Electronic and Geometric Effects of ZnO-Promoted Pt Nanocatalysts for Aqueous Phase Reforming of 1-Propanol. *ACS Catalysis*, **2016**, 6, 3457-3460	13.1	37
30	Design and synthesis of model and practical palladium catalysts using atomic layer deposition. *Catalysis Science and Technology*, **2016**, 6, 6845-6852	5.5	8
29	Atomic Layer Deposition for Lithium-Based Batteries. *Advanced Materials Interfaces*, **2016**, 3, 1600564	4.6	59
28	Towards ALD thin film stabilized single-atom Pd1 catalysts. *Nanoscale*, **2016**, 8, 15348-56	7.7	70
27	Pd nanoparticles on ZnO-passivated porous carbon by atomic layer deposition: an effective electrochemical catalyst for Li-O2 battery. *Nanotechnology*, **2015**, 26, 164003	3.4	23
26	Synthesis of palladium nanoparticles on TiO2(110) using a beta-diketonate precursor. *Physical Chemistry Chemical Physics*, **2015**, 17, 6470-7	3.6	7
25	Toward atomically-precise synthesis of supported bimetallic nanoparticles using atomic layer deposition. *Nature Communications*, **2014**, 5, 3264	17.4	156
24	Effects of Chlorine in Titanium Oxide on Palladium Atomic Layer Deposition. *Journal of Physical Chemistry C*, **2014**, 118, 22611-22619	3.8	21
23	In situ diffraction of highly dispersed supported platinum nanoparticles. *Catalysis Science and Technology*, **2014**, 4, 3053-3063	5.5	34

22	Enhancing the stability of copper chromite catalysts for the selective hydrogenation of furfural using ALD overcoating. *Journal of Catalysis*, **2014**, 317, 284-292	7.3	52
21	Palladium nanoparticle formation on TiO(110) by thermal decomposition of palladium(II) hexafluoroacetylacetonate. *ACS Applied Materials & Interfaces*, **2014**, 6, 14702-11	9.5	37
20	Adsorbate-induced structural changes in 1-3 nm platinum nanoparticles. *Journal of the American Chemical Society*, **2014**, 136, 9320-6	16.4	59
19	Effectively suppressing dissolution of manganese from spinel lithium manganate via a nanoscale surface-doping approach. *Nature Communications*, **2014**, 5, 5693	17.4	202
18	A nanostructured cathode architecture for low charge overpotential in lithium-oxygen batteries. *Nature Communications*, **2013**, 4, 2383	17.4	355
17	Synthesis of porous carbon supported palladium nanoparticle catalysts by atomic layer deposition: application for rechargeable lithium-O2 battery. *Nano Letters*, **2013**, 13, 4182-9	11.5	170
16	Nucleation behavior of supported Rh nanoparticles fabricated from Rh(CO)2(acac) on Al2O3/Ni3Al(111). *Chemical Physics Letters*, **2013**, 555, 7-11	2.5	7
15	Resolving Precursor Deligation, Surface Species Evolution, and Nanoparticle Nucleation during Palladium Atomic Layer Deposition. *Journal of Physical Chemistry C*, **2013**, 117, 11141-11148	3.8	27
14	Structural and Electrochemical Study of Al2O3 and TiO2 Coated Li1.2Ni0.13Mn0.54Co0.13O2 Cathode Material Using ALD. *Advanced Energy Materials*, **2013**, 3, 1299-1307	21.8	342
13	Understanding the Chemistry of H2 Production for 1-Propanol Reforming: Pathway and Support Modification Effects. *ACS Catalysis*, **2012**, 2, 2316-2326	13.1	24
12	Porous Alumina Protective Coatings on Palladium Nanoparticles by Self-Poisoned Atomic Layer Deposition. *Chemistry of Materials*, **2012**, 24, 2047-2055	9.6	100
11	Au25 nanocluster-catalyzed Ullmann-type homocoupling reaction of aryl iodides. *Chemical Communications*, **2012**, 48, 12005-7	5.8	80
10	Synthesis of PtPd Core-Shell Nanostructures by Atomic Layer Deposition: Application in Propane Oxidative Dehydrogenation to Propylene. *Chemistry of Materials*, **2012**, 24, 3525-3533	9.6	96
9	CO+NO versus CO+O2 Reaction on Monolayer FeO(111) Films on Pt(111). *ChemCatChem*, **2011**, 3, 671-674	5.2	29
8	Effect of Particle Size and Adsorbates on the L3, L2 and L1 X-ray Absorption Near Edge Structure of Supported Pt Nanoparticles. *Topics in Catalysis*, **2011**, 54, 334-348	2.3	90
7	Size-dependent selectivity and activity of silver nanoclusters in the partial oxidation of propylene to propylene oxide and acrolein: A joint experimental and theoretical study. *Catalysis Today*, **2011**, 160, 116-130	5.3	102
6	Preparation and characterization of iron molybdate thin films. *Surface Science*, **2011**, 605, 1550-1555	1.8	25
5	Formation of Ruthenium Tin Nanoparticles on Al2O3/Ni3Al(111) from an Organometallic Precursor. *Journal of Physical Chemistry C*, **2010**, 114, 17062-17068	3.8	5

4	Adsorption and reaction of Rh(CO)2(acac) on Al2O3/Ni3Al(111). *Physical Chemistry Chemical Physics* , **2010**, 12, 1264-70	3.6	17
3	CO Adsorption on Monometallic and Bimetallic Au□Pd Nanoparticles Supported on Oxide Thin Films□*Journal of Physical Chemistry C*, **2010**, 114, 17099-17104	3.8	70
2	Increased silver activity for direct propylene epoxidation via subnanometer size effects. *Science*, **2010**, 328, 224-8	33.3	665
1	Relating methanol oxidation to the structure of ceria-supported vanadia monolayer catalysts. *Journal of Catalysis*, **2010**, 272, 82-91	7.3	67