Kwangjin An

List of Publications by Year in Descending Order

64 papers	7,549 citations	31 h-index	67 g-index
67 ext. papers	8,282 ext. citations	9.2 avg, IF	5.83 L-index

#	Paper	IF	Citations
64	Methane oxidation to formaldehyde over vanadium oxide supported on various mesoporous silicas. *Korean Journal of Chemical Engineering*, **2021**, 38, 1224-1230	2.8	2
63	Interfacial effect of Pd supported on mesoporous oxide for catalytic furfural hydrogenation. *Catalysis Today*, **2021**, 365, 291-300	5.3	3
62	Cu2O(100) surface as an active site for catalytic furfural hydrogenation. *Applied Catalysis B: Environmental*, **2021**, 282, 119576	21.8	15
61	Modified Metal□Organic Frameworks as Efficient Catalysts for Lignocellulosic Biomass Conversion. *Bulletin of the Korean Chemical Society*, **2021**, 42, 346-358	1.2	3
60	Atomically Alloyed Fe□Co Catalyst Derived from a N-Coordinated Co Single-Atom Structure for CO2 Hydrogenation. *ACS Catalysis*, **2021**, 11, 2267-2278	13.1	11
59	Layered Double Hydroxide-Derived Intermetallic Ni3GaC0.25 Catalysts for Dry Reforming of Methane. *ACS Catalysis*, **2021**, 11, 11091-11102	13.1	3
58	Revealing Charge Transfer at the Interface of Spinel Oxide and Ceria during CO Oxidation. *ACS Catalysis*, **2021**, 11, 1516-1527	13.1	7
57	Al2O3-Coated Ni/CeO2 nanoparticles as coke-resistant catalyst for dry reforming of methane. *Catalysis Science and Technology*, **2020**, 10, 8283-8294	5.5	12
56	Cobalt Ferrite Nanoparticles to Form a Catalytic Co□Fe Alloy Carbide Phase for Selective CO2 Hydrogenation to Light Olefins. *ACS Catalysis*, **2020**, 10, 8660-8671	13.1	42
55	An efficient hydrogenation catalytic model hosted in a stable hyper-crosslinked porous-organic-polymer: from fatty acid to bio-based alkane diesel synthesis. *Green Chemistry*, **2020**, 22, 2049-2068	10	29
54	Synergistic effect of quinary molten salts and ruthenium catalyst for high-power-density lithium-carbon dioxide cell. *Nature Communications*, **2020**, 11, 456	17.4	22
53	Structural evolution of ZIF-67-derived catalysts for furfural hydrogenation. *Journal of Catalysis*, **2020**, 392, 302-312	7.3	9
52	Recycling Carbon Dioxide through Catalytic Hydrogenation: Recent Key Developments and Perspectives. *ACS Catalysis*, **2020**, 10, 11318-11345	13.1	74
51	Highly dispersed Pd catalysts supported on various carbons for furfural hydrogenation. *Catalysis Today*, **2020**, 350, 71-79	5.3	16
50	Enhanced hot electron generation by inverse metal-oxide interfaces on catalytic nanodiode. *Faraday Discussions*, **2019**, 214, 353-364	3.6	9
49	Integration of Interfacial and Alloy Effects to Modulate Catalytic Performance of Metal□Organic-Framework-Derived Cu□Pd Nanocrystals toward Hydrogenolysis of 5-Hydroxymethylfurfural. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 10349-10362	8.3	52
48	Structure-dependent catalytic properties of mesoporous cobalt oxides in furfural hydrogenation. *Applied Catalysis A: General*, **2019**, 583, 117125	5.1	16

47	Mesoporous mixed CuCo oxides as robust catalysts for liquid-phase furfural hydrogenation. *Applied Catalysis A: General*, **2019**, 571, 118-126	5.1	22
46	Catalytic 1-Propanol Oxidation on Size-Controlled Platinum Nanoparticles at Solid–Gas and Solid–Liquid Interfaces: Significant Differences in Kinetics and Mechanisms. *Journal of Physical Chemistry C*, **2019**, 123, 7577-7583	3.8	5
45	Supported Pd nanoparticle catalysts with high activities and selectivities in liquid-phase furfural hydrogenation. *Fuel*, **2018**, 226, 607-617	7.1	42
44	Catalytic CO Oxidation on Nanocatalysts. *Topics in Catalysis*, **2018**, 61, 986-1001	2.3	10
43	Specific Metal–Support Interactions between Nanoparticle Layers for Catalysts with Enhanced Methanol Oxidation Activity. *ACS Catalysis*, **2018**, 8, 5391-5398	13.1	44
42	Boosting hot electron flux and catalytic activity at metal-oxide interfaces of PtCo bimetallic nanoparticles. *Nature Communications*, **2018**, 9, 2235	17.4	56
41	Catalytic CO Oxidation over Au Nanoparticles Supported on CeO2 Nanocrystals: Effect of the Au–CeO2 Interface. *ACS Catalysis*, **2018**, 8, 11491-11501	13.1	112
40	SiO2@V2O5@Al2O3 core–shell catalysts with high activity and stability for methane oxidation to formaldehyde. *Journal of Catalysis*, **2018**, 368, 134-144	7.3	15
39	Chemically impregnated NiO catalyst for molten electrolyte based gas-tank-free LiO2 battery. *Journal of Power Sources*, **2018**, 402, 68-74	8.9	7
38	Acidic effect of porous alumina as supports for Pt nanoparticle catalysts in n-hexane reforming. *Catalysis Science and Technology*, **2018**, 8, 3295-3303	5.5	9
37	Transition Metal-Based Thiometallates as Surface Ligands for Functionalization of All-Inorganic Nanocrystals. *Chemistry of Materials*, **2017**, 29, 10510-10517	9.6	11
36	Photocatalytic H2 generation on macro-mesoporous oxide-supported Pt nanoparticles. *RSC Advances*, **2016**, 6, 18198-18203	3.7	12
35	Postsynthesis Modulation of the Catalytic Interface inside a Hollow Nanoreactor: Exploitation of the Bidirectional Behavior of Mixed-Valent Mn3O4 Phase in the Galvanic Replacement Reaction. *Chemistry of Materials*, **2016**, 28, 9049-9055	9.6	15
34	High-performance hybrid oxide catalyst of manganese and cobalt for low-pressure methanol synthesis. *Nature Communications*, **2015**, 6, 6538	17.4	106
33	Nanocatalysis I: Synthesis of Metal and Bimetallic Nanoparticles and Porous Oxides and Their Catalytic Reaction Studies. *Catalysis Letters*, **2015**, 145, 233-248	2.8	95
32	Hollow MnOxPy and Pt/MnOxPy yolk/shell nanoparticles as a T1 MRI contrast agent. *Journal of Colloid and Interface Science*, **2015**, 439, 134-8	9.3	6
31	Evidence of highly active cobalt oxide catalyst for the Fischer-Tropsch synthesis and CO2 hydrogenation. *Journal of the American Chemical Society*, **2014**, 136, 2260-3	16.4	173
30	Effects of Nanoparticle Size and Metal/Support Interactions in Pt-Catalyzed Methanol Oxidation Reactions in Gas and Liquid Phases. *Catalysis Letters*, **2014**, 144, 1930-1938	2.8	26

29	Comparing the catalytic oxidation of ethanol at the solid-gas and solid-liquid interfaces over size-controlled Pt nanoparticles: striking differences in kinetics and mechanism. *Nano Letters*, **2014**, 14, 6727-30	11.5	38
28	High-temperature catalytic reforming of n-hexane over supported and core-shell Pt nanoparticle catalysts: role of oxide-metal interface and thermal stability. *Nano Letters*, **2014**, 14, 4907-12	11.5	53
27	Designed catalysts from Pt nanoparticles supported on macroporous oxides for selective isomerization of n-hexane. *Journal of the American Chemical Society*, **2014**, 136, 6830-3	16.4	88
26	Promotion of Hydrogenation of Organic Molecules by Incorporating Iron into Platinum Nanoparticle Catalysts: Displacement of Inactive Reaction Intermediates. *ACS Catalysis*, **2013**, 3, 2371-2375	12.1	18
25	Enhanced CO oxidation rates at the interface of mesoporous oxides and Pt nanoparticles. *Journal of the American Chemical Society*, **2013**, 135, 16689-96	16.4	311
24	Preparation of mesoporous oxides and their support effects on Pt nanoparticle catalysts in catalytic hydrogenation of furfural. *Journal of Colloid and Interface Science*, **2013**, 392, 122-128	9.3	75
23	Influence of size-induced oxidation state of platinum nanoparticles on selectivity and activity in catalytic methanol oxidation in the gas phase. *Nano Letters*, **2013**, 13, 2976-9	11.5	83
22	Isomerization of n-Hexane Catalyzed by Supported Monodisperse PtRh Bimetallic Nanoparticles. *Catalysis Letters*, **2013**, 143, 907-911	2.8	17
21	Colloid chemistry of nanocatalysts: a molecular view. *Journal of Colloid and Interface Science*, **2012**, 373, 1-13	9.3	77
20	Sum Frequency Generation Vibrational Spectroscopy of Colloidal Platinum Nanoparticle Catalysts: Disordering versus Removal of Organic Capping. *Journal of Physical Chemistry C*, **2012**, 116, 17540-17546	3.8	40
19	Size and Shape Control of Metal Nanoparticles for Reaction Selectivity in Catalysis. *ChemCatChem*, **2012**, 4, 1512-1524	5.2	376
18	High structure sensitivity of vapor-phase furfural decarbonylation/hydrogenation reaction network as a function of size and shape of Pt nanoparticles. *Nano Letters*, **2012**, 12, 5196-201	11.5	161
17	Monodisperse Metal Nanoparticle Catalysts: Synthesis, Characterizations, and Molecular Studies Under Reaction Conditions. *Topics in Catalysis*, **2012**, 55, 1257-1275	2.3	26
16	Reforming of C6 Hydrocarbons Over Model Pt Nanoparticle Catalysts. *Topics in Catalysis*, **2012**, 55, 723-730	2.9	18
15	Synthesis of Uniformly Sized Manganese Oxide Nanocrystals with Various Sizes and Shapes and Characterization of Their T1 Magnetic Resonance Relaxivity. *European Journal of Inorganic Chemistry*, **2012**, 2012, 2148-2155	2.3	62
14	Large-Scale Soft Colloidal Template Synthesis of 1.4 nm Thick CdSe Nanosheets. *Angewandte Chemie*, **2009**, 121, 6993-6996	3.6	53
13	Synthesis and biomedical applications of hollow nanostructures. *Nano Today*, **2009**, 4, 359-373	17.9	337
12	Synthesis of uniform hollow oxide nanoparticles through nanoscale acid etching. *Nano Letters*, **2008**, 8, 4252-8	11.5	192

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11	Development of a T1 contrast agent for magnetic resonance imaging using MnO nanoparticles. *Angewandte Chemie - International Edition*, **2007**, 46, 5397-401	16.4	505
10	Cover Picture: Development of a T1 Contrast Agent for Magnetic Resonance Imaging Using MnO Nanoparticles (Angew. Chem. Int. Ed. 28/2007). *Angewandte Chemie - International Edition*, **2007**, 46, 5247-5247	16.4	4
9	Development of a T1 Contrast Agent for Magnetic Resonance Imaging Using MnO Nanoparticles. *Angewandte Chemie*, **2007**, 119, 5493-5497	3.6	119
8	Titelbild: Development of a T1 Contrast Agent for Magnetic Resonance Imaging Using MnO Nanoparticles (Angew. Chem. 28/2007). *Angewandte Chemie*, **2007**, 119, 5341-5341	3.6	4
7	Generalized Fabrication of Multifunctional Nanoparticle Assemblies on Silica Spheres. *Angewandte Chemie*, **2006**, 118, 4907-4911	3.6	59
6	Sea urchin shaped carbon nanostructured materials: carbon nanotubes immobilized on hollow carbon spheres. *Journal of Materials Chemistry*, **2006**, 16, 2984		43
5	Synthesis, characterization, and self-assembly of pencil-shaped CoO nanorods. *Journal of the American Chemical Society*, **2006**, 128, 9753-60	16.4	194
4	Large-scale synthesis of hexagonal pyramid-shaped ZnO nanocrystals from thermolysis of Zn-oleate complex. *Journal of Physical Chemistry B*, **2005**, 109, 14792-4	3.4	119
3	Ultra-large-scale syntheses of monodisperse nanocrystals. *Nature Materials*, **2004**, 3, 891-5	27	3372
2	Influence of the Pt size and CeO2 morphology at the Pt□eO2 interface in CO oxidation. *Journal of Materials Chemistry A*,	13	6
1	Boosting Support Reducibility and Metal Dispersion by Exposed Surface Atom Control for Highly Active Supported Metal Catalysts. *ACS Catalysis*,4402-4414	13.1	2