Yanshan Gao

List of Publications by Year
in descending order

53 papers	4,642 citations	159585 30 h-index	175258 52 g-index
53 all docs	53 docs citations	53 times ranked	5037 citing authors

#	Article	IF	Citations
1	Recent advances in solid sorbents for CO_2 capture and new development trends. Energy and Environmental Science, 2014, 7, 3478-3518.	30.8	953
2	Industrial carbon dioxide capture and utilization: state of the art and future challenges. Chemical Society Reviews, 2020, 49, 8584-8686.	38.1	610
3	Flame retardant polymer/layered double hydroxide nanocomposites. Journal of Materials Chemistry A, 2014, 2, 10996.	10.3	299
4	A Critical Review on the Heterogeneous Catalytic Oxidation of Elemental Mercury in Flue Gases. Environmental Science & Technology, 2013, 47, 10813-10823.	10.0	222
5	Electrolytic cell design for electrochemical CO2 reduction. Journal of CO2 Utilization, 2020, 35, 90-105.	6.8	184
6	Comprehensive investigation of CO2 adsorption on Mg–Al–CO3 LDH-derived mixed metal oxides. Journal of Materials Chemistry A, 2013, 1, 12782.	10.3	164
7	Synthesis of Flame-Retardant Polypropylene/LDH-Borate Nanocomposites. Macromolecules, 2013, 46, 6145-6150.	4.8	146
8	Oxygen vacancy mediated CuyCo3-yFe1Ox mixed oxide as highly active and stable toluene oxidation catalyst by multiple phase interfaces formation and metal doping effect. Applied Catalysis B: Environmental, 2020, 269, 118827.	20.2	122
9	Synthesis of layered double hydroxides/graphene oxide nanocomposite as a novel high-temperature CO_2 adsorbent. Journal of Energy Chemistry, 2015, 24, 127-137.	12.9	121
10	Electrochemical Reduction of CO_2 to CO over Transition Metal/N‐Doped Carbon Catalysts: The Active Sites and Reaction Mechanism. Advanced Science, 2021, 8, e2102886.	11.2	121
11	Thin film nanocomposite forward osmosis membranes based on layered double hydroxide nanoparticles blended substrates. Journal of Membrane Science, 2016, 504, 196-205.	8.2	120
12	Synthesis of nano-sized spherical Mg3Al–CO3 layered double hydroxide as a high-temperature CO2 adsorbent. RSC Advances, 2013, 3, 3414.	3.6	119
13	Molten salts-modified MgO-based adsorbents for intermediate-temperature CO2 capture: A review. Journal of Energy Chemistry, 2017, 26, 830-838.	12.9	114
14	Synthesis of Highly Efficient Flame Retardant High-Density Polyethylene Nanocomposites with Inorgano-Layered Double Hydroxides As Nanofiller Using Solvent Mixing Method. ACS Applied Materials & Interfaces, 2014, 6, 5094-5104.	8.0	110
15	Recent advances in lithium containing ceramic based sorbents for high-temperature CO_2 capture. Journal of Materials Chemistry A, 2019, 7, 7962-8005.	10.3	106
16	Promotional effect of Ce doping in Cu4Al1Ox – LDO catalyst for low-T practical NH3-SCR: Steady-state and transient kinetics studies. Applied Catalysis B: Environmental, 2019, 255, 117749.	20.2	75
17	The synergistic effect of layered double hydroxides with other flame retardant additives for polymer nanocomposites: a critical review. Dalton Transactions, 2018, 47, 14827-14840.	3.3	71
18	Highly sensitive p-nitrophenol chemical sensor based on crystalline α-MnO_2 nanotubes. New Journal of Chemistry, 2014, 38, 4420-4426.	2.8	70

#	Article	IF	Citations
19	Synthesis of LiAl$_2$-layered double hydroxides for CO_2 capture over a wide temperature range. Journal of Materials Chemistry A, 2014, 2, 18454-18462.	10.3	69
20	Microporous Zeolite@Vertically Aligned Mg–Al Layered Double Hydroxide Core@Shell Structures with Improved Hydrophobicity and Toluene Adsorption Capacity under Wet Conditions. ACS Applied Materials & Interfaces, 2018, 10, 34834-34839.	8.0	65
21	Synthesis of polypropylene/Mg3Al–X (X = CO32⁻, NO3⁻, Cl⁻, SO42⁻) LDH nanocomposites using a solvent mixing method: thermal and melt rheological properties. Journal of Materials Chemistry A, 2013, 1, 9928.	10.3	61
22	Preparation of ammonium polyphosphate and dye co-intercalated LDH/polypropylene composites with enhanced flame retardant and UV resistance properties. Chemosphere, 2021, 277, 130370.	8.2	46
23	Adsorption of acid red from dye wastewater by Zn2Al-NO3 LDHs and the resource of adsorbent sludge as nanofiller for polypropylene. Journal of Alloys and Compounds, 2014, 587, 99-104.	5.5	45
24	Synthesis of ZSM-5/Siliceous Zeolite Composites for Improvement of Hydrophobic Adsorption of Volatile Organic Compounds. Frontiers in Chemistry, 2019, 7, 505.	3.6	45
25	Layered double hydroxide-oxidized carbon nanotube hybrids as highly efficient flame retardant nanofillers for polypropylene. Scientific Reports, 2016, 6, 35502.	3.3	44
26	Polypropylene/Mg3Al–tartrazine LDH nanocomposites with enhanced thermal stability, UV absorption, and rheological properties. RSC Advances, 2013, 3, 26017.	3.6	39
27	Synthesis of highly efficient flame retardant polypropylene nanocomposites with surfactant intercalated layered double hydroxides. Dalton Transactions, 2018, 47, 2965-2975.	3.3	37
28	Enhanced water gas shift processes for carbon dioxide capture and hydrogen production. Applied Energy, 2019, 254, 113700.	10.1	36
29	Study on MNO$_3$/NO$_2$ (M = Li, Na, and K)/MgO Composites for Intermediate-Temperature CO_2 Capture. Energy & Fuels, 2019, 33, 1704-1712.	5.1	32
30	Novel Na2Mo4O13/α-MoO3 hybrid material as highly efficient CWAO catalyst for dye degradation at ambient conditions. Scientific Reports, 2014, 4, 6797.	3.3	31
31	Electrospun organic–inorganic nanohybrids as sustained release drug delivery systems. Journal of Materials Chemistry B, 2017, 5, 9165-9174.	5.8	31
32	Synthesis and properties of polypropylene/layered double hydroxide nanocomposites with different LDHs particle sizes. Journal of Applied Polymer Science, 2018, 135, 46204.	2.6	28
33	A simple and reliable method for determining the delamination degree of nitrate and glycine intercalated LDHs in formamide. Chemical Communications, 2014, 50, 10130.	4.1	27
34	Fabrication of lithium silicates from zeolite for CO2 capture at high temperatures. Journal of Energy Chemistry, 2019, 33, 81-89.	12.9	23
35	Morphology-dependent performance of Mg$_3$Al–CO_3 layered double hydroxide as a nanofiller for polypropylene nanocomposites. RSC Advances, 2015, 5, 51900-51911.	3.6	22
36	Preparation of MnO2 decorated Co3Fe1O powder/monolithic catalyst with improved catalytic activity for toluene oxidation. Journal of Environmental Sciences, 2020, 96, 194-203.	6.1	22

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37	Unravelling the Mechanism of Intermediate-Temperature CO_2 Interaction with Molten-$NaNO_3$-Salt-Promoted MgO. Advanced Materials, 2022, 34, e2106677.	21.0	21
38	Synthesis of hierarchical Li4SiO4 nanoparticles/flakers composite from vermiculite/MCM-41 hybrid with improved CO2 capture performance under different CO2 concentrations. Chemical Engineering Journal, 2019, 371, 424-432.	12.7	20
39	Synthesis and Characterization of High Surface Area Flower-Like Ca-Containing Layered Double Hydroxides $Mg_{3-x}Ca_xAl_1-NO_3$. Science of Advanced Materials, 2013, 5, 411-420.	0.7	18
40	Co_3O_4 nanoparticles/MWCNTs composites: a potential scaffold for hydrazine and glucose electrochemical detection. RSC Advances, 2017, 7, 50087-50096.	3.6	17
41	Ammonium Polyphosphate Intercalated Layered Double Hydroxide and Zinc Borate as Highly Efficient Flame Retardant Nanofillers for Polypropylene. Polymers, 2018, 10, 1114.	4.5	17
42	Preparation of 4,4′-diaminostilbene-2,2′-disulfonic acid intercalated LDH/polypropylene nanocomposites with enhanced UV absorption property. Polymer Composites, 2017, 38, 1937-1947.	4.6	16
43	The influencing mechanism of NH3 and NOx addition on the catalytic oxidation of toluene over Mn2Cu1Al1Ox catalyst. Journal of Cleaner Production, 2022, 348, 131152.	9.3	16
44	Synthesis and characterization of alkali metal molybdates with high catalytic activity for dye degradation. RSC Advances, 2016, 6, 54553-54563.	3.6	15
45	Facile synthesis of Co3O4/N-doped carbon nanocomposites as efficient electrode material for sensitive determination of hydrazine. Journal of Alloys and Compounds, 2020, 816, 152574.	5.5	12
46	Fundamental investigation on layered double hydroxides derived mixed metal oxides for selective catalytic reduction of NOx by H2. Catalysis Today, 2020, 355, 450-457.	4.4	12
47	The influence of Pt loading and dispersion on the NOx storage and reduction performance of Pt/K2CO3/Co1Mg2Al1Ox catalysts. Catalysis Today, 2020, 339, 148-158.	4.4	11
48	Ethylene-VInyl acetate/LDH nanocomposites with enhanced thermal stability, flame retardancy, and rheological property. Polymer Composites, 2016, 37, 3449-3459.	4.6	10
49	Morphology Controlled Synthesis of Co_3O_4 Nanostructures for Hydrazine Chemical Sensor. Nanoscience and Nanotechnology Letters, 2016, 8, 634-640.	0.4	8
50	Preparation and Characterization of Highly Efficient CuFe Mixed Oxides for Total Oxidation of Toluene. Journal of Nanoscience and Nanotechnology, 2018, 18, 3381-3386.	0.9	7
51	Thermal properties and flame-retardant characteristics of layered double hydroxide polymer nanocomposites. , 2020, , 311-345.		5
52	Controllable synthesis of MnO2/iron mesh monolithic catalyst and its significant enhancement for toluene oxidation. Chinese Chemical Letters, 2023, 34, 107437.	9.0	5
53	A comparative study on the NOx storage and reduction performance of Pt/Ni1Mg2Al1Ox and Pt/Mn1Mg2Al1Ox catalysts. Dalton Transactions, 2020, 49, 3970-3980.	3.3	2