Asif Hasan Rony

List of Publications by Year
in descending order

171	10,622	36203	35952
papers	citations	51 h-index	97 g-index

171	171	171	12270
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The newly-assisted catalytic mechanism of surface hydroxyl species performed as the promoter in syngas-to-C2 species on the Cu-based bimetallic catalysts. Green Energy and Environment, 2023, 8, 487-498.	4.7	2
2	C2H2 semi-hydrogenation on the PdxMy cluster/graphdiyne catalysts: Effects of cluster composition and size on the activity and selectivity. Green Energy and Environment, 2022, 7, 500-511.	4.7	10
3	The roles of Rh crystal phase and facet in syngas conversion to ethanol. Chemical Engineering Science, 2022, 248, 117186.	1.9	10
4	Surface oxygen vacancies modified Bi2MoO6 double-layer spheres: Enhanced visible LED light photocatalytic activity for ciprofloxacin degradation. Journal of Alloys and Compounds, 2022, 892, 162217.	2.8	26
5	The influence of spatial scale of active sites on the catalytic performance: Probing into C2H2 semi-hydrogenation on the Cu and S-modified Cu catalysts. Fuel, 2022, 315, 123180.	3.4	5
6	C2H2 semi-hydrogenation over Cu catalysts: Revealing the influence of Cu active site types on the catalytic performance. Chemical Engineering Science, 2022, 251, 117494.	1.9	4
7	Theoretical insight into mercury species adsorption on graphene-based Pt single-atom catalysts. RSC Advances, 2022, 12, 5797-5806.	1.7	5
8	Removal of ions from produced water using Powder River Basin coal. International Journal of Coal Science and Technology, 2022, 9, 1.	2.7	4
9	The role of CO2 over different binary catalysts in methanol synthesis. Catalysis Today, 2022, , .	2.2	0
10	Enhanced low-temperature CO2 methanation performance of Ni/ZrO2 catalysts via a phase engineering strategy. Chemical Engineering Journal, 2022, 446, 137031.	6.6	26
11	Intrinsic activity and selectivity enhancement of single-atom Rh in syngas-to-C2 oxygenates by engineering the local coordination atom. Applied Surface Science, 2022, 597, 153755.	3.1	3
12	High thermal stability Si-Al based N-carrier for efficient and stable chemical looping ammonia generation. Applied Energy, 2022, 323, 119519.	5.1	10
13	Robust â€œdry amineâ€•solid CO2 sorbent synthesized by a facile, cost-effective and environmental friendly pathway. Chemical Engineering Journal, 2021, 404, 126447.	6.6	18
14	HCOOH decomposition over the pure and Ag-modified Pd nanoclusters: Insight into the effects of cluster size and composition on the activity and selectivity. Chemical Engineering Science, 2021, 229, 116016.	1.9	14
15	Engineering Ni/SiO2 catalysts for enhanced CO2 methanation. Fuel, 2021, 285, 119151.	3.4	76
16	Effective anaerobic treatment of produced water from petroleum production using an anaerobic digestion inoculum from a brewery wastewater treatment facility. Journal of Hazardous Materials, 2021, 407, 124348.	6.5	11
17	Advance in Using Plasma Technology for Modification or Fabrication of Carbonâ€Based Materials and Their Applications in Environmental, Material, and Energy Fields. Advanced Functional Materials, 2021, 31, 2006287.	7.8	55
18	Highly dispersed Ru nanoparticles on a bipyridine-linked covalent organic framework for efficient photocatalytic CO‹sub›2‹/sub›reduction. Sustainable Energy and Fuels, 2021, 5, 2871-2876.	2.5	30

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19	A novel Bi₂S₃/KTa_{0.75}Nb_{0.25}O₃nanocomposite with high efficiency for photocatalytic and piezocatalytic N₂fixation. Journal of Materials Chemistry A, 2021, 9, 13344-13354.	5.2	109
20	Metalâ€“support interactions in Feâ€“Cuâ€“K admixed with SAPO-34 catalysts for highly selective transformation of CO₂ and H₂ into lower olefins. Journal of Materials Chemistry A, 2021, 9, 21877-21887.	5.2	11
21	Modification of Catalytic Properties of Hollandite Manganese Oxide by Ag Intercalation for Oxidative Acetalization of Ethanol to Diethoxyethane. ACS Catalysis, 2021, 11, 5347-5357.	5.5	14
22	Interfacial and electronic band structure optimization for the adsorption and visible-light photocatalytic activity of macroscopic ZnSnO3/graphene aerogel. Composites Part B: Engineering, 2021, 215, 108765.	5.9	65
23	Application of percarbonate and peroxymonocarbonate in decontamination technologies. Journal of Environmental Sciences, 2021, 105, 100-115.	3.2	30
24	C₂H₂ Selective Hydrogenation to C₂H₄: Engineering the Surface Structure of Pd-Based Alloy Catalysts to Adjust the Catalytic Performance. Journal of Physical Chemistry C, 2021, 125, 15251-15261.	1.5	13
25	Theoretical DFT Study on the Mechanisms of CO/CO2 Conversion in Chemical Looping Catalyzed by Calcium Ferrite. Journal of Physical Chemistry A, 2021, 125, 8159-8167.	1.1	2
26	A new method for preparing excellent electrical conductivity carbon nanofibers from coal extraction residual. Cleaner Engineering and Technology, 2021, 4, 100109.	2.1	3
27	Visible-light-driven photocatalytic CO₂ reduction over ketoenamine-based covalent organic frameworks: role of the host functional groups. Catalysis Science and Technology, 2021, 11, 1717-1724.	2.1	46
28	CO₂ Adsorption on Hazelnut-Shell-Derived Nitrogen-Doped Porous Carbons Synthesized by Single-Step Sodium Amide Activation. Industrial & Engineering Chemistry Research, 2020, 59, 7046-7053.	1.8	88
29	First principle study of feasibility of dinitrogen reduction to ammonia on two-dimensional transition metal phthalocyanine monolayer. Applied Surface Science, 2020, 500, 144032.	3.1	34
30	The adsorption of phosphate on hydroxylated alpha-SiO2 (0â€¯0â€¯1) surface and influence of typical anions: A theoretical study. Applied Surface Science, 2020, 501, 144233.	3.1	24
31	Mechanistic research on NO removal by K2S2O8 with electrochemical catalysis. Chemical Engineering Journal, 2020, 382, 122873.	6.6	21
32	Double-shelled ZnSnO3 hollow cubes for efficient photocatalytic degradation of antibiotic wastewater. Chemical Engineering Journal, 2020, 384, 123279.	6.6	179
33	Dimethyl oxalate synthesis via CO oxidation on Pd-doped Ag(111) surface: A theoretic study. Molecular Catalysis, 2020, 484, 110731.	1.0	8
34	Two-Dimensional Transition Metal Porphyrin Sheets as a Promising Single-Atom-Catalyst for Dinitrogen Electrochemical Reduction to Ammonia: A Theoretical Study. Journal of Physical Chemistry C, 2020, 124, 1492-1499.	1.5	30
35	Promising zirconia-mixed Al-based nitrogen carriers for chemical looping of NH3: Reduced NH3 decomposition and improved NH3 yield. Fuel, 2020, 264, 116821.	3.4	24
36	High-performance of nanostructured Ni/CeO2 catalyst on CO2 methanation. Applied Catalysis B: Environmental, 2020, 268, 118474.	10.8	226

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37	Enhanced liquid tar production as fuels/chemicals from Powder River Basin coal through CaO catalyzed stepwise degradation in eco-friendly supercritical CO2/ethanol. Energy, 2020, 191, 116563.	4.5	3
38	Unveiling the critical role of p-d hybridization interaction in M13â^'nGan clusters on CO2 adsorption. Fuel, 2020, 280, 118446.	3.4	9
39	Simultaneous Removal of SO₂ and Hg⁰ by Composite Oxidant NaClO/NaClO₂ in a Packed Tower. ACS Omega, 2020, 5, 17931-17939.	1.6	4
40	Enhanced near-zero-CO2-emission chemicals-oriented oil production from coal with inherent CO2 recycling: Part Iâ€"PRB coal fast pyrolysis coupled with CO2/CH4 reforming. International Journal of Coal Science and Technology, 2020, 7, 433-443.	2.7	3
41	Synthesis of Highly Nanoporous Î²-Silicon Carbide from Corn Stover and Sandstone. ACS Sustainable Chemistry and Engineering, 2020, 8, 14896-14904.	3.2	11
42	Renewable Cyclopentanol From Catalytic Hydrogenation-Rearrangement of Biomass Furfural Over Ruthenium-Molybdenum Bimetallic Catalysts. Frontiers in Bioengineering and Biotechnology, 2020, 8, 615235.	2.0	7
43	Lithium Enrichment in the No. 21 Coal of the Hebi No. 6 Mine, Anhe Coalfield, Henan Province, China. Minerals (Basel, Switzerland), 2020, 10, 521.	0.8	12
44	The volume expansion effect of amine during CO2 adsorption process: An experimental study combined with theoretical calculations. Journal of Colloid and Interface Science, 2020, 572, 190-197.	5.0	9
45	A novel and high-performance double Z-scheme photocatalyst ZnO-SnO2-Zn2SnO4 for effective removal of the biological toxicity of antibiotics. Journal of Hazardous Materials, 2020, 399, 123017.	6.5	115
46	Insight into Crystal Phase Dependent CO Dissociation on Rh Catalyst from DFT and Microkinetic Modeling. Journal of Physical Chemistry C, 2020, 124, 6756-6769.	1.5	7
47	Perspectives on the Active Sites and Catalyst Design for the Hydrogenation of Dimethyl Oxalate. ACS Catalysis, 2020, 10, 4465-4490.	5.5	69
48	Crystal facet dependence of carbon chain growth mechanism over the Hcp and Fcc Co catalysts in the Fischer-Tropsch synthesis. Applied Catalysis B: Environmental, 2020, 269, 118847.	10.8	29
49	Preparation of biomass-derived porous carbon supported Ni nanoparticles for CO₂ reforming of CH₄. New Journal of Chemistry, 2020, 44, 12503-12513.	1.4	4
50	0.03 V Electrolysis Voltage Driven Hydrazine Assisted Hydrogen Generation on NiCo phosphide Nanowires Supported NiCoHydroxide Nanosheets. ChemElectroChem, 2020, 7, 3089-3097.	1.7	10
51	Effect of copper on highly effective Fe-Mn based catalysts during production of light olefins via Fischer-Tropsch process with low CO2 emission. Applied Catalysis B: Environmental, 2020, 278, 119302.	10.8	58
52	Probe into the effects of surface composition and ensemble effect of active sites on the catalytic performance of C2H2 semi-hydrogenation over the Pd-Ag bimetallic catalysts. Chemical Engineering Science, 2020, 218, 115549.	1.9	30
53	Mechanism and catalytic performance for direct dimethyl ether synthesis by CO2 hydrogenation over CuZnZr/ferrierite hybrid catalyst. Journal of Environmental Sciences, 2020, 92, 106-117.	3.2	37
54	Highly efficient methane decomposition to H2 and CO2 reduction to CO via redox looping of Ca2FexAl2-xO5 supported NiyFe3-yO4 nanoparticles. Applied Catalysis B: Environmental, 2020, 271, 118938.	10.8	24

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55	NMR Techniques and Prediction Models for the Analysis of Species Formed in CO₂ Capture Processes with Amine-Based Sorbents: A Critical Review. ACS Sustainable Chemistry and Engineering, 2020, 8, 6173-6193.	3.2	50
56	A new approach of reduction of carbon dioxide emission and optimal use of carbon and hydrogen content for the desired syngas production from coal. Journal of Cleaner Production, 2020, 265, 121786.	4.6	12
57	Green and efficient two-step degradation approach for converting Powder River Basin coal into fuels/chemicals and insights into their chemical compositions. Applied Energy, 2020, 264, 114739.	5.1	15
58	Thermodynamics of NaHCO3 decomposition during Na2CO3-based CO2 capture. Journal of Environmental Sciences, 2019, 78, 74-80.	3.2	15
59	Understanding the catalytic mechanisms of CO2 hydrogenation to methanol on unsupported and supported Ga-Ni clusters. Applied Energy, 2019, 253, 113623.	5.1	34
60	CO2 hydrogenation to light olefins with high-performance Fe0.30Co0.15Zr0.45K0.10O1.63. Journal of Catalysis, 2019, 377, 224-232.	3.1	37
61	Low-energy-consumption and environmentally friendly CO2 capture via blending alcohols into amine solution. Applied Energy, 2019, 254, 113696.	5.1	39
62	Carbon nanofiber generation from the precursor containing unprecedently high percentage of inexpensive coal-derived carbon material. Journal of Cleaner Production, 2019, 236, 117621.	4.6	8
63	The new role of surface adsorbed CH (xâ€¯=â€¯1â€“3) intermediates as a co-adsorbed promoter in self-promoting syngas conversion to form CH intermediates and C2 oxygenates on the Rh-doped Cu catalyst. Journal of Catalysis, 2019, 377, 1-12.	3.1	18
64	Recent progress in theoretical and computational studies on the utilization of lignocellulosic materials. Green Chemistry, 2019, 21, 9-35.	4.6	96
65	Enhanced stability of Ni/SiO2 catalyst for CO2 methanation: Derived from nickel phyllosilicate with strong metal-support interactions. Energy, 2019, 188, 116059.	4.5	123
66	Clean and low-cost synthesis of high purity beta-silicon carbide with carbon fiber production residual and a sandstone. Journal of Cleaner Production, 2019, 238, 117875.	4.6	16
67	Synergistic enhancement of chemical looping-based CO₂ splitting with biomass cascade utilization using cyclic stabilized Ca₂Fe₂O₅ aerogel. Journal of Materials Chemistry A, 2019, 7, 1216-1226.	5.2	43
68	New insight into the reaction mechanism of carbon disulfide hydrolysis and the impact of H₂S with density functional modeling. New Journal of Chemistry, 2019, 43, 2347-2352.	1.4	7
69	First-Principle Study on Heterofullerenes: Effective and Multifunctional in Hg Removal. Industrial & Engineering Chemistry Research, 2019, 58, 11101-11110.	1.8	8
70	C₂H₂ Selective Hydrogenation over the M@Pd and M@Cu (M = Au, Ag, Cu, and) Tj ETQq0 0 0 rgBT /Overlock Activity and Selectivity. Journal of Physical Chemistry C, 2019, 123, 16107-16117.	1.5	15
71	Catalytic synthesis of non-carbon fuel NH3 from easily available N2 and H2O over FeO(100) surface: study of reaction mechanism using the density functional theory. New Journal of Chemistry, 2019, 43, 10066-10072.	1.4	5
72	Resolving a Decade-Long Question of Oxygen Defects in Raman Spectra of Ceria-Based Catalysts at Atomic Level. Journal of Physical Chemistry C, 2019, 123, 18889-18894.	1.5	53

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73	A new and different insight into the promotion mechanisms of Ga for the hydrogenation of carbon dioxide to methanol over a Ga-doped Ni(211) bimetallic catalyst. Nanoscale, 2019, 11, 9969-9979.	2.8	10
74	Kinetics, thermodynamics, and physical characterization of corn stover (Zea mays) for solar biomass pyrolysis potential analysis. Bioresource Technology, 2019, 284, 466-473.	4.8	92
75	A DFT study and microkinetic analysis of CO oxidation to dimethyl oxalate over Pd stripe and Pd single atom-doped Cu(111) surfaces. Applied Surface Science, 2019, 479, 1057-1067.	3.1	10
76	Inductive Multi-view Semi-Supervised Anomaly Detection via Probabilistic Modeling. , 2019, , .		3
77	Surface modification of porous g-C₃N₄ materials using a waste product for enhanced photocatalytic performance under visible light. Green Chemistry, 2019, 21, 5934-5944.	4.6	31
78	CO2 hydrogenation to high-value products via heterogeneous catalysis. Nature Communications, 2019, 10, 5698.	5.8	571
79	Temperature modulation of defects in NH₂-UiO-66(Zr) for photocatalytic CO₂ reduction. RSC Advances, 2019, 9, 37733-37738.	1.7	47
80	A DFT study on dimethyl oxalate synthesis over PdML/Ni(1â€¯1â€¯1) and PdML/Co(1â€¯1â€¯1) surfaces. Applied Surface Science, 2019, 465, 498-508.	3.1	9
81	Facile synthesis of nitrogen-enriched nanoporous carbon materials for high performance supercapacitors. Journal of Colloid and Interface Science, 2019, 538, 199-208.	5.0	52
82	DFT study on CO oxidative coupling to DMO over Pd4/TiO2 and Pd4/TiO2-Ov: A role of oxygen vacancy on support. Computational Materials Science, 2019, 159, 1-11.	1.4	11
83	Evaluation of natural goethite on the removal of arsenate and selenite from water. Journal of Environmental Sciences, 2019, 76, 133-141.	3.2	42
84	Catalytic Oxidation of Hydrogen Sulfide on Fe/WSAC Catalyst Surface Modification via NH₃-NTP: Influence of Gas Gap and Dielectric Thickness. Industrial & Engineering Chemistry Research, 2018, 57, 2873-2881.	1.8	5
85	Costâ€Effective Palladiumâ€Doped Cu Bimetallic Materials to Tune Selectivity and Activity by using Doped Atom Ensembles as Active Sites for Efficient Removal of Acetylene from Ethylene. ChemCatChem, 2018, 10, 2424-2432.	1.8	27
86	Hydrogen-Bonding Interactions in Pyridinium-Based Ionic Liquids and Dimethyl Sulfoxide Binary Systems: A Combined Experimental and Computational Study. ACS Omega, 2018, 3, 1823-1833.	1.6	53
87	Syngas Production from Chemicalâ€Looping Reforming of Methane Using Ironâ€Doped Cerium Oxides. Energy Technology, 2018, 6, 1610-1617.	1.8	11
88	CO oxidative coupling to dimethyl oxalate over Pdâ€“Me (Me = Cu, Al) catalysts: a combined DFT and kinetic study. Physical Chemistry Chemical Physics, 2018, 20, 7317-7332.	1.3	22
89	Progress in Nonoxidative Dehydroaromatization of Methane in the Last 6 Years. Industrial & Engineering Chemistry Research, 2018, 57, 1768-1789.	1.8	97
90	Thermodynamic and Kinetic Study on Carbon Dioxide Hydrogenation to Methanol over a Ga₃Ni₅(111) Surface: The Effects of Step Edge. Journal of Physical Chemistry C, 2018, 122, 315-330.	1.5	26

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91	A DFT Study on the Catalytic CO Oxidative Coupling to Dimethyl Oxalate on Al-Doped Coreâ€“Shell Pd Clusters. Journal of Physical Chemistry C, 2018, 122, 1169-1179.	1.5	20
92	Improvement of H2-rich gas production with tar abatement from pine wood conversion over bi-functional Ca2Fe2O5 catalyst: Investigation of inner-looping redox reaction and promoting mechanisms. Applied Energy, 2018, 212, 931-943.	5.1	89
93	Amine-impregnated silicic acid composite as an efficient adsorbent for CO 2 capture. Applied Energy, 2018, 223, 293-301.	5.1	37
94	A novel solar powered biomass pyrolysis reactor for producing fuels and chemicals. Journal of Analytical and Applied Pyrolysis, 2018, 132, 19-32.	2.6	26
95	Application of Ag/AgBr/GdVO 4 composite photocatalyst in wastewater treatment. Journal of Environmental Sciences, 2018, 63, 68-75.	3.2	48
96	A new insight into the theoretical design of highly dispersed and stable ceria supported metal nanoparticles. Journal of Colloid and Interface Science, 2018, 512, 775-783.	5.0	8
97	H2 Thermal Desorption Spectra on Pt(111): A Density Functional Theory and Kinetic Monte Carlo Simulation Study. Catalysts, 2018, 8, 450.	1.6	14
98	Green, safe, fast, and inexpensive removal of CO2 from aqueous KHCO3 solutions using a nanostructured catalyst TiO(OH)2: A milestone toward truly low-cost CO2 capture that can ease implementation of the Paris Agreement. Nano Energy, 2018, 53, 508-512.	8.2	15
99	Mild degradation of Powder River Basin sub-bituminous coal in environmentally benign supercritical CO2-ethanol system to produce valuable high-yield liquid tar. Applied Energy, 2018, 225, 460-470.	5.1	29
100	TiO(OH)₂ can exceed the critical limit of conventional CO₂ sorbents: modification needed for high capacity and selectivity. Chemical Communications, 2018, 54, 8395-8398.	2.2	4
101	Catalyst-TiO(OH)2 could drastically reduce the energy consumption of CO2 capture. Nature Communications, 2018, 9, 2672.	5.8	122
102	Supercritical water oxidation of 2-, 3- and 4-nitroaniline: A study on nitrogen transformation mechanism. Chemosphere, 2018, 205, 426-432.	4.2	28
103	Effect of surfactants on the properties of a gas-sealing coating modified with fly ash and cement. Journal of Materials Science, 2018, 53, 15142-15156.	1.7	8
104	First-principles and experimental studies of [ZrO(OH)]⁺ or ZrO(OH)₂ for enhancing CO₂ desorption kinetics â€“ imperative for significant reduction of CO₂ capture energy consumption. Journal of Materials Chemistry A, 2018, 6, 17671-17681.	5.2	13
105	A Selfâ€Supported Î»â€MnO₂ Film Electrode used for Electrochemical Lithium Recovery from Brines. ChemPlusChem, 2018, 83, 521-528.	1.3	42
106	Visual Assay of Glutathione in Vegetables and Fruits Using Quantum Dot Ratiometric Hybrid Probes. Journal of Agricultural and Food Chemistry, 2018, 66, 6431-6438.	2.4	27
107	Recent progress in improving the stability of copper-based catalysts for hydrogenation of carbonâ€“oxygen bonds. Catalysis Science and Technology, 2018, 8, 3428-3449.	2.1	89
108	The cost-effective Cu-based catalysts for the efficient removal of acetylene from ethylene: The effects of Cu valence state, surface structure and surface alloying on the selectivity and activity. Chemical Engineering Journal, 2018, 351, 732-746.	6.6	36

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109	Application of mass spectrometry in the characterization of chemicals in coalâ€derived liquids. Mass Spectrometry Reviews, 2017, 36, 543-579.	2.8	39
110	A Facile Synthesis of Highly Stable Modified Carbon Nanotubes as Efficient Oxygen Reduction Reaction Catalysts. ChemistrySelect, 2017, 2, 1932-1938.	0.7	0
111	A DFT study on lignin dissolution in imidazolium-based ionic liquids. RSC Advances, 2017, 7, 12670-12681.	1.7	100
112	An Experimental and Theoretical Study on the Unexpected Catalytic Activity of Triethanolamine for the Carboxylative Cyclization of Propargylic Amines with CO₂. ChemSusChem, 2017, 10, 2001-2007.	3.6	38
113	Electrochemical nitrate reduction by using a novel Co 3 O 4 /Ti cathode. Water Research, 2017, 120, 1-11.	5.3	202
114	Design of efficient mono-aminosilane precursors for atomic layer deposition of SiO₂ thin films. RSC Advances, 2017, 7, 22672-22678.	1.7	16
115	Progress in catalytic synthesis of advanced carbon nanofibers. Journal of Materials Chemistry A, 2017, 5, 13863-13881.	5.2	38
116	TiO(OH)2 â€“ highly effective catalysts for optimizing CO2 desorption kinetics reducing CO2 capture cost: A new pathway. Scientific Reports, 2017, 7, 2943.	1.6	21
117	Computation-predicted, stable, and inexpensive single-atom nanocatalyst Pt@Mo₂C â€“ an important advanced material for H₂ production. Journal of Materials Chemistry A, 2017, 5, 14658-14672.	5.2	34
118	Lithium adsorption performance of a three-dimensional porous H₂TiO₃-type lithium ion-sieve in strong alkaline Bayer liquor. RSC Advances, 2017, 7, 18883-18891.	1.7	39
119	C₂ Oxygenate Synthesis via Fischerâ€“Tropsch Synthesis on Co₂C and Co/Co₂C Interface Catalysts: How To Control the Catalyst Crystal Facet for Optimal Selectivity. ACS Catalysis, 2017, 7, 8285-8295.	5.5	81
120	Measurement and Correlation of High Pressure Phase Equilibria for CO₂ + Alkanes and CO₂ + Crude Oil Systems. Journal of Chemical & Engineering Data, 2017, 62, 3807-3822.	1.0	13
121	Recovery of rare earth elements with ionic liquids. Green Chemistry, 2017, 19, 4469-4493.	4.6	126
122	Fe₂O₃, a cost effective and environmentally friendly catalyst for the generation of NH₃â€“ a future fuel â€“ using a new Al₂O₃-looping based technology. Chemical Communications, 2017, 53, 10664-10667.	2.2	31
123	Enhanced photocatalytic CO₂ reduction over Co-doped NH₂-MIL-125(Ti) under visible light. RSC Advances, 2017, 7, 42819-42825.	1.7	53
124	Low-Pressure Hydrogenation of CO₂ to CH₃OH Using Ni-In-Al/SiO₂ Catalyst Synthesized via a Phyllosilicate Precursor. ACS Catalysis, 2017, 7, 5679-5692.	5.5	103
125	High-quality oil and gas from pyrolysis of Powder River Basin coal catalyzed by an environmentally-friendly, inexpensive composite iron-sodium catalysts. Fuel Processing Technology, 2017, 167, 334-344.	3.7	25
126	Efficient CO₂ Capture by Nitrogen-Doped Biocarbons Derived from Rotten Strawberries. Industrial & Engineering Chemistry Research, 2017, 56, 14115-14122.	1.8	62

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127	Synthesis of methanol from CO₂hydrogenation promoted by dissociative adsorption of hydrogen on a Ga₃Ni₅(221) surface. Physical Chemistry Chemical Physics, 2017, 19, 18539-18555.	1.3	43
128	Efficient Ionicâ€Liquidâ€Promoted Chemical Fixation of CO₂ into Î±â€Alkylidene Cyclic Carbonates. ChemSusChem, 2017, 10, 1120-1127.	3.6	99
129	Selective denitrification of flue gas by O3 and ethanol mixtures in a duct: Investigation of processes and mechanisms. Journal of Hazardous Materials, 2016, 311, 218-229.	6.5	9
130	Characterization of the Oxygenated Chemicals Produced from Supercritical Methanolysis of Modified Lignites. Energy & Fuels, 2016, 30, 2636-2646.	2.5	22
131	Role of Hydrogen Peroxide Preoxidizing on CO₂ Adsorption of Nitrogen-Doped Carbons Produced from Coconut Shell. ACS Sustainable Chemistry and Engineering, 2016, 4, 2806-2813.	3.2	92
132	New Copper(I)/DBU Catalyst System for the Carboxylative Cyclization of Propargylic Amines with Atmospheric CO₂: An Experimental and Theoretical Study. ACS Sustainable Chemistry and Engineering, 2016, 4, 5553-5560.	3.2	59
133	Effects of strong interactions between Ti and ceria on the structures of Ti/CeO₂. Physical Chemistry Chemical Physics, 2016, 18, 32494-32502.	1.3	6
134	Enhanced CO₂ Capture Capacity of Nitrogen-Doped Biomass-Derived Porous Carbons. ACS Sustainable Chemistry and Engineering, 2016, 4, 1439-1445.	3.2	313
135	Effects of CO and CO₂ on the desulfurization of H₂S using a ZnO sorbent: a density functional theory study. Physical Chemistry Chemical Physics, 2016, 18, 11150-11156.	1.3	16
136	Separation and structural characterization of the value-added chemicals from mild degradation of lignites: A review. Applied Energy, 2016, 170, 415-436.	5.1	129
137	Highly Cost-Effective Nitrogen-Doped Porous Coconut Shell-Based CO₂ Sorbent Synthesized by Combining Ammoxidation with KOH Activation. Environmental Science & Technology, 2015, 49, 7063-7070.	4.6	173
138	Development of a contaminant leaching model for aquifer storage and recovery technology. Cogent Environmental Science, 2015, 1, 1066177.	1.6	1
139	Mechanistic Study on Water Gas Shift Reaction on the Fe₃O₄ (111) Reconstructed Surface. Journal of Physical Chemistry C, 2015, 119, 28934-28945.	1.5	44
140	Recent developments in heterogeneous photocatalytic water treatment using visible light-responsive photocatalysts: a review. RSC Advances, 2015, 5, 14610-14630.	1.7	796
141	Amine-Based CO₂ Capture Technology Development from the Beginning of 2013â€”A Review. ACS Applied Materials & Interfaces, 2015, 7, 2137-2148.	4.0	686
142	Application of computational chemistry in understanding the mechanisms of mercury removal technologies: a review. Energy and Environmental Science, 2015, 8, 3109-3133.	15.6	64
143	Magnetic titanium dioxide based nanomaterials: synthesis, characteristics, and photocatalytic application in pollutant degradation. Journal of Materials Chemistry A, 2015, 3, 17511-17524.	5.2	77
144	CO2 gasification of Powder River Basin coal catalyzed by a cost-effective and environmentally friendly iron catalyst. Applied Energy, 2015, 145, 295-305.	5.1	74

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145	Nitrogen-doped porous carbon spheres derived from <scp>d</scp>-glucose as highly-efficient CO₂ sorbents. RSC Advances, 2015, 5, 37964-37969.	1.7	57
146	Abatement of SO2â€“NOx binary gas mixtures using a ferruginous active absorbent: Part I. Synergistic effects and mechanism. Journal of Environmental Sciences, 2015, 30, 55-64.	3.2	11
147	Facile synthesis of an amine hybrid aerogel with high adsorption efficiency and regenerability for air capture via a solvothermal-assisted solâ€“gel process and supercritical drying. Green Chemistry, 2015, 17, 3436-3445.	4.6	47
148	Modified nanosepiolite as an inexpensive support of tetraethylenepentamine for CO2 sorption. Nano Energy, 2015, 11, 235-246.	8.2	82
149	Sulfate Radical and Its Application in Decontamination Technologies. Critical Reviews in Environmental Science and Technology, 2015, 45, 1756-1800.	6.6	392
150	Synthesis of linear low-density polyethylene-g-poly (acrylic acid)-co-starch/organo-montmorillonite hydrogel composite as an adsorbent for removal of Pb(Î™Î™) from aqueous solutions. Journal of Environmental Sciences, 2015, 27, 9-20.	3.2	78
151	Synthesis of nitrogen-doped carbon with three-dimensional mesostructures for CO2 capture. Journal of Materials Science, 2015, 50, 1221-1227.	1.7	19
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