

The past, present and future of heterogeneous catalysis

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Carbon heterogeneous surface modification on a mesoporous TiO ₂ -supported catalyst and its enhanced hydrodesulfurization performance. <i>Chemical Communications</i> , 2012, 48, 11525.	2.2	43
4	Effect of nickel nanoparticle size in Ni/Al ₂ O ₃ on CO methanation reaction for the production of synthetic natural gas. <i>Catalysis Science and Technology</i> , 2013, 3, 2009.	2.1	110
5	X-Ray Structural and Functional Diagnostics of Heterogeneous Catalysts. <i>Theoretical and Experimental Chemistry</i> , 2013, 49, 71-87.	0.2	7
6	Production of Liquid Feedstock from Biomass via Steam Pyrolysis in a Fluidized Bed Reactor. <i>Energy & Fuels</i> , 2013, 27, 4748-4759.	2.5	52
8	Catalytic behavior of MnMCM-48 and WMnMCM-48 ordered mesoporous catalysts in a reductive environment: a study of the conversion of methylcyclopentane. <i>Catalysis Science and Technology</i> , 2013, 3, 444-453.	2.1	28
9	Synthesis of Ni/Mo/N catalyst and its application in benzene hydrogenation in the presence of thiophene. <i>Chinese Journal of Catalysis</i> , 2013, 34, 159-166.	6.9	10
10	Influence of the hydroxylation of Al ₂ O ₃ surfaces on the stability and growth of Cu for Cu/Al ₂ O ₃ catalyst: A DFT study. <i>Applied Surface Science</i> , 2013, 270, 728-736.	3.1	38
11	Theoretical investigation of the FriedlÄnder reaction catalysed by CuBTC: Concerted effect of the adjacent Cu ²⁺ sites. <i>Catalysis Today</i> , 2013, 204, 101-107.	2.2	33
12	Electron-deficient adduct site in the ring opening of methylcyclopentane (MCP) on tungsten-oxide-supported Pt, Ir and Pt-Ir catalysts. <i>Comptes Rendus Chimie</i> , 2013, 16, 433-441.	0.2	6
13	Unique Mesoporous Silicoaluminophosphate Assembled from Faujasite-type SAPO-37 Precursor: A Potential Catalyst for Isomerization. <i>Chemistry Letters</i> , 2013, 42, 1160-1162.	0.7	24
14	Heterogeneous Metal Catalysts for Oxidation Reactions. <i>Journal of Nanomaterials</i> , 2014, 2014, 1-23.	1.5	55
15	Man's Search for Extra-Ordinary Answers in Life: Silence as a Catalyst for Crisis-Solving. , 2014, , 239-250.		4
16	Precious Metals in Automotive Technology: An Unsolvable Depletion Problem?. <i>Minerals (Basel)</i> , 2014, 4, 23.	0.8	23
17	Electronic properties of unsupported trimetallic catalysts. <i>Catalysis Today</i> , 2014, 220-222, 106-112.	2.2	7
18	The magnetic properties of Ce/Pd surface alloys investigated using DFT. <i>Chemical Physics Letters</i> , 2014, 605-606, 5-9.	1.2	5
19	Ålaboration de catalyseurs Å base de bentonite et de kieselguhr pour le craquage catalytique des coupes pÅtrolliÅres. <i>Comptes Rendus Chimie</i> , 2014, 17, 746-751.	0.2	2
20	Manganese(III) tetrapyridylporphyrin-chloromethylated MIL-101 hybrid material: A highly active catalyst for oxidation of hydrocarbons. <i>Applied Catalysis A: General</i> , 2014, 477, 34-41.	2.2	47
21	In situ synthesis and characterization of TiO ₂ /HPM cellulose hybrid material for the photocatalytic degradation of 4-NP under visible light. <i>Comptes Rendus Chimie</i> , 2014, 17, 839-848.	0.2	13

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22	Doping level effect on visible-light irradiation W-doped TiO ₂ anatase photocatalysts for Congo red photodegradation. <i>Comptes Rendus Chimie</i> , 2014, 17, 818-823.	0.2	33
23	Preparation of porous paper composites with ruthenium hydroxide and catalytic alcohol oxidation in a multiphase gas-liquid-solid reaction. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2014, 184, 7-13.	1.7	4
24	Kinetic and equilibrium studies of lead(II) adsorption from aqueous media by KIT-6 mesoporous silica functionalized with -COOH. <i>Comptes Rendus Chimie</i> , 2014, 17, 869-880.	0.2	30
25	Effect of synthesis atmosphere on photocatalytic hydrogen production of NaNbO ₃ . <i>Physica B: Condensed Matter</i> , 2014, 447, 12-14.	1.3	19
26	Concept and progress in coupling of dehydrogenation and hydrogenation reactions through catalysts. <i>Journal of Chemical Sciences</i> , 2014, 126, 311-317.	0.7	11
27	Substrate-Selective Catalysis. <i>Chemistry - A European Journal</i> , 2014, 20, 13432-13481.	1.7	37
28	Band gap engineering of NaTaO ₃ using density functional theory: a charge compensated codoping strategy. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 17116.	1.3	49
29	A study to initiate development of sustainable Ni ³⁺ -Al ₂ O ₃ catalyst for hydrogen production from steam reforming of biomass-derived glycerol. <i>RSC Advances</i> , 2014, 4, 32429-32437.	1.7	15
30	Activity enhancement of zeolite MCM-22 by interlayer expansion enabling higher Ce loading and room temperature CO oxidation. <i>Journal of Materials Chemistry A</i> , 2014, 2, 15722-15725.	5.2	29
31	Aldol reaction of kojic acid using alumina supported base catalyst and enzymatic resolution of the aldol adduct by CALB. <i>Tetrahedron Letters</i> , 2014, 55, 5846-5850.	0.7	7
32	Multi-scale modeling of diffusion and reaction-diffusion phenomena in catalytic porous layers: Comparison with the 1D approach. <i>Chemical Engineering Science</i> , 2014, 117, 364-375.	1.9	22
33	Application of quasi-equilibrated thermodesorption of linear and di-branched paraffin molecules for detailed porosity characterization of the mono-layered zeolite MCM-56, in comparison with MCM-22 and ZSM-5. <i>Dalton Transactions</i> , 2014, 43, 10574-10583.	1.6	15
34	Recent Advances in Reactions of Alkylbenzenes Over Novel Zeolites: The Effects of Zeolite Structure and Morphology. <i>Catalysis Reviews - Science and Engineering</i> , 2014, 56, 333-402.	5.7	148
35	Reactivity Descriptor in Solid Acid Catalysis: Predicting Turnover Frequencies for Propene Methylation in Zeotypes. <i>Journal of Physical Chemistry Letters</i> , 2014, 5, 1516-1521.	2.1	96
36	Morphology-dependent nanocatalysts: Rod-shaped oxides. <i>Chemical Society Reviews</i> , 2014, 43, 1543-1574.	18.7	445
37	Exhaust constituent emission factors of printed circuit board pyrolysis processes and its exhaust control. <i>Journal of Hazardous Materials</i> , 2014, 264, 545-551.	6.5	29
38	Cathode catalysts degradation mechanism from liquid electrolyte to membrane electrode assembly. <i>Comptes Rendus Chimie</i> , 2014, 17, 752-759.	0.2	9
39	Étude de l'élimination du Cr(VI) par l'oxyde mixte obtenu par calcination de l'hydroxyde double lamellaire MgAl. <i>Comptes Rendus Chimie</i> , 2014, 17, 860-868.	0.2	8

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40	Silicoaluminophosphate molecular sieves as potential catalysts for hydroisomerization of alkanes and alkenes. <i>Applied Catalysis A: General</i> , 2014, 481, 143-160.	2.2	98
41	Revisiting active sites in heterogeneous catalysis: Their structure and their dynamic behaviour. <i>Applied Catalysis A: General</i> , 2014, 474, 40-50.	2.2	91
42	Electrolysis Process Analysis by Using Low Carbon Content Additives: A Batch Test Study. <i>Energy Procedia</i> , 2015, 72, 196-201.	1.8	5
43	Synthesis of Ethanol from Syngas over Rh/MCM-41 Catalyst: Effect of Water on Product Selectivity. <i>Catalysts</i> , 2015, 5, 1737-1755.	1.6	19
44	Correlation between the Photocatalytic Degradability of PAHs over Pt/TiO ₂ -SiO ₂ in Water and Their Quantitative Molecular Structure. <i>Journal of Nanomaterials</i> , 2015, 2015, 1-11.	1.5	11
45	Nanoporous Materials as New Engineered Catalysts for the Synthesis of Green Fuels. <i>Molecules</i> , 2015, 20, 5638-5666.	1.7	77
46	Spectroscopic characterisation of hydroxyapatite and nanocrystalline apatite with grafted aminopropyltriethoxysilane: nature of silane-surface interaction. <i>Journal of Materials Science</i> , 2015, 50, 5746-5757.	1.7	39
47	Synthesis of mesoporous MCM-41 supported reduced graphene oxide-Fe catalyst for heterogeneous Fenton degradation of phenol. <i>RSC Advances</i> , 2015, 5, 103989-103998.	1.7	18
48	Catalysis in Diesel engine NO _x aftertreatment: a review. <i>Journal of Lithic Studies</i> , 2015, 1, 155-173.	0.1	57
49	Physicochemical properties of vanadium impregnated Al-PILCs: Effect of vanadium source. <i>Applied Surface Science</i> , 2015, 330, 455-464.	3.1	6
50	Enhanced diesel fuel fraction from waste high-density polyethylene and heavy gas oil pyrolysis using factorial design methodology. <i>Waste Management</i> , 2015, 36, 166-176.	3.7	20
51	UV Raman Spectroscopic Characterization of Catalysts and Catalytic Active Sites. <i>Catalysis Letters</i> , 2015, 145, 468-481.	1.4	40
52	Catalysts for Thermochemical Conversion of Biomass. , 2015, , 109-132.		10
53	NiMo catalysts supported on graphene-modified mesoporous TiO ₂ toward highly efficient hydrodesulfurization of dibenzothiophene. <i>Applied Catalysis A: General</i> , 2015, 502, 157-165.	2.2	34
54	Elemental distribution and porosity enhancement in advanced nano bimetallic catalyst. <i>Powder Technology</i> , 2015, 280, 42-52.	2.1	5
55	Effect of syngas conversion and catalyst reduction temperature in the synthesis of ethanol: concentration of water vapor in mesoporous Rh/MCM-41 catalyst. <i>Catalysis Communications</i> , 2015, 69, 183-187.	1.6	6
56	Swelling and Interlayer Chemistry of Layered MWW Zeolites MCM-22 and MCM-56 with High Al Content. <i>Chemistry of Materials</i> , 2015, 27, 4620-4629.	3.2	64
57	Acid-base characterization of heterogeneous catalysts: an up-to-date overview. <i>Research on Chemical Intermediates</i> , 2015, 41, 9387-9423.	1.3	76

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58	The ADOR mechanism for the synthesis of new zeolites. <i>Chemical Society Reviews</i> , 2015, 44, 7177-7206.	18.7	275
59	3D ordered mesoporous Fe-KIT-6 catalysts for methylcyclopentane (MCP) conversion and carbon dioxide (CO ₂) hydrogenation for energy and environmental applications. <i>Applied Catalysis A: General</i> , 2015, 504, 672-681.	2.2	51
60	Macroporous Helical Silica Immobilizing Cobalt-Salen Complex Catalyzed Asymmetric Hydrolytic Kinetic Resolution of Epoxides. <i>Catalysis Surveys From Asia</i> , 2015, 19, 236-248.	1.0	4
61	Aromatization of n-hexane over Ga, Mo and Zn modified H-ZSM-5 zeolite catalysts. <i>Catalysis Communications</i> , 2015, 72, 49-52.	1.6	80
62	Urea-containing metal-organic frameworks as heterogeneous organocatalysts. <i>Journal of Materials Chemistry A</i> , 2015, 3, 20408-20415.	5.2	54
63	Operando characterization and DFT modelling of nanospinel: Some examples showing the relationship with catalytic activity. <i>Applied Catalysis A: General</i> , 2015, 504, 631-641.	2.2	11
64	Mesoporous silico-aluminophosphates derived from microporous precursors as promising catalyst for hydroisomerization. <i>Catalysis Today</i> , 2015, 245, 155-162.	2.2	19
65	Mesoporous silica supported Rh catalysts for high concentration N ₂ O decomposition. <i>Applied Catalysis B: Environmental</i> , 2015, 165, 158-168.	10.8	50
66	Improving the catalytic performances of metal nanoparticles by combining shape control and encapsulation. <i>Applied Catalysis A: General</i> , 2015, 504, 504-508.	2.2	12
67	Influence of oxygen nonstoichiometry and doping with 2p-, 3p-, 6p- and 3d-elements on electronic structure, optical properties and photocatalytic activity of rutile and anatase: Ab initio approaches. <i>Journal of Photochemistry and Photobiology C: Photochemistry Reviews</i> , 2015, 22, 58-83.	5.6	28
68	Boron nitride supported Pd catalysts for the hydrogenation of lactose. <i>Catalysis Today</i> , 2015, 241, 200-207.	2.2	31
69	Improved photocatalytic activity in a surfactant-assisted synthesized Ti-containing MOF photocatalyst under blue LED irradiation. <i>New Journal of Chemistry</i> , 2015, 39, 931-937.	1.4	23
70	Comparison between a Water-Based and a Solvent-Based Impregnation Method towards Dispersed CuO/SBA-15 Catalysts: Texture, Structure and Catalytic Performance in Automotive Exhaust Gas Abatement. <i>Catalysts</i> , 2016, 6, 164.	1.6	14
71	Porous aluminosilicate inorganic polymers (geopolymers): a new class of environmentally benign heterogeneous solid acid catalysts. <i>Applied Catalysis A: General</i> , 2016, 524, 173-181.	2.2	57
72	Framework-substituted cerium MCM-22 zeolite and its interlayer expanded derivative MWW-IEZ. <i>Catalysis Science and Technology</i> , 2016, 6, 2742-2753.	2.1	27
73	Submerged Barriers in the Ni ⁺ Assisted Decomposition of Propionaldehyde. <i>Journal of Physical Chemistry A</i> , 2016, 120, 2275-2284.	1.1	5
74	Effect of titanium source on structural properties and acidity of Ti-pillared bentonite. <i>Chemical Papers</i> , 2016, 70, .	1.0	9
75	Hollow Core-Shell Titania Photocatalysts for Selective Organic Synthesis. <i>Nanostructure Science and Technology</i> , 2016, , 137-146.	0.1	0

#	ARTICLE	IF	CITATIONS
76	Power-to-Fuel and Artificial Photosynthesis for Chemical Energy Storage. , 2016, , 493-566.		0
77	Graphene-Based Metal-Free Catalysts for Catalytic Reactions in the Liquid Phase. ACS Catalysis, 2016, 6, 6948-6958.	5.5	104
78	Transformations of Organic Molecules over Metal Surfaces: Insights from Computational Catalysis. Chemical Record, 2016, 16, 2388-2404.	2.9	14
79	Selectively forming light olefins via macroporous iron-based Fischerâ€™Tropsch catalysts. Reaction Kinetics, Mechanisms and Catalysis, 2016, 119, 457-468.	0.8	7
80	Ruthenium nanoparticles supported over mesoporous TiO ₂ as an efficient bifunctional nanocatalyst for esterification of biomass-derived levulinic acid and transfer-hydrogenation reactions. RSC Advances, 2016, 6, 73440-73449.	1.7	16
81	ZrO ₂ /MoS ₂ heterojunction photocatalysts for efficient photocatalytic degradation of methyl orange. Electronic Materials Letters, 2016, 12, 812-823.	1.0	44
82	Generation of singlet oxygen on the surface of metal oxides. Optics and Spectroscopy (English) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 50	0.2	22
83	Interconversion of the CDO Layered Precursor ZSM-55 between FER and CDO Frameworks by Controlled Deswelling and Reassembly. Chemistry of Materials, 2016, 28, 3616-3619.	3.2	16
84	Facile synthesis of crystalline nanoporous Mg ₃ (PO ₄) ₂ and its application to aerobic oxidation of alcohols. Catalysis Communications, 2016, 84, 129-133.	1.6	11
85	Effect of Zeolite Membrane Shell Thickness on Reactant Selectivity for Hydrocarbon Steam Reforming Using Layered Catalysts. Energy & Fuels, 2016, 30, 5300-5308.	2.5	14
86	Preparation, Characterization, and Testing of a Carbon-Supported Catalyst Obtained by Slow Pyrolysis of Nickel Salt Impregnated Vegetal Material. Industrial & Engineering Chemistry Research, 2016, 55, 1491-1502.	1.8	16
87	Nano-CuFe ₂ O ₄ -supported sulfonic acid as a novel and recyclable nanomagnetic acid for diazotization of aromatic amines: efficient synthesis of various azo dyes. Journal of the Iranian Chemical Society, 2016, 13, 1045-1054.	1.2	9
88	Self-functionalization of cellular alumina monoliths in hydrothermal conditions. Journal of the European Ceramic Society, 2016, 36, 1053-1058.	2.8	3
89	Heterogeneous partial oxidation catalysis on metal oxides. Comptes Rendus Chimie, 2016, 19, 1203-1225.	0.2	72
90	Stability and nucleation of Ir _n (n = 1â€“5) clusters on different γ -Al ₂ O ₃ surfaces: A density functional theory study. Physics Letters, Section A: General, Atomic and Solid State Physics, 2016, 380, 718-725.	0.9	8
91	Two-dimensional zeolites in catalysis: current status and perspectives. Catalysis Science and Technology, 2016, 6, 2467-2484.	2.1	161
92	Catalytic properties and activity of copper and silver containing Al-pillared bentonite for CO oxidation. Journal of Molecular Structure, 2016, 1106, 382-389.	1.8	12
93	Mesoporous helical silica immobilizing manganese(III)-salen complex for oxidative kinetic resolution of secondary alcohols. Journal of Porous Materials, 2016, 23, 19-33.	1.3	7

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94	Review and perspectives on the use of magnetic nanophotocatalysts (MNPCs) in water treatment. <i>Chemical Engineering Journal</i> , 2017, 310, 407-427.	6.6	247
95	Industrial-Quality Graphene Oxide Switched Highly Efficient Metal- and Solvent-Free Synthesis of β -Ketoenamides under Feasible Conditions. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 1253-1259.	3.2	26
96	Effect of zeolite pore morphology on solvent-less alkylation of benzene with 1-hexene. <i>Materials Today Chemistry</i> , 2017, 4, 45-52.	1.7	13
97	Influence of a ZrO_2 Support and Its Surface Structures on the Stability and Nucleation of Pt _n ($n = 1-5$) Clusters: A Density Functional Theory Study. <i>Journal of Physical Chemistry B</i> , 2017, 121, 2132-2141.	1.2	25
98	Structural, optical, and improved photocatalytic properties of CdS/SnO ₂ hybrid photocatalyst nanostructure. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2017, 221, 63-72.	1.7	34
99	Exploring structural features of USY zeolite in the catalytic cracking of <i>Jatropha Curcas L.</i> seed oil towards higher gasoline/diesel yield and lower CO ₂ emission. <i>Fuel</i> , 2017, 202, 563-571.	3.4	26
100	H-ZSM-5 zeolite model crystals: Structure-diffusion-activity relationship in methanol-to-olefins catalysis. <i>Journal of Catalysis</i> , 2017, 345, 11-23.	3.1	96
102	Novel eco-friendly biocatalyst: soybean peroxidase immobilized onto activated carbon obtained from agricultural waste. <i>RSC Advances</i> , 2017, 7, 16460-16466.	1.7	34
104	Mechanochemical Synthesis of Dipeptides Using Mg-Al Hydrotalcite as Activating Agent under Solvent-Free Reaction Conditions. <i>European Journal of Organic Chemistry</i> , 2017, 2017, 687-694.	1.2	37
105	Facile synthesis of new hierarchical aluminosilicate inorganic polymer solid acids and their catalytic performance in alkylation reactions. <i>Microporous and Mesoporous Materials</i> , 2017, 241, 316-325.	2.2	27
106	Cost-Effective Catalytic Materials for AOP Treatment Units. <i>Handbook of Environmental Chemistry</i> , 2017, , 309-343.	0.2	6
107	NO oxidation catalyzed by Ir ₄ -based nanoclusters: the role of alloying on the catalytic activity. <i>Theoretical Chemistry Accounts</i> , 2017, 136, 1.	0.5	1
108	Water splitting catalyzed by titanium dioxide decorated with plasmonic nanoparticles. <i>Pure and Applied Chemistry</i> , 2017, 89, 1817-1827.	0.9	28
109	Embedded Cluster Model for Al ₂ O ₃ and AlPO ₄ Surfaces Using Point Charges and Periodic Electrostatic Potential. <i>Journal of Physical Chemistry C</i> , 2017, 121, 20242-20253.	1.5	7
110	Boosting Chemical Stability, Catalytic Activity, and Enantioselectivity of Metal-Organic Frameworks for Batch and Flow Reactions. <i>Journal of the American Chemical Society</i> , 2017, 139, 13476-13482.	6.6	110
111	Grand challenges for catalysis in the Science and Technology Roadmap on Catalysis for Europe: moving ahead for a sustainable future. <i>Catalysis Science and Technology</i> , 2017, 7, 5182-5194.	2.1	71
112	Valorization of waste <i>œdate seeds</i> bio-glycerol for synthesizing oxidative green fuel additive. <i>Journal of Cleaner Production</i> , 2017, 165, 1090-1096.	4.6	16
113	State of the art and prospective of lipase-catalyzed transesterification reaction for biodiesel production. <i>Energy Conversion and Management</i> , 2017, 141, 339-353.	4.4	246

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114	MOF catalysts in biomass upgrading towards value-added fine chemicals. <i>CrystEngComm</i> , 2017, 19, 4092-4117.	1.3	166
115	New Paradigms and Future Critical Directions in Heterogeneous Catalysis and Multifunctional Reactors. <i>Chemical Engineering Communications</i> , 2017, 204, 1-27.	1.5	9
116	Sixteen isostructural phosphonate metal-organic frameworks with controlled Lewis acidity and chemical stability for asymmetric catalysis. <i>Nature Communications</i> , 2017, 8, 2171.	5.8	97
117	0D, 1D, 2D, and 3D Soft and Hard Templates for Catalysis. <i>Studies in Surface Science and Catalysis</i> , 2017, , 317-357.	1.5	2
118	Recent Overview on the Abatement of Pesticide Residues in Water by Photocatalytic Treatment Using TiO ₂ . , 0, , .		11
119	Two-Dimensional Silica-Based Inorganic Networks. , 2017, , 475-501.		1
120	In Situ X-Ray Absorption Spectroscopy Studies of Functional Nanomaterials. , 2018, , 159-188.		1
121	Major Advances and Challenges in Heterogeneous Catalysis for Environmental Applications: A Review. <i>Ecological Chemistry and Engineering S</i> , 2018, 25, 9-34.	0.3	58
122	Feasibility of modified bentonite as acidic heterogeneous catalyst in low temperature catalytic cracking process of biofuel production from nonedible vegetable oils. <i>Journal of Molecular Liquids</i> , 2018, 254, 260-266.	2.3	51
123	Palladium-Loaded Cucurbit[7]uril-Modified Iron Oxide Nanoparticles for C-C Cross-Coupling Reactions. <i>Chemistry - A European Journal</i> , 2018, 24, 2349-2353.	1.7	14
124	The role of water in the reusability of aminated silica catalysts for aldol reactions. <i>Journal of Catalysis</i> , 2018, 361, 51-61.	3.1	39
125	Preparation of CuO/SBA-15 catalyst by the modified ammonia driven deposition precipitation method with a high thermal stability and an efficient automotive CO and hydrocarbons conversion. <i>Applied Catalysis B: Environmental</i> , 2018, 223, 103-115.	10.8	30
126	Pillaring of layered zeolite precursors with ferrierite topology leading to unusual molecular sieves on the micro/mesoporous border. <i>Dalton Transactions</i> , 2018, 47, 3029-3037.	1.6	16
127	The effect of hot liquid water treatment on the properties and catalytic activity of MWW zeolites with various layered structures. <i>Catalysis Today</i> , 2018, 304, 22-29.	2.2	10
128	Controllable synthesis of mesoporous cobalt oxide for peroxide free catalytic epoxidation of alkenes under aerobic conditions. <i>Applied Catalysis B: Environmental</i> , 2018, 221, 681-690.	10.8	61
129	Synthesis, optical properties and efficient photocatalytic activity of CdO/ZnO hybrid nanocomposite. <i>Journal of Physics and Chemistry of Solids</i> , 2018, 112, 20-28.	1.9	109
130	Zeolite constructor kit: Design for catalytic applications. <i>Catalysis Today</i> , 2018, 304, 2-11.	2.2	10
131	Photocatalytic oxidation of six pesticides listed as endocrine disruptor chemicals from wastewater using two different TiO ₂ samples at pilot plant scale under sunlight irradiation. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2018, 353, 271-278.	2.0	52

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132	Pulse EPR Study of Gas Adsorption in Cu ²⁺ -Doped Metal-Organic Framework [Zn ₂ (1,4-bdc) ₂ (dabco)]. Applied Magnetic Resonance, 2018, 49, 255-264.	0.6	20
133	Removal of methyl orange by heterogeneous Fenton catalysts prepared using glycerol as green reducing agent. Environmental Technology (United Kingdom), 2018, 39, 2822-2833.	1.2	8
134	Metal-Organic Frameworks-Based Catalysts for Biomass Processing. Catalysts, 2018, 8, 368.	1.6	40
135	Sonochemically synthesized Ag/CaCO ₃ nanocomposites: A highly efficient reusable catalyst for reduction of 4-nitrophenol. Materials Chemistry and Physics, 2018, 220, 409-416.	2.0	23
136	An approach to classification and hi-tech applications of room-temperature ionic liquids (RTILs): A review. Journal of Molecular Liquids, 2018, 271, 403-420.	2.3	78
137	Fundamentals of heterogeneous catalysis. , 2018, , 1-41.		17
138	Metal-free heterogeneous and mesoporous biogenic graphene-oxide nanoparticle-catalyzed synthesis of bioactive benzylpyrazolyl coumarin derivatives. RSC Advances, 2018, 8, 17373-17379.	1.7	26
139	Concluding remarks and challenges of heterogeneous catalysis on metal oxides * *Personal views and conclusions/challenges drawn for the different chapters in this book. , 2018, , 551-569.		7
140	Nanomagnetic-Supported Catalysts. , 2018, , 333-371.		5
141	Mechanism of heterogeneous catalytic oxidation of organic compounds to carboxylic acids. Russian Chemical Reviews, 2018, 87, 586-603.	2.5	10
142	Synthesis of glycerol carbonate over a 2D coordination polymer built with Nd ³⁺ ions and organic ligands. Dalton Transactions, 2018, 47, 10976-10988.	1.6	3
143	Bridging homogeneous and heterogeneous catalysis by heterogeneous single-metal-site catalysts. Nature Catalysis, 2018, 1, 385-397.	16.1	725
144	Carbonaceous materials modified catalysts for simultaneous SO ₂ /NO _x removal from flue gas: A review. Catalysis Reviews - Science and Engineering, 2019, 61, 134-161.	5.7	61
145	2D Oxide Nanomaterials to Address the Energy Transition and Catalysis. Advanced Materials, 2019, 31, e1801712.	11.1	88
146	Continuous-Flow Process for Glycerol Conversion to Solketal Using a Brønsted Acid Functionalized Carbon-Based Catalyst. Catalysts, 2019, 9, 609.	1.6	18
147	Porous ceramic nanofibers as new catalysts toward heterogeneous reactions. Composites Communications, 2019, 15, 168-178.	3.3	39
148	Understanding the role of catalytic active sites for heterogeneous photocatalytic oxidation of methanol and thermal reduction of NO _x . Molecular Catalysis, 2019, 476, 110505.	1.0	5
149	Atomic layer deposited photocatalysts: comprehensive review on viable fabrication routes and reactor design approaches for photo-mediated redox reactions. Journal of Materials Chemistry A, 2019, 7, 17703-17734.	5.2	31

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150	Importance, features and uses of metal oxide catalysts in heterogeneous catalysis. Chinese Journal of Catalysis, 2019, 40, 1627-1636.	6.9	95
151	Selective oxidation of thioanisole by titanium complexes immobilized on mesoporous silica nanoparticles: elucidating the environment of titanium(IV) species. Catalysis Science and Technology, 2019, 9, 620-633.	2.1	16
152	Effect of ball milling on optical properties and visible photocatalytic activity of Fe doped ZnO nanoparticles. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2019, 240, 33-40.	1.7	44
153	Designing and Fabricating Ordered Mesoporous Metal Oxides for CO ₂ Catalytic Conversion: A Review and Prospect. Materials, 2019, 12, 276.	1.3	29
154	Removing NO _x , CO and HC from automobile exhaust based on chemical looping combustion. Journal of Chemical Technology and Biotechnology, 2019, 94, 2969-2979.	1.6	3
155	Removal of Pesticides with Endocrine Disruptor Activity in Wastewater Effluent by Solar Heterogeneous Photocatalysis Using ZnO/Na ₂ S ₂ O ₈ . Water, Air, and Soil Pollution, 2019, 230, 1.	1.1	19
156	A new layered MWW zeolite synthesized with the bifunctional surfactant template and the updated classification of layered zeolite forms obtained by direct synthesis. Journal of Materials Chemistry A, 2019, 7, 7701-7709.	5.2	41
157	Enhancement of photodegradation efficiency, photoluminescence quantum yield, and magnetization in highly Yb ³⁺ -doped CdO nanoparticles synthesized via sol-gel method. Research on Chemical Intermediates, 2019, 45, 3183-3198.	1.3	6
158	Binary Oxides Prepared by Microwave-Assisted Solution Combustion: Synthesis, Characterization and Catalytic Activity. Materials, 2019, 12, 910.	1.3	6
159	A study of the external and internal sites of 2D and 3D zeolites through the FTIR investigation of the adsorption of ammonia and pivalonitrile. Applied Catalysis A: General, 2019, 578, 63-69.	2.2	11
160	Discrete Polyoxopalladates as Molecular Precursors for Supported Palladium Metal Nanoparticles as Hydrogenation Catalysts. Inorganic Chemistry, 2019, 58, 5576-5582.	1.9	24
161	Electrospun Nanofibers for Catalysts. , 2019, , 695-717.		14
162	Free fatty acids esterification catalyzed by acid Faujasite type zeolite. RSC Advances, 2019, 9, 4900-4907.	1.7	22
163	Si-MCM-41 obtained from different sources of silica and its application as support for nickel catalysts used in dry reforming of methane. International Journal of Hydrogen Energy, 2019, 44, 32003-32018.	3.8	32
164	Visible-light assisted CdO nanowires photocatalyst for toxic dye degradation studies. Optik, 2019, 179, 535-544.	1.4	35
165	Metal Oxides in Heterogeneous Oxidation Catalysis: State of the Art and Challenges for a More Sustainable World. ChemSusChem, 2019, 12, 577-588.	3.6	179
166	Solar photocatalytic reclamation of agro-waste water polluted with twelve pesticides for agricultural reuse. Chemosphere, 2019, 214, 839-845.	4.2	39
167	Environmental Catalysis: Present and Future. ChemCatChem, 2019, 11, 18-38.	1.8	87

#	ARTICLE	IF	CITATIONS
168	A novel method of synthesis and a new insight into the vanadium incorporation in three dimensional mesoporous KIT-6. <i>Materials Research Express</i> , 2019, 6, 015021.	0.8	4
169	Structural transformation and chemical modifications of the unusual layered zeolite MWW form SSZ-70. <i>Catalysis Today</i> , 2020, 354, 133-140.	2.2	11
170	Synthesis of mesoporous ZSM-5 zeolite encapsulated in an ultrathin protective shell of silicalite-1 for MTH conversion. <i>Microporous and Mesoporous Materials</i> , 2020, 292, 109730.	2.2	44
171	Multicomponent Reductive Cross-Coupling of an Inorganic Sulfur Dioxide Surrogate: Straightforward Construction of Diversely Functionalized Sulfones. <i>Angewandte Chemie</i> , 2020, 132, 1362-1369.	1.6	25
172	Multicomponent Reductive Cross-Coupling of an Inorganic Sulfur Dioxide Surrogate: Straightforward Construction of Diversely Functionalized Sulfones. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 1346-1353.	7.2	159
173	Sustainability in Catalytic Cyclohexane Oxidation: The Contribution of Porous Support Materials. <i>Catalysts</i> , 2020, 10, 2.	1.6	16
174	Metal organic frameworks as solid catalysts for liquid-phase continuous flow reactions. <i>Chemical Communications</i> , 2020, 56, 26-45.	2.2	47
175	Recyclable Solid-Supported Catalysts for Quaternary Ammonium Iodide-Catalyzed Living Radical Polymerization. <i>Macromolecules</i> , 2020, 53, 51-58.	2.2	22
176	Multi-purpose structured catalysts designed and manufactured by 3D printing. <i>Materials and Design</i> , 2020, 187, 108377.	3.3	31
177	The role of H ₂ on the stability of the single-metal-site Ir ₁ /AC catalyst for heterogeneous methanol carbonylation. <i>Journal of Catalysis</i> , 2020, 381, 193-203.	3.1	21
178	Synthesis of Ce-MCM-22 and its enhanced catalytic performance for the removal of olefins from aromatic stream. <i>Journal of Porous Materials</i> , 2020, 27, 1649-1658.	1.3	10
179	Radio Frequency Driven Heating of Catalytic Reactors for Portable Green Chemistry. <i>Advanced Sustainable Systems</i> , 2020, 4, 2000095.	2.7	8
180	Salt-washing Improvement of the Electrochemical Properties of Zeolite-sulfur Cathode for Lithium-sulfur Batteries. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2020, 35, 665-670.	0.4	2
181	Catalytic cracking of polyethylene terephthalate (PET) plastic waste and palm fibre mixtures using Ni-USY zeolite catalyst. <i>Journal of Physics: Conference Series</i> , 2020, 1567, 022034.	0.3	1
182	Catalytic Cracking of n-Hexadecane Using Carbon Nanostructures/Nano-Zeolite-Y Composite Catalyst. <i>Catalysts</i> , 2020, 10, 1385.	1.6	6
183	Solid Nanoporosity Governs Catalytic CO ₂ and N ₂ Reduction. <i>ACS Nano</i> , 2020, 14, 7734-7759.	7.3	59
184	End-of-life recycling rates of platinum group metals in the automotive industry: Insight into regional disparities. <i>Journal of Cleaner Production</i> , 2020, 266, 121942.	4.6	40
185	Development of tethered dual catalysts: synergy between photo- and transition metal catalysts for enhanced catalysis. <i>Chemical Science</i> , 2020, 11, 6256-6267.	3.7	20

#	ARTICLE	IF	CITATIONS
186	Nanotechnology and remediation of agrochemicals. , 2020, , 487-533.		5
187	Chemical Synthesis of Single Atomic Site Catalysts. <i>Chemical Reviews</i> , 2020, 120, 11900-11955.	23.0	806
188	Versatile bifunctional nitrogen-doped porous carbon derived from biomass in catalytic reduction of 4-nitrophenol and oxidation of styrene. <i>Chinese Journal of Catalysis</i> , 2020, 41, 1217-1229.	6.9	36
189	Functionalized Metal-Organic Framework Catalysts for Sustainable Biomass Valorization. <i>Advances in Polymer Technology</i> , 2020, 2020, 1-11.	0.8	10
190	Recent Development of Catalytic Materials for Ethylbenzene Oxidation. <i>Journal of Nanomaterials</i> , 2020, 2020, 1-20.	1.5	11
191	Ensembles of Metastable States Govern Heterogeneous Catalysis on Dynamic Interfaces. <i>Accounts of Chemical Research</i> , 2020, 53, 447-458.	7.6	134
192	Study of ethylbenzene oxidation over polymer-silica hybrid supported Co (II) and Cu (II) complexes. <i>Catalysis Today</i> , 2021, 375, 601-613.	2.2	17
193	Heterogeneous carbon-based catalyst modified by alkaline earth metal oxides for biodiesel production: Parametric and kinetic study. <i>Energy Conversion and Management: X</i> , 2021, 10, 100047.	0.9	28
194	Green synthesis of faujasite-La _{0.6} Sr _{0.4} Co _{0.2} Fe _{0.8} O _{3-δ} mineral nanocomposite membrane for low temperature advanced fuel cells. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 9826-9834.	3.8	13
195	Catalytic performance of a metal-free graphene oxide-Al ₂ O ₃ composite assembled by 3D printing. <i>Journal of the European Ceramic Society</i> , 2021, 41, 1399-1406.	2.8	12
196	New aspects of covalent triazine frameworks in heterogeneous catalysis. , 2021, , 1-32.		1
197	Atom migration-trapping toward single-atom catalysts for energy electrocatalysis. <i>Materials Today Energy</i> , 2021, 19, 100586.	2.5	15
198	Green palladium nanoparticles prepared with glycerol and supported on maghemite for dye removal application. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 104856.	3.3	12
199	Synergistic catalysis by Mn promoted ceria for molecular oxygen assisted epoxidation. <i>Applied Catalysis B: Environmental</i> , 2021, 282, 119573.	10.8	39
200	Pyrolysis of oil sludge from the offshore petroleum industry: influence of different mesoporous zeolites catalysts to obtain paraffinic products. <i>Environmental Technology (United Kingdom)</i> , 2021, 42, 1013-1022.	1.2	23
201	Current heterogeneous catalytic processes for environmental remediation of air, water, and soil. <i>Interface Science and Technology</i> , 2021, , 443-498.	1.6	0
202	The design and synthesis of heterogeneous catalysts for environmental applications. <i>Dalton Transactions</i> , 2021, 50, 4765-4771.	1.6	12
203	Al-ZSM-5 Nanocrystal Catalysts Grown from Silicalite-1 Seeds for Methane Conversion. <i>Energies</i> , 2021, 14, 485.	1.6	10

#	ARTICLE	IF	CITATIONS
204	MWW and MFI Frameworks as Model Layered Zeolites: Structures, Transformations, Properties, and Activity. <i>ACS Catalysis</i> , 2021, 11, 2366-2396.	5.5	63
205	Liquid-Phase Peak Force Infrared Microscopy for Chemical Nanoimaging and Spectroscopy. <i>Analytical Chemistry</i> , 2021, 93, 3567-3575.	3.2	17
206	Mechanochemical Synthesis of Catalytic Materials. <i>Chemistry - A European Journal</i> , 2021, 27, 6819-6847.	1.7	130
207	Non-hydrolytic sol-gel as a versatile route for the preparation of hybrid heterogeneous catalysts. <i>Journal of Sol-Gel Science and Technology</i> , 2021, 97, 505-522.	1.1	10
208	Desert Rose-MCM-22 microsphere: Synthesis, formation mechanism and alkylation performance. <i>Microporous and Mesoporous Materials</i> , 2021, 315, 110910.	2.2	16
209	Precisely Constructed Silver Active Sites in Gold Nanoclusters for Chemical Fixation of CO ₂ . <i>Angewandte Chemie - International Edition</i> , 2021, 60, 10573-10576.	7.2	60
210	Precisely Constructed Silver Active Sites in Gold Nanoclusters for Chemical Fixation of CO ₂ . <i>Angewandte Chemie</i> , 2021, 133, 10667-10670.	1.6	21
211	Silver nanoparticles embedded on in-vitro biomineralized vaterite: A highly efficient catalyst with enhanced catalytic activity towards 4-Nitrophenol reduction. <i>Molecular Catalysis</i> , 2021, 504, 111433.	1.0	17
212	Photocatalytic C-H Activation with Alcohol as a Hydrogen Atom Transfer Agent in a 9-Fluorenone Based Metal-Organic Framework. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 25898-25905.	4.0	12
213	Pulsed Laser in Liquids Made Nanomaterials for Catalysis. <i>Chemical Reviews</i> , 2021, 121, 7568-7637.	23.0	100
214	Oxidative Strong Metal-Support Interactions. <i>Catalysts</i> , 2021, 11, 896.	1.6	16
215	3D Magnetic Field-Controlled Synthesis, Collective Motion, and Bioreaction Enhancement of Multifunctional Peasecod-like Nanochains. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 36157-36170.	4.0	14
216	Fabrication and Sterilization Characteristics of Visible Light Photocatalyst of CuO/ZrO ₂ /CB/Coal-Tar-Pitch-SAC. <i>Coatings</i> , 2021, 11, 816.	1.2	3
217	Hybrid Porous Crystalline Materials from Metal Organic Frameworks and Covalent Organic Frameworks. <i>Advanced Science</i> , 2021, 8, e2101883.	5.6	83
218	Î ³ -Valerolactone synthesis from Î ³ -angelica lactone and levulinic acid over biobased multifunctional nanohybrid catalysts. <i>Catalysis Today</i> , 2022, 394-396, 268-281.	2.2	7
219	Maghemite/ZnO nanocomposites: A highly efficient, reusable and non-noble metal catalyst for reduction of 4-nitrophenol. <i>Advanced Powder Technology</i> , 2021, 32, 2905-2915.	2.0	14
220	How the Ti Precursor is Involved in the Effectiveness of Pt-TiO ₂ Materials in Photodegrading Methyl Orange. <i>Revista Facultad De Ciencias B�sicas</i> , 2021, 16, 21-30.	0.2	2
221	Regulation of Strong Metal-Support Interaction by Alkaline Earth Metal Salts. <i>Chemistry - an Asian Journal</i> , 2021, 16, 2633-2640.	1.7	4

#	ARTICLE	IF	CITATIONS
222	Influence of N-Substituents on the Adsorption Geometry of OH-Functionalized Chiral N-Heterocyclic Carbenes. <i>Langmuir</i> , 2021, 37, 10029-10035.	1.6	18
223	Platinum nanoparticles supported on zeolite MWW nanosheets prepared via homogeneous solution route. <i>Catalysis Today</i> , 2022, 390-391, 335-342.	2.2	1
224	Single sites in heterogeneous catalysts: separating myth from reality. <i>Trends in Chemistry</i> , 2021, 3, 850-862.	4.4	23
225	Versatile functionalized mesoporous Zr/SBA-15 for catalytic transfer hydrogenation and oxidation reactions. <i>Renewable Energy</i> , 2021, 178, 1070-1083.	4.3	12
226	Modular Design of Advanced Catalytic Materials Using Hybrid Organic-Inorganic Raspberry Particles. <i>Advanced Functional Materials</i> , 2018, 28, 1704559.	7.8	31
227	Highly selective and stable Zn-Fe/ZSM-5 catalyst for aromatization of propane. <i>Applied Petrochemical Research</i> , 2020, 10, 55-65.	1.3	20
228	In-situ confinement of ultrasmall palladium nanoparticles in silicalite-1 for methane combustion with excellent activity and hydrothermal stability. <i>Applied Catalysis B: Environmental</i> , 2020, 276, 119142.	10.8	61
229	Molecular reactions and oxidation corrosion on UN (001) surface under exposure to environment gases: A DFT study. <i>Journal of Nuclear Materials</i> , 2020, 533, 152095.	1.3	5
230	Development of new technological solutions for recovery of heavy non-ferrous metals from technogenic waste of electroplating plants and sludge of water treatment systems. <i>Eastern-European Journal of Enterprise Technologies</i> , 2018, 2, 17-24.	0.3	4
231	REMOVAL OF CADMIUM (II) FROM AQUEOUS MEDIA USING COOH/TUD-1 MESOPOROUS SOLID. KINETIC AND THERMODYNAMIC STUDIES. <i>Environmental Engineering and Management Journal</i> , 2014, 13, 2675-2686.	0.2	9
232	Catalytic activity enhancement in pillared zeolites produced from exfoliated MWW monolayers in solution. <i>Catalysis Today</i> , 2022, 390-391, 272-280.	2.2	5
233	Effects of Cerium, Iron and Copper Incorporation on the Structural Properties and Activities of Ti-Pillared Bentonites. <i>Cumhuriyet Science Journal</i> , 2018, 39, 477-495.	0.1	1
234	The Effects of Catalyst Carrier and Reaction Conditions on the Hydrogenation Deoxidation of Bio-Oil Model Compound Phenol. <i>Journal of Organic Chemistry Research</i> , 2019, 07, 1-10.	0.1	0
236	Roles of Coordination Geometry in Single-Atom Catalysts. <i>ACS Symposium Series</i> , 2020, , 37-76.	0.5	4
237	Effect of the simultaneous presence of sodium and potassium cations on the hydrothermal synthesis of MCM-22 zeolite. <i>Research, Society and Development</i> , 2021, 10, e192101421744.	0.0	0
238	CHAPTER 3. Aerobic Oxidation Reactions Using Metal-based Heterogeneous Systems. <i>RSC Catalysis Series</i> , 2020, , 50-77.	0.1	0
239	Homogeneous Catalysis for Sustainable Energy: Hydrogen and Methanol Economies, Fuels from Biomass, and Related Topics. <i>Chemical Reviews</i> , 2022, 122, 385-441.	23.0	223
240	Acid-Base Properties of Cobalt Ferrite Surface Examined by Different Physicochemical Methods. <i>Theoretical Foundations of Chemical Engineering</i> , 2020, 54, 1306-1313.	0.2	2

#	ARTICLE	IF	CITATIONS
241	Mesoporous CuO/TiO ₂ catalysts prepared by the ammonia driven deposition precipitation method for CO preferential oxidation: Effect of metal loading. <i>Fuel</i> , 2022, 311, 122491.	3.4	12
242	<i>In situ</i> observation of heterogeneous catalytic organic reactions <i>via</i> aggregation-induced emission luminogens. <i>Chemical Communications</i> , 2022, 58, 1601-1604.	2.2	6
243	The utilization of ball-mill in the fabrication of metallic titanium incorporated carbon nitride as an active visible light sensitive photocatalyst. <i>Inorganic Chemistry Communication</i> , 2022, 137, 109194.	1.8	1
244	Microscopic mechanisms of cooperative communications within single nanocatalysts. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, .	3.3	5
245	Progress in Development of Magadiite to Produce Multifunctional Lamellar Materials. <i>ACS Applied Materials & Interfaces</i> , 2022, , .	4.0	2
246	An excellent universal catalyst support-mesoporous silica: Preparation, modification and applications in energy-related reactions. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 9537-9565.	3.8	23
247	Dicarbonyl compounds in the synthesis of heterocycles under green conditions. <i>ChemistrySelect</i> , 2020, .	0.7	1
248	Coupling mesoscale transport to catalytic surface reactions in a hybrid model. <i>Journal of Chemical Physics</i> , 2022, 156, 084105.	1.2	2
249	Single-atom catalysts supported on ordered porous materials: Synthetic strategies and applications. <i>Information Materials</i> , 2022, 4, .	8.5	32
250	Adsorption of Pb ²⁺ ions in aqueous media using the new zeolite nanocomposite adsorbent CaO/CdO/ZSM5 synthesized with new techniques. <i>Open Journal of Analytical and Bioanalytical Chemistry</i> , 2022, 6, 001-003.	0.4	0
251	A novel physisorption model based on mathematical morphology operators preserving exact pore morphology and connectivity. <i>Microporous and Mesoporous Materials</i> , 2022, 337, 111847.	2.2	4
252	Carbon-based bifunctional electrocatalysts for oxygen reduction and oxygen evolution reactions: Optimization strategies and mechanistic analysis. <i>Journal of Energy Chemistry</i> , 2022, 71, 234-265.	7.1	78
253	Kinetic Modeling of Ethene Oligomerization on Bifunctional Nickel and Acid $\hat{2}$ Zeolites. <i>Industrial & Engineering Chemistry Research</i> , 2022, 61, 3860-3876.	1.8	5
254	Chromium oxide silica catalyst: Synthesis and characterization. <i>Materials Today: Proceedings</i> , 2021, , .	0.9	0
255	Shadowing Effect in Catalyst Activity: Experimental Observation. <i>ACS Catalysis</i> , 2022, 12, 5455-5463.	5.5	1
256	Preparation of Ca- and Na-Modified Activated Clay as a Promising Heterogeneous Catalyst for Biodiesel Production via Transesterification. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 4667.	1.3	4
257	Sulfur-doped graphitic carbon nitride decorated with starch, Fe ₃ O ₄ , and Ag nanoparticles: As efficient and magnetic recoverable nanocatalyst for hydrogenation of nitroaromatics in aqueous media. <i>Diamond and Related Materials</i> , 2022, 126, 109078.	1.8	4
258	High Yield Silica-Based Emerging Nanoparticles Activities for Hybrid Catalyst Applications. <i>Topics in Catalysis</i> , 2022, 65, 1706-1718.	1.3	12

#	ARTICLE	IF	CITATIONS
259	Green and high-efficiency synthesis of 2-hydroxyethyl acrylate with ion exchange resins as Cr(III) support and collector. <i>Chemical Engineering Journal</i> , 2022, 446, 137130.	6.6	5
260	Simple Model and Spectral Analysis for a Fluxional Catalyst: Intermediate Abundances, Pathway Fluxes, Rates, and Transients. <i>ACS Catalysis</i> , 2022, 12, 8038-8047.	5.5	4
261	Integrated processes involving adsorption, photolysis, and photocatalysis. , 2022, , 117-153.		3
262	Biogenic Synthesis of Magnetic Palladium Nanoparticles Decorated Over Reduced Graphene Oxide Using Piper Betle Petiole Extract (Pd-rGO@Fe ₃ O ₄ NPs) as Heterogeneous Hybrid Nanocatalyst for Applications in Suzuki-Miyaura Coupling Reactions of Biphenyl Compounds. <i>Topics in Catalysis</i> , 0, , .	1.3	12
263	Resolving the Effect of Oxygen Vacancies on Co Nanostructures Using Soft XAS/X-PEEM. <i>ACS Catalysis</i> , 2022, 12, 9125-9134.	5.5	9
264	Molecular and Electronic Structure of Isolated Platinum Sites Enabled by the Expedient Measurement of ¹⁹⁵ Pt Chemical Shift Anisotropy. <i>Journal of the American Chemical Society</i> , 2022, 144, 13511-13525.	6.6	14
265	Synthesis of Heterogeneous Catalysts in Catalyst Informatics to Bridge Experiment and High-Throughput Calculation. <i>Journal of the American Chemical Society</i> , 2022, 144, 15735-15744.	6.6	8
266	Recent advances in catalytic synthesis of pyridine derivatives. , 2023, , 503-580.		3
267	<i>In situ</i> study of the evolution of NiFe nanocatalysts in reductive and oxidative environments upon thermal treatments. <i>Faraday Discussions</i> , 0, , .	1.6	0
268	A Cu(II) complex supported on Fe ₃ O ₄ @SiO ₂ as a magnetic heterogeneous catalyst for the reduction of environmental pollutants. <i>RSC Advances</i> , 2022, 12, 26527-26541.	1.7	3
269	Alkali-activated materials as catalysts in chemical processes. , 2022, , 355-379.		0
270	Surface Organometallic Chemistry for Single-site Catalysis and Single-atom Catalysis. <i>Chemical Research in Chinese Universities</i> , 2022, 38, 1139-1145.	1.3	4
271	Oxovanadium(IV) salenophen covalently immobilized on silica-coated Fe ₃ O ₄ nanoparticles: A magnetically recoverable nanocatalyst for the selective oxidation of sulfides. <i>Applied Organometallic Chemistry</i> , 2023, 37, .	1.7	2
272	Metal single atom doped 2D materials for photocatalysis: current status and future perspectives. <i>Progress in Energy</i> , 2023, 5, 012001.	4.6	9
273	Catalytic hydrodeoxygenation of corn cob and pinus bark derived lignin into hydrocarbons and phenols using Ru@CNF with mechanistic details. <i>Biomass Conversion and Biorefinery</i> , 0, , .	2.9	1
274	Trans-level multi-scale simulation of porous catalytic systems: Bridging reaction kinetics and reactor performance. <i>Chemical Engineering Journal</i> , 2023, 455, 140745.	6.6	3
275	Active-Site Determination and Mechanistic Insights in a MOF-Supported Polymerization Catalyst. <i>Journal of Physical Chemistry C</i> , 2022, 126, 20388-20394.	1.5	2
276	Collagen and Silk Fibroin as Promising Candidates for Constructing Catalysts. <i>Polymers</i> , 2023, 15, 375.	2.0	2

#	ARTICLE	IF	CITATIONS
277	Catalysts informatics: paradigm shift towards data-driven catalyst design. <i>Chemical Communications</i> , 2023, 59, 2222-2238.	2.2	16
278	Liquid Metal Patterning and Unique Properties for Next-Generation Soft Electronics. <i>Advanced Science</i> , 2023, 10, .	5.6	29
279	Citric acid supported on melamine-based COP [CA@MIP] in metal-free on-water synthesis of quinazolinones. , 2023, 1, 100002.		4
280	Isothiocyanate-functionalized silica as an efficient heterogeneous catalyst for carotenoid isomerization. <i>Food Chemistry</i> , 2023, 410, 135388.	4.2	6
281	Mechanistic Insights into Molecular Crystalline Organometallic Heterogeneous Catalysis through Parahydrogen-Based Nuclear Magnetic Resonance Studies. <i>Journal of the American Chemical Society</i> , 2023, 145, 2619-2629.	6.6	1
282	Exfoliating layered zeolite MFI into unilamellar nanosheets in solution as precursors for the synthesis of hierarchical nanocomposites and oriented films. <i>Inorganic Chemistry Frontiers</i> , 2023, 10, 1511-1521.	3.0	6
283	Green Synthesis and Photocatalytic Dye Degradation Activity of CuO Nanoparticles. <i>Catalysts</i> , 2023, 13, 502.	1.6	19
284	Novel Nanomaterials for Catalytic and Biological Applications. <i>Crystals</i> , 2023, 13, 427.	1.0	0
285	Acceleration of indirect detection ¹⁹⁵ Pt solid-state NMR experiments by sideband selective excitation or alternative indirect sampling schemes. <i>Journal of Magnetic Resonance</i> , 2023, 352, 107457.	1.2	0
286	Magnetic nanoparticles embedded hexagonal boron nitride tethered N-heterocyclic carbene-palladium(II): An efficient and reusable magnetic catalyst for fluoride-free Hiyama cross-coupling and 4-nitrophenol reduction reactions. <i>Journal of Physics and Chemistry of Solids</i> , 2023, 177, 111283.	1.9	6
287	Catalytic Conversion of Low Alcohol to Hydrocarbons: Challenges, Prospects, and Future Work Considerations. <i>International Journal of Energy Research</i> , 2023, 2023, 1-28.	2.2	5
290	Biodiesel Production from Waste Oil Catalysed by Metal-Organic Framework (MOF-5): Insights on Activity and Mechanism. <i>Catalysts</i> , 2023, 13, 503.	1.6	3
292	An expedient heterogeneous catalyst for one-pot tandem synthesis of 1-aryl-1, 2, 3-triazoles through Huisgen 1,3-cycloaddition. <i>Research on Chemical Intermediates</i> , 2023, 49, 2433-2453.	1.3	3
293	Friedel-Crafts acylation of anisole with acetic anhydride over single- to multiple-layer MWW zeolites: Catalytic behavior and kinetic mechanism. <i>Chemical Engineering Journal</i> , 2023, 466, 143098.	6.6	2
295	MOFganic Chemistry: Challenges and Opportunities for Metal-Organic Frameworks in Synthetic Organic Chemistry. <i>Chemistry of Materials</i> , 2023, 35, 4883-4896.	3.2	4
308	Megalibraries: Supercharged acceleration of materials discovery. <i>MRS Bulletin</i> , 2023, 48, 1172-1183.	1.7	1
311	Electrocatalysis with molecules and molecular assemblies within gas diffusion electrodes. <i>Chemical Science</i> , 2023, 14, 13696-13712.	3.7	0
323	Advanced Nanostructured Materials for Heterogeneous Catalysis—Past, Present and Future. <i>Advances in Material Research and Technology</i> , 2024, , 23-59.	0.3	0

#	ARTICLE	IF	CITATIONS
324	Hierarchical surface-modification of nano-Cu toward one pot H-transfer-coupling-cyclization-CO ₂ fixation tandem reactions. Materials Horizons, 2024, 11, 1957-1963.	6.4	0