Thongthai Witoon

List of Publications by Year
in descending order

86	3,636	36	57
papers	citations	h-index (101384)	g-index (143772)

87	87	87	3685
all docs	docs citations	times ranked	citing authors

#	ARTICLE	IF	CITATIONS
1	CO 2 hydrogenation to methanol over Cu/ZrO 2 catalysts: Effects of zirconia phases. Chemical Engineering Journal, 2016, 293, 327-336.	6.6	292
2	Characterization of calcium oxide derived from waste eggshell and its application as CO2 sorbent. Ceramics International, 2011, 37, 3291-3298.	2.3	217
3	CO 2 hydrogenation to methanol over CuOâ€“ZnOâ€“ZrO 2 â€“SiO 2 catalysts: Effects of SiO 2 contents. Chemical Engineering Journal, 2017, 316, 692-703.	6.6	160
4	Tuning of catalytic CO2 hydrogenation by changing composition of CuOâ€“ZnOâ€“ZrO2 catalysts. Energy Conversion and Management, 2016, 118, 21-31.	4.4	140
5	Enhanced activity, selectivity and stability of a CuO-ZnO-ZrO2 catalyst by adding graphene oxide for CO2 hydrogenation to methanol. Chemical Engineering Journal, 2018, 334, 1781-1791.	6.6	129
6	Structureâ€“activity relationships of Fe-Co/K-Al2O3 catalysts calcined at different temperatures for CO2 hydrogenation to light olefins. Applied Catalysis A: General, 2017, 547, 219-229.	2.2	119
7	Treatment technologies of palm oil mill effluent (POME) and olive mill wastewater (OMW): A brief review. Environmental Technology and Innovation, 2019, 15, 100377.	3.0	114
8	Development of synthetic CaO sorbents via CTAB-assisted solâ€“gel method for CO2 capture at high temperature. Chemical Engineering Journal, 2014, 237, 189-198.	6.6	103
9	Biodiesel production from transesterification of palm oil with methanol over CaO supported on bimodal meso-macroporous silica catalyst. Bioresource Technology, 2014, 156, 329-334.	4.8	91
10	Synthesis of bimodal porous silica from rice husk ash via solâ€“gel process using chitosan as template. Materials Letters, 2008, 62, 1476-1479.	1.3	86
11	Role of Calcination Temperatures of ZrO₂ Support on Methanol Synthesis from CO₂ Hydrogenation at High Reaction Temperatures over ZnO_{<i>x</i>}/ZrO₂ Catalysts. Industrial & Engineering Chemistry Research, 2020, 59, 5525-5535.	1.8	81
12	Optimization of synthesis condition for CO2 hydrogenation to light olefins over In2O3 admixed with SAPO-34. Energy Conversion and Management, 2019, 180, 511-523.	4.4	77
13	Direct synthesis of dimethyl ether from CO₂ hydrogenation over Cuâ€“ZnOâ€“ZrO₂/SO₄^{2âˆ’}â€“ZrO₂ hybrid catalysts: effects of sulfur-to-zirconia ratios. Catalysis Science and Technology, 2015, 5, 2347-2357.	2.1	71
14	Advances in catalytic production of value-added biochemicals and biofuels via furfural platform derived lignocellulosic biomass. Biomass and Bioenergy, 2021, 148, 106033.	2.9	69
15	CO2 hydrogenation to methanol over Cu/ZnO nanocatalysts prepared via a chitosan-assisted co-precipitation method. Fuel Processing Technology, 2013, 116, 72-78.	3.7	64
16	Pore size effects on physicochemical properties of Fe-Co/K-Al2O3 catalysts and their catalytic activity in CO2 hydrogenation to light olefins. Applied Surface Science, 2019, 483, 581-592.	3.1	61
17	Effect of reaction conditions on the lifetime of SAPO-34 catalysts in methanol to olefins process â€“ A review. Fuel, 2021, 283, 118851.	3.4	59
18	Effect of hierarchical mesoâ€“macroporous alumina-supported copper catalyst for methanol synthesis from CO2 hydrogenation. Energy Conversion and Management, 2015, 103, 886-894.	4.4	57

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19	Tuning Interactions of Surfaceâ€adsorbed Species over Feâˆ’Co/Kâˆ’Al₂O₃ Catalyst by Different K Contents: Selective CO₂ Hydrogenation to Light Olefins. ChemCatChem, 2020, 12, 3306-3320.	1.8	56
20	Tuning interaction of surface-adsorbed species over Fe/K-Al2O3 modified with transition metals (Cu,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	3.4	53
21	Hierarchical FAU-type zeolite nanosheets as green and sustainable catalysts for benzylation of toluene. Journal of Cleaner Production, 2017, 142, 1244-1251.	4.6	51
22	CO2 hydrogenation to light olefins over mixed Fe-Co-K-Al oxides catalysts prepared via precipitation and reduction methods. Chemical Engineering Journal, 2022, 428, 131389.	6.6	51
23	Effect of magnetic field on CO2 conversion over Cu-ZnO/ZrO2 catalyst in hydrogenation reaction. Journal of CO2 Utilization, 2016, 16, 204-211.	3.3	50
24	Polyethyleneimine-loaded bimodal porous silica as low-cost and high-capacity sorbent for CO2 capture. Materials Chemistry and Physics, 2012, 137, 235-245.	2.0	49
25	Modeling the effect of process parameters on the photocatalytic degradation of organic pollutants using artificial neural networks. Chemical Engineering Research and Design, 2021, 145, 120-132.	2.7	49
26	Biotemplated synthesis of highly stable calcium-based sorbents for CO2 capture via a precipitation method. Applied Energy, 2014, 118, 32-40.	5.1	46
27	Deactivation of nickel catalysts in methane cracking reaction: Effect of bimodal mesoâ€“macropore structure of silica support. Chemical Engineering Journal, 2015, 262, 364-371.	6.6	46
28	Synthesis of mixed-phase uniformly infiltrated SBA-3-like in SBA-15 bimodal mesoporous silica from rice husk ash. Materials Letters, 2009, 63, 1303-1306.	1.3	42
29	Effect of acidity on the formation of silicaâ€“chitosan hybrid materials and thermal conductive property. Journal of Sol-Gel Science and Technology, 2009, 51, 146-152.	1.1	42
30	Effect of hierarchical meso-macroporous silica supports on Fischer-Tropsch synthesis using cobalt catalyst. Fuel Processing Technology, 2011, 92, 1498-1505.	3.7	41
31	A review on advances in green treatment of glycerol waste with a focus on electro-oxidation pathway. Chemosphere, 2021, 276, 130128.	4.2	41
32	Tuning adsorption properties of GaxIn2âˆ’xO3 catalysts for enhancement of methanol synthesis activity from CO2 hydrogenation at high reaction temperature. Applied Surface Science, 2019, 489, 278-286.	3.1	40
33	Highly active Fe-Co-Zn/K-Al2O3 catalysts for CO2 hydrogenation to light olefins. Chemical Engineering Science, 2021, 233, 116428.	1.9	40
34	CO2 hydrogenation to methanol at high reaction temperatures over In2O3/ZrO2 catalysts: Influence of calcination temperatures of ZrO2 support. Catalysis Today, 2021, 375, 298-306.	2.2	39
35	Recent advances in light olefins production from catalytic hydrogenation of carbon dioxide. Chemical Engineering Research and Design, 2021, 151, 401-427.	2.7	39
36	Carbon-structure affecting catalytic carbon dioxide reforming of methane reaction over Ni-carbon composites. Journal of CO2 Utilization, 2016, 16, 245-256.	3.3	37

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37	Direct synthesis of dimethyl ether from CO 2 hydrogenation over novel hybrid catalysts containing a Cu ZnO ZrO 2 catalyst admixed with WO x /Al 2 O 3 catalysts: Effects of pore size of Al 2 O 3 support and W loading content. Energy Conversion and Management, 2018, 159, 20-29.	4.4	37
38	Syngas from catalytic steam reforming of palm oil mill effluent: An optimization study. International Journal of Hydrogen Energy, 2019, 44, 9220-9236.	3.8	37
39	Direct synthesis of dimethyl ether from CO2 and H2 over novel bifunctional catalysts containing CuO-ZnO-ZrO2 catalyst admixed with WOx/ZrO2 catalysts. Chemical Engineering Journal, 2018, 348, 713-722.	6.6	36
40	Preparation of silica xerogel with high silanol content from sodium silicate and its application as CO2 adsorbent. Ceramics International, 2011, 37, 2297-2303.	2.3	35
41	Impact of pore characteristics of silica materials on loading capacity and release behavior of ibuprofen. Materials Science and Engineering C, 2016, 59, 43-52.	3.8	35
42	Dehydrogenation of Propane to Propylene Using Promoter-Free Hierarchical Pt/Silicalite-1 Nanosheets. Catalysts, 2019, 9, 174.	1.6	35
43	Synthesis of hierarchical mesoâ€macroporous silica monolith using chitosan as biotemplate and its application as polyethyleneimine support for CO2 capture. Materials Letters, 2012, 81, 181-184.	1.3	33
44	Bifunctional and Bimetallic Ptâ€“Ru/HZSM-5 Nanoparticles for the Mild Hydrodeoxygenation of Lignin-Derived 4-Propylphenol. ACS Applied Nano Materials, 2019, 2, 1053-1062.	2.4	33
45	Facile synthesis of CaFe2O4 for visible light driven treatment of polluting palm oil mill effluent: Photokinetic and scavenging study. Science of the Total Environment, 2019, 661, 522-530.	3.9	33
46	Enhanced CO2 hydrogenation to higher alcohols over K-Co promoted In2O3 catalysts. Chemical Engineering Journal, 2022, 431, 133211.	6.6	32
47	Ethylene production from ethanol dehydration over mesoporous SBA-15 catalyst derived from palm oil clinker waste. Journal of Cleaner Production, 2020, 249, 119323.	4.6	30
48	Chitosan-assisted combustion synthesis of CuOâ€“ZnO nanocomposites: Effect of pH and chitosan concentration. Ceramics International, 2013, 39, 3371-3375.	2.3	29
49	Sustainable utilization of waste glycerol for 1,3-propanediol production over Pt/WOx/Al2O3 catalysts: Effects of catalyst pore sizes and optimization of synthesis conditions. Environmental Pollution, 2021, 272, 116029.	3.7	29
50	Development of SO42âˆ’â€“ZrO2 acid catalysts admixed with a CuO-ZnO-ZrO2 catalyst for CO2 hydrogenation to dimethyl ether. Fuel, 2019, 241, 695-703.	3.4	25
51	Structureâ€“Activity Relationships of Hierarchical Mesoâ€“Macroporous Alumina Supported Copper Catalysts for CO2 Hydrogenation: Effects of Calcination Temperature of Alumina Support. Catalysis Letters, 2016, 146, 1943-1955.	1.4	21
52	CO2 Hydrogenation to Light Olefins Over In2O3/SAPO-34 and Fe-Co/K-Al2O3 Composite Catalyst. Topics in Catalysis, 2021, 64, 316-327.	1.3	21
53	Preparation and characterization of Coâ€“Cuâ€“ZrO 2 nanomaterials and their catalytic activity in CO 2 methanation. Ceramics International, 2016, 42, 10444-10451.	2.3	20
54	Impact of physicochemical properties of porous silica materials conjugated with dexamethasone via pH-responsive hydrazone bond on drug loading and release behavior. Applied Surface Science, 2017, 396, 504-514.	3.1	20

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55	Multimetallic catalysts of RuO₂â€“CuOâ€“Cs₂Oâ€“TiO₂/SiO₂ for direct gas-phase epoxidation of propylene to propylene oxide. RSC Advances, 2016, 6, 56116-56126.	1.7	17
56	Highly dispersed Ni Cu nanoparticles on SBA-15 for selective hydrogenation of methyl levulinate to Î³-valerolactone. International Journal of Hydrogen Energy, 2020, 45, 24054-24065.	3.8	17
57	Green and sustainable methanol production from CO 2 over magnetized Fe Cu/coreâ€“shell and infiltrate mesoporous silica-aluminosilicates. Energy Conversion and Management, 2018, 159, 342-352.	4.4	16
58	Modified Acidâ€Base ZSMâ€5 Derived from Coreâ€Shell ZSMâ€5@ Aqueous Miscible Organicâ€Layered Double Hydroxides for Catalytic Cracking of <i>n</i>â€Pentane to Light Olefins. ChemCatChem, 2020, 12, 4288-4296.	1.8	14
59	Process intensification of hydrogen production by catalytic steam methane reforming: Performance analysis of multilayer perceptron-artificial neural networks and nonlinear response surface techniques. Chemical Engineering Research and Design, 2021, 156, 315-329.	2.7	14
60	One-pot synthesis of coreâ€“shell silicaâ€“aluminosilicate composites: Effect of pH and chitosan addition. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2011, 380, 319-326.	2.3	13
61	Size control of nanostructured silica using chitosan template and fractal geometry: effect of chitosan/silica ratio and aging temperature. Journal of Sol-Gel Science and Technology, 2010, 56, 270-277.	1.1	12
62	Synthesis of value-added hydrocarbons via oxidative coupling of methane over MnTiO3-Na2WO4/SBA-15 catalysts. Chemical Engineering Research and Design, 2021, 148, 1110-1122.	2.7	12
63	Sustainable transformation of natural silica-rich solid and waste to hierarchical zeolites for sugar conversion to hydroxymethylfurfural (HMF). Microporous and Mesoporous Materials, 2021, 323, 111252.	2.2	12
64	Interaction of chitosan with tetraethyl orthosilicate on the formation of silica nanoparticles: Effect of pH and chitosan concentration. Ceramics International, 2012, 38, 5999-6007.	2.3	11
65	Light olefins synthesis from CO2 hydrogenation over mixed Feâ€“Coâ€“K supported on micro-mesoporous carbon catalysts. International Journal of Hydrogen Energy, 2022, 47, 42185-42199.	3.8	11
66	Enhanced activity and stability of SO42âˆ'/ZrO2 by addition of Cu combined with CuZnOZrO2 for direct synthesis of dimethyl ether from CO2 hydrogenation. International Journal of Hydrogen Energy, 2022, 47, 41374-41385.	3.8	11
67	Nanoceria-modified platinum supported on hierarchical zeolites for selective alcohol oxidation. RSC Advances, 2019, 9, 36027-36033.	1.7	10
68	Effect of pH and chitosan concentration on precipitation and morphology of hierarchical porous silica. Journal of Non-Crystalline Solids, 2011, 357, 3513-3519.	1.5	9
69	One step NaBH 4 reduction of Pt-Ru-Ni catalysts on different types of carbon supports for direct ethanol fuel cells: Synthesis and characterization. Journal of Fuel Chemistry and Technology, 2017, 45, 596-607.	0.9	9
70	Tailoring hierarchical zeolite composites with two distinct frameworks for fine-tuning the product distribution in benzene alkylation with ethanol. Nanoscale Advances, 2020, 2, 4437-4449.	2.2	9
71	One-Pot Synthesis of Ultra-Small Pt Dispersed on Hierarchical Zeolite Nanosheet Surfaces for Mild Hydrodeoxygenation of 4-Propylphenol. Catalysts, 2021, 11, 333.	1.6	9
72	Oxidative coupling of methaneâ€"comparisons of MnTiO3â€“Na2WO4 and MnOxâ€“TiO2â€“Na2WO4 catalysts on different silica supports. Scientific Reports, 2022, 12, 2595.	1.6	9

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73	Rapid effectual entrapment of arsenic pollutant by Fe2O3 supported on bimodal meso-macroporous silica for cleaning up aquatic system. Chemosphere, 2022, 300, 134613.	4.2	9
74	Radial Basis Function Neural Network Model Prediction of Thermo-catalytic Carbon Dioxide Oxidative Coupling of Methane to C2-hydrocarbon. Topics in Catalysis, 2021, 64, 328-337.	1.3	8
75	CuAl2O4â€“CuOâ€“Al2O3 catalysts prepared by flame-spray pyrolysis for glycerol hydrogenolysis. Molecular Catalysis, 2022, 523, 111426.	1.0	8
76	Biomass-derived carbon-based and silica-based materials for catalytic and adsorptive applications- An update since 2010. Chemosphere, 2022, 287, 132222.	4.2	8
77	Synthesis of Na2WO4-MnxOy supported on SiO2 or La2O3 as fiber catalysts by electrospinning for oxidative coupling of methane. Arabian Journal of Chemistry, 2022, 15, 103577.	2.3	8
78	How magnetic field affects catalytic CO2 hydrogenation over Fe-Cu/MCM-41: In situ active metal phaseâ€”reactivity observation during activation and reaction. Chemical Engineering Journal, 2022, 441, 135952.	6.6	8
79	Effect of bimodal porous silica on particle size and reducibility of cobalt oxide. Journal of Porous Materials, 2013, 20, 481-488.	1.3	7
80	Synthesis of Dimethyl Ether via CO₂ Hydrogenation: Effect of the Drying Technique of Alumina on Properties and Performance of Alumina-Supported Copper Catalysts. ACS Omega, 2020, 5, 2334-2344.	1.6	7
81	Highly efficient TiO2-supported Coâ€“Cu catalysts for conversion of glycerol to 1,2-propanediol. Scientific Reports, 2021, 11, 23042.	1.6	7
82	Coreâ€Shell Faujasite@Aqueous Miscible Organicâ€Layered Double Hydroxides Composites with Tunable Acid/Base Properties for Oneâ€Pot Synthesis of Ethyl trans â€Î±â€Cyanocinnamate. Advanced Materials Interfaces, 2021, 8, 2002259.	1.9	4
83	Effect of Water and Glycerol in Deoxygenation of Coconut Oil over Bimetallic NiCo/SAPO-11 Nanocatalyst under N2 Atmosphere. Nanomaterials, 2020, 10, 2548.	1.9	2
84	Effect of surface treatment technique on properties and performance of <scp>Na₂WO₄â€TiO₂â€MnO_x</scp>/<scp>SiO₂</scp> for oxidative coupling of methane. Journal of Chemical Technology and Biotechnology, 2021, 96, 3101-3113.	1.6	2
85	Preface to â€œThermocatalytic Conversion of CO2 into Sustainable Chemical Productsâ€ Topics in Catalysis, 2021, 64, 315-315.	1.3	0
86	Bifunctional Acidâ€Base Catalysts: Coreâ€Shell Faujasite@Aqueous Miscible Organicâ€Layered Double Hydroxides Composites with Tunable Acid/Base Properties for Oneâ€Pot Synthesis of Ethyl <i>trans</i>â€Î±â€Cyanocinnamate (Adv. Mater. Interfaces 9/2021). Advanced Materials Interfaces, 2021, 8, 2170049.	1.9	0