David KubiÄka

List of Publications by Year
in descending order

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114	5,512	70961	85405
papers	citations	41	71
		h-index	g-index

116	116	116	4114
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Deoxygenation of vegetable oils over sulfided Ni, Mo and NiMo catalysts. Applied Catalysis A: General, 2010, 372, 199-208.	2.2	408
2	Hydroprocessed rapeseed oil as a source of hydrocarbon-based biodiesel. Fuel, 2009, 88, 456-460.	3.4	230
3	Deactivation of HDS catalysts in deoxygenation of vegetable oils. Applied Catalysis A: General, 2011, 394, 9-17.	2.2	199
4	Transformation of Vegetable Oils into Hydrocarbons over Mesoporous-Alumina-Supported CoMo Catalysts. Topics in Catalysis, 2009, 52, 161-168.	1.3	161
5	Fuel properties of hydroprocessed rapeseed oil. Fuel, 2010, 89, 611-615.	3.4	158
6	Overview of Analytical Methods Used for Chemical Characterization of Pyrolysis Bio-oil. Energy & Fuels, 2014, 28, 385-402.	2.5	157
7	Utilization of Triglycerides and Related Feedstocks for Production of Clean Hydrocarbon Fuels and Petrochemicals: A Review. Waste and Biomass Valorization, 2010, 1, 293-308.	1.8	156
8	Recent Advances in Reactions of Alkylbenzenes Over Novel Zeolites: The Effects of Zeolite Structure and Morphology. Catalysis Reviews - Science and Engineering, 2014, 56, 333-402.	5.7	148
9	Aldol condensation of furfural and acetone over MgAl layered double hydroxides and mixed oxides. Catalysis Today, 2014, 223, 138-147.	2.2	143
10	Application of Molecular Sieves in Transformations of Biomass and Biomass-Derived Feedstocks. Catalysis Reviews - Science and Engineering, 2013, 55, 1-78.	5.7	142
11	Ring opening of decalin over zeolitesI. Activity and selectivity of proton-form zeolites. Journal of Catalysis, 2004, 222, 65-79.	3.1	131
12	Metalâ^'Support Interactions in Zeolite-Supported Noble Metals:Â Influence of Metal Crystallites on the Support Acidity. Journal of Physical Chemistry B, 2006, 110, 4937-4946.	1.2	127
13	Aldol condensation of furfural and acetone on zeolites. Catalysis Today, 2014, 227, 154-162.	2.2	125
14	Ring opening of decalin over zeolitesII. Activity and selectivity of platinum-modified zeolites. Journal of Catalysis, 2004, 227, 313-327.	3.1	123
15	Premium quality renewable diesel fuel by hydroprocessing of sunflower oil. Fuel, 2011, 90, 2473-2479.	3.4	120
16	Effect of support-active phase interactions on the catalyst activity and selectivity in deoxygenation of triglycerides. Applied Catalysis B: Environmental, 2014, 145, 101-107.	10.8	115
17	The role of Ni species in the deoxygenation of rapeseed oil over NiMo-alumina catalysts. Applied Catalysis A: General, 2011, 397, 127-137.	2.2	109
18	Refinery co-processing of renewable feeds. Progress in Energy and Combustion Science, 2018, 68, 29-64.	15.8	108

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19	Conversion of Vegetable Oils into Hydrocarbons over CoMo/MCM-41 Catalysts. Topics in Catalysis, 2010, 53, 168-178.	1.3	104
20	Toward understanding of the role of Lewis acidity in aldol condensation of acetone and furfural using MOF and zeolite catalysts. Catalysis Today, 2015, 243, 158-162.	2.2	93
21	Ring opening of decalin over zeolitesII. Activity and selectivity of platinum-modified zeolites. Journal of Catalysis, 2004, 227, 313-327.	3.1	82
22	Opportunities for zeolites in biomass upgradingâ€"Lessons from the refining and petrochemical industry. Catalysis Today, 2015, 243, 10-22.	2.2	81
23	Zeolite-Beta-supported platinum catalysts for hydrogenation/hydrodeoxygenation of pyrolysis oil model compounds. Catalysis Today, 2013, 204, 38-45.	2.2	80
24	Hydrocracking of petroleum vacuum distillate containing rapeseed oil: Evaluation of diesel fuel. Fuel, 2010, 89, 1508-1513.	3.4	76
25	Petroleomic Characterization of Pyrolysis Bio-oils: A Review. Energy & Fuels, 2017, 31, 10283-10299.	2.5	73
26	Future Refining Catalysis - Introduction of Biomass Feedstocks. Collection of Czechoslovak Chemical Communications, 2008, 73, 1015-1044.	1.0	72
27	Nanosized TiO2â€"A promising catalyst for the aldol condensation of furfural with acetone in biomass upgrading. Catalysis Today, 2016, 277, 97-107.	2.2	68
28	Hydrotreatment of straw bio-oil from ablative fast pyrolysis to produce suitable refinery intermediates. Fuel, 2019, 238, 98-110.	3.4	64
29	Lignin to liquids over sulfided catalysts. Catalysis Today, 2012, 179, 191-198.	2.2	61
30	Comparative study of physico-chemical properties of laboratory and industrially prepared layered double hydroxides and their behavior in aldol condensation of furfural and acetone. Catalysis Today, 2015, 241, 221-230.	2.2	57
31	Influence of Mgâ€"Al Mixed Oxide Compositions on Their Properties and Performance in Aldol Condensation. Industrial & Engineering Chemistry Research, 2017, 56, 13411-13422.	1.8	57
32	Aldol condensation of furfural with acetone over ion-exchanged and impregnated potassium BEA zeolites. Journal of Molecular Catalysis A, 2016, 424, 358-368.	4.8	56
33	Peculiar behavior of MWW materials in aldol condensation of furfural and acetone. Dalton Transactions, 2014, 43, 10628.	1.6	52
34	Reconstructed Mg-Al hydrotalcites prepared by using different rehydration and drying time: Physico-chemical properties and catalytic performance in aldol condensation. Applied Catalysis A: General, 2017, 536, 85-96.	2.2	52
35	Application of orbitrap mass spectrometry for analysis of model bio-oil compounds and fast pyrolysis bio-oils from different biomass sources. Journal of Analytical and Applied Pyrolysis, 2017, 124, 230-238.	2.6	47
36	Bio-oil hydrotreating over conventional CoMo & NiMo catalysts: The role of reaction conditions and additives. Fuel, 2017, 198, 49-57.	3.4	47

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37	Catalytic pyrolysis of low density polyethylene over H-Î², H-Y, H-Mordenite, and H-Ferrierite zeolite catalysts: Influence of acidity and structures. Kinetics and Catalysis, 2007, 48, 535-540.	0.3	45
38	Transesterification of rapeseed oil by Mgâ€“Al mixed oxides with various Mg/Al molar ratio. Chemical Engineering Journal, 2015, 263, 160-167.	6.6	45
39	Quantitative Study of Straw Bio-oil Hydrodeoxygenation over a Sulfided NiMo Catalyst. ACS Sustainable Chemistry and Engineering, 2019, 7, 7080-7093.	3.2	45
40	Quantitative analysis of pyrolysis bio-oils: A review. TrAC - Trends in Analytical Chemistry, 2020, 126, 115857.	5.8	44
41	HDO catalysts for triglycerides conversion into pyrolysis and isomerization feedstock. Fuel, 2014, 121, 57-64.	3.4	42
42	Characterization of potassium-modified FAU zeolites and their performance in aldol condensation of furfural and acetone. Applied Catalysis A: General, 2018, 549, 8-18.	2.2	41
43	Gas transport properties and pervaporation performance of fluoropolymer gel membranes based on pure and mixed ionic liquids. Separation and Purification Technology, 2013, 109, 87-97.	3.9	40
44	Unprecedented selectivities in aldol condensation over Mgâ€“Al hydrotalcite in a fixed bed reactor setup. Catalysis Communications, 2015, 58, 89-92.	1.6	37
45	Ring Opening of Decalin Over Zeolite-Supported Iridium Catalysts. Topics in Catalysis, 2010, 53, 1438-1445.	1.3	36
46	Chemical Characterization of Pyrolysis Bio-oil: Application of Orbitrap Mass Spectrometry. Energy & Fuels, 2015, 29, 3233-3240.	2.5	36
47	The occurrence of Cannizzaro reaction over Mg-Al hydrotalcites. Applied Catalysis A: General, 2016, 525, 215-225.	2.2	35
48	Towards understanding the hydrodeoxygenation pathways of furfuralâ€“acetone aldol condensation products over supported Pt catalysts. Catalysis Science and Technology, 2016, 6, 1829-1841.	2.1	34
49	The role of alumina support in the deoxygenation of rapeseed oil over NiMoâ€“alumina catalysts. Catalysis Today, 2011, 176, 409-412.	2.2	33
50	Catalytic co-hydroprocessing of gasoilâ€“palm oil/AVO mixtures over a NiMo/Î³-Al2O3 catalyst. Fuel, 2014, 116, 49-55.	3.4	33
51	Hydrodeoxygenation of Isoeugenol over Ni- and Co-Supported Catalysts. ACS Sustainable Chemistry and Engineering, 2019, 7, 14545-14560.	3.2	33
52	Catalytic Transfer Hydrogenation of Furfural over Co₃O₄â^'Al₂O₃ Hydrotalciteâ€derived Catalyst. ChemCatChem, 2020, 12, 1467-1475.	1.8	31
53	Aldose to ketose interconversion: galactose and arabinose isomerization over heterogeneous catalysts. Catalysis Science and Technology, 2017, 7, 5321-5331.	2.1	29
54	Solvent effects in hydrodeoxygenation of furfural-acetone aldol condensation products over Pt/TiO 2 catalyst. Applied Catalysis A: General, 2017, 530, 174-183.	2.2	28

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55	(V)/Hydrotalcite, (V)/Al2O3, (V)/TiO2 and (V)/SBA-15 catalysts for the partial oxidation of ethanol to acetaldehyde. Journal of Molecular Catalysis A, 2016, 420, 178-189.	4.8	27
56	Ring-opening of decalin â€“ Kinetic modelling. Fuel, 2009, 88, 366-373.	3.4	26
57	The effect of oxygenates structure on their deoxygenation over USY zeolite. Catalysis Today, 2013, 204, 46-53.	2.2	26
58	Using Mgâ€Al Mixed Oxide and Reconstructed Hydrotalcite as Basic Catalysts for Aldol Condensation of Furfural and Cyclohexanone. ChemCatChem, 2018, 10, 1464-1475.	1.8	26
59	Efficient One-Stage Bio-Oil Upgrading over Sulfided Catalysts. ACS Sustainable Chemistry and Engineering, 2020, 8, 15149-15167.	3.2	25
60	The development of the method of low-temperature peat pyrolysis on the basis of alumosilicate catalytic system. Chemical Engineering Journal, 2007, 134, 162-167.	6.6	24
61	The Effect of Thermal Pre-Treatment on Structure, Composition, Basicity and Catalytic Activity of Mg/Al Mixed Oxides. Topics in Catalysis, 2013, 56, 586-593.	1.3	24
62	Extraâ€Largeâ€Pore Zeolites with UTL Topology: Control of the Catalytic Activity by Variation in the Nature of the Active Sites. ChemCatChem, 2013, 5, 1891-1898.	1.8	24
63	Physico-Chemical Properties of MgGa Mixed Oxides and Reconstructed Layered Double Hydroxides and Their Performance in Aldol Condensation of Furfural and Acetone. Frontiers in Chemistry, 2018, 6, 176.	1.8	24
64	On the influence of acidic admixtures in furfural on the performance of MgAl mixed oxide catalysts in aldol condensation of furfural and acetone. Catalysis Today, 2021, 367, 248-257.	2.2	24
65	On the mutual interactions between noble metal crystallites and zeolitic supports and their impacts on catalysis. Journal of Molecular Catalysis A, 2007, 264, 192-201.	4.8	23
66	Clinoptilolite foams prepared by alkali activation of natural zeolite and their post-synthesis modifications. Microporous and Mesoporous Materials, 2019, 282, 169-178.	2.2	23
67	Hydrotreating of Triglyceride-Based Feedstocks in Refineries. Advances in Chemical Engineering, 2013, , 141-194.	0.5	22
68	Activity of Molybdenum Oxide Catalyst Supported on Al2O3, TiO2, and SiO2 Matrix in the Oxidative Dehydrogenation of n-Butane. Topics in Catalysis, 2015, 58, 866-876.	1.3	22
69	Bio-based refinery intermediate production via hydrodeoxygenation of fast pyrolysis bio-oil. Renewable Energy, 2021, 168, 593-605.	4.3	22
70	Fischerâ€“Tropsch product as a co-feed for refinery hydrocracking unit. Fuel, 2013, 105, 432-439.	3.4	20
71	Aspects of Mgâ€“Al mixed oxide activity in transesterification of rapeseed oil in a fixed-bed reactor. Fuel Processing Technology, 2014, 122, 176-181.	3.7	20
72	CuZn Catalysts Superior to Adkins Catalysts for Dimethyl Adipate Hydrogenolysis. ChemCatChem, 2019, 11, 2169-2178.	1.8	20

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73	Upgrading of Fischerâ€“Tropsch Waxes by Fluid Catalytic Cracking. Industrial & Engineering Chemistry Research, 2012, 51, 8849-8857.	1.8	19
74	Synthesis of Ru-modified MCM-41 Mesoporous Material, Y and Beta Zeolite Catalysts for Ring Opening of Decalin. Topics in Catalysis, 2009, 52, 380-386.	1.3	17
75	The comparison of Co, Ni, Mo, CoMo and NiMo sulfided catalysts in rapeseed oil hydrodeoxygenation. Reaction Kinetics, Mechanisms and Catalysis, 2017, 122, 333-341.	0.8	17
76	Effect of Calcination Atmosphere and Temperature on the Hydrogenolysis Activity and Selectivity of Copper-Zinc Catalysts. Catalysts, 2018, 8, 446.	1.6	17
77	Conversion of ethanol to acetaldehyde over VOX-SiO2 catalysts: the effects of support texture and vanadium speciation. Reaction Kinetics, Mechanisms and Catalysis, 2017, 121, 353-369.	0.8	15
78	On the importance of transesterification by-products during hydrogenolysis of dimethyl adipate to hexanediol. Catalysis Communications, 2018, 111, 16-20.	1.6	15
79	The role of ZnO in the catalytic behaviour of Zn-Al mixed oxides in aldol condensation of furfural with acetone. Catalysis Today, 2021, 379, 181-191.	2.2	13
80	Integration of stabilized bio-oil in light cycle oil hydrotreatment unit targeting hybrid fuels. Fuel Processing Technology, 2022, 230, 107220.	3.7	13
81	Improved kinetic data from analysis of complex hydrocarbon mixtures by using SIMCA. Analytica Chimica Acta, 2005, 537, 339-348.	2.6	12
82	Reaction Routes in Selective Ring Opening of Naphthenes. Topics in Catalysis, 2010, 53, 1172-1175.	1.3	12
83	One-pot citral transformation to menthol over bifunctional micro- and mesoporous metal modified catalysts: Effect of catalyst support and metal. Journal of Molecular Catalysis A, 2005, , .	4.8	11
84	Non-traditional three-phase reactor setup for simultaneous acoustic irradiation and hydrogenation. Journal of Chemical Technology and Biotechnology, 2003, 78, 203-207.	1.6	10
85	Does the structure of CuZn hydroxycarbonate precursors affect the intrinsic hydrogenolysis activity of CuZn catalysts?. Catalysis Science and Technology, 2020, 10, 3303-3314.	2.1	10
86	Decalin ring opening reactions on ruthenium-containing zeolite MCM-41. Petroleum Chemistry, 2009, 49, 90-93.	0.4	9
87	Catalytic conversion of furfural-acetone condensation products into bio-derived C8 linear alcohols over Ni Cu/Al-SBA-15. Catalysis Communications, 2018, 114, 42-45.	1.6	9
88	Effect of Temperature on the Hydrotreatment of Sewage Sludge-Derived Pyrolysis Oil and Behavior of Ni-Based Catalyst. Catalysts, 2020, 10, 1273.	1.6	9
89	Do metal-oxide promoters of Cu hydrogenolysis catalysts affect the Cu intrinsic activity?. Applied Catalysis A: General, 2020, 608, 117889.	2.2	9
90	Improved bio-oil upgrading due to optimized reactor temperature profile. Fuel Processing Technology, 2021, 222, 106977.	3.7	9

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91	On the way to improve cetane number in diesel fuels: Ring opening of decalin over Ir-modified embedded mesoporous materials. Catalysis in Industry, 2013, 5, 105-122.	0.3	8
92	Towards efficient Cu/ZnO catalysts for ester hydrogenolysis: The role of synthesis method. Applied Catalysis A: General, 2021, 624, 118320.	2.2	8
93	Studies on Sodium Lignosulfonate Depolymerization Over Al2O3 Supported Catalysts Loaded with Metals and Metal Oxides in a Continuous Flow Reactor. Topics in Catalysis, 2013, 56, 794-799.	1.3	7
94	Fuels from Reliable Bio-based Refinery Intermediates: BioMates. Waste and Biomass Valorization, 2020, 11, 579-598.	1.8	7
95	On the Effect of the M3+ Origin on the Properties and Aldol Condensation Performance of MgM3+ Hydrotalcites and Mixed Oxides. Catalysts, 2021, 11, 992.	1.6	7
96	Ring opening of decalin over Pt-and Ir-modified SAPO-5 and VPI-5 zeolite catalysts. Studies in Surface Science and Catalysis, 2005, 158, 1669-1676.	1.5	6
97	Synthesis of Pt-modified MCM-41 mesoporous molecular sieve catalysts: influence of methods of Pt introduction in MCM-41 on physico-chemical and catalytic properties for ring opening of decalin. Studies in Surface Science and Catalysis, 2006, , 401-408.	1.5	6
98	Aspects of stability of K/Al2O3 catalysts for the transesterification of rapeseed oil in batch and fixed-bed reactors. Chinese Journal of Catalysis, 2014, 35, 1084-1090.	6.9	6
99	On the origin of the transesterification reaction route during dimethyl adipate hydrogenolysis. Applied Catalysis A: General, 2020, 606, 117825.	2.2	6
100	Understanding of the key properties of supported Cu-based catalysts and their influence on ester hydrogenolysis. Catalysis Today, 2022, 397-399, 173-181.	2.2	5
101	Highly effective Pd/ZSM-12 bifunctional catalysts by in-situ glow discharge plasma reduction: the effect of metal function on the catalytic performance for n-hexadecane hydroisomerization. Journal of the Taiwan Institute of Chemical Engineers, 2022, 134, 104303.	2.7	5
102	Hydrogenation of Bio-Oil Model Compounds over Raney-Ni at Ambient Pressure. Catalysts, 2019, 9, 268.	1.6	4
103	Alternative Preparation of Improved NiMo-Alumina Deoxygenation Catalysts. Frontiers in Chemistry, 2020, 8, 216.	1.8	4
104	Critical evaluation of parameters affecting Cu nanoparticles formation and their activity in dimethyl adipate hydrogenolysis. Catalysis Today, 2022, 387, 61-71.	2.2	4
105	Semiâ€Batch Hydrotreatment of Ligninâ€Derived Phenolic Compounds over Raneyâ€Ni with a Continuous Regeneration of the Hâ€Donor Solvent. ChemSusChem, 2022, 15, .	3.6	4
106	Fading memory of MgAl hydrotalcites at mild rehydration conditions deteriorates their performance in aldol condensation. Applied Catalysis A: General, 2022, 632, 118482.	2.2	4
107	The promotion effects of MoOx species in the highly effective NiMo/MgAl2O4 catalysts for the hydrodeoxygenation of methyl palmitate. Journal of Environmental Chemical Engineering, 2022, 10, 107761.	3.3	4
108	Classification and pattern recognition of acyclic octenes based on mass spectra. Talanta, 2007, 72, 1573-1580.	2.9	3

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109	Thermodynamic balance in reaction system of total vegetable oil hydrogenation. Chemical Engineering Journal, 2008, , .	6.6	3
110	Partial oxidation of ethanol over ZrO2-supported vanadium catalysts. Reaction Kinetics, Mechanisms and Catalysis, 2017, 121, 161-173.	0.8	3
111	Understanding of the Key Factors Determining the Activity and Selectivity of CuZn Catalysts in Hydrogenolysis of Alkyl Esters to Alcohols. Catalysts, 2021, 11, 1417.	1.6	3
112	Novel Polymerâ€“Silica Composite-Based Bifunctional Catalysts for Hydrodeoxygenation of 4-(2-Furyl)-3-Buten-2-One as Model Substance for Furfuralâ€“Acetone Aldol Condensation Products. Applied Sciences (Switzerland), 2019, 9, 2438.	1.3	2
113	Liquid-phase hydrogenation of diethylbenzenes. Catalysis Today, 2005, 100, 453-456.	2.2	1
114	Hydroconversion of sunflower oil to fatty alcohols and hydrocarbons using CuZn and CuZn-HBEA-based catalysts. Catalysis Today, 2023, 424, 113841.	2.2	1