

# Dekui Shen

## List of Publications by Year in descending order

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Version: 2024-02-01

61  
papers

3,729  
citations

136740

32  
h-index

128067

60  
g-index

64  
all docs

64  
docs citations

64  
times ranked

4363  
citing authors

#	ARTICLE	IF	CITATIONS
1	A critical review on VOCs adsorption by different porous materials: Species, mechanisms and modification methods. <i>Journal of Hazardous Materials</i> , 2020, 389, 122102.	6.5	504
2	Phosphate adsorption on lanthanum loaded biochar. <i>Chemosphere</i> , 2016, 150, 1-7.	4.2	305
3	State-of-the-art on the production and application of carbon nanomaterials from biomass. <i>Green Chemistry</i> , 2018, 20, 5031-5057.	4.6	256
4	An overview on fast pyrolysis of the main constituents in lignocellulosic biomass to valued-added chemicals: Structures, pathways and interactions. <i>Renewable and Sustainable Energy Reviews</i> , 2015, 51, 761-774.	8.2	212
5	Characterization of Coke Deposition in the Catalytic Fast Pyrolysis of Biomass Derivates. <i>Energy &amp; Fuels</i> , 2014, 28, 52-57.	2.5	177
6	Removal of Pb(II) from water by the activated carbon modified by nitric acid under microwave heating. <i>Journal of Colloid and Interface Science</i> , 2016, 463, 118-127.	5.0	169
7	Catalytic Upgrading of Biomass Model Compounds: Novel Approaches and Lessons Learnt from Traditional Hydrodeoxygenation – a Review. <i>ChemCatChem</i> , 2019, 11, 924-960.	1.8	167
8	The pyrolytic behavior of cellulose in lignocellulosic biomass: a review. <i>RSC Advances</i> , 2011, 1, 1641.	1.7	145
9	Structural analysis of lignin residue from black liquor and its thermal performance in thermogravimetric-Fourier transform infrared spectroscopy. <i>Bioresource Technology</i> , 2013, 128, 633-639.	4.8	95
10	State-of-the-art catalytic hydrogenolysis of lignin for the production of aromatic chemicals. <i>Catalysis Science and Technology</i> , 2018, 8, 6275-6296.	2.1	90
11	Green Synthesis of Tunable Fluorescent Carbon Quantum Dots from Lignin and Their Application in Anti-Counterfeit Printing. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 56465-56475.	4.0	82
12	High H <sub>2</sub> /CO Ratio Syngas Production from Chemical Looping Gasification of Sawdust in a Dual Fluidized Bed Gasifier. <i>Energy &amp; Fuels</i> , 2016, 30, 1764-1770.	2.5	77
13	Catalytic Oxidation of Lignin in Solvent Systems for Production of Renewable Chemicals: A Review. <i>Polymers</i> , 2017, 9, 240.	2.0	72
14	State-of-the-Art on the Preparation, Modification, and Application of Biomass-Derived Carbon Quantum Dots. <i>Industrial &amp; Engineering Chemistry Research</i> , 2020, 59, 22017-22039.	1.8	67
15	Mechanism on microwave-assisted acidic solvolysis of black-liquor lignin. <i>Bioresource Technology</i> , 2014, 162, 136-141.	4.8	64
16	TG-MS analysis for thermal decomposition of cellulose under different atmospheres. <i>Carbohydrate Polymers</i> , 2013, 98, 514-521.	5.1	63
17	Sustainable synthesis of bright green fluorescent carbon quantum dots from lignin for highly sensitive detection of Fe <sup>3+</sup> ions. <i>Applied Surface Science</i> , 2021, 565, 150526.	3.1	63
18	Co-catalytic pyrolysis of biomass and waste triglyceride seed oil in a novel fluidized bed reactor to produce olefins and aromatics integrated with self-heating and catalyst regeneration processes. <i>RSC Advances</i> , 2013, 3, 5769.	1.7	58

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19	Online evolved gas analysis by Thermogravimetric-Mass Spectroscopy for thermal decomposition of biomass and its components under different atmospheres: Part I. Lignin. <i>Bioresource Technology</i> , 2013, 130, 449-456.	4.8	57
20	Study on Pyrolysis of Pine Sawdust with Solid Base and Acid Mixed Catalysts by Thermogravimetry–Fourier Transform Infrared Spectroscopy and Pyrolysis–Gas Chromatography/Mass Spectrometry. <i>Energy &amp; Fuels</i> , 2014, 28, 4294-4299.	2.5	56
21	Hydrogenolysis of Organosolv Lignin in Ethanol/Isopropanol Media without Added Transition-Metal Catalyst. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 1023-1030.	3.2	55
22	Catalytic solvolysis of lignin with the modified HUSYs in formic acid assisted by microwave heating. <i>Chemical Engineering Journal</i> , 2015, 270, 641-647.	6.6	54
23	Progress in carbon-based electrocatalyst derived from biomass for the hydrogen evolution reaction. <i>Fuel</i> , 2021, 293, 120440.	3.4	53
24	Thermal degradation of xylan-based hemicellulose under oxidative atmosphere. <i>Carbohydrate Polymers</i> , 2015, 127, 363-371.	5.1	50
25	Kinetics, equilibrium and thermodynamics studies on biosorption of Rhodamine B from aqueous solution by earthworm manure derived biochar. <i>International Biodeterioration and Biodegradation</i> , 2017, 120, 104-114.	1.9	50
26	Catalytic Conversion of Biomass Derivates over Acid Dealuminated ZSM-5. <i>Industrial &amp; Engineering Chemistry Research</i> , 2014, 53, 15871-15878.	1.8	49
27	Catalytic hydrogenolysis of lignin in ethanol/isopropanol over an activated carbon supported nickel-copper catalyst. <i>Bioresource Technology</i> , 2021, 319, 124238.	4.8	45
28	Thermal behavior and kinetics of co-pyrolysis of cellulose and polyethylene with the addition of transition metals. <i>Energy Conversion and Management</i> , 2018, 172, 32-38.	4.4	44
29	Composition Analysis of Organosolv Lignin and Its Catalytic Solvolysis in Supercritical Alcohol. <i>Energy &amp; Fuels</i> , 2014, 28, 4260-4266.	2.5	41
30	Temperature sensitivity of the selective catalytic reduction (SCR) performance of Ce–TiO <sub>2</sub> in the presence of SO <sub>2</sub> . <i>Chemosphere</i> , 2020, 243, 125419.	4.2	39
31	Comparison of Catalytic Characteristics of Biomass Derivates with Different Structures Over ZSM-5. <i>Bioenergy Research</i> , 2013, 6, 1173-1182.	2.2	37
32	Triple-emission nitrogen and boron co-doped carbon quantum dots from lignin: Highly fluorescent sensing platform for detection of hexavalent chromium ions. <i>Journal of Colloid and Interface Science</i> , 2022, 617, 557-567.	5.0	37
33	Investigation on the effect of different additives on anaerobic co-digestion of corn straw and sewage sludge: Comparison of biochar, Fe <sub>3</sub> O <sub>4</sub> , and magnetic biochar. <i>Bioresource Technology</i> , 2022, 345, 126532.	4.8	34
34	Nonprecious Metal/Bimetallic Catalytic Hydrogenolysis of Lignin in a Mixed-Solvent System. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 16217-16228.	3.2	33
35	Hydrogen production from bio-oil by chemical looping reforming. <i>Journal of Thermal Analysis and Calorimetry</i> , 2014, 115, 1921-1927.	2.0	28
36	Mechanism of hydrodeoxygenation (HDO) in anisole decomposition over metal loaded Brønsted acid sites: Density Functional Theory (DFT) study. <i>Molecular Catalysis</i> , 2018, 454, 30-37.	1.0	28

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37	Co-pyrolysis of lignin and polyethylene with the addition of transition metals - Part I: Thermal behavior and kinetics analysis. <i>Journal of the Energy Institute</i> , 2020, 93, 281-291.	2.7	28
38	Immobilization of Cu <sup>2+</sup> and Cd <sup>2+</sup> by earthworm manure derived biochar in acidic circumstance. <i>Journal of Environmental Sciences</i> , 2017, 53, 293-300.	3.2	25
39	Catalytic Conversion of Furan to Hydrocarbons using HZSM-5: Coking Behavior and Kinetic Modeling including Coke Deposition. <i>Energy Technology</i> , 2017, 5, 111-118.	1.8	21
40	H <sub>2</sub> O and/or SO <sub>2</sub> Tolerance of Cu-Mn/SAPO-34 Catalyst for NO Reduction with NH <sub>3</sub> at Low Temperature. <i>Catalysts</i> , 2019, 9, 289.	1.6	17
41	Thermal-balanced integral model for pyrolysis and ignition of wood. <i>Korean Journal of Chemical Engineering</i> , 2013, 30, 228-234.	1.2	16
42	Experimental and Kinetic Study on Lignin Depolymerization in Water/Formic Acid System. <i>International Journal of Molecular Sciences</i> , 2017, 18, 2082.	1.8	14
43	Catalytic cleavage of C-O linkages in benzyl phenyl ether assisted by microwave heating. <i>RSC Advances</i> , 2015, 5, 43972-43977.	1.7	12
44	Sulfation effect of Ce/TiO <sub>2</sub> catalyst for the selective catalytic reduction of NO <sub>x</sub> with NH <sub>3</sub> : mechanism and kinetic studies. <i>RSC Advances</i> , 2019, 9, 32110-32120.	1.7	11
45	Facile Synthesis of Multi-Emission Nitrogen/Boron Co-Doped Carbon Dots from Lignin for Anti-Counterfeiting Printing. <i>Polymers</i> , 2022, 14, 2779.	2.0	11
46	Mechanism of transmethylation in anisole decomposition over HZSM-5: Experimental study. <i>Journal of Analytical and Applied Pyrolysis</i> , 2016, 122, 323-331.	2.6	10
47	Experimental study on anaerobic co-digestion of the individual component of biomass with sewage sludge: methane production and microbial community. <i>Biomass Conversion and Biorefinery</i> , 2022, 12, 5045-5058.	2.9	10
48	Thermal Behavior of Wood Slab Under a Truncated-Cone Electrical Heater: Experimental Observation. <i>Combustion Science and Technology</i> , 2013, 185, 848-862.	1.2	9
49	The mechanism of transmethylation in anisole decomposition over Brønsted acid sites: density functional theory (DFT) study. <i>Sustainable Energy and Fuels</i> , 2017, 1, 1788-1794.	2.5	9
50	Preparation of Different Nickel-Iron/Titania-Alumina Catalysts for Hydrogen/Carbon Monoxide Methanation under Atmospheric Pressure. <i>Energy Technology</i> , 2017, 5, 1218-1227.	1.8	9
51	Coked Ni/Al <sub>2</sub> O <sub>3</sub> from the catalytic reforming of volatiles from co-pyrolysis of lignin and polyethylene: preparation, identification and application as a potential adsorbent. <i>Catalysis Science and Technology</i> , 2021, 11, 4162-4171.	2.1	9
52	Carbon nanotubes/Al <sub>2</sub> O <sub>3</sub> composite derived from catalytic reforming of the pyrolysis volatiles of the mixture of polyethylene and lignin for highly-efficient removal of Pb(II). <i>RSC Advances</i> , 2021, 11, 37851-37865.	1.7	9
53	Pb(II) ion adsorption by biomass-based carbonaceous fiber modified by the integrated oxidation and vulcanization. <i>Korean Journal of Chemical Engineering</i> , 2017, 34, 2619-2630.	1.2	8
54	Anaerobic Co-digestion of Urban Sewage Sludge with Agricultural Biomass. <i>Waste and Biomass Valorization</i> , 2020, 11, 6199-6209.	1.8	8

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55	Prediction of methane production from co-digestion of lignocellulosic biomass with sludge based on the major compositions of lignocellulosic biomass. <i>Environmental Science and Pollution Research</i> , 2021, 28, 25808-25818.	2.7	8
56	Effect of Transition Metal Additives on the Catalytic Performance of Cu-Mn/SAPO-34 for Selective Catalytic Reduction of NO with NH <sub>3</sub> at Low Temperature. <i>Catalysts</i> , 2019, 9, 685.	1.6	7
57	Comparison Study of the SCR Performance over Mn-TiO <sub>2</sub> and Ce-TiO <sub>2</sub> Catalysts: An Experimental and DFT Study. <i>Energy &amp; Fuels</i> , 2021, 35, 14681-14691.	2.5	7
58	Adsorption of C-C Linkage-Contained Lignin Model Compound Over the Metal Surface of Catalysts: Quantum Simulation. <i>Topics in Catalysis</i> , 2018, 61, 1783-1791.	1.3	4
59	Preparation of Citric Acid-Sewage Sludge Hydrochar and Its Adsorption Performance for Pb(II) in Aqueous Solution. <i>Polymers</i> , 2022, 14, 968.	2.0	4
60	A mathematical description of thermal decomposition and spontaneous ignition of wood slab under a truncated-cone heater. <i>Korean Journal of Chemical Engineering</i> , 2013, 30, 613-619.	1.2	3
61	Facile and green preparation of solid carbon nanoions <i>via</i> catalytic co-pyrolysis of lignin and polyethylene and their adsorption capability towards Cu(II). <i>RSC Advances</i> , 2022, 12, 5042-5052.	1.7	3