

# Ajay Kumar

## List of Publications by Year in descending order

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53  
papers

4,006  
citations

159525

30  
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182361

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docs citations

53  
times ranked

4623  
citing authors

#	ARTICLE	IF	CITATIONS
1	Comparative Life Cycle Assessment of Gasification and Landfilling for Disposal of Municipal Solid Wastes. <i>Energies</i> , 2021, 14, 7032.	1.6	11
2	Distributed power generation via gasification of biomass and municipal solid waste: A review. <i>Journal of the Energy Institute</i> , 2020, 93, 2293-2313.	2.7	53
3	Economics of Distributed Power Generation via Gasification of Biomass and Municipal Solid Waste. <i>Energies</i> , 2020, 13, 3703.	1.6	27
4	Commercial clustering of sustainable bamboo species in India. <i>Industrial Crops and Products</i> , 2020, 154, 112693.	2.5	47
5	The Effect of Gasification Conditions on the Surface Properties of Biochar Produced in a Top-Lit Updraft Gasifier. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 688.	1.3	20
6	Modeling low temperature plasma gasification of municipal solid waste. <i>Environmental Technology and Innovation</i> , 2019, 15, 100412.	3.0	47
7	Catalytic co-pyrolysis of red cedar with methane to produce upgraded bio-oil. <i>Bioresource Technology</i> , 2019, 285, 121299.	4.8	24
8	Tar reduction in biomass syngas using heat exchanger and vegetable oil bubbler. <i>Energy</i> , 2019, 175, 402-409.	4.5	25
9	Physicochemical properties and morphology of biochars as affected by feedstock sources and pyrolysis temperatures. <i>Biochar</i> , 2019, 1, 325-336.	6.2	38
10	Recent Advances in Power Generation Through Biomass and Municipal Solid Waste Gasification. <i>Energy, Environment, and Sustainability</i> , 2018, , 369-401.	0.6	4
11	Scale-up of a downdraft gasifier system for commercial scale mobile power generation. <i>Renewable Energy</i> , 2018, 118, 25-33.	4.3	35
12	Enhanced ethanol production by <i>Clostridium ragsdalei</i> from syngas by incorporating biochar in the fermentation medium. <i>Bioresource Technology</i> , 2018, 247, 291-301.	4.8	61
13	Bioenergy from Food Wastes: Thermal Decomposition of Carbohydrates, Lipids, and Proteins. <i>Transactions of the ASABE</i> , 2018, 61, 797-805.	1.1	5
14	Electricity power generation from co-gasification of municipal solid wastes and biomass: Generation and emission performance. <i>Energy</i> , 2018, 162, 764-775.	4.5	50
15	Co-gasification of municipal solid waste and biomass in a commercial scale downdraft gasifier. <i>Energy</i> , 2018, 163, 513-518.	4.5	91
16	Biochar enhanced ethanol and butanol production by <i>Clostridium carboxidivorans</i> from syngas. <i>Bioresource Technology</i> , 2018, 265, 128-138.	4.8	53
17	Co-Pyrolysis of torrefied biomass and methane over molybdenum modified bimetallic HZSM-5 catalyst for hydrocarbons production. <i>Green Chemistry</i> , 2017, 19, 757-768.	4.6	35
18	Engine power generation and emission performance of syngas generated from low-density biomass. <i>Energy Conversion and Management</i> , 2017, 148, 593-603.	4.4	60

#	ARTICLE	IF	CITATIONS
19	Catalytic reforming of toluene and naphthalene (model tar) by char supported nickel catalyst. Fuel, 2017, 187, 128-136.	3.4	86
20	Effects of Syngas Cooling and Biomass Filter Medium on Tar Removal. Energies, 2017, 10, 349.	1.6	47
21	Integration of biomass catalytic pyrolysis and methane aromatization over Mo/HZSM-5 catalysts. Journal of Analytical and Applied Pyrolysis, 2016, 120, 484-492.	2.6	46
22	Pyrolysis of eastern redcedar: Distribution and characteristics of fast and slow pyrolysis products. Fuel, 2016, 166, 157-165.	3.4	30
23	Critical factors affecting the integration of biomass gasification and syngas fermentation technology. AIMS Bioengineering, 2016, 3, 188-210.	0.6	36
24	Solubility enhancement of producer gas tar compounds in water using sodium dodecyl sulfate as a surfactant. Fuel Processing Technology, 2015, 133, 75-79.	3.7	4
25	Vegetable oil as a solvent for removing producer gas tar compounds. Fuel Processing Technology, 2015, 133, 97-104.	3.7	18
26	Review of recent developments to improve storage and transportation stability of bio-oil. Renewable and Sustainable Energy Reviews, 2015, 50, 859-870.	8.2	138
27	Life Cycle Assessment of Biochar versus Metal Catalysts Used in Syngas Cleaning. Energies, 2015, 8, 621-644.	1.6	22
28	Design and development of a bench scale vegetable oil based wet packed bed scrubbing system for removing producer gas tar compounds. Fuel Processing Technology, 2015, 134, 243-250.	3.7	21
29	Equilibrium stage based model of a vegetable oil based wet packed bed scrubbing system for removing producer gas tar compounds. Separation and Purification Technology, 2015, 142, 196-202.	3.9	13
30	Reforming of lignin-derived tars over char-based catalyst using Py-GC/MS. Fuel, 2015, 162, 47-54.	3.4	26
31	A Fuzzy Inference System (FIS) and Dimensional Analysis for Predicting Energy Consumption and Mean Residence Time in a Twin-Screw Extruder. Journal of Food Process Engineering, 2015, 38, 125-134.	1.5	2
32	Physical properties and reactivity of char obtained from downdraft gasification of sorghum and eastern red cedar. Fuel, 2015, 143, 383-389.	3.4	13
33	Recent advances in utilization of biochar. Renewable and Sustainable Energy Reviews, 2015, 42, 1055-1064.	8.2	640
34	Application of Isothermal Calorimetry to Phosphorus Sorption onto Soils in a Flow-through System. Soil Science Society of America Journal, 2014, 78, 147-156.	1.2	9
35	Effects of torrefaction and densification on switchgrass pyrolysis products. Bioresource Technology, 2014, 174, 266-273.	4.8	66
36	Synthesis and evaluation of biochar-derived catalysts for removal of toluene (model tar) from biomass-generated producer gas. Renewable Energy, 2014, 66, 346-353.	4.3	117

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37	Effect of steam injection location on syngas obtained from an air–steam gasifier. <i>Fuel</i> , 2014, 116, 388-394.	3.4	9
38	Gasification performance of switchgrass pretreated with torrefaction and densification. <i>Applied Energy</i> , 2014, 127, 194-201.	5.1	106
39	Simultaneous Removal of Toluene (Model Tar), NH <sub>3</sub> , and H <sub>2</sub> S, from Biomass-Generated Producer Gas Using Biochar-Based and Mixed-Metal Oxide Catalysts. <i>Energy &amp; Fuels</i> , 2014, 28, 1918-1925.	2.5	33
40	Prediction of biomass-generated syngas using extents of major reactions in a continuous stirred-tank reactor. <i>Energy</i> , 2014, 72, 222-232.	4.5	6
41	Fluidization characteristics of a mixture of gasifier solid residues, switchgrass and inert material. <i>Powder Technology</i> , 2013, 235, 661-668.	2.1	24
42	Effects of Biomass Feedstocks and Gasification Conditions on the Physiochemical Properties of Char. <i>Energies</i> , 2013, 6, 3972-3986.	1.6	157
43	Review of Syngas Contaminants removal using Carbon-based Catalysts. , 2012, , .		0
44	Effects of cellulose, hemicellulose and lignin on thermochemical conversion characteristics of the selected biomass. <i>Bioresource Technology</i> , 2012, 114, 663-669.	4.8	263
45	Characterization of Switchgrass, Cellulose, Hemicellulose and Lignin for Thermochemical Conversions. <i>Journal of Biobased Materials and Bioenergy</i> , 2012, 6, 249-258.	0.1	16
46	Thermochemical Conversion of Biomass to Biofuels. , 2011, , 51-77.		47
47	Optimization and economic evaluation of industrial gas production and combined heat and power generation from gasification of corn stover and distillers grains. <i>Bioresource Technology</i> , 2010, 101, 3696-3701.	4.8	63
48	Macromolecular Changes in Extruded Starch–Films Plasticized with Glycerol, Water and Stearic Acid. <i>Starch/Staerke</i> , 2009, 61, 256-266.	1.1	46
49	Steam–air fluidized bed gasification of distillers grains: Effects of steam to biomass ratio, equivalence ratio and gasification temperature. <i>Bioresource Technology</i> , 2009, 100, 2062-2068.	4.8	182
50	Thermochemical Biomass Gasification: A Review of the Current Status of the Technology. <i>Energies</i> , 2009, 2, 556-581.	1.6	673
51	Modeling residence time distribution in a twin-screw extruder as a series of ideal steady-state flow reactors. <i>Journal of Food Engineering</i> , 2008, 84, 441-448.	2.7	48
52	Thermogravimetric characterization of corn stover as gasification and pyrolysis feedstock. <i>Biomass and Bioenergy</i> , 2008, 32, 460-467.	2.9	255
53	Digital image processing for measurement of residence time distribution in a laboratory extruder. <i>Journal of Food Engineering</i> , 2006, 75, 237-244.	2.7	58