

Jun-ichiro Hayashi

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	FT-Raman spectroscopic study of the evolution of char structure during the pyrolysis of a Victorian brown coal. <i>Fuel</i> , 2006, 85, 1700-1707.	6.4	767
2	Effect of Alkali and Alkaline Earth Metallic Species on Biochar Reactivity and Syngas Compositions during Steam Gasification. <i>Energy & Fuels</i> , 2010, 24, 173-181.	5.1	203
3	Volatilisation and catalytic effects of alkali and alkaline earth metallic species during the pyrolysis and gasification of Victorian brown coal. Part VII. Raman spectroscopic study on the changes in char structure during the catalytic gasification in air. <i>Fuel</i> , 2006, 85, 1509-1517.	6.4	202
4	Volatilisation and catalytic effects of alkali and alkaline earth metallic species during the pyrolysis and gasification of Victorian brown coal. Part IV. Catalytic effects of NaCl and ion-exchangeable Na in coal on char reactivity. <i>Fuel</i> , 2003, 82, 587-593.	6.4	200
5	Primary Release of Alkali and Alkaline Earth Metallic Species during the Pyrolysis of Pulverized Biomass. <i>Energy & Fuels</i> , 2005, 19, 2164-2171.	5.1	186
6	Separation of Ethane/Ethylene and Propane/Propylene Systems with a Carbonized BPDA-ODA Polyimide Membrane. <i>Industrial & Engineering Chemistry Research</i> , 1996, 35, 4176-4181.	3.7	152
7	Volatilisation of alkali and alkaline earth metallic species during the pyrolysis of biomass: differences between sugar cane bagasse and cane trash. <i>Bioresource Technology</i> , 2005, 96, 1570-1577.	9.6	151
8	Pyrolysis of a Victorian brown coal and gasification of nascent char in CO ₂ atmosphere in a wire-mesh reactor. <i>Fuel</i> , 2004, 83, 833-843.	6.4	141
9	Pore size control of carbonized BPDA-ODA polyimide membrane by chemical vapor deposition of carbon. <i>Journal of Membrane Science</i> , 1997, 124, 243-251.	8.2	138
10	Mechanism of decomposition of aromatics over charcoal and necessary condition for maintaining its activity. <i>Fuel</i> , 2008, 87, 2914-2922.	6.4	134
11	Conversion of Fuel-N into HCN and NH ₃ During the Pyrolysis and Gasification in Steam: A Comparative Study of Coal and Biomass. <i>Energy & Fuels</i> , 2007, 21, 517-521.	5.1	132
12	Drastic changes in biomass char structure and reactivity upon contact with steam. <i>Fuel</i> , 2008, 87, 1127-1132.	6.4	127
13	Catalytic and Noncatalytic Mechanisms in Steam Gasification of Char from the Pyrolysis of Biomass. <i>Energy & Fuels</i> , 2010, 24, 108-116.	5.1	126
14	Volatilisation and catalytic effects of alkali and alkaline earth metallic species during the pyrolysis and gasification of Victorian brown coal. Part V. Combined effects of Na concentration and char structure on char reactivity. <i>Fuel</i> , 2004, 83, 23-30.	6.4	124
15	Preparation and characterization of silica-polyimide composite membranes coated on porous tubes for CO ₂ separation. <i>Journal of Membrane Science</i> , 1996, 115, 65-75.	8.2	113
16	Roles of inherent metallic species in secondary reactions of tar and char during rapid pyrolysis of brown coals in a drop-tube reactor. <i>Fuel</i> , 2002, 81, 1977-1987.	6.4	111
17	Characterization of the Structural Features of Char from the Pyrolysis of Cane Trash Using Fourier Transform-Raman Spectroscopy. <i>Energy & Fuels</i> , 2007, 21, 1816-1821.	5.1	106
18	Effects of volatile-char interactions on the volatilisation of alkali and alkaline earth metallic species during the pyrolysis of biomass. <i>Fuel</i> , 2008, 87, 1187-1194.	6.4	106

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19	Inhibition of steam gasification of char by volatiles in a fluidized bed under continuous feeding of a brown coal. <i>Fuel</i> , 2006, 85, 340-349.	6.4	105
20	Simultaneous Improvement of Permeance and Permselectivity of 3,3',4,4'-Biphenyltetracarboxylic Dianhydride-4,4'-Oxydianiline Polyimide Membrane by Carbonization. <i>Industrial & Engineering Chemistry Research</i> , 1995, 34, 4364-4370.	3.7	99
21	Formation of NO _x precursors during the pyrolysis of coal and biomass. Part VI. Effects of gas atmosphere on the formation of NH ₃ and HCN†. <i>Fuel</i> , 2003, 82, 1159-1166.	6.4	93
22	Analysis of pyrolysis products from light hydrocarbons and kinetic modeling for growth of polycyclic aromatic hydrocarbons with detailed chemistry. <i>Journal of Analytical and Applied Pyrolysis</i> , 2009, 86, 148-160.	5.5	91
23	Volatilisation and catalytic effects of alkali and alkaline earth metallic species during the pyrolysis and gasification of Victorian brown coal. Part VI. Further investigation into the effects of volatile-char interactions. <i>Fuel</i> , 2004, 83, 1273-1279.	6.4	90
24	Evolution of biomass char structure during oxidation in O ₂ as revealed with FT-Raman spectroscopy. <i>Fuel Processing Technology</i> , 2008, 89, 1429-1435.	7.2	89
25	Effect of Oxidation on Gas Permeation of Carbon Molecular Sieving Membranes Based on BPDA-ppâ€‘ODA Polyimide. <i>Industrial & Engineering Chemistry Research</i> , 1997, 36, 2134-2140.	3.7	83
26	Estimation of Enthalpy of Bio-Oil Vapor and Heat Required for Pyrolysis of Biomass. <i>Energy & Fuels</i> , 2013, 27, 2675-2686.	5.1	82
27	Classification of Water Sorbed in Coal on the Basis of Congelation Characteristics. <i>Energy & Fuels</i> , 1998, 12, 574-579.	5.1	81
28	Carbon molecular sieve membrane formed by oxidative carbonization of a copolyimide film coated on a porous support tube. <i>Journal of Membrane Science</i> , 1997, 133, 195-205.	8.2	79
29	A review on methane transformation to hydrogen and nanocarbon: Relevance of catalyst characteristics and experimental parameters on yield. <i>Renewable and Sustainable Energy Reviews</i> , 2017, 76, 743-767.	16.4	79
30	Production of Levoglucosenone and Dihydrolevoglucosenone by Catalytic Reforming of Volatiles from Cellulose Pyrolysis Using Supported Ionic Liquid Phase. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 1132-1140.	6.7	78
31	Effects of volatileâ€‘char interactions on the reactivity of chars from NaCl-loaded Loy Yang brown coal. <i>Fuel</i> , 2005, 84, 1221-1228.	6.4	77
32	Reforming of Volatiles from the Biomass Pyrolysis over Charcoal in a Sequence of Coke Deposition and Steam Gasification of Coke. <i>Energy & Fuels</i> , 2011, 25, 5387-5393.	5.1	77
33	Efficient levoglucosenone production by catalytic pyrolysis of cellulose mixed with ionic liquid. <i>Green Chemistry</i> , 2011, 13, 3306.	9.0	77
34	Volatilisation and catalytic effects of alkali and alkaline earth metallic species during the pyrolysis and gasification of Victorian brown coal. Part IX. Effects of volatile-char interactions on charâ€‘H ₂ O and charâ€‘O ₂ reactivities. <i>Fuel</i> , 2011, 90, 1655-1661.	6.4	77
35	Simultaneous Steam Reforming of Tar and Steam Gasification of Char from the Pyrolysis of Potassium-Loaded Woody Biomass. <i>Energy & Fuels</i> , 2012, 26, 199-208.	5.1	77
36	Catalytic effects of Na and Ca from inexpensive materials on in-situ steam gasification of char from rapid pyrolysis of low rank coal in a drop-tube reactor. <i>Fuel Processing Technology</i> , 2013, 113, 1-7.	7.2	76

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37	In-Situ Reforming of Tar from the Rapid Pyrolysis of a Brown Coal over Char. <i>Energy & Fuels</i> , 2010, 24, 76-83.	5.1	74
38	Production of ketones from pyrolytic acid of woody biomass pyrolysis over an iron-oxide catalyst. <i>Fuel</i> , 2013, 103, 130-134.	6.4	68
39	Detailed chemical kinetic modelling of vapour-phase cracking of multi-component molecular mixtures derived from the fast pyrolysis of cellulose. <i>Fuel</i> , 2013, 103, 141-150.	6.4	68
40	Release of alkali and alkaline earth metallic species during rapid pyrolysis of a Victorian brown coal at elevated pressures. <i>Fuel</i> , 2003, 82, 1491-1497.	6.4	66
41	Gasification of Low-Rank Solid Fuels with Thermochemical Energy Recuperation for Hydrogen Production and Power Generation. <i>Chemical Engineering Research and Design</i> , 2006, 84, 409-419.	5.6	66
42	Kinetics of steam gasification of nascent char from rapid pyrolysis of a Victorian brown coal. <i>Fuel</i> , 2005, 84, 1612-1612.	6.4	65
43	Spontaneous Generation of Tar Decomposition Promoter in a Biomass Steam Reformer. <i>Chemical Engineering Research and Design</i> , 2005, 83, 1093-1102.	5.6	64
44	Reactions in Brown Coal Pyrolysis Responsible for Heating Rate Effect on Tar Yield. <i>Energy & Fuels</i> , 2000, 14, 400-408.	5.1	60
45	A mechanistic study on kinetic compensation effect during low-temperature oxidation of coal chars. <i>Proceedings of the Combustion Institute</i> , 2011, 33, 1755-1762.	3.9	60
46	Volatilisation of alkali and alkaline earth metallic species during the gasification of a Victorian brown coal in CO ₂ . <i>Fuel Processing Technology</i> , 2005, 86, 1241-1251.	7.2	58
47	Rapid pyrolysis of brown coal in a drop-tube reactor with co-feeding of char as a promoter of in situ tar reforming. <i>Fuel</i> , 2013, 112, 681-686.	6.4	58
48	Contribution of dehydration and depolymerization reactions during the fast pyrolysis of various salt-loaded celluloses at low temperatures. <i>Fuel</i> , 2014, 136, 62-68.	6.4	56
49	Impact of heating rates on the evolution of function groups of the biochar from lignin pyrolysis. <i>Journal of Analytical and Applied Pyrolysis</i> , 2021, 155, 105031.	5.5	56
50	Biotar Ironmaking Using Wooden Biomass and Nanoporous Iron Ore. <i>Energy & Fuels</i> , 2009, 23, 1128-1131.	5.1	55
51	Production of chemicals by cracking pyrolytic tar from Loy Yang coal over iron oxide catalysts in a steam atmosphere. <i>Fuel Processing Technology</i> , 2011, 92, 771-775.	7.2	53
52	Formation of NO precursors during the pyrolysis of coal and biomass. Part VII. Pyrolysis and gasification of cane trash with steam. <i>Fuel</i> , 2005, 84, 371-376.	6.4	52
53	Low-Temperature Gasification of Biomass and Lignite: Consideration of Key Thermochemical Phenomena, Rearrangement of Reactions, and Reactor Configuration. <i>Energy & Fuels</i> , 2014, 28, 4-21.	5.1	51
54	Microwave-assisted dry reforming of methane for syngas production: a review. <i>Environmental Chemistry Letters</i> , 2020, 18, 1987-2019.	16.2	51

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55	Combined effects of pressure and ion-exchangeable metallic species on pyrolysis of Victorian lignite. <i>Fuel</i> , 2003, 82, 343-350.	6.4	50
56	Synthesis of carbon nanotubes on carbon fibers by means of two-step thermochemical vapor deposition. <i>Carbon</i> , 2006, 44, 1754-1761.	10.3	50
57	Detailed Chemical Kinetic Modeling of Vapor-Phase Reactions of Volatiles Derived from Fast Pyrolysis of Lignin. <i>Industrial & Engineering Chemistry Research</i> , 2015, 54, 6855-6864.	3.7	50
58	Catalytic hydrogenolysis of kraft lignin to monomers at high yield in alkaline water. <i>Green Chemistry</i> , 2017, 19, 2636-2645.	9.0	49
59	Decomposition of humic acid and reduction of trihalomethane formation potential in water by ozone with u.v. irradiation. <i>Water Research</i> , 1990, 24, 781-785.	11.3	48
60	Control of molecular composition of tar by secondary reaction in fluidized-bed pyrolysis of a subbituminous coal. <i>Energy & Fuels</i> , 1993, 7, 57-66.	5.1	48
61	Fluorescence Spectroscopic Analysis of Tars from the Pyrolysis of a Victorian Brown Coal in a Wire-Mesh Reactor. <i>Energy & Fuels</i> , 2000, 14, 476-482.	5.1	48
62	Estimation of Size and Shape of Pores in Moist Coal Utilizing Sorbed Water as a Molecular Probe. <i>Energy & Fuels</i> , 2001, 15, 903-909.	5.1	48
63	Characterisation of coal and biomass based on kinetic parameter distributions for pyrolysis. <i>Fuel</i> , 2013, 114, 206-215.	6.4	47
64	Recent application of calculations of metal complexes based on density functional theory. <i>RSC Advances</i> , 2016, 6, 77375-77395.	3.6	47
65	A Highly Active Ni/ZSM-5 Catalyst for Complete Hydrogenation of Polymethylbenzenes. <i>ChemCatChem</i> , 2013, 5, 3543-3547.	3.7	45
66	Deep hydrogenation of coal tar over a Ni/ZSM-5 catalyst. <i>RSC Advances</i> , 2014, 4, 17105.	3.6	45
67	An Overview of Metal Oxide Nanostructures. , 2018, , 19-57.		45
68	Evaluation of Effect of Predrying on the Porous Structure of Water-Swollen Coal Based on the Freezing Property of Pore Condensed Water. <i>Energy & Fuels</i> , 1999, 13, 1058-1066.	5.1	43
69	Depolymerization of Lower Rank Coals by Low-Temperature O ₂ Oxidation. <i>Energy & Fuels</i> , 1997, 11, 227-235.	5.1	42
70	Behavior of Inherent Metallic Species as a Crucial Factor for Kinetics of Steam Gasification of Char from Coal Pyrolysis. <i>Energy & Fuels</i> , 2007, 21, 387-394.	5.1	42
71	Leaching of Alkali and Alkaline Earth Metallic Species from Rice Husk with Bio-oil from Its Pyrolysis. <i>Energy & Fuels</i> , 2014, 28, 6459-6466.	5.1	42
72	Effects of Pretreatment in Steam on the Pyrolysis Behavior of Loy Yang Brown Coal. <i>Energy & Fuels</i> , 2006, 20, 281-286.	5.1	41

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73	Kinetic study of hydrogen adsorption on sulfated zirconia-supported platinum. <i>Applied Catalysis A: General</i> , 2000, 202, 207-213.	4.3	40
74	Formation of NO precursors during the pyrolysis of coal and biomass. Part VIII. Effects of pressure on the formation of NH and HCN during the pyrolysis and gasification of Victorian brown coal in steam. <i>Fuel</i> , 2005, 84, 2102-2108.	6.4	40
75	Review on the catalytic tri-reforming of methane - Part II: Catalyst development. <i>Applied Catalysis A: General</i> , 2021, 623, 118286.	4.3	40
76	Evaluation of Macromolecular Structure of a Brown Coal by Means of Oxidative Degradation in Aqueous Phase. <i>Energy & Fuels</i> , 1999, 13, 69-76.	5.1	39
77	Interparticle Desorption and Re-adsorption of Alkali and Alkaline Earth Metallic Species within a Bed of Pyrolyzing Char from Pulverized Woody Biomass. <i>Energy & Fuels</i> , 2006, 20, 1294-1297.	5.1	38
78	Simultaneous Maximization of the Char Yield and Volatility of Oil from Biomass Pyrolysis. <i>Energy & Fuels</i> , 2013, 27, 247-254.	5.1	38
79	Adsorption and Desorption Behavior of Asphaltene on Polymer-Brush-Immobilized Surfaces. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 20385-20389.	8.0	38
80	Release of volatiles from the pyrolysis of a Victorian lignite at elevated pressures. <i>Fuel</i> , 2002, 81, 1171-1178.	6.4	37
81	Evidence of poly-condensed aromatic rings in a Victorian brown coal. <i>Fuel</i> , 2004, 83, 97-107.	6.4	37
82	A mechanistic study on the reaction pathways leading to benzene and naphthalene in cellulose vapor phase cracking. <i>Biomass and Bioenergy</i> , 2014, 69, 144-154.	5.7	37
83	Dependence of Single Coal Particle Ignition Mechanism on the Surrounding Volatile Matter Cloud. <i>Energy & Fuels</i> , 1997, 11, 1033-1039.	5.1	36
84	Points of onset of gasification in a multi-walled carbon nanotube having an imperfect structure. <i>Carbon</i> , 2004, 42, 1635-1639.	10.3	35
85	Kinetics and Mechanism of Steam Gasification of Char from Hydrothermally Treated Woody Biomass. <i>Energy & Fuels</i> , 2014, 28, 7133-7139.	5.1	35
86	Pyrolysis of polypropylene in the presence of oxygen. <i>Fuel Processing Technology</i> , 1998, 55, 265-275.	7.2	34
87	Sulfonate Ionic Liquid as a Stable and Active Catalyst for Levoglucosenone Production from Saccharides via Catalytic Pyrolysis. <i>Catalysts</i> , 2013, 3, 757-773.	3.5	34
88	Clean Synthesis of 5-Hydroxymethylfurfural and Levulinic Acid by Aqueous Phase Conversion of Levoglucosenone over Solid Acid Catalysts. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 5892-5899.	6.7	34
89	Change in molecular structure of flash pyrolysis tar by secondary reaction in a fluidized bed reactor. <i>Fuel Processing Technology</i> , 1992, 30, 237-248.	7.2	33
90	Degradation of a Victorian brown coal in sub-critical water. <i>Fuel</i> , 2004, 83, 353-358.	6.4	33

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91	Examination of catalytic roles of inherent metallic species in steam reforming of nascent volatiles from the rapid pyrolysis of a brown coal. <i>Fuel Processing Technology</i> , 2007, 88, 179-185.	7.2	32
92	Destruction rate of volatile organochlorine compounds in water by ozonation with ultraviolet radiation. <i>Water Research</i> , 1991, 25, 1199-1203.	11.3	31
93	Development of supported thin palladium membrane and application to enhancement of propane aromatization on Ga-silicate catalyst. <i>Chemical Engineering Science</i> , 1996, 51, 3027-3032.	3.8	31
94	Numerical simulation of thermal conversion of aromatic hydrocarbons in the presence of hydrogen and steam using a detailed chemical kinetic model. <i>Chemical Engineering Journal</i> , 2011, 178, 282-290.	12.7	31
95	Promoting gas production by controlling the interaction of volatiles with char during coal gasification in a circulating fluidized bed gasification reactor. <i>Fuel Processing Technology</i> , 2013, 116, 308-316.	7.2	31
96	Preparation of Coke from Indonesian Lignites by a Sequence of Hydrothermal Treatment, Hot Briquetting, and Carbonization. <i>Energy & Fuels</i> , 2013, 27, 6607-6616.	5.1	31
97	The role of microwave irradiation in coal desulphurization with molten caustics. <i>Fuel</i> , 1990, 69, 739-742.	6.4	30
98	Removal of calcium from low rank coals by treatment with CO ₂ dissolved in water. <i>Fuel</i> , 1991, 70, 1181-1186.	6.4	30
99	Effects of thermal pretreatment in helium on the pyrolysis behaviour of Loy Yang brown coal. <i>Fuel</i> , 2005, 84, 1586-1586.	6.4	30
100	A study on pyrolytic gasification of coffee grounds and implications to allothermal gasification. <i>Biomass and Bioenergy</i> , 2008, 32, 78-89.	5.7	30
101	Preparation of High-Strength Coke by Carbonization of Hot-Briquetted Victorian Brown Coal. <i>Energy & Fuels</i> , 2012, 26, 296-301.	5.1	30
102	Formation of NO _x precursors during the pyrolysis of coal and biomass. Part IX. Effects of coal ash and externally loaded-Na on fuel-N conversion during the reforming of coal and biomass in steam. <i>Fuel</i> , 2006, 85, 1411-1417.	6.4	29
103	Nano-sized nickel catalyst for deep hydrogenation of lignin monomers and first-principles insight into the catalyst preparation. <i>Journal of Materials Chemistry A</i> , 2017, 5, 3948-3965.	10.3	29
104	Cracking and Coking Behaviors of Nascent Volatiles Derived from Flash Pyrolysis of Woody Biomass over Mesoporous Fluidized-Bed Material. <i>Industrial & Engineering Chemistry Research</i> , 2009, 48, 2851-2860.	3.7	27
105	Selective Production of Light Oil by Biomass Pyrolysis with Feedstock-Mediated Recycling of Heavy Oil. <i>Energy & Fuels</i> , 2012, 26, 256-264.	5.1	27
106	Coating of carbon fibers with amorphous SiC films as diffusion barriers by chemical vapor deposition with triisopropylsilane. <i>Carbon</i> , 1996, 34, 179-185.	10.3	26
107	Steam gasification characteristics of coal with rapid heating. <i>Journal of Analytical and Applied Pyrolysis</i> , 2003, 70, 185-197.	5.5	26
108	Application of an Existing Detailed Chemical Kinetic Model to a Practical System of Hot Coke Oven Gas Reforming by Noncatalytic Partial Oxidation. <i>Industrial & Engineering Chemistry Research</i> , 2010, 49, 10565-10571.	3.7	26

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109	Improvement of Pelletability of Woody Biomass by Torrefaction under Pressurized Steam. <i>Energy & Fuels</i> , 2019, 33, 11253-11262.	5.1	26
110	Decomposition rate of volatile organochlorines by ozone and utilization efficiency of ozone with ultraviolet radiation in a bubble-column contactor. <i>Water Research</i> , 1993, 27, 1091-1097.	11.3	25
111	Evaluation of Drying Induced Changes in the Molecular Mobility of Coal by Means of Pulsed Proton NMR. <i>Energy & Fuels</i> , 1998, 12, 1013-1019.	5.1	25
112	Structure and Properties of Victorian Brown Coal. , 2004, , 11-84.		25
113	In-situ reforming of the volatiles from fast pyrolysis of ligno-cellulosic biomass over zeolite catalysts for aromatic compound production. <i>Fuel Processing Technology</i> , 2015, 136, 73-78.	7.2	25
114	Effects of Dewatering on the Pyrolysis and Gasification Reactivity of Victorian Brown Coal. <i>Energy & Fuels</i> , 2007, 21, 399-404.	5.1	24
115	Biochar-Assisted Water Electrolysis. <i>Energy & Fuels</i> , 2019, 33, 11246-11252.	5.1	24
116	A reduced mechanism for primary reactions of coal volatiles in a plug flow reactor. <i>Combustion Theory and Modelling</i> , 2010, 14, 841-853.	1.9	23
117	Detailed Kinetic Analysis and Modeling of Steam Gasification of Char from Ca-Loaded Lignite. <i>Energy & Fuels</i> , 2013, 27, 6617-6631.	5.1	23
118	Coproduction of clean syngas and iron from woody biomass and natural goethite ore. <i>Fuel</i> , 2013, 103, 64-72.	6.4	23
119	Hydrodynamic behavior of binary mixture of solids in a triple-bed combined circulating fluidized bed with high mass flux. <i>Advanced Powder Technology</i> , 2014, 25, 379-388.	4.1	23
120	Predicting molecular composition of primary product derived from fast pyrolysis of lignin with semi-detailed kinetic model. <i>Fuel</i> , 2018, 212, 515-522.	6.4	23
121	Numerical Simulation of the Partial Oxidation of Hot Coke Oven Gas with a Detailed Chemical Kinetic Model. <i>Energy & Fuels</i> , 2010, 24, 165-172.	5.1	22
122	Catalytic Strategies for Levoglucosenone Production by Pyrolysis of Cellulose and Lignocellulosic Biomass. <i>Energy & Fuels</i> , 2021, 35, 9809-9824.	5.1	22
123	Evaluation of Vapor-Phase Reactivity of Primary Tar Produced by Flash Pyrolysis of Coal. <i>Energy & Fuels</i> , 1995, 9, 290-294.	5.1	21
124	Characteristics of Gas-Phase Partial Oxidation of Nascent Tar from the Rapid Pyrolysis of Cedar Sawdust at 700~800 Å°C. <i>Energy & Fuels</i> , 2010, 24, 2900-2909.	5.1	21
125	Detailed Analysis of Residual Volatiles in Chars from the Pyrolysis of Biomass and Lignite. <i>Energy & Fuels</i> , 2013, 27, 3209-3223.	5.1	21
126	Examination of Kinetics of Non-catalytic Steam Gasification of Biomass/Lignite Chars and Its Relationship with the Variation of the Pore Structure. <i>Energy & Fuels</i> , 2014, 28, 5902-5908.	5.1	21

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127	Methane decomposition with a minimal catalyst: An optimization study with response surface methodology over Ni/SiO ₂ nanocatalyst. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 14383-14395.	7.1	21
128	Effect of carbon source on formation of vapor-grown carbon fiber. <i>Carbon</i> , 1993, 31, 937-940.	10.3	20
129	Rapid stabilization of pitch fiber precursor by multi-step thermal oxidation. <i>Carbon</i> , 1995, 33, 1567-1571.	10.3	20
130	Catalytic Hydrothermal Reforming of Lignin in Aqueous Alkaline Medium. <i>Energy & Fuels</i> , 2014, 28, 76-85.	5.1	20
131	Decomposition and utilization of ozone in water treatment reactor with ultraviolet radiation. <i>Industrial & Engineering Chemistry Research</i> , 1988, 27, 2372-2377.	3.7	19
132	Physical and chemical modification of low-rank coals with alkyl chains and the roles of incorporated groups in pyrolysis. <i>Energy & Fuels</i> , 1993, 7, 1118-1122.	5.1	19
133	Flash Pyrolysis of Brown Coal Modified by Alcohol-Vapor Explosion Treatment. <i>Energy & Fuels</i> , 1996, 10, 1099-1107.	5.1	19
134	Experimental investigation of thermal decomposition of dihydroxybenzene isomers: Catechol, hydroquinone, and resorcinol. <i>Journal of Analytical and Applied Pyrolysis</i> , 2016, 120, 321-329.	5.5	19
135	Influence of ionic liquid type on porous carbon formation during the ionothermal pyrolysis of cellulose. <i>Journal of Analytical and Applied Pyrolysis</i> , 2020, 145, 104728.	5.5	19
136	Analytical Procedure for Proximate Analysis of Algal Biomass: Case Study for <i>Spirulina platensis</i> and <i>Chlorella vulgaris</i> . <i>Energy & Fuels</i> , 2020, 34, 474-482.	5.1	19
137	Sustainable Iron-Making Using Oxalic Acid: The Concept, A Brief Review of Key Reactions, and An Experimental Demonstration of the Iron-Making Process. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 13292-13301.	6.7	19
138	Rapid Gasification of Nascent Char in Steam Atmosphere during the Pyrolysis of Na- and Ca-Ion-Exchanged Brown Coals in a Drop-Tube Reactor. <i>Energy & Fuels</i> , 2009, 23, 4496-4501.	5.1	18
139	Catalytic Hydrothermal Reforming of Jatropha Oil in Subcritical Water for the Production of Green Fuels: Characteristics of Reactions over Pt and Ni Catalysts. <i>Energy & Fuels</i> , 2013, 27, 4796-4803.	5.1	18
140	Preparation of Coke from Hydrothermally Treated Biomass in Sequence of Hot Briquetting and Carbonization. <i>ISIJ International</i> , 2014, 54, 2461-2469.	1.4	18
141	Predicting the temperature and reactant concentration profiles of reacting flow in the partial oxidation of hot coke oven gas using detailed chemistry and a one-dimensional flow model. <i>Chemical Engineering Journal</i> , 2015, 266, 82-90.	12.7	18
142	Interactions between Volatiles and Char during Pyrolysis of Biomass: Reactive Species Determining and Reaction over Functionalized Carbon Nanotubes. <i>Energy & Fuels</i> , 2016, 30, 5758-5765.	5.1	18
143	Synthesis of Carbon-Supported Pt _x and Pt _y Nanoparticles with High Catalytic Activity for the Oxygen Reduction Reaction Using a Microwave-Based Polyol Method. <i>ChemCatChem</i> , 2017, 9, 962-970.	3.7	18
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