List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Modeling nitrogen chemistry in combustion. Progress in Energy and Combustion Science, 2018, 67, 31-68.	15.8	980
2	Oxy-fuel combustion of solid fuels. Progress in Energy and Combustion Science, 2010, 36, 581-625.	15.8	940
3	Fuel nitrogen conversion in solid fuel fired systems. Progress in Energy and Combustion Science, 2003, 29, 89-113.	15.8	764
4	Kinetic Modeling of Hydrocarbon/Nitric Oxide Interactions in a Flow Reactor. Combustion and Flame, 1998, 115, 1-27.	2.8	475
5	Review on Ammonia as a Potential Fuel: From Synthesis to Economics. Energy & Fuels, 2021, 35, 6964-7029.	2.5	403
6	Kinetic modeling and sensitivity analysis of nitrogen oxide formation in well-stirred reactors. Combustion and Flame, 1986, 65, 177-202.	2.8	398
7	An experimental and kinetic modeling study of premixed NH3/CH4/O2/Ar flames at low pressure. Combustion and Flame, 2009, 156, 1413-1426.	2.8	359
8	Chemical Effects of a High CO ₂ Concentration in Oxy-Fuel Combustion of Methane. Energy & Fuels, 2008, 22, 291-296.	2.5	348
9	Ammonia chemistry in oxy-fuel combustion of methane. Combustion and Flame, 2009, 156, 1937-1949.	2.8	327
10	Release of K, Cl, and S during Pyrolysis and Combustion of High-Chlorine Biomass. Energy & Fuels, 2011, 25, 4961-4971.	2.5	312
11	The oxidation of hydrogen cyanide and related chemistry. Progress in Energy and Combustion Science, 2008, 34, 1-46.	15.8	305
12	The role of NNH in NO formation and control. Combustion and Flame, 2011, 158, 774-789.	2.8	304
13	Release to the Gas Phase of Inorganic Elements during Wood Combustion. Part 2: Influence of Fuel Composition. Energy & Fuels, 2008, 22, 1598-1609.	2.5	252
14	Ammonia chemistry below 1400ÂK under fuel-rich conditions in a flow reactor. Combustion and Flame, 2004, 136, 501-518.	2.8	228
15	Global Combustion Mechanisms for Use in CFD Modeling under Oxy-Fuel Conditions. Energy & Fuels, 2009, 23, 1379-1389.	2.5	223
16	Ammonia oxidation at high pressure and intermediate temperatures. Fuel, 2016, 181, 358-365.	3.4	223
17	Mechanism and modeling of the formation of gaseous alkali sulfates. Combustion and Flame, 2005, 141, 22-39.	2.8	203
18	Numerical modeling of straw combustion in a fixed bed. Fuel, 2005, 84, 389-403.	3.4	181

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19	Release to the Gas Phase of Inorganic Elements during Wood Combustion. Part 1:  Development and Evaluation of Quantification Methods. Energy & Fuels, 2006, 20, 964-978.	2.5	177
20	Experimental measurements and kinetic modeling of CO/H ₂ /O ₂ /NO _x conversion at high pressure. International Journal of Chemical Kinetics, 2008, 40, 454-480.	1.0	164
21	Hidden interactions—Trace species governing combustion and emissions. Proceedings of the Combustion Institute, 2007, 31, 77-98.	2.4	161
22	Formation of polycyclic aromatic hydrocarbons and soot in fuel-rich oxidation of methane in a laminar flow reactor. Combustion and Flame, 2004, 136, 91-128.	2.8	157
23	High-pressure oxidation of methane. Combustion and Flame, 2016, 172, 349-364.	2.8	157
24	Modeling the thermal DENOx process in flow reactors. Surface effects and Nitrous Oxide formation. International Journal of Chemical Kinetics, 1994, 26, 421-436.	1.0	156
25	Inhibition and sensitization of fuel oxidation by SO2. Combustion and Flame, 2001, 127, 2234-2251.	2.8	150
26	Shedding of ash deposits. Progress in Energy and Combustion Science, 2009, 35, 31-56.	15.8	148
27	Modelling and experiments of straw combustion in a grate furnace. Biomass and Bioenergy, 2000, 19, 199-208.	2.9	143
28	Impact of SO2 and NO on CO oxidation under post-flame conditions. International Journal of Chemical Kinetics, 1996, 28, 773-790.	1.0	140
29	Modeling the thermal De-NOx process: Closing in on a final solution. International Journal of Chemical Kinetics, 1999, 31, 757-765.	1.0	135
30	The thermal DeNOx process: Influence of partial pressures and temperature. Chemical Engineering Science, 1995, 50, 1455-1466.	1.9	131
31	Experimental and numerical analysis of the autoignition behavior of NH3 and NH3/H2 mixtures at high pressure. Combustion and Flame, 2020, 215, 134-144.	2.8	130
32	Release of Chlorine and Sulfur during Biomass Torrefaction and Pyrolysis. Energy & Fuels, 2014, 28, 3738-3746.	2.5	128
33	Nitrogen chemistry during burnout in fuel-staged combustion. Combustion and Flame, 1996, 107, 211-222.	2.8	123
34	Experimental and kinetic modeling study of the oxidation of benzene. International Journal of Chemical Kinetics, 2000, 32, 498-522.	1.0	121
35	Sensitizing effects of NOx on CH4 oxidation at high pressure. Combustion and Flame, 2008, 154, 529-545.	2.8	119
36	Reburning chemistry: a kinetic modeling study. Industrial & Engineering Chemistry Research, 1992, 31, 1477-1490.	1.8	118

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37	Low temperature interactions between hydrocarbons and nitric oxide: An experimental study. Combustion and Flame, 1997, 109, 25-36.	2.8	111
38	Reburn Chemistry in Oxy-fuel Combustion of Methane. Energy & Fuels, 2009, 23, 3565-3572.	2.5	111
39	The reaction of ammonia with nitrogen dioxide in a flow reactor: Implications for the NH2 + NO2 reaction. International Journal of Chemical Kinetics, 1995, 27, 1207-1220.	1.0	110
40	Influence of process parameters on nitrogen oxide formation in pulverized coal burners. Progress in Energy and Combustion Science, 1997, 23, 349-377.	15.8	110
41	Heat transfer in ash deposits: A modelling tool-box. Progress in Energy and Combustion Science, 2005, 31, 371-421.	15.8	108
42	Nitric Oxide Reduction by Non-hydrocarbon Fuels. Implications for Reburning with Gasification Gases. Energy & Fuels, 2000, 14, 828-838.	2.5	107
43	Low temperature oxidation of methane: the influence of nitrogen oxides. Combustion Science and Technology, 2000, 151, 31-71.	1.2	102
44	Ignition delay times of NH3 /DME blends at high pressure and low DME fraction: RCM experiments and simulations. Combustion and Flame, 2021, 227, 120-134.	2.8	97
45	Ammonia conversion and NOx formation in laminar coflowing nonpremixed methane-air flames. Combustion and Flame, 2002, 131, 285-298.	2.8	95
46	An exploratory study of alkali sulfate aerosol formation during biomass combustion. Fuel, 2008, 87, 1591-1600.	3.4	95
47	Influence of fast pyrolysis conditions on yield and structural transformation of biomass chars. Fuel Processing Technology, 2015, 140, 205-214.	3.7	94
48	An experimental study of biomass ignitionâ~†. Fuel, 2003, 82, 825-833.	3.4	92
49	Screening of NiFe ₂ O ₄ Nanoparticles as Oxygen Carrier in Chemical Looping Hydrogen Production. Energy & Fuels, 2016, 30, 4251-4262.	2.5	91
50	Experimental and kinetic modeling study of the effect of NO and SO2 on the oxidation of CO?H2 mixtures. International Journal of Chemical Kinetics, 2003, 35, 564-575.	1.0	90
51	Formation and reduction of nitric oxide in fixed-bed combustion of straw. Fuel, 2006, 85, 705-716.	3.4	90
52	Release of K, Cl, and S during combustion and co-combustion with wood of high-chlorine biomass in bench and pilot scale fuel beds. Proceedings of the Combustion Institute, 2013, 34, 2363-2372.	2.4	90
53	Autoignition studies of NH3/CH4 mixtures at high pressure. Combustion and Flame, 2020, 218, 19-26.	2.8	90
54	Kinetics of homogeneous nitrous oxide decomposition. Combustion and Flame, 1994, 99, 523-532.	2.8	89

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55	Combustion chemistry in the twenty-first century: Developing theory-informed chemical kinetics models. Progress in Energy and Combustion Science, 2021, 83, 100886.	15.8	89
56	Mechanism and modeling of hydrogen cyanide oxidation in a flow reactor. Combustion and Flame, 1994, 99, 475-483.	2.8	87
57	Hydrogen oxidation at high pressure and intermediate temperatures: Experiments and kinetic modeling. Proceedings of the Combustion Institute, 2015, 35, 553-560.	2.4	87
58	Mechanisms of radical removal by SO2. Proceedings of the Combustion Institute, 2007, 31, 339-347.	2.4	84
59	Effects of several types of biomass fuels on the yield, nanostructure and reactivity of soot from fast pyrolysis at high temperatures. Applied Energy, 2016, 171, 468-482.	5.1	82
60	A flow reactor study of HNCO oxidation chemistry. Combustion and Flame, 1994, 98, 241-258.	2.8	77
61	High-pressure oxidation of ethane. Combustion and Flame, 2017, 182, 150-166.	2.8	76
62	Oxidation of formaldehyde and its interaction with nitric oxide in a flow reactor. Combustion and Flame, 2003, 132, 629-638.	2.8	74
63	Fuel-nitrogen conversion in the combustion of small amines using dimethylamine and ethylamine as biomass-related model fuels. Combustion and Flame, 2012, 159, 2254-2279.	2.8	74
64	Nitromethane dissociation: Implications for the CH3 + NO2 reaction. International Journal of Chemical Kinetics, 1999, 31, 591-602.	1.0	73
65	Post-flame gas-phase sulfation of potassium chloride. Combustion and Flame, 2013, 160, 959-969.	2.8	72
66	Devolatilization characteristics of large particles of tyre rubber under combustion conditions. Fuel, 2006, 85, 1335-1345.	3.4	71
67	Interactions of CO, NOxand H2O Under Post-Flame Conditions. Combustion Science and Technology, 1995, 110-111, 461-485.	1.2	70
68	Release and Transformation of Inorganic Elements in Combustion of a High-Phosphorus Fuel. Energy & Fuels, 2011, 25, 2874-2886.	2.5	70
69	Ignition-promoting effect of NO2 on methane, ethane and methane/ethane mixtures in a rapid compression machine. Proceedings of the Combustion Institute, 2011, 33, 433-440.	2.4	70
70	Experimental measurements and kinetic modeling of CH ₄ /O ₂ and CH ₄ /C ₂ H ₆ /O ₂ conversion at high pressure. International Journal of Chemical Kinetics, 2008, 40, 778-807.	1.0	69
71	Experimental Study on Effects of Particle Shape and Operating Conditions on Combustion Characteristics of Single Biomass Particles. Energy & amp; Fuels, 2013, 27, 507-514.	2.5	69
72	Release and transformation of chlorine and potassium during pyrolysis of KCl doped biomass. Fuel, 2017, 197, 422-432.	3.4	68

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73	Experimental and Kinetic Modeling Study of C ₂ H ₂ Oxidation at High Pressure. International Journal of Chemical Kinetics, 2016, 48, 724-738.	1.0	67
74	Experimental and kinetic modeling study of C2H4 oxidation at high pressure. Proceedings of the Combustion Institute, 2009, 32, 367-375.	2.4	66
75	Formation of NO from N ₂ /O ₂ Mixtures in a Flow Reactor: Toward an Accurate Prediction of Thermal NO. International Journal of Chemical Kinetics, 2015, 47, 518-532.	1.0	66
76	Co-combustion of pulverized coal and solid recovered fuel in an entrained flow reactor – General combustion and ash behaviour. Fuel, 2011, 90, 1980-1991.	3.4	65
77	Impact of coal fly ash addition on ash transformation and deposition in a full-scale wood suspension-firing boiler. Fuel, 2013, 113, 632-643.	3.4	65
78	Reactions of SO3with the O/H Radical Pool under Combustion Conditionsâ€. Journal of Physical Chemistry A, 2007, 111, 3984-3991.	1.1	64
79	Characterization of free radicals by electron spin resonance spectroscopy in biochars from pyrolysis at high heating rates and at high temperatures. Biomass and Bioenergy, 2016, 94, 117-129.	2.9	64
80	Laboratory Study of the CO/NH3/NO/O2System:Â Implications for Hybrid Reburn/SNCR Strategies. Energy & Fuels, 1997, 11, 716-723.	2.5	63
81	Oxidation of Dimethyl Ether and its Interaction with Nitrogen Oxides. Israel Journal of Chemistry, 1999, 39, 73-86.	1.0	63
82	Evaluation of different oxygen carriers for biomass tar reforming (I): Carbon deposition in experiments with toluene. Fuel, 2011, 90, 1049-1060.	3.4	63
83	display="inline" overflow="scroll" xmins:xocs="http://www.elsevier.com/xml/xocs/dtd xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML"	1.9	62
84	Effect of fast pyrolysis conditions on biomass solid residues at high temperatures. Fuel Processing Technology, 2016, 143, 118-129.	3.7	62
85	Evaluation of different oxygen carriers for biomass tar reforming (II): Carbon deposition in experiments with methane and other gases. Fuel, 2011, 90, 1370-1382.	3.4	61
86	Methanol oxidation in a flow reactor: Implications for the branching ratio of the CH ₃ OH+OH reaction. International Journal of Chemical Kinetics, 2008, 40, 423-441.	1.0	60
87	Dust-Firing of Straw and Additives: Ash Chemistry and Deposition Behavior. Energy & Fuels, 2011, 25, 2862-2873.	2.5	59
88	High-pressure pyrolysis and oxidation of DME and DME/CH4. Combustion and Flame, 2019, 205, 80-92.	2.8	58
89	Trace elements in co-combustion of solid recovered fuel and coal. Fuel Processing Technology, 2013, 105, 212-221.	3.7	57
90	Comparison of high temperature chars of wheat straw and rice husk with respect to chemistry, morphology and reactivity. Biomass and Bioenergy, 2016, 86, 76-87.	2.9	57

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91	Theory and modeling of relevance to prompt-NO formation at high pressure. Combustion and Flame, 2018, 195, 3-17.	2.8	57
92	An experimental and kinetic modeling study of premixed nitromethane flames at low pressure. Proceedings of the Combustion Institute, 2011, 33, 407-414.	2.4	55
93	Experimental and Kinetic Modeling Study of Methanol Ignition and Oxidation at High Pressure. International Journal of Chemical Kinetics, 2013, 45, 283-294.	1.0	55
94	Kinetic Study of NO Reduction over Biomass Char under Dynamic Conditions. Energy & Fuels, 2003, 17, 1429-1436.	2.5	52
95	A kinetic issue in reburning: the fate of HCNO. Combustion and Flame, 2003, 135, 357-362.	2.8	51
96	Branching Fraction of the NH2 + NO Reaction between 1210 and 1370 K. Journal of Physical Chemistry A, 1997, 101, 3741-3745.	1.1	49
97	High-pressure oxidation of propane. Proceedings of the Combustion Institute, 2019, 37, 461-468.	2.4	48
98	Mutually Promoted Thermal Oxidation of Nitric Oxide and Organic Compounds. Industrial & Engineering Chemistry Research, 1995, 34, 1882-1888.	1.8	47
99	Modeling Low-Temperature Gas Reburning. NOxReduction Potential and Effects of Mixing. Energy & Fuels, 1998, 12, 329-338.	2.5	47
100	Partitioning of K, Cl, S and P during combustion of poplar and brassica energy crops. Fuel, 2014, 134, 209-219.	3.4	47
101	A reduced mechanism for nitrogen chemistry in methane combustion. Proceedings of the Combustion Institute, 1992, 24, 889-898.	0.3	46
102	Modelling the Formation of N2O and NO2 in the Thermal De-NOx Process. Springer Series in Chemical Physics, 1996, , 318-333.	0.2	46
103	Ab initio and kinetic modeling studies of formic acid oxidation. Proceedings of the Combustion Institute, 2015, 35, 153-160.	2.4	45
104	Experimental investigation of no from pulverized char combustion. Proceedings of the Combustion Institute, 2000, 28, 2271-2278.	2.4	44
105	New insights in the low-temperature oxidation of acetylene. Proceedings of the Combustion Institute, 2017, 36, 355-363.	2.4	43
106	On the Rate Constant for NH ₂ +HO ₂ and Third-Body Collision Efficiencies for NH ₂ +H(+M) and NH ₂ +NH ₂ (+M). Journal of Physical Chemistry A, 2021, 125, 1505-1516.	1.1	43
107	A Model for Nitrogen Chemistry in Oxy-Fuel Combustion of Pulverized Coal. Energy & Fuels, 2011, 25, 4280-4289.	2.5	42
108	The recombination of hydrogen atoms with nitric oxide at high temperatures. Proceedings of the Combustion Institute, 1998, 27, 219-226.	0.3	41

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109	High-temperature chemistry of HCl and Cl2. Combustion and Flame, 2015, 162, 2693-2704.	2.8	41
110	Theoretical kinetics predictions for NH2Â+ÂHO2. Combustion and Flame, 2022, 236, 111787.	2.8	41
111	Experimental and Modeling Study of Biomass Reburning. Energy & Fuels, 2004, 18, 1442-1450.	2.5	39
112	Thermal Dissociation of SO3at 1000â^'1400 Kâ€. Journal of Physical Chemistry A, 2006, 110, 6654-6659.	1.1	39
113	Review: Circulation of Inorganic Elements in Combustion of Alternative Fuels in Cement Plants. Energy & Fuels, 2015, 29, 4076-4099.	2.5	39
114	High pressure oxidation of C2H4/NO mixtures. Proceedings of the Combustion Institute, 2011, 33, 449-457.	2.4	38
115	Formation of fine particles in co-combustion of coal and solid recovered fuel in a pulverized coal-fired power station. Proceedings of the Combustion Institute, 2011, 33, 2845-2852.	2.4	38
116	Oxidation of Reduced Sulfur Species: Carbonyl Sulfide. International Journal of Chemical Kinetics, 2013, 45, 429-439.	1.0	38
117	An Exploratory Flow Reactor Study of H ₂ S Oxidation at 30–100 Bar. International Journal of Chemical Kinetics, 2017, 49, 37-52.	1.0	38
118	High-pressure pyrolysis and oxidation of ethanol. Fuel, 2018, 218, 247-257.	3.4	38
119	Rate Constant and Branching Fraction for the NH ₂ + NO ₂ Reaction. Journal of Physical Chemistry A, 2013, 117, 9011-9022.	1.1	37
120	Oxidation of Reduced Sulfur Species: Carbon Disulfide. Journal of Physical Chemistry A, 2014, 118, 6798-6809.	1.1	37
121	Experimental and Modeling Investigation of the Effect of H ₂ S Addition to Methane on the Ignition and Oxidation at High Pressures. Energy & Fuels, 2017, 31, 2175-2182.	2.5	37
122	Visualization methods in analysis of detailed chemical kinetics modelling. Computers & Chemistry, 2001, 25, 161-170.	1.2	36
123	Potassium Capture by Kaolin, Part 2: K ₂ CO ₃ , KCl, and K ₂ SO ₄ . Energy & Fuels, 2018, 32, 3566-3578.	2.5	36
124	Devolatilization kinetics of woody biomass at short residence times and high heating rates and peak temperatures. Applied Energy, 2016, 162, 245-256.	5.1	35
125	Kinetic Modeling of Fuel-Nitrogen Conversion in One-Dimensional, Pulverized-Coal Flames. Combustion Science and Technology, 1991, 76, 81-109.	1.2	34
126	Potassium Capture by Kaolin, Part 1: KOH. Energy & amp; Fuels, 2018, 32, 1851-1862.	2.5	34

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127	An experimental and modeling study on auto-ignition kinetics of ammonia/methanol mixtures at intermediate temperature and high pressure. Combustion and Flame, 2022, 242, 112160.	2.8	34
128	A study of benzene formation in a laminar flow reactor. Proceedings of the Combustion Institute, 2002, 29, 1329-1336.	2.4	33
129	Numerical simulation of nitrogen oxide formation in lean premixed turbulent H2/O2/N2 flames. Proceedings of the Combustion Institute, 2011, 33, 1591-1599.	2.4	33
130	Influence of coal quality on combustion performance. Fuel, 1998, 77, 1317-1328.	3.4	32
131	Experimental and detailed kinetic modeling study of PAH formation in laminar co-flow methane diffusion flames. Proceedings of the Combustion Institute, 2013, 34, 1811-1818.	2.4	32
132	Sulfation of Condensed Potassium Chloride by SO ₂ . Energy & Fuels, 2013, 27, 3283-3289.	2.5	32
133	NO Formation during Oxy-Fuel Combustion of Coal and Biomass Chars. Energy & Fuels, 2014, 28, 4684-4693.	2.5	32
134	Effects of ambient pressure on ignition and flame characteristics in diesel spray combustion. Fuel, 2019, 237, 676-685.	3.4	32
135	Inhibition of hydrogen oxidation by HBr and Br2. Combustion and Flame, 2012, 159, 528-540.	2.8	31
136	Optical investigation of gas-phase KCl/KOH sulfation in post flame conditions. Fuel, 2018, 224, 461-468.	3.4	31
137	Potassium capture by coal fly ash: K2CO3, KCl and K2SO4. Fuel Processing Technology, 2019, 194, 106115.	3.7	31
138	Thermal dissociation of nitrous oxide at medium temperatures. Proceedings of the Combustion Institute, 1992, 24, 917-923.	0.3	30
139	Parabenzoquinone pyrolysis and oxidation in a flow reactor. International Journal of Chemical Kinetics, 1998, 30, 683-697.	1.0	30
140	A Chemical Engineering Model for Predicting NO Emissions and Burnout from Pulverised Coal Flames. Combustion Science and Technology, 1998, 132, 251-314.	1.2	30
141	Propargyl recombination: estimation of the high temperature, low pressure rate constant from flame measurements. Proceedings of the Combustion Institute, 2005, 30, 1023-1031.	2.4	30
142	Experimental Investigation of Ash Deposit Shedding in a Straw-Fired Boiler. Energy & Fuels, 2006, 20, 512-519.	2.5	30
143	Direct Partial Oxidation of Natural Gas to Liquid Chemicals: Chemical Kinetic Modeling and Global Optimization. Industrial & Engineering Chemistry Research, 2008, 47, 6579-6588.	1.8	30
144	An experimental and kinetic modeling study of premixed nitroethane flames at low pressure. Proceedings of the Combustion Institute, 2013, 34, 617-624.	2.4	29

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145	Influence of Torrefaction on Single Particle Combustion of Wood. Energy & Fuels, 2016, 30, 5772-5778.	2.5	29
146	A Rhodium-Based Methane Oxidation Catalyst with High Tolerance to H ₂ O and SO ₂ . ACS Catalysis, 2020, 10, 1821-1827.	5.5	29
147	Residence time distributions in a cold, confined swirl flow. Chemical Engineering Science, 1997, 52, 2743-2756.	1.9	28
148	Effects of mixing on ammonia oxidation in combustion environments at intermediate temperatures. Proceedings of the Combustion Institute, 2005, 30, 1193-1200.	2.4	28
149	Challenges in Kinetic modeling of ammonia pyrolysis. Fuel Communications, 2022, 10, 100049.	2.0	28
150	Extension of apparent devolatilization kinetics from thermally thin to thermally thick particles in zero dimensions for woody biomass. Energy, 2016, 95, 279-290.	4.5	27
151	Density Functional Theory Study of the Role of an Carbon–Oxygen Single Bond Group in the NO–Char Reaction. Energy & Fuels, 2018, 32, 7734-7744.	2.5	27
152	Nitrous oxide emissions control by reburning. Combustion and Flame, 1996, 107, 453-463.	2.8	26
153	Some chemical kinetics issues in reburning: The branching fraction of the HCCO+NO reaction. Proceedings of the Combustion Institute, 1998, 27, 235-243.	0.3	26
154	Detailed modeling and laser-induced fluorescence imaging of nitric oxide in a NH3-seeded non-premixed methane/air flame. Proceedings of the Combustion Institute, 2002, 29, 2195-2202.	2.4	25
155	NO Reduction over Biomass and Coal Char during Simultaneous Combustion. Energy & Fuels, 2013, 27, 7817-7826.	2.5	25
156	Modeling the Use of Sulfate Additives for Potassium Chloride Destruction in Biomass Combustion. Energy & Fuels, 2014, 28, 199-207.	2.5	25
157	Impact of Coal Fly Ash Addition on Combustion Aerosols (PM _{2.5}) from Full-Scale Suspension-Firing of Pulverized Wood. Energy & Fuels, 2014, 28, 3217-3223.	2.5	25
158	Fly Ash Formation during Suspension Firing of Biomass: Effects of Residence Time and Fuel Type. Energy & Fuels, 2017, 31, 555-570.	2.5	25
159	Skeletal mechanisms for prediction of <mml:math altimg="si1.svg" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mrow><mml:mtext>NO</mml:mtext></mml:mrow><mml:mrow><mml:mrow><mml:mtext>NO</mml:mtext></mml:mrow><mml:mrow></mml:mrow></mml:mrow></mml:msub></mml:mrow><td>w_{3.4}mml:</td><td>mi₂₅</td></mml:math>	w _{3.4} mml:	mi ₂₅
160	KOH capture by coal fly ash. Fuel, 2019, 242, 828-836.	3.4	25
161	Kinetic NO modelling and experimental results from single wood particle combustion. Fuel, 1997, 76, 671-682.	3.4	24
162	Post-processing of detailed chemical kinetic mechanisms onto CFD simulations. Computers and Chemical Engineering, 2004, 28, 2351-2361.	2.0	24

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163	Computer-Aided Modeling Framework for Efficient Model Development, Analysis, and Identification: Combustion and Reactor Modeling. Industrial & Engineering Chemistry Research, 2011, 50, 5253-5265.	1.8	24
164	Soot Reactivity in Conventional Combustion and Oxy-fuel Combustion Environments. Energy & Fuels, 2012, 26, 5337-5344.	2.5	24
165	Glyoxal Oxidation Mechanism: Implications for the Reactions HCO + O2and OCHCHO + HO2. Journal of Physical Chemistry A, 2015, 119, 7305-7315.	1.1	24
166	Reactivity of sewage sludge, RDF, and straw chars towards NO. Fuel, 2019, 236, 297-305.	3.4	24
167	Oxidation of methylamine. International Journal of Chemical Kinetics, 2020, 52, 893-906.	1.0	24
168	The CH3+NO rate coefficient at high temperatures: Theoretical analysis and comparison with experiment. International Journal of Chemical Kinetics, 1998, 30, 223-228.	1.0	23
169	Formation and Destruction of CH2O in the Exhaust System of a Gas Engine. Environmental Science & Technology, 2003, 37, 4512-4516.	4.6	23
170	Reactivity of coal char in reducing NO. Combustion and Flame, 2004, 136, 249-253.	2.8	23
171	Influence of potassium chloride on moist CO oxidation under reducing conditions: Experimental and kinetic modeling study. Fuel, 2006, 85, 978-988.	3.4	23
172	High-Temperature Release of SO ₂ from Calcined Cement Raw Materials. Energy & Fuels, 2011, 25, 2917-2926.	2.5	23
173	Mixing large and small particles in a pilot scale rotary kiln. Powder Technology, 2011, 210, 273-280.	2.1	23
174	Deposit Probe Measurements in Large Biomass-Fired Grate Boilers and Pulverized-Fuel Boilers. Energy & Fuels, 2014, 28, 3539-3555.	2.5	23
175	Defluidization in fluidized bed gasifiers using high-alkali content fuels. Biomass and Bioenergy, 2016, 91, 160-174.	2.9	23
176	A model of the coal reburning process. Proceedings of the Combustion Institute, 1998, 27, 3027-3035.	0.3	22
177	Formation of NO from combustion of volatiles from municipal solid wastes. Combustion and Flame, 2001, 124, 195-212.	2.8	22
178	Inhibition and Promotion of Pyrolysis by Hydrogen Sulfide (H ₂ S) and Sulfanyl Radical (SH). Journal of Physical Chemistry A, 2016, 120, 8941-8948.	1.1	22
179	Modelling of temporal and spatial evolution of sulphur oxides and sulphuric acid under large, two-stroke marine engine-like conditions using integrated CFD-chemical kinetics. Applied Energy, 2017, 193, 60-73.	5.1	22
180	Importance of the Hydrogen Isocyanide Isomer in Modeling Hydrogen Cyanide Oxidation in Combustion. Energy & amp; Fuels, 2017, 31, 2156-2163.	2.5	22

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181	Optical measurements of KOH, KCl and K for quantitative K-Cl chemistry in thermochemical conversion processes. Fuel, 2020, 271, 117643.	3.4	22
182	Heat Transfer in a Fixed Bed of Straw Char. Energy & Fuels, 2003, 17, 1251-1258.	2.5	21
183	Modeling of chemical reactions in afterburning for the reduction of N2O. Combustion and Flame, 1996, 106, 345-358.	2.8	20
184	Mixing Effects in the Selective Noncatalytic Reduction of NO. Industrial & Engineering Chemistry Research, 2000, 39, 3221-3232.	1.8	20
185	Rate Constant and Thermochemistry for K + O ₂ + N ₂ = KO ₂ + N ₂ . Journal of Physical Chemistry A, 2015, 119, 3329-3336.	1.1	20
186	Interactive Matching between the Temperature Profile and Secondary Reactions of Oil Shale Pyrolysis. Energy & Fuels, 2016, 30, 2865-2873.	2.5	20
187	Sulfur poisoning and regeneration of Rh-ZSM-5 catalysts for total oxidation of methane. Applied Catalysis B: Environmental, 2020, 277, 119176.	10.8	20
188	Oxy-fuel combustion of millimeter-sized coal char: Particle temperatures and NO formation. Fuel, 2013, 106, 72-78.	3.4	19
189	Tensile Adhesion Strength of Biomass Ash Deposits: Effect of the Temperature Gradient and Ash Chemistry. Energy & Fuels, 2018, 32, 4432-4441.	2.5	19
190	Biomass fly ash deposition in an entrained flow reactor. Proceedings of the Combustion Institute, 2019, 37, 2689-2696.	2.4	19
191	CPFD simulation of petcoke and SRF co–firing in a full–scale cement calciner. Fuel Processing Technology, 2019, 196, 106153.	3.7	19
192	Shedding light on the governing mechanisms for insufficient CO and H2 burnout in the presence of potassium, chlorine and sulfur. Fuel, 2020, 273, 117762.	3.4	19
193	A reaction mechanism for ozone dissociation and reaction with hydrogen at elevated temperature. Fuel, 2022, 322, 124138.	3.4	19
194	Pressure effects on the thermal de-NOx process. Proceedings of the Combustion Institute, 1996, 26, 2067-2074.	0.3	18
195	Particle Emissions from Domestic Gas Cookers. Combustion Science and Technology, 2010, 182, 1511-1527.	1.2	18
196	NOx reduction using amine reclaimer wastes (ARW) generated in post combustion CO2 capture. International Journal of Greenhouse Gas Control, 2012, 10, 33-45.	2.3	18
197	Mechanistic Model for Ash Deposit Formation in Biomass Suspension Firing. Part 1: Model Verification by Use of Entrained Flow Reactor Experiments. Energy & amp; Fuels, 2017, 31, 2771-2789.	2.5	18
198	Modeling post-flame sulfation of KCl and KOH in bio-dust combustion with full and simplified mechanisms. Fuel, 2019, 258, 116147.	3.4	18

#	Article	IF	CITATIONS
199	Experimental and modelling study on the influence of wood type, density, water content, and temperature on wood devolatilization. Fuel, 2020, 260, 116410.	3.4	18
200	Development of a Detailed Kinetic Model for Hydrogen Oxidation in Supercritical H ₂ O/CO ₂ Mixtures. Energy & Fuels, 2020, 34, 15379-15388.	2.5	18
201	Experimental investigation and modelling of heat capacity, heat of fusion and melting interval of rocks. Thermochimica Acta, 2003, 406, 129-142.	1.2	17
202	Experimental and Numerical Investigation of Gas-Phase Freeboard Combustion. Part 1: Main Combustion Process. Energy & amp; Fuels, 2009, 23, 5773-5782.	2.5	17
203	Deposit Shedding in Biomass-Fired Boilers: Shear Adhesion Strength Measurements. Energy & Fuels, 2017, 31, 8733-8741.	2.5	17
204	Experimental and CPFD study of gas–solid flow in a cold pilot calciner. Powder Technology, 2018, 340, 99-115.	2.1	17
205	A Reduced Reaction Scheme for Volatile Nitrogen Conversion in Coal Combustion. Combustion Science and Technology, 1998, 131, 193-223.	1.2	16
206	Impact of KCl impregnation on single particle combustion of wood and torrefied wood. Fuel, 2017, 206, 684-689.	3.4	16
207	Influence of H2O on NO formation during char oxidation of biomass. Fuel, 2019, 235, 1260-1265.	3.4	16
208	The influence of size and morphology on devolatilization of biomass particles. Fuel, 2020, 264, 116755.	3.4	16
209	Kinetics of tyre char oxidation under combustion conditions. Fuel, 2007, 86, 2343-2350.	3.4	15
210	New reactions of diazene and related species for modelling combustion of amine fuels. Molecular Physics, 2021, 119, .	0.8	15
211	A Simplified Model for Volatile-N Oxidation. Energy & amp; Fuels, 2010, 24, 2883-2890.	2.5	14
212	The C2H2 + NO2 reaction: Implications for high pressure oxidation of C2H2/NOx mixtures. Proceedings of the Combustion Institute, 2019, 37, 469-476.	2.4	14
213	Release of P from Pyrolysis, Combustion, and Gasification of Biomass—A Model Compound Study. Energy & Fuels, 2021, 35, 15817-15830.	2.5	14
214	Characterization of a full-scale, single-burner pulverized coal boiler: temperatures, gas concentrations and nitrogen oxides. Fuel, 1994, 73, 492-499.	3.4	13
215	Exhaust Oxidation of Unburned Hydrocarbons from Lean-Burn Natural Gas Engines. Combustion Science and Technology, 2000, 157, 262-292.	1.2	13
216	Importance of Vanadium-Catalyzed Oxidation of SO ₂ to SO ₃ in Two-Stroke Marine Diesel Engines. Energy & Fuels, 2016, 30, 6098-6102.	2.5	13

#	Article	IF	CITATIONS
217	Experimental and kinetic modeling study of oxidation of acetonitrile. Proceedings of the Combustion Institute, 2021, 38, 575-583.	2.4	13
218	Heterogeneous fixation of N2: Investigation of a novel mechanism for formation of NO. Proceedings of the Combustion Institute, 2009, 32, 1973-1980.	2.4	12
219	Experimental and Kinetic Modeling Study of Nitroethane Pyrolysis at a Low Pressure: Competition Reactions in the Primary Decomposition. Energy & Fuels, 2016, 30, 7738-7745.	2.5	12
220	Measurements of the NOx precursors and major species concentrations above the grate at a waste-to-energy plant. Fuel, 2018, 222, 475-484.	3.4	12
221	High Heating Rate Devolatilization Kinetics of Pulverized Biomass Fuels. Energy & Fuels, 2018, 32, 12955-12961.	2.5	12
222	Kinetic modeling of urea decomposition and byproduct formation. Chemical Engineering Science, 2021, 230, 116138.	1.9	12
223	Sulfur Release from Cement Raw Materials during Solid Fuel Combustion. Energy & Fuels, 2011, 25, 3917-3924.	2.5	11
224	Reduced chemical kinetic mechanisms for NO _{<i>x</i>} emission prediction in biomass combustion. International Journal of Chemical Kinetics, 2012, 44, 219-231.	1.0	11
225	Detailed Kinetic Mechanisms of Pollutant Formation in Combustion Processes. Computer Aided Chemical Engineering, 2019, , 603-645.	0.3	11
226	Formation of NO and N ₂ O during Raw and Demineralized Biomass Char Combustion. Energy & Fuels, 2019, 33, 5304-5315.	2.5	11
227	Particulate emissions from a modern wood stove – Influence of KCl. Renewable Energy, 2021, 170, 1215-1227.	4.3	11
228	Simplified Model for Reburning Chemistry. Energy & amp; Fuels, 2010, 24, 4185-4192.	2.5	10
229	Aerodynamic and Physical Characterization of Refuse Derived Fuel. Energy & Fuels, 2018, 32, 7685-7700.	2.5	10
230	Predicting Biomass Char Yield from High Heating Rate Devolatilization Using Chemometrics. Energy & Fuels, 2018, 32, 9572-9580.	2.5	10
231	Kinetic Parameters for Biomass under Self-Ignition Conditions: Low-Temperature Oxidation and Pyrolysis. Energy & Fuels, 2019, 33, 8606-8619.	2.5	10
232	Quantitative K-Cl-S chemistry in thermochemical conversion processes using in situ optical diagnostics. Proceedings of the Combustion Institute, 2021, 38, 5219-5227.	2.4	10
233	Sulphur Chemistry in Combustion I. , 2000, , 263-282.		10
234	Modeling of ferric sulfate decomposition and sulfation of potassium chloride during grateâ€firing of biomass. AICHE Journal, 2013, 59, 4314-4324.	1.8	9

#	Article	IF	CITATIONS
235	Investigation of a Mineral Melting Cupola Furnace. Part II. Mathematical Modeling. Industrial & Engineering Chemistry Research, 2003, 42, 6880-6892.	1.8	8
236	Experimental and Numerical Investigation of Gas-Phase Freeboard Combustion. Part 2: Fuel NO Formation. Energy & Fuels, 2009, 23, 5783-5791.	2.5	8
237	The Use of Amine Reclaimer Wastes as a NOx Reduction Agent. Energy Procedia, 2013, 37, 691-700.	1.8	8
238	<i>Ab initio</i> calculations and kinetic modeling of thermal conversion of methyl chloride: implications for gasification of biomass. Physical Chemistry Chemical Physics, 2018, 20, 10741-10752.	1.3	8
239	Influence of the support on rhodium speciation and catalytic activity of rhodium-based catalysts for total oxidation of methane. Catalysis Science and Technology, 2020, 10, 6035-6044.	2.1	8
240	Kinetic Model for High-Pressure Methanol Oxidation in Gas Phase and Supercritical Water. Energy & Fuels, 2022, 36, 575-588.	2.5	8
241	Comparative study of reactivity to CO2 of cokes used in stone wool production. Fuel Processing Technology, 2005, 86, 551-563.	3.7	7
242	Experimental investigation and mathematical modeling of the reaction between SO2(g) and CaCO3(s)-containing micelles in lube oil for large two-stroke marine diesel engines. Chemical Engineering Journal, 2020, 388, 124188.	6.6	7
243	Effect of gasification reactions on biomass char conversion under pulverized fuel combustion conditions. Proceedings of the Combustion Institute, 2021, 38, 3919-3928.	2.4	7
244	Acetaldehyde oxidation at elevated pressure. Proceedings of the Combustion Institute, 2021, 38, 269-278.	2.4	7
245	Selective Noncatalytic Reduction of NO <i>_x</i> Using Ammonium Sulfate. Energy & Fuels, 2021, 35, 12392-12402.	2.5	7
246	Assessment of the effect of alkali chemistry on post-flame aerosol formation during oxy-combustion of biomass. Fuel, 2022, 311, 122521.	3.4	7
247	Participation of alkali and sulfur in ammonia combustion chemistry: Investigation for ammonia/solid fuel co-firing applications. Combustion and Flame, 2022, 244, 112236.	2.8	7
248	The Reaction Kinetics of Amino Radicals with Sulfur Dioxide. Zeitschrift Fur Physikalische Chemie, 2015, 229, 1649-1661.	1.4	6
249	Mechanistic Model for Ash Deposit Formation in Biomass Suspension Firing. Part 2: Model Verification by Use of Full-Scale Tests. Energy & amp; Fuels, 2017, 31, 2790-2802.	2.5	6
250	Kinetic modeling of carbon monoxide oxidation and water gas shift reaction in supercritical water. Journal of Supercritical Fluids, 2021, 171, 105165.	1.6	6
251	Self-heating and thermal runaway of biomass – Lab-scale experiments and modeling for conditions resembling power plant mills. Fuel, 2021, 294, 120281.	3.4	6
252	Modeling Potassium Capture by Aluminosilicate, Part 1: Kaolin. Energy & Fuels, 2021, 35, 13984-13998.	2.5	6

#	Article	IF	CITATIONS
253	Investigation of a Mineral Melting Cupola Furnace. Part I. Experimental Work. Industrial & Engineering Chemistry Research, 2003, 42, 6872-6879.	1.8	5
254	Devolatilization and Combustion of Tire Rubber and Pine Wood in a Pilot Scale Rotary Kiln. Energy & Fuels, 2012, 26, 854-868.	2.5	5
255	SO ₂ Release as a Consequence of Alternative Fuel Combustion in Cement Rotary Kiln Inlets. Energy & Fuels, 2015, 29, 2729-2737.	2.5	5
256	Experiments and modeling of single plastic particle conversion in suspension. Fuel Processing Technology, 2018, 178, 213-225.	3.7	5
257	Mixed Flow Reactor Experiments and Modeling of Sulfuric Acid Neutralization in Lube Oil for Large Two-Stroke Diesel Engines. Industrial & Engineering Chemistry Research, 2019, 58, 138-155.	1.8	5
258	NO emission from cement calciners firing coal and petcoke: A CPFD study. Applications in Energy and Combustion Science, 2021, 5, 100023.	0.9	5
259	Influence of potassium on benzene and soot formation in fuel-rich oxidation of methane in a laminar flow reactor. Combustion and Flame, 2021, 234, 111624.	2.8	5
260	Temperature and Pressure Dependence of the Reaction S + CS (+M) → CS ₂ (+M). Journal of Physical Chemistry A, 2015, 119, 7277-7281.	1.1	4
261	Behavior of Alkali Metals and Ash in a Low-Temperature Circulating Fluidized Bed (LTCFB) Gasifier. Energy & Fuels, 2016, , .	2.5	4
262	Evaluation of a Semiglobal Approach for Modeling Methane/ <i>n</i> -Heptane Dual-Fuel Ignition. Energy & Fuels, 2021, 35, 14042-14050.	2.5	4
263	Modeling Potassium Capture by Aluminosilicate, Part 2: Coal Fly Ash. Energy & Fuels, 2021, 35, 19725-19736.	2.5	4
264	Design concept to reduce fuel NOX in catalytic combustion of gasified biomass. AICHE Journal, 2003, 49, 2149-2157.	1.8	3
265	The rate constant for the <mml:math <br="" xmlns:mml="http://www.w3.org/1998/Math/MathML">altimg="si16.gif" display="inline" overflow="scroll"><mml:mrow><mml:mtext>CO</mml:mtext><mml:mo>+</mml:mo><mml:msub><mml:mrow></mml:mrow></mml:msub></mml:mrow></mml:math>	<###	ext ³ H
266	Predicted thermochemistry and unimolecular kinetics of nitrous sulfide. Journal of Chemical Physics, 2011, 135, 094301.	1.2	3
267	Reaction of Sulfuric Acid in Lube Oil: Implications for Large Two-Stroke Diesel Engines. , 2017, , .		3
268	Spillback nozzle characterization using pulsating LED shadowgraphy. Experimental Thermal and Fluid Science, 2020, 119, 110172.	1.5	3
269	Determination of Zero Dimensional, Apparent Devolatilization Kinetics for Biomass Particles at Suspension Firing Conditions. Energies, 2021, 14, 1018.	1.6	3
270	Theoretical and kinetic modeling study of chloromethane (CH ₃ Cl) pyrolysis and oxidation. International Journal of Chemical Kinetics, 2021, 53, 403-418.	1.0	2

#	Article	IF	CITATIONS
271	Oxidation Kinetics of Methane and Methane/Methanol Mixtures in Supercritical Water. Industrial & Engineering Chemistry Research, 2022, 61, 3889-3899.	1.8	2
272	Modeling the decomposition and byproduct formation of a urea-water-solution droplet. Chemical Engineering Science, 2021, 237, 116587.	1.9	1
273	Application of a Mathematical Model of a Mineral Melting Cupola. Industrial & Engineering Chemistry Research, 2003, 42, 6893-6897.	1.8	Ο
274	Special Issue in Memory of Professor Mário Costa. Energy & Fuels, 2021, 35, 6935-6939.	2.5	0