Hai Wang

List of Publications by Year
in descending order

189 papers	15,789 citations	15503 65 h-index	18128 120 g-index
195 all docs	195 docs citations	195 times ranked	6203 citing authors

#	Article	IF	Citations
1	A detailed kinetic modeling study of aromatics formation in laminar premixed acetylene and ethylene flames. Combustion and Flame, 1997, 110, 173-221.	5.2	1,070
2	Formation of nascent soot and other condensed-phase materials in flames. Proceedings of the Combustion Institute, 2011, 33, 41-67.	3.9	936
3	Detailed modeling of soot particle nucleation and growth. Proceedings of the Combustion Institute, 1991, 23, 1559-1566.	0.3	876
4	An optimized kinetic model of H2/CO combustion. Proceedings of the Combustion Institute, 2005, 30, 1283-1292.	3.9	607
5	Detailed surface and gas-phase chemical kinetics of diamond deposition. Physical Review B, 1991, 43, 1520-1545.	3.2	388
6	Optimization and analysis of large chemical kinetic mechanisms using the solution mapping methodâ€"combustion of methane. Progress in Energy and Combustion Science, 1992, 18, 47-73.	31.2	369
7	Propagation and extinction of premixed C5â€"C12 n-alkane flames. Combustion and Flame, 2010, 157, 277-287.	5.2	307
8	Combustion chemistry of propane: A case study of detailed reaction mechanism optimization. Proceedings of the Combustion Institute, 2000, 28, 1663-1669.	3.9	306
9	A physics-based approach to modeling real-fuel combustion chemistry - I. Evidence from experiments, and thermodynamic, chemical kinetic and statistical considerations. Combustion and Flame, 2018, 193, 502-519.	5.2	304
10	Calculations of Rate Coefficients for the Chemically Activated Reactions of Acetylene with Vinylic and Aromatic Radicals. The Journal of Physical Chemistry, 1994, 98, 11465-11489.	2.9	301
11	A physics-based approach to modeling real-fuel combustion chemistryÂâ€"ÂII. Reaction kinetic models of jet and rocket fuels. Combustion and Flame, 2018, 193, 520-537.	5.2	247
12	Combustion kinetic model uncertainty quantification, propagation and minimization. Progress in Energy and Combustion Science, 2015, 47, 1-31.	31.2	238
13	Transport properties of polycyclic aromatic hydrocarbons for flame modelingâ˜†. Combustion and Flame, 1994, 96, 163-170.	5.2	237
14	Measurement and numerical simulation of soot particle size distribution functions in a laminar premixed ethylene-oxygen-argon flame. Combustion and Flame, 2003, 133, 173-188.	5.2	230
15	Detailed modeling of soot formation in laminar premixed ethylene flames at a pressure of 10 bar. Combustion and Flame, 1995, 100, 111-120.	5.2	222
16	Micro-FTIR study of soot chemical compositionâ€"evidence of aliphatic hydrocarbons on nascent soot surfaces. Physical Chemistry Chemical Physics, 2010, 12, 5206.	2.8	205
17	On evolution of particle size distribution functions of incipient soot in premixed ethyleneâ€"oxygenâ€"argon flames. Combustion and Flame, 2008, 154, 775-788.	5.2	195
18	Detailed Mechanism and Modeling of Soot Particle Formation. Springer Series in Chemical Physics, 1994, , 165-192.	0.2	194

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19	Propene pyrolysis and oxidation kinetics in a flow reactor and laminar flames. Combustion and Flame, 1999, 119, 375-399.	5.2	191
20	The method of uncertainty quantification and minimization using polynomial chaos expansions. Combustion and Flame, 2011, 158, 2358-2374.	5.2	185
21	Analysis of Soot Nanoparticles in a Laminar Premixed Ethylene Flame by Scanning Mobility Particle Sizer. Aerosol Science and Technology, 2003, 37, 611-620.	3.1	182
22	Detailed and simplified kinetic models of n-dodecane oxidation: The role of fuel cracking in aliphatic hydrocarbon combustion. Proceedings of the Combustion Institute, 2009, 32, 403-410.	3.9	181
23	Kinetic modeling of particle size distribution of soot in a premixed burner-stabilized stagnation ethylene flame. Combustion and Flame, 2015, 162, 3356-3369.	5.2	169
24	Chemical species associated with the early stage of soot growth in a laminar premixed ethyleneâ€“oxygenâ€“argon flame. Combustion and Flame, 2005, 142, 364-373.	5.2	167
25	Spectral uncertainty quantification, propagation and optimization of a detailed kinetic model for ethylene combustion. Proceedings of the Combustion Institute, 2009, 32, 535-542.	3.9	163
26	Detailed reduction of reaction mechanisms for flame modeling. Combustion and Flame, 1991, 87, 365-370.	5.2	158
27	Thermodynamic Consistency in Microkinetic Development of Surface Reaction Mechanisms. Journal of Physical Chemistry B, 2003, 107, 12721-12733.	2.6	145
28	Fuel effects on lean blow-out in a realistic gas turbine combustor. Combustion and Flame, 2017, 181, 82-99.	5.2	143
29	Detailed kinetic modeling of 1,3-butadiene oxidation at high temperatures. International Journal of Chemical Kinetics, 2000, 32, 589-614.	1.6	141
30	Quantitative measurement of soot particle size distribution in premixed flames â€“ The burner-stabilized stagnation flame approach. Combustion and Flame, 2009, 156, 1862-1870.	5.2	139
31	Particle size distribution function of incipient soot in laminar premixed ethylene flames: effect of flame temperature. Proceedings of the Combustion Institute, 2005, 30, 1441-1448.	3.9	137
32	Numerical simulation and sensitivity analysis of detailed soot particle size distribution in laminar premixed ethylene flames. Combustion and Flame, 2006, 145, 117-127.	5.2	130
33	A Review of Terminology Used to Describe Soot Formation and Evolution under Combustion and Pyrolytic Conditions. ACS Nano, 2020, 14, 12470-12490.	14.6	122
34	Mobility size and mass of nascent soot particles in a benchmark premixed ethylene flame. Combustion and Flame, 2015, 162, 3810-3822.	5.2	118
35	Propyne Pyrolysis in a Flow Reactor:Â An Experimental, RRKM, and Detailed Kinetic Modeling Study. Journal of Physical Chemistry A, 1999, 103, 5889-5899.	2.5	116
36	Master equation modeling of wide range temperature and pressure dependence of CO + OH â†’ products. International Journal of Chemical Kinetics, 2006, 38, 57-73.	1.6	114

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37	A comparative study of nanoparticles in premixed flames by scanning mobility particle sizer, small angle neutron scattering, and transmission electron microscopy. Proceedings of the Combustion Institute, 2007, 31, 851-860.	3.9	111
38	Hygroscopic Behavior of Substrate-Deposited Particles Studied by micro-FT-IR Spectroscopy and Complementary Methods of Particle Analysis. Analytical Chemistry, 2008, 80, 633-642.	6.5	111
39	Drag force, diffusion coefficient, and electric mobility of small particles. I. Theory applicable to the free-molecule regime. Physical Review E, 2003, 68, 061206.	2.1	107
40	Development of Comprehensive Detailed and Reduced Reaction Mechanisms for Combustion Modeling. AIAA Journal, 2003, 41, 1629-1646.	2.6	106
41	Size distribution and morphology of nascent soot in premixed ethylene flames with and without benzene doping. Proceedings of the Combustion Institute, 2009, 32, 681-688.	3.9	100
42	Sensitivity of propagation and extinction of large hydrocarbon flames to fuel diffusion. Proceedings of the Combustion Institute, 2009, 32, 1157-1163.	3.9	99
43	An experimental and modeling study of the propagation of cyclohexane and mono-alkylated cyclohexane flames. Proceedings of the Combustion Institute, 2011, 33, 971-978.	3.9	96
44	A physics-based approach to modeling real-fuel combustion chemistry â€" IV. HyChem modeling of combustion kinetics of a bio-derived jet fuel and its blends with a conventional Jet A. Combustion and Flame, 2018, 198, 477-489.	5.2	95
45	Reaction Kinetics of CO + HO2â†' Products:Â Ab Initio Transition State Theory Study with Master Equation Modelingâ€. Journal of Physical Chemistry A, 2007, 111, 4031-4042.	2.5	92
46	Products of the Benzene + O(³P) Reaction. Journal of Physical Chemistry A, 2010, 114, 3355-3370.	2.5	92
47	Propagation and extinction of benzene and alkylated benzene flames. Combustion and Flame, 2012, 159, 1070-1081.	5.2	92
48	The oxidation of methane at elevated pressures: Experiments and modeling. Combustion and Flame, 1994, 97, 201-224.	5.2	87
49	Extinction of premixed H2/air flames: Chemical kinetics and molecular diffusion effects. Combustion and Flame, 2005, 142, 374-387.	5.2	87
50	Combustion kinetic modeling using multispecies time histories in shock-tube oxidation of heptane. Combustion and Flame, 2011, 158, 645-656.	5.2	87
51	A computational study of sooting limits in laminar premixed flames of ethane, ethylene, and acetylene. Combustion and Flame, 1993, 93, 467-482.	5.2	84
52	Experimental and modeling study of laminar flame speed and non-premixed counterflow ignition of n-heptane. Proceedings of the Combustion Institute, 2009, 32, 1245-1252.	3.9	83
53	Evolution of size distribution of nascent soot in n- and i-butanol flames. Proceedings of the Combustion Institute, 2013, 34, 1853-1860.	3.9	83
54	Drag force, diffusion coefficient, and electric mobility of small particles. II. Application. Physical Review E, 2003, 68, 061207.	2.1	80

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55	OH production by transient plasma and mechanism of flame ignition and propagation in quiescent methaneâ€“air mixtures. Combustion and Flame, 2008, 154, 715-727.	5.2	78
56	Morphology of nascent soot in ethylene flames. Proceedings of the Combustion Institute, 2015, 35, 1879-1886.	3.9	78
57	On the structure of nonsooting counterflow ethylene and acetylene diffusion flames. Combustion and Flame, 1996, 107, 321-335.	5.2	76
58	Kinetics of Heterogeneous Reaction of CaCO₃ Particles with Gaseous HNO₃ over a Wide Range of Humidity. Journal of Physical Chemistry A, 2008, 112, 1561-1571.	2.5	73
59	Evidence of aliphatics in nascent soot particles in premixed ethylene flames. Proceedings of the Combustion Institute, 2011, 33, 533-540.	3.9	73
60	Combustion of CO/H2 mixtures at elevated pressures. Proceedings of the Combustion Institute, 2007, 31, 429-437.	3.9	72
61	Computational Study on the Thermochemistry of Cyclopentadiene Derivatives and Kinetics of Cyclopentadienone Thermal Decomposition. Journal of Physical Chemistry A, 1998, 102, 1530-1541.	2.5	71
62	On initiation reactions of acetylene oxidation in shock tubes. Chemical Physics Letters, 1999, 303, 43-49.	2.6	71
63	Tunneling in Hydrogen-Transfer Isomerization of <i>n</i>-Alkyl Radicals. Journal of Physical Chemistry A, 2012, 116, 319-332.	2.5	70
64	Isolating the effect of induction length on detonation structure: Hydrogenâ€“oxygen detonation promoted by ozone. Combustion and Flame, 2019, 200, 44-52.	5.2	70
65	Kinetic Study of Heterogeneous Reaction of Deliquesced NaCl Particles with Gaseous HNO3Using Particle-on-Substrate Stagnation Flow Reactor Approach. Journal of Physical Chemistry A, 2007, 111, 10026-10043.	2.5	69
66	Particle size distribution of nascent soot in lightly and heavily sooting premixed ethylene flames. Combustion and Flame, 2016, 165, 177-187.	5.2	67
67	A Physics-based approach to modeling real-fuel combustion chemistry â€“ÂIII. Reaction kinetic model of JP10. Combustion and Flame, 2018, 198, 466-476.	5.2	67
68	Imaging Nanocarbon Materials: Soot Particles in Flames are Not Structurally Homogeneous. ChemPhysChem, 2013, 14, 3248-3254.	2.1	66
69	Molecular characterization of organic content of soot along the centerline of a coflow diffusion flame. Physical Chemistry Chemical Physics, 2014, 16, 25862-25875.	2.8	65
70	Gas-Nanoparticle Scattering: A Molecular View of Momentum Accommodation Function. Physical Review Letters, 2005, 95, 014502.	7.8	64
71	An experimental and kinetic modeling study of n-dodecane pyrolysis and oxidation. Combustion and Flame, 2016, 163, 12-30.	5.2	64
72	Effect of ferrocene addition on sooting limits in laminar premixed ethyleneâ€“oxygenâ€“argon flames. Combustion and Flame, 2004, 139, 288-299.	5.2	63

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73	A New Approach to Determining Gas-Particle Reaction Probabilities and Application to the Heterogeneous Reaction of Deliquesced Sodium Chloride Particles with Gas-Phase Hydroxyl Radicals. Journal of Physical Chemistry A, 2006, 110, 10619-10627.	2.5	60
74	Numerical simulation and parametric sensitivity study of particle size distributions in a burner-stabilised stagnation flame. Combustion and Flame, 2015, 162, 2569-2581.	5.2	57
75	Analysis of segregation and bifurcation in turbulent spray flames: A 3D counterflow configuration. Proceedings of the Combustion Institute, 2015, 35, 1675-1683.	3.9	57
76	Ignition of ethane, propane, and butane in counterflow jets of cold fuel versus hot air under variable pressures. Combustion and Flame, 1999, 117, 777-794.	5.2	56
77	A computational study of the thermal ionization of soot particles and its effect on their growth in laminar premixed flames. Combustion and Flame, 2002, 129, 204-216.	5.2	56
78	Kinetics of nascent soot oxidation by molecular oxygen in a flow reactor. Proceedings of the Combustion Institute, 2015, 35, 1887-1894.	3.9	56
79	Detailed oxidation kinetics and flame inhibition effects of chloromethane. Combustion and Flame, 1996, 105, 291-307.	5.2	54
80	Enthalpies of formation of benzenoid aromatic molecules and radicals. The Journal of Physical Chemistry, 1993, 97, 3867-3874.	2.9	53
81	Synthesis of nano-phase TiO2 crystalline films over premixed stagnation flames. Proceedings of the Combustion Institute, 2009, 32, 1839-1845.	3.9	53
82	A new approach to response surface development for detailed gas-phase and surface reaction kinetic model optimization. International Journal of Chemical Kinetics, 2003, 36, 94-106.	1.6	51
83	Thermophoretic force and velocity of nanoparticles in the free molecule regime. Physical Review E, 2004, 70, 021205.	2.1	51
84	A New Mechanism for the Formation of Meteoritic Kerogen-Like Material. Science, 1991, 252, 109-112.	12.6	49
85	Thermal Stability of Flame-Synthesized Anatase TiO2 Nanoparticles. Journal of Physical Chemistry B, 2004, 108, 17398-17402.	2.6	49
86	Including real fuel chemistry in LES of turbulent spray combustion. Combustion and Flame, 2018, 193, 397-416.	5.2	49
87	A first-principle calculation of the binary diffusion coefficients pertinent to kinetic modeling of hydrogen/oxygen/helium flames. Proceedings of the Combustion Institute, 2002, 29, 1361-1369.	3.9	48
88	Properties of Complexes Formed by Na⁺, Mg²⁺, and Fe²⁺ Binding with Benzene Molecules. Journal of Physical Chemistry A, 2014, 118, 9500-9511.	2.5	48
89	Flame-formed carbon nanoparticles exhibit quantum dot behaviors. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 12692-12697.	7.1	48
90	Induced nucleation of carbon dust in red giant stars. Astrophysical Journal, 1994, 429, 285.	4.5	48

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91	Ultrafine anatase TiO2 nanoparticles produced in premixed ethylene stagnation flame at 1atm. Proceedings of the Combustion Institute, 2005, 30, 2569-2576.	3.9	46
92	On unimolecular decomposition of phenyl radical. Proceedings of the Combustion Institute, 2000, 28, 1545-1555.	3.9	45
93	Probe effects in soot sampling from a burner-stabilized stagnation flame. Combustion and Flame, 2016, 167, 184-197.	5.2	45
94	The distillation curve and sooting propensity of a typical jet fuel. Fuel, 2019, 235, 350-362.	6.4	44
95	HOMO-LUMO energy splitting in polycyclic aromatic hydrocarbons and their derivatives. Proceedings of the Combustion Institute, 2019, 37, 953-959.	3.9	43
96	Critical kinetic uncertainties in modeling hydrogen/carbon monoxide, methane, methanol, formaldehyde, and ethylene combustion. Combustion and Flame, 2018, 195, 18-29.	5.2	42
97	Methane ignition catalyzed by in situ generated palladium nanoparticles. Combustion and Flame, 2010, 157, 421-435.	5.2	40
98	Violation of collision limit in recently published reaction models. Combustion and Flame, 2017, 186, 208-210.	5.2	40
99	Chemical kinetic model uncertainty minimization through laminar flame speed measurements. Combustion and Flame, 2016, 172, 136-152.	5.2	39
100	Thermal Decomposition of Ethylene Oxide:Â Potential Energy Surface, Master Equation Analysis, and Detailed Kinetic Modeling. Journal of Physical Chemistry A, 2005, 109, 8016-8027.	2.5	38
101	Skeletal reaction model generation, uncertainty quantification and minimization: Combustion of butane. Combustion and Flame, 2014, 161, 3031-3039.	5.2	38
102	Structure of strongly turbulent premixed n-dodecaneâ€"air flames: Direct numerical simulations and chemical explosive mode analysis. Combustion and Flame, 2019, 209, 27-40.	5.2	38
103	Properties of nanocrystalline TiO2 synthesized in premixed flames stabilized on a rotating surface. Proceedings of the Combustion Institute, 2011, 33, 1917-1924.	3.9	37
104	Silicon Particle Formation in Pyrolysis of Silane and Disilane. Israel Journal of Chemistry, 1996, 36, 293-303.	2.3	36
105	Thermodynamic functions for the cyclopentadienyl radical: The effect of Jahn-Teller distortion. International Journal of Chemical Kinetics, 2001, 33, 834-845.	1.6	36
106	In Situ Generation of Pd/PdO Nanoparticle Methane Combustion Catalyst: Correlation of Particle Surface Chemistry with Ignition. Journal of Physical Chemistry C, 2009, 113, 20632-20639.	3.1	36
107	On existence of nanoparticles below the sooting threshold. Proceedings of the Combustion Institute, 2007, 31, 639-647.	3.9	35
108	Nanoporous Titania Gas Sensing Films Prepared in a Premixed Stagnation Flame. Journal of Physical Chemistry C, 2011, 115, 21620-21628.	3.1	35

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109	Soot particle size distributions in premixed stretch-stabilized flat ethyleneâ€“oxygenâ€“argon flames. Proceedings of the Combustion Institute, 2017, 36, 1001-1009.	3.9	35
110	Ethane oxidation at elevated pressures in the intermediate temperature regime: Experiments and modeling. Combustion and Flame, 1996, 104, 505-523.	5.2	34
111	Isomerization kinetics of benzylic and methylphenyl type radicals in single-ring aromatics. Proceedings of the Combustion Institute, 2013, 34, 307-314.	3.9	32
112	Mobility size distributions of soot in premixed propene flames. Combustion and Flame, 2016, 172, 365-373.	5.2	32
113	Small-angle neutron scattering of soot formed in laminar premixed ethylene flames. Proceedings of the Combustion Institute, 2002, 29, 2749-2757.	3.9	31
114	First-principle calculation for the high-temperature diffusion coefficients of small pairs: the Hâ€“Ar Case. Combustion Theory and Modelling, 2005, 9, 353-363.	1.9	31
115	Evolution of Soot Particle Size Distribution Function in Burner-Stabilized Stagnation <i>n</i>-Dodecaneâˆ'Oxygenâˆ'Argon Flames. Energy & Fuels, 2009, 23, 4286-4294.	5.1	31
116	Laminar Burning Velocities of Trifluoromethaneâ€“Methane Mixtures: Experiment and Numerical Simulation. Combustion and Flame, 1998, 114, 457-468.	5.2	30
117	Binary CF3Br- and CHF3â€“inert flame suppressants: effect of temperature on the flame inhibition effectiveness of CF3Br and CHF3. Combustion and Flame, 1999, 118, 489-499.	5.2	30
118	Kinetics of catalytic oxidation of methane, ethane and propane over palladium oxide. Combustion and Flame, 2014, 161, 1048-1054.	5.2	29
119	HOMOâ€“LUMO Gaps of Homogeneous Polycyclic Aromatic Hydrocarbon Clusters. Journal of Physical Chemistry C, 2019, 123, 27785-27793.	3.1	29
120	Experiments and Numerical Simulation on the Laminar Flame Speeds of Dichloromethane and Trichloromethane. Combustion and Flame, 1998, 114, 285-293.	5.2	28
121	A new mechanism for initiation of free-radical chain reactions during high-temperature, homogeneous oxidation of unsaturated hydrocarbons: Ethylene, propyne, and allene. International Journal of Chemical Kinetics, 2001, 33, 698-706.	1.6	28
122	On lumped-reduced reaction model for combustion of liquid fuels. Combustion and Flame, 2016, 163, 437-446.	5.2	27
123	Synthesis of freestanding few-layer graphene in microwave plasma: The role of oxygen. Carbon, 2022, 186, 560-573.	10.3	27
124	Internal structure, hygroscopic and reactive properties of mixed sodium methanesulfonate-sodium chloride particles. Physical Chemistry Chemical Physics, 2011, 13, 11846.	2.8	25
125	Energy and temperature dependent dissociation of the Na+(benzene)1,2 clusters: Importance of anharmonicity. Journal of Chemical Physics, 2015, 142, 044306.	3.0	24
126	Joint probability distribution of Arrhenius parameters in reaction model optimization and uncertainty minimization. Proceedings of the Combustion Institute, 2019, 37, 817-824.	3.9	24

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127	Thermochemistry of Benzvalene, Dihydrobenzvalene, and Cubane:Â A High-Level Computational Study. Journal of Physical Chemistry B, 1997, 101, 3400-3403.	2.6	23
128	Effect of n-dodecane decomposition on its fundamental flame properties. Combustion and Flame, 2018, 190, 65-73.	5.2	23
129	Phase Equilibrium of TiO₂ Nanocrystals in Flameâ€Assisted Chemical Vapor Deposition. ChemPhysChem, 2018, 19, 180-186.	2.1	23
130	A physics-based approach to modeling real-fuel combustion chemistry â€“ V. NO formation from a typical Jet A. Combustion and Flame, 2020, 212, 270-278.	5.2	23
131	On imaging nascent soot by transmission electron microscopy. Combustion and Flame, 2018, 198, 260-266.	5.2	22
132	A physics-based approach to modeling real-fuel combustion chemistry â€“ VI. Predictive kinetic models of gasoline fuels. Combustion and Flame, 2020, 220, 475-487.	5.2	21
133	Weakly Bound Carbonâˆ’Carbon Bonds in Acenaphthene Derivatives and Hexaphenylethane. Journal of Physical Chemistry A, 2010, 114, 1161-1168.	2.5	20
134	Spin-Forbidden Channels in Reactions of Unsaturated Hydrocarbons with O(³P). Journal of Physical Chemistry A, 2019, 123, 482-491.	2.5	20
135	Soot Formation in Counterflow Ethylene Diffusion Flames from 1 to 2.5 Atmospheres. Combustion and Flame, 1998, 113, 264-270.	5.2	19
136	On the Rational Interpretation of Data on Laminar Flame Speeds and Ignition Delay Times. Combustion Science and Technology, 2015, 187, 27-36.	2.3	19
137	Theory and Experiment of Binary Diffusion Coefficient ofn-Alkanes in Dilute Gases. Journal of Physical Chemistry A, 2016, 120, 8065-8074.	2.5	19
138	Binary diffusion coefficients and non-premixed flames extinction of long-chain alkanes. Proceedings of the Combustion Institute, 2017, 36, 1523-1530.	3.9	19
139	Mesoporous Titania Films Prepared by Flame Stabilized on a Rotating Surface: Application in Dye Sensitized Solar Cells. Journal of Physical Chemistry C, 2012, 116, 5342-5351.	3.1	18
140	A high pressure shock tube study of pyrolysis of real jet fuel Jet A. Proceedings of the Combustion Institute, 2019, 37, 189-196.	3.9	18
141	Electronic band gap of flame-formed carbon nanoparticles by scanning tunneling spectroscopy. Proceedings of the Combustion Institute, 2021, 38, 1805-1812.	3.9	18
142	Kinetics of Catalytic Oxidation of Methane over Palladium Oxide by Wire Microcalorimetry. Journal of Physical Chemistry C, 2013, 117, 19499-19507.	3.1	17
143	Quantum confinement and size resolved modeling of electronic and optical properties of small soot particles. Proceedings of the Combustion Institute, 2021, 38, 1517-1524.	3.9	17
144	Cyclic deposition of diamond: Experimental testing of model predictions. Journal of Applied Physics, 1992, 72, 5926-5940.	2.5	16

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145	Comment on â€œPhenomenological description of mobility of nm- and sub-nm-sized charged aerosol particles in electric fieldâ€•by Shandakov, S. D., Nasibulin, A. G. and Kauppinen, E. I.. Journal of Aerosol Science, 2006, 37, 111-114.	3.8	16
146	Temperature-dependent gas-surface chemical kinetic model for methane ignition catalyzed by in situ generated palladium nanoparticles. Proceedings of the Combustion Institute, 2011, 33, 1859-1866.	3.9	16
147	Modification of Troe's fall-off broadening. Chemical Physics Letters, 1993, 205, 271-276.	2.6	15
148	Parametrization of Chemically Activated Reactions Involving Isomerization. The Journal of Physical Chemistry, 1994, 98, 10598-10605.	2.9	15
149	Drag force and transport property of a small cylinder in free molecule flow: A gas-kinetic theory analysis. Physical Review E, 2016, 94, 023102.	2.1	15
150	Principle of large component number in multicomponent fuel combustion â€“ a Monte Carlo study. Proceedings of the Combustion Institute, 2019, 37, 613-620.	3.9	15
151	Kinetic analysis of distinct product generation in oxidative pyrolysis of four octane isomers. Proceedings of the Combustion Institute, 2019, 37, 531-538.	3.9	15
152	Effect of operating parameters on time to decomposition of high density polyethylene and chlorinated polyethylenes. Thermochimica Acta, 1987, 117, 157-166.	2.7	13
153	On mild and vigorous oxidation of mixtures of chlorinated hydrocarbons in droplet burning. Combustion and Flame, 1997, 110, 222-238.	5.2	13
154	Effect of transiently bound collision on binary diffusion coefficients of free radical species. Chemical Physics Letters, 2000, 325, 661-667.	2.6	13
155	Detonation and its limit in small tubes with ozone sensitization. Proceedings of the Combustion Institute, 2021, 38, 3547-3554.	3.9	13
156	Burning velocity measurements of microgravity spherical sooting premixed flames using rainbow Schlieren deflectometry. Combustion and Flame, 2005, 140, 93-102.	5.2	12
157	Cationâ˘Ï€ Interactions between Flame Chemi-ions and Aromatic Compounds. Energy & Fuels, 2017, 31, 2345-2352.	5.1	11
158	Transport Properties of Small Spherical Particles. Annals of the New York Academy of Sciences, 2009, 1161, 484-493.	3.8	10
159	Kinetics of catalytic oxidation of ethylene over palladium oxide. Proceedings of the Combustion Institute, 2015, 35, 2233-2240.	3.9	10
160	In situ X-ray Scattering and Dynamical Modeling of Pd Catalyst Nanoparticles Formed in Flames. Journal of Physical Chemistry C, 2015, 119, 19073-19082.	3.1	10
161	Sensitivities of direct numerical simulations to chemical kinetic uncertainties: spherical flame kernel evolution of a real jet fuel. Combustion and Flame, 2019, 209, 117-132.	5.2	10
162	Natural gas versus methane: Ignition kinetics and detonation limit behavior in small tubes. Combustion and Flame, 2022, 237, 111719.	5.2	9

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163	Morphology and electronic properties of incipient soot by scanning tunneling microscopy and spectroscopy. Combustion and Flame, 2022, 243, 111980.	5.2	9
164	Theoretical study of reaction between phenylvinyleum ion and acetylene. The Journal of Physical Chemistry, 1993, 97, 10364-10371.	2.9	8
165	Dye sensitized solar cells prepared by flames stabilized on a rotating surface. Proceedings of the Combustion Institute, 2013, 34, 2171-2178.	3.9	8
166	A Soot Chemistry Model That Captures Fuel Effects. , 2014, , .		8
167	A Comparative Study of Combustion Chemistry of Conventional and Alternative Jet Fuels with Hybrid Chemistry Approach. , 2017, , .		8
168	Large-Eddy Simulations of Fuel Effect on Gas Turbine Lean Blow-out. , 2017, , .		8
169	Nanoparticles in dilute gases: Fundamental equivalence between momentum accommodation and surface adsorption. Physical Review E, 2019, 99, 042127.	2.1	8
170	A physics-based approach to modeling real-fuel combustion chemistry â€“ VII. Relationship between speciation measurement and reaction model accuracy. Combustion and Flame, 2021, 224, 126-135.	5.2	8
171	Geometric modeling and analysis of detonation cellular stability. Proceedings of the Combustion Institute, 2021, 38, 3585-3593.	3.9	8
172	A thermogravimetric study of the decomposition rate of chlorinated polyethylenes under ignition conditions. Thermochimica Acta, 1988, 125, 247-259.	2.7	7
173	A thermogravimetric study of coal decomposition under ignition conditions. Thermochimica Acta, 1990, 171, 193-206.	2.7	7
174	Analysis of cyclic deposition of diamond. Journal of Applied Physics, 1991, 70, 7132-7136.	2.5	7
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