Hai Wang

List of Publications by Citations

183 papers	12,965 citations	61 h-index	110 g-index
195 ext. papers	14,438 ext. citations	5.2 avg, IF	6.77 L-index

#	Paper	IF	Citations
183	A detailed kinetic modeling study of aromatics formation in laminar premixed acetylene and ethylene flames. *Combustion and Flame*, **1997**, 110, 173-221	5.3	940
182	Formation of nascent soot and other condensed-phase materials in flames. *Proceedings of the Combustion Institute*, **2011**, 33, 41-67	5.9	741
181	Detailed modeling of soot particle nucleation and growth. *Proceedings of the Combustion Institute*, **1991**, 23, 1559-1566		722
180	An optimized kinetic model of H2/CO combustion. *Proceedings of the Combustion Institute*, **2005**, 30, 1283-1292	5.9	493
179	Detailed surface and gas-phase chemical kinetics of diamond deposition. *Physical Review B*, **1991**, 43, 1520-1545	3.3	347
178	Optimization and analysis of large chemical kinetic mechanisms using the solution mapping method□combustion of methane. *Progress in Energy and Combustion Science*, **1992**, 18, 47-73	33.6	307
177	Propagation and extinction of premixed C5□12 n-alkane flames. *Combustion and Flame*, **2010**, 157, 277-287	3.3	264
176	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		262
175	Combustion chemistry of propane: A case study of detailed reaction mechanism optimization. *Proceedings of the Combustion Institute*, **2000**, 28, 1663-1669	5.9	261
174	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	5.3	208
173	Transport properties of polycyclic aromatic hydrocarbons for flame modeling?. *Combustion and Flame*, **1994**, 96, 163-170	5.3	207
172	Detailed modeling of soot formation in laminar premixed ethylene flames at a pressure of 10 bar. *Combustion and Flame*, **1995**, 100, 111-120	5.3	192
171	Combustion kinetic model uncertainty quantification, propagation and minimization. *Progress in Energy and Combustion Science*, **2015**, 47, 1-31	33.6	178
170	On evolution of particle size distribution functions of incipient soot in premixed ethylene□oxygen□argon flames. *Combustion and Flame*, **2008**, 154, 775-788	5.3	177
169	Micro-FTIR study of soot chemical composition-evidence of aliphatic hydrocarbons on nascent soot surfaces. *Physical Chemistry Chemical Physics*, **2010**, 12, 5206-18	3.6	175
168	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	5.3	174
167	Propene pyrolysis and oxidation kinetics in a flow reactor and laminar flames. *Combustion and Flame*, **1999**, 119, 375-399	5.3	170

166	Chemical species associated with the early stage of soot growth in a laminar premixed ethylene–oxygen–argon flame. *Combustion and Flame*, **2005**, 142, 364-373	5.3	155
165	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	5.9	154
164	Analysis of Soot Nanoparticles in a Laminar Premixed Ethylene Flame by Scanning Mobility Particle Sizer. *Aerosol Science and Technology*, **2003**, 37, 611-620	3.4	154
163	A physics-based approach to modeling real-fuel combustion chemistry – II. Reaction kinetic models of jet and rocket fuels. *Combustion and Flame*, **2018**, 193, 520-537	5.3	150
162	Detailed Mechanism and Modeling of Soot Particle Formation. *Springer Series in Chemical Physics*, **1994**, 165-192	0.3	145
161	The method of uncertainty quantification and minimization using polynomial chaos expansions. *Combustion and Flame*, **2011**, 158, 2358-2374	5.3	138
160	Detailed reduction of reaction mechanisms for flame modeling. *Combustion and Flame*, **1991**, 87, 365-379	5.3	136
159	Spectral uncertainty quantification, propagation and optimization of a detailed kinetic model for ethylene combustion. *Proceedings of the Combustion Institute*, **2009**, 32, 535-542	5.9	133
158	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	5.9	133
157	Kinetic modeling of particle size distribution of soot in a premixed burner-stabilized stagnation ethylene flame. *Combustion and Flame*, **2015**, 162, 3356-3369	5.3	128
156	Numerical simulation and sensitivity analysis of detailed soot particle size distribution in laminar premixed ethylene flames. *Combustion and Flame*, **2006**, 145, 117-127	5.3	124
155	Thermodynamic Consistency in Microkinetic Development of Surface Reaction Mechanisms. *Journal of Physical Chemistry B*, **2003**, 107, 12721-12733	3.4	124
154	Quantitative measurement of soot particle size distribution in premixed flames – The burner-stabilized stagnation flame approach. *Combustion and Flame*, **2009**, 156, 1862-1870	5.3	122
153	Detailed kinetic modeling of 1,3-butadiene oxidation at high temperatures. *International Journal of Chemical Kinetics*, **2000**, 32, 589-614	1.4	120
152	Propyne Pyrolysis in a Flow Reactor: An Experimental, RRKM, and Detailed Kinetic Modeling Study. *Journal of Physical Chemistry A*, **1999**, 103, 5889-5899	2.8	108
151	Hygroscopic behavior of substrate-deposited particles studied by micro-FT-IR spectroscopy and complementary methods of particle analysis. *Analytical Chemistry*, **2008**, 80, 633-42	7.8	104
150	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	5.9	102
149	Mobility size and mass of nascent soot particles in a benchmark premixed ethylene flame. *Combustion and Flame*, **2015**, 162, 3810-3822	5.3	98

148	Master equation modeling of wide range temperature and pressure dependence of CO + OH -> products. *International Journal of Chemical Kinetics*, **2006**, 38, 57-73	1.4	98
147	Drag force, diffusion coefficient, and electric mobility of small particles. I. Theory applicable to the free-molecule regime. *Physical Review E*, **2003**, 68, 061206	2.4	97
146	Development of Comprehensive Detailed and Reduced Reaction Mechanisms for Combustion Modeling. *AIAA Journal*, **2003**, 41, 1629-1646	2.1	95
145	Fuel effects on lean blow-out in a realistic gas turbine combustor. *Combustion and Flame*, **2017**, 181, 82-99	5.3	89
144	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	5.9	89
143	Sensitivity of propagation and extinction of large hydrocarbon flames to fuel diffusion. *Proceedings of the Combustion Institute*, **2009**, 32, 1157-1163	5.9	85
142	Reaction kinetics of CO + HO(2) --> products: ab initio transition state theory study with master equation modeling. *Journal of Physical Chemistry A*, **2007**, 111, 4031-42	2.8	82
141	Extinction of premixed H2/air flames: Chemical kinetics and molecular diffusion effects. *Combustion and Flame*, **2005**, 142, 374-387	5.3	82
140	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	5.9	77
139	An experimental and modeling study of the propagation of cyclohexane and mono-alkylated cyclohexane flames. *Proceedings of the Combustion Institute*, **2011**, 33, 971-978	5.9	76
138	Products of the benzene + O(3P) reaction. *Journal of Physical Chemistry A*, **2010**, 114, 3355-70	2.8	75
137	Evolution of size distribution of nascent soot in n- and i-butanol flames. *Proceedings of the Combustion Institute*, **2013**, 34, 1853-1860	5.9	74
136	A computational study of sooting limits in laminar premixed flames of ethane, ethylene, and acetylene. *Combustion and Flame*, **1993**, 93, 467-482	5.3	73
135	Combustion kinetic modeling using multispecies time histories in shock-tube oxidation of heptane. *Combustion and Flame*, **2011**, 158, 645-656	5.3	71
134	The oxidation of methane at elevated pressures: Experiments and modeling. *Combustion and Flame* , **1994**, 97, 201-224	5.3	71
133	Morphology of nascent soot in ethylene flames. *Proceedings of the Combustion Institute*, **2015**, 35, 1879-1886	5.9	70
132	Drag force, diffusion coefficient, and electric mobility of small particles. II. Application. *Physical Review E*, **2003**, 68, 061207	2.4	70
131	Propagation and extinction of benzene and alkylated benzene flames. *Combustion and Flame*, **2012**, 159, 1070-1081	5.3	69

130	On the structure of nonsooting counterflow ethylene and acetylene diffusion flames. *Combustion and Flame*, **1996**, 107, 321-335	5.3	68
129	Combustion of CO/H2 mixtures at elevated pressures. *Proceedings of the Combustion Institute*, **2007**, 31, 429-437	5.9	67
128	Computational Study on the Thermochemistry of Cyclopentadiene Derivatives and Kinetics of Cyclopentadienone Thermal Decomposition. *Journal of Physical Chemistry A*, **1998**, 102, 1530-1541	2.8	66
127	Kinetics of heterogeneous reaction of CaCO3 particles with gaseous HNO3 over a wide range of humidity. *Journal of Physical Chemistry A*, **2008**, 112, 1561-71	2.8	65
126	On initiation reactions of acetylene oxidation in shock tubes. *Chemical Physics Letters*, **1999**, 303, 43-49	2.5	65
125	OH production by transient plasma and mechanism of flame ignition and propagation in quiescent methane–air mixtures. *Combustion and Flame*, **2008**, 154, 715-727	5.3	64
124	Evidence of aliphatics in nascent soot particles in premixed ethylene flames. *Proceedings of the Combustion Institute*, **2011**, 33, 533-540	5.9	63
123	Tunneling in hydrogen-transfer isomerization of n-alkyl radicals. *Journal of Physical Chemistry A*, **2012**, 116, 319-32	2.8	62
122	Particle size distribution of nascent soot in lightly and heavily sooting premixed ethylene flames. *Combustion and Flame*, **2016**, 165, 177-187	5.3	61
121	Kinetic study of heterogeneous reaction of deliquesced NaCl particles with gaseous HNO3 using particle-on-substrate stagnation flow reactor approach. *Journal of Physical Chemistry A*, **2007**, 111, 10026-43	2.8	61
120	A physics-based approach to modeling real-fuel combustion chemistry – 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	5.3	58
119	Imaging nanocarbon materials: soot particles in flames are not structurally homogeneous. *ChemPhysChem*, **2013**, 14, 3248-54	3.2	57
118	Gas-nanoparticle scattering: a molecular view of momentum accommodation function. *Physical Review Letters*, **2005**, 95, 014502	7.4	56
117	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, 10619-27	2.8	55
116	A Review of Terminology Used to Describe Soot Formation and Evolution under Combustion and Pyrolytic Conditions. *ACS Nano*, **2020**, 14, 12470-12490	16.7	53
115	Effect of ferrocene addition on sooting limits in laminar premixed ethylene–oxygen–argon flames. *Combustion and Flame*, **2004**, 139, 288-299	5.3	52
114	An experimental and kinetic modeling study of n-dodecane pyrolysis and oxidation. *Combustion and Flame*, **2016**, 163, 12-30	5.3	51
113	Detailed oxidation kinetics and flame inhibition effects of chloromethane. *Combustion and Flame*, **1996**, 105, 291-307	5.3	50

112	Molecular characterization of organic content of soot along the centerline of a coflow diffusion flame. *Physical Chemistry Chemical Physics*, **2014**, 16, 25862-75	3.6	49
111	Numerical simulation and parametric sensitivity study of particle size distributions in a burner-stabilised stagnation flame. *Combustion and Flame*, **2015**, 162, 2569-2581	5.3	48
110	Synthesis of nano-phase TiO2 crystalline films over premixed stagnation flames. *Proceedings of the Combustion Institute*, **2009**, 32, 1839-1845	5.9	48
109	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	5.3	48
108	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	5.3	48
107	Thermal Stability of Flame-Synthesized Anatase TiO2 Nanoparticles. *Journal of Physical Chemistry B*, **2004**, 108, 17398-17402	3.4	46
106	Thermophoretic force and velocity of nanoparticles in the free molecule regime. *Physical Review E*, **2004**, 70, 021205	2.4	46
105	Enthalpies of formation of benzenoid aromatic molecules and radicals. *The Journal of Physical Chemistry*, **1993**, 97, 3867-3874		46
104	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	1.4	45
103	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	5.9	44
102	Induced nucleation of carbon dust in red giant stars. *Astrophysical Journal*, **1994**, 429, 285	4.7	44
101	Ultrafine anatase TiO2 nanoparticles produced in premixed ethylene stagnation flame at 1atm. *Proceedings of the Combustion Institute*, **2005**, 30, 2569-2576	5.9	43
100	Analysis of segregation and bifurcation in turbulent spray flames: A 3D counterflow configuration. *Proceedings of the Combustion Institute*, **2015**, 35, 1675-1683	5.9	42
99	A new mechanism for the formation of meteoritic kerogen-like material. *Science*, **1991**, 252, 109-12	33.3	42
98	Properties of complexes formed by Na(+), Mg(2+), and Fe(2+) binding with benzene molecules. *Journal of Physical Chemistry A*, **2014**, 118, 9500-11	2.8	40
97	Kinetics of nascent soot oxidation by molecular oxygen in a flow reactor. *Proceedings of the Combustion Institute*, **2015**, 35, 1887-1894	5.9	39
96	Probe effects in soot sampling from a burner-stabilized stagnation flame. *Combustion and Flame*, **2016**, 167, 184-197	5.3	38
95	On unimolecular decomposition of phenyl radical. *Proceedings of the Combustion Institute*, **2000**, 28, 1545-1555	5.9	38

94	Thermodynamic functions for the cyclopentadienyl radical: The effect of Jahn□Teller distortion. *International Journal of Chemical Kinetics*, **2001**, 33, 834-845	1.4	35
93	The distillation curve and sooting propensity of a typical jet fuel. *Fuel*, **2019**, 235, 350-362	7.1	34
92	Properties of nanocrystalline TiO2 synthesized in premixed flames stabilized on a rotating surface. *Proceedings of the Combustion Institute*, **2011**, 33, 1917-1924	5.9	34
91	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	3.8	34
90	Methane ignition catalyzed by in situ generated palladium nanoparticles. *Combustion and Flame*, **2010**, 157, 421-435	5.3	34
89	Silicon Particle Formation in Pyrolysis of Silane and Disilane. *Israel Journal of Chemistry*, **1996**, 36, 293-303	3.4	34
88	A Physics-based approach to modeling real-fuel combustion chemistry □III. Reaction kinetic model of JP10. *Combustion and Flame*, **2018**, 198, 466-476	5.3	34
87	Skeletal reaction model generation, uncertainty quantification and minimization: Combustion of butane. *Combustion and Flame*, **2014**, 161, 3031-3039	5.3	33
86	On existence of nanoparticles below the sooting threshold. *Proceedings of the Combustion Institute*, **2007**, 31, 639-647	5.9	33
85	Thermal decomposition of ethylene oxide: potential energy surface, master equation analysis, and detailed kinetic modeling. *Journal of Physical Chemistry A*, **2005**, 109, 8016-27	2.8	33
84	Including real fuel chemistry in LES of turbulent spray combustion. *Combustion and Flame*, **2018**, 193, 397-416	5.3	30
83	Soot particle size distributions in premixed stretch-stabilized flat ethylene□oxygen□argon flames. *Proceedings of the Combustion Institute*, **2017**, 36, 1001-1009	5.9	30
82	Chemical kinetic model uncertainty minimization through laminar flame speed measurements. *Combustion and Flame*, **2016**, 172, 136-152	5.3	30
81	Nanoporous Titania Gas Sensing Films Prepared in a Premixed Stagnation Flame. *Journal of Physical Chemistry C*, **2011**, 115, 21620-21628	3.8	29
80	First-principle calculation for the high-temperature diffusion coefficients of small pairs: the H□Ar Case. *Combustion Theory and Modelling*, **2005**, 9, 353-363	1.5	29
79	Small-angle neutron scattering of soot formed in laminar premixed ethylene flames. *Proceedings of the Combustion Institute*, **2002**, 29, 2749-2757	5.9	29
78	Ethane oxidation at elevated pressures in the intermediate temperature regime: Experiments and modeling. *Combustion and Flame*, **1996**, 104, 505-523	5.3	28
77	Critical kinetic uncertainties in modeling hydrogen/carbon monoxide, methane, methanol, formaldehyde, and ethylene combustion. *Combustion and Flame*, **2018**, 195, 18-29	5.3	27

76	Violation of collision limit in recently published reaction models. *Combustion and Flame*, **2017**, 186, 208-210	5.3	27
75	Evolution of Soot Particle Size Distribution Function in Burner-Stabilized Stagnation n-Dodecane/Oxygen/Argon Flames. *Energy & Fuels*, **2009**, 23, 4286-4294	4.1	27
74	Laminar Burning Velocities of Trifluoromethane/Methane Mixtures: Experiment and Numerical Simulation. *Combustion and Flame*, **1998**, 114, 457-468	5.3	26
73	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	1.4	26
72	Binary CF3Br- and CHF3/inert flame suppressants: effect of temperature on the flame inhibition effectiveness of CF3Br and CHF3. *Combustion and Flame*, **1999**, 118, 489-499	5.3	26
71	Isolating the effect of induction length on detonation structure: Hydrogen/Oxygen detonation promoted by ozone. *Combustion and Flame*, **2019**, 200, 44-52	5.3	26
70	HOMO-LUMO energy splitting in polycyclic aromatic hydrocarbons and their derivatives. *Proceedings of the Combustion Institute*, **2019**, 37, 953-959	5.9	25
69	Kinetics of catalytic oxidation of methane, ethane and propane over palladium oxide. *Combustion and Flame*, **2014**, 161, 1048-1054	5.3	25
68	Experiments and Numerical Simulation on the Laminar Flame Speeds of Dichloromethane and Trichloromethane. *Combustion and Flame*, **1998**, 114, 285-293	5.3	25
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66	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	11.5	24
65	Internal structure, hygroscopic and reactive properties of mixed sodium methanesulfonate-sodium chloride particles. *Physical Chemistry Chemical Physics*, **2011**, 13, 11846-57	3.6	24
64	Isomerization kinetics of benzylic and methylphenyl type radicals in single-ring aromatics. *Proceedings of the Combustion Institute*, **2013**, 34, 307-314	5.9	23
63	On lumped-reduced reaction model for combustion of liquid fuels. *Combustion and Flame*, **2016**, 163, 437-446	5.3	22
62	Structure of strongly turbulent premixed n-dodecane/air flames: Direct numerical simulations and chemical explosive mode analysis. *Combustion and Flame*, **2019**, 209, 27-40	5.3	22
61	Energy and temperature dependent dissociation of the Na(+)(benzene)1,2 clusters: importance of anharmonicity. *Journal of Chemical Physics*, **2015**, 142, 044306	3.9	21
60	Thermochemistry of Benzvalene, Dihydrobenzvalene, and Cubane: A High-Level Computational Study. *Journal of Physical Chemistry B*, **1997**, 101, 3400-3403	3.4	19
59	Effect of n-dodecane decomposition on its fundamental flame properties. *Combustion and Flame*, **2018**, 190, 65-73	5.3	18

58	Phase Equilibrium of TiO Nanocrystals in Flame-Assisted Chemical Vapor Deposition. *ChemPhysChem*, **2018**, 19, 180-186	3.2	18
57	Soot Formation in Counterflow Ethylene Diffusion Flames from 1 to 2.5 Atmospheres. *Combustion and Flame*, **1998**, 113, 264-270	5.3	18
56	Spin-Forbidden Channels in Reactions of Unsaturated Hydrocarbons with O(P). *Journal of Physical Chemistry A*, **2019**, 123, 482-491	2.8	18
55	Weakly bound carbon-carbon bonds in acenaphthene derivatives and hexaphenylethane. *Journal of Physical Chemistry A*, **2010**, 114, 1161-8	2.8	17
54	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	3.8	16
53	Binary diffusion coefficients and non-premixed flames extinction of long-chain alkanes. *Proceedings of the Combustion Institute*, **2017**, 36, 1523-1530	5.9	15
52	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	5.9	15
51	On imaging nascent soot by transmission electron microscopy. *Combustion and Flame*, **2018**, 198, 260-266	5.3	15
50	A high pressure shock tube study of pyrolysis of real jet fuel Jet A. *Proceedings of the Combustion Institute*, **2019**, 37, 189-196	5.9	14
49	Kinetics of Catalytic Oxidation of Methane over Palladium Oxide by Wire Microcalorimetry. *Journal of Physical Chemistry C*, **2013**, 117, 19499-19507	3.8	14
48	Comment on "Phenomenological description of mobility of nm- and sub-nm-sized charged aerosol particles in electric field" by Shandakov, S. D., Nasibulin, A. G. and Kauppinen, E. I.. *Journal of Aerosol Science*, **2006**, 37, 111-114	4.3	14
47	Theory and Experiment of Binary Diffusion Coefficient of n-Alkanes in Dilute Gases. *Journal of Physical Chemistry A*, **2016**, 120, 8065-8074	2.8	14
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45	On the Rational Interpretation of Data on Laminar Flame Speeds and Ignition Delay Times. *Combustion Science and Technology*, **2015**, 187, 27-36	1.5	13
44	Parametrization of Chemically Activated Reactions Involving Isomerization. *The Journal of Physical Chemistry*, **1994**, 98, 10598-10605		13
43	Cyclic deposition of diamond: Experimental testing of model predictions. *Journal of Applied Physics*, **1992**, 72, 5926-5940	2.5	13
42	Modification of Troe's fall-off broadening. *Chemical Physics Letters*, **1993**, 205, 271-276	2.5	13
41	Joint probability distribution of Arrhenius parameters in reaction model optimization and uncertainty minimization. *Proceedings of the Combustion Institute*, **2019**, 37, 817-824	5.9	13

40	Drag force and transport property of a small cylinder in free molecule flow: A gas-kinetic theory analysis. *Physical Review E*, **2016**, 94, 023102	2.4	12
39	Principle of large component number in multicomponent fuel combustion a Monte Carlo study. *Proceedings of the Combustion Institute*, **2019**, 37, 613-620	5.9	12
38	Effect of transiently bound collision on binary diffusion coefficients of free radical species. *Chemical Physics Letters*, **2000**, 325, 661-667	2.5	12
37	Effect of operating parameters on time to decomposition of high density polyethylene and chlorinated polyethylenes. *Thermochimica Acta*, **1987**, 117, 157-166	2.9	12
36	Kinetic analysis of distinct product generation in oxidative pyrolysis of four octane isomers. *Proceedings of the Combustion Institute*, **2019**, 37, 531-538	5.9	12
35	Cation Interactions between Flame Chemi-ions and Aromatic Compounds. *Energy & Fuels*, **2017**, 31, 2345-2352	4.1	10
34	On mild and vigorous oxidation of mixtures of chlorinated hydrocarbons in droplet burning. *Combustion and Flame*, **1997**, 110, 222-238	5.3	10
33	A physics-based approach to modeling real-fuel combustion chemistry V. NO formation from a typical Jet A. *Combustion and Flame*, **2020**, 212, 270-278	5.3	10
32	A physics-based approach to modeling real-fuel combustion chemistry VI. Predictive kinetic models of gasoline fuels. *Combustion and Flame*, **2020**, 220, 475-487	5.3	10
31	Burning velocity measurements of microgravity spherical sooting premixed flames using rainbow Schlieren deflectometry. *Combustion and Flame*, **2005**, 140, 93-102	5.3	9
30	Large-Eddy Simulations of Fuel Effect on Gas Turbine Lean Blow-out **2017**,		8
29	In situ X-ray Scattering and Dynamical Modeling of Pd Catalyst Nanoparticles Formed in Flames. *Journal of Physical Chemistry C*, **2015**, 119, 19073-19082	3.8	8
28	Dye sensitized solar cells prepared by flames stabilized on a rotating surface. *Proceedings of the Combustion Institute*, **2013**, 34, 2171-2178	5.9	8
27	Transport properties of small spherical particles. *Annals of the New York Academy of Sciences*, **2009**, 1161, 484-93	6.5	8
26	Quantum confinement and size resolved modeling of electronic and optical properties of small soot particles. *Proceedings of the Combustion Institute*, **2021**, 38, 1517-1524	5.9	8
25	On potential energy landscape and combustion chemistry modeling. *Combustion and Flame*, **2013**, 160, 222-223	5.3	7
24	Analysis of cyclic deposition of diamond. *Journal of Applied Physics*, **1991**, 70, 7132-7136	2.5	7
23	Electronic band gap of flame-formed carbon nanoparticles by scanning tunneling spectroscopy. *Proceedings of the Combustion Institute*, **2021**, 38, 1805-1812	5.9	7

22	Kinetics of catalytic oxidation of ethylene over palladium oxide. *Proceedings of the Combustion Institute*, **2015**, 35, 2233-2240	5.9	6
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18	Theoretical study of reaction between phenylvinyleum ion and acetylene. *The Journal of Physical Chemistry*, **1993**, 97, 10364-10371		5
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15	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	5.3	4
14	Synthesis of freestanding few-layer graphene in microwave plasma: The role of oxygen. *Carbon*, **2022**, 186, 560-573	10.4	4
13	A Soot Chemistry Model That Captures Fuel Effects **2014**,		3
12	Experimental characterization of premixed spherical ethylene/air flames under sooting conditions. *Proceedings of the Combustion Institute*, **2007**, 31, 1047-1054	5.9	3
11	Natural gas versus methane: Ignition kinetics and detonation limit behavior in small tubes. *Combustion and Flame*, **2022**, 237, 111719	5.3	2
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9	Detonation and its limit in small tubes with ozone sensitization. *Proceedings of the Combustion Institute*, **2021**, 38, 3547-3554	5.9	2
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