

# Tiziano Faravelli

## List of Publications by Citations

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215  
papers

10,070  
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55  
h-index

93  
g-index

218  
ext. papers

11,945  
ext. citations

5.3  
avg, IF

6.29  
L-index

#	Paper	IF	Citations
215	Hierarchical and comparative kinetic modeling of laminar flame speeds of hydrocarbon and oxygenated fuels. <i>Progress in Energy and Combustion Science</i> , <b>2012</b> , 38, 468-501	33.6	603
214	Chemical Kinetics of Biomass Pyrolysis. <i>Energy &amp; Fuels</i> , <b>2008</b> , 22, 4292-4300	4.1	465
213	Experimental formulation and kinetic model for JP-8 surrogate mixtures. <i>Combustion Science and Technology</i> , <b>2002</b> , 174, 399-417	1.5	348
212	Lumping procedures in detailed kinetic modeling of gasification, pyrolysis, partial oxidation and combustion of hydrocarbon mixtures. <i>Progress in Energy and Combustion Science</i> , <b>2001</b> , 27, 99-139	33.6	308
211	Detailed kinetic modeling of the thermal degradation of lignins. <i>Biomass and Bioenergy</i> , <b>2010</b> , 34, 290-303	5.3	237
210	Reduced Kinetic Schemes of Complex Reaction Systems: Fossil and Biomass-Derived Transportation Fuels. <i>International Journal of Chemical Kinetics</i> , <b>2014</b> , 46, 512-542	1.4	224
209	Wide-Range Kinetic Modeling Study of the Pyrolysis, Partial Oxidation, and Combustion of Heavyn-Alkanes. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2005</b> , 44, 5170-5183	3.9	216
208	An experimental and kinetic modeling study of combustion of isomers of butanol. <i>Combustion and Flame</i> , <b>2010</b> , 157, 2137-2154	5.3	206
207	OpenSMOKE++: An object-oriented framework for the numerical modeling of reactive systems with detailed kinetic mechanisms. <i>Computer Physics Communications</i> , <b>2015</b> , 192, 237-264	4.2	196
206	Kinetic modeling of the interactions between NO and hydrocarbons in the oxidation of hydrocarbons at low temperatures. <i>Combustion and Flame</i> , <b>2003</b> , 132, 188-207	5.3	187
205	Thermal degradation of polystyrene. <i>Journal of Analytical and Applied Pyrolysis</i> , <b>2001</b> , 60, 103-121	6	182
204	Experimental and kinetic modeling study of combustion of JP-8, its surrogates and reference components in laminar nonpremixed flows. <i>Proceedings of the Combustion Institute</i> , <b>2007</b> , 31, 393-400	5.9	159
203	Low-temperature combustion: Automatic generation of primary oxidation reactions and lumping procedures. <i>Combustion and Flame</i> , <b>1995</b> , 102, 179-192	5.3	142
202	Reference components of jet fuels: kinetic modeling and experimental results. <i>Experimental Thermal and Fluid Science</i> , <b>2004</b> , 28, 701-708	3	133
201	Thermal degradation of poly(vinyl chloride). <i>Journal of Analytical and Applied Pyrolysis</i> , <b>2003</b> , 70, 519-553	3	132
200	The ignition, combustion and flame structure of carbon monoxide/hydrogen mixtures. Note 1: Detailed kinetic modeling of syngas combustion also in presence of nitrogen compounds. <i>International Journal of Hydrogen Energy</i> , <b>2007</b> , 32, 3471-3485	6.7	131
199	Kinetic modeling of particle size distribution of soot in a premixed burner-stabilized stagnation ethylene flame. <i>Combustion and Flame</i> , <b>2015</b> , 162, 3356-3369	5.3	128

198	An experimental and kinetic modeling study of n-propanol and iso-propanol combustion. <i>Combustion and Flame</i> , <b>2010</b> , 157, 2-16	5.3	128
197	A wide-range modeling study of iso-octane oxidation. <i>Combustion and Flame</i> , <b>1997</b> , 108, 24-42	5.3	120
196	Experimental and modeling study of single coal particle combustion in O <sub>2</sub> /N <sub>2</sub> and Oxy-fuel (O <sub>2</sub> /CO <sub>2</sub> ) atmospheres. <i>Combustion and Flame</i> , <b>2013</b> , 160, 2559-2572	5.3	114
195	Kinetic modeling of the interactions between NO and hydrocarbons at high temperature. <i>Combustion and Flame</i> , <b>2003</b> , 135, 97-112	5.3	109
194	New reaction classes in the kinetic modeling of low temperature oxidation of n-alkanes. <i>Combustion and Flame</i> , <b>2015</b> , 162, 1679-1691	5.3	107
193	Kinetic and fluid dynamics modeling of methane/hydrogen jet flames in diluted coflow. <i>Applied Thermal Engineering</i> , <b>2010</b> , 30, 376-383	5.8	105
192	Computational and experimental study of JP-8, a surrogate, and its components in counterflow diffusion flames. <i>Proceedings of the Combustion Institute</i> , <b>2005</b> , 30, 439-446	5.9	104
191	A computational tool for the detailed kinetic modeling of laminar flames: Application to C <sub>2</sub> H <sub>4</sub> /CH <sub>4</sub> coflow flames. <i>Combustion and Flame</i> , <b>2013</b> , 160, 870-886	5.3	101
190	A wide range kinetic modeling study of the pyrolysis and combustion of naphthenes. <i>Combustion and Flame</i> , <b>2003</b> , 132, 533-544	5.3	100
189	Detailed kinetic modeling of the combustion of the four butanol isomers in premixed low-pressure flames. <i>Combustion and Flame</i> , <b>2012</b> , 159, 2295-2311	5.3	95
188	Analysis of process parameters for steady operations in methane mild combustion technology. <i>Proceedings of the Combustion Institute</i> , <b>2005</b> , 30, 2605-2612	5.9	94
187	A predictive multi-step kinetic model of coal devolatilization. <i>Fuel</i> , <b>2010</b> , 89, 318-328	7.1	93
186	Skeletal mechanism reduction through species-targeted sensitivity analysis. <i>Combustion and Flame</i> , <b>2016</b> , 163, 382-393	5.3	91
185	Kinetic modeling of polyethylene and polypropylene thermal degradation. <i>Journal of Analytical and Applied Pyrolysis</i> , <b>1997</b> , 40-41, 305-319	6	91
184	A wide range kinetic modeling study of pyrolysis and oxidation of benzene. <i>Combustion and Flame</i> , <b>2013</b> , 160, 1168-1190	5.3	90
183	Detailed Chemistry Promotes Understanding of Octane Numbers and Gasoline Sensitivity. <i>Energy &amp; Fuels</i> , <b>2006</b> , 20, 2391-2398	4.1	89
182	Autoignition and burning rates of fuel droplets under microgravity. <i>Combustion and Flame</i> , <b>2005</b> , 143, 211-226	5.3	79
181	Kinetic modeling of the thermal degradation of polyethylene and polystyrene mixtures. <i>Journal of Analytical and Applied Pyrolysis</i> , <b>2003</b> , 70, 761-777	6	78

180	The chemistry of chemical recycling of solid plastic waste via pyrolysis and gasification: State-of-the-art, challenges, and future directions. <i>Progress in Energy and Combustion Science</i> , <b>2021</b> , 84, 100901	33.6	78
179	Extractives Extend the Applicability of Multistep Kinetic Scheme of Biomass Pyrolysis. <i>Energy &amp; Fuels</i> , <b>2015</b> , 29, 6544-6555	4.1	76
178	Improved Kinetic Model of the Low-Temperature Oxidation of n-Heptane. <i>Energy &amp; Fuels</i> , <b>2014</b> , 28, 7178-7193	4.1	75
177	Experimental and kinetic modeling study of combustion of gasoline, its surrogates and components in laminar non-premixed flows. <i>Proceedings of the Combustion Institute</i> , <b>2009</b> , 32, 493-500	5.9	75
176	Gas product distribution from polyethylene pyrolysis. <i>Journal of Analytical and Applied Pyrolysis</i> , <b>1999</b> , 52, 87-103	6	73
175	Numerical Modeling of Laminar Flames with Detailed Kinetics Based on the Operator-Splitting Method. <i>Energy &amp; Fuels</i> , <b>2013</b> , 27, 7730-7753	4.1	71
174	A wide range modeling study of NOx/NOx formation and nitrogen chemistry in hydrogen combustion. <i>International Journal of Hydrogen Energy</i> , <b>2006</b> , 31, 2310-2328	6.7	71
173	Experimental data and kinetic modeling of primary reference fuel mixtures. <i>Proceedings of the Combustion Institute</i> , <b>1996</b> , 26, 739-746		71
172	An experimental, theoretical and kinetic-modeling study of the gas-phase oxidation of ammonia. <i>Reaction Chemistry and Engineering</i> , <b>2020</b> , 5, 696-711	4.9	69
171	Lumping and Reduction of Detailed Kinetic Schemes: an Effective Coupling. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2014</b> , 53, 9004-9016	3.9	69
170	Determination of . <i>Chemical Engineering Science</i> , <b>2005</b> , 60, 2851-2869	4.4	67
169	Formation of soot and nitrogen oxides in unsteady counterflow diffusion flames. <i>Combustion and Flame</i> , <b>2009</b> , 156, 2010-2022	5.3	66
168	A Wide Range Modeling Study of Methane Oxidation. <i>Combustion Science and Technology</i> , <b>1994</b> , 96, 279-335		65
167	Prediction of Kinetic Parameters for Hydrogen Abstraction Reactions. <i>Combustion Science and Technology</i> , <b>1993</b> , 95, 1-50	1.5	64
166	The ignition, combustion and flame structure of carbon monoxide/hydrogen mixtures. Note 2: Fluid dynamics and kinetic aspects of syngas combustion. <i>International Journal of Hydrogen Energy</i> , <b>2007</b> , 32, 3486-3500	6.7	62
165	Examination of a soot model in premixed laminar flames at fuel-rich conditions. <i>Proceedings of the Combustion Institute</i> , <b>2019</b> , 37, 1013-1021	5.9	62
164	Reduced kinetic mechanisms of diesel fuel surrogate for engine CFD simulations. <i>Combustion and Flame</i> , <b>2015</b> , 162, 3991-4007	5.3	58
163	Ab initio evaluation of primary cyclo-hexane oxidation reaction rates. <i>Proceedings of the Combustion Institute</i> , <b>2007</b> , 31, 201-209	5.9	58

162	Detailed kinetic mechanism of gas-phase reactions of volatiles released from biomass pyrolysis. <i>Biomass and Bioenergy</i> , <b>2016</b> , 93, 60-71	5.3	56
161	Kinetic Modeling of the Oxidation of Ethanol and Gasoline Surrogate Mixtures. <i>Combustion Science and Technology</i> , <b>2010</b> , 182, 653-667	1.5	55
160	Comprehensive kinetic study of combustion technologies for low environmental impact: MILD and OXY-fuel combustion of methane. <i>Combustion and Flame</i> , <b>2020</b> , 212, 142-155	5.3	55
159	The kinetic modeling of soot precursors in a butadiene flame. <i>Combustion and Flame</i> , <b>2000</b> , 122, 350-358	5.3	54
158	Kinetic Modeling Study of Polycyclic Aromatic Hydrocarbons and Soot Formation in Acetylene Pyrolysis. <i>Energy &amp; Fuels</i> , <b>2014</b> , 28, 1489-1501	4.1	53
157	Resolved flow simulation of pulverized coal particle devolatilization and ignition in air- and O <sub>2</sub> /CO <sub>2</sub> -atmospheres. <i>Fuel</i> , <b>2016</b> , 186, 285-292	7.1	52
156	Modeling soot formation in premixed flames using an Extended Conditional Quadrature Method of Moments. <i>Combustion and Flame</i> , <b>2015</b> , 162, 2529-2543	5.3	51
155	H-Abstraction reactions by OH, HO, O, O and benzyl radical addition to O and their implications for kinetic modelling of toluene oxidation. <i>Physical Chemistry Chemical Physics</i> , <b>2018</b> , 20, 10607-10627	3.6	50
154	Algae characterization and multistep pyrolysis mechanism. <i>Journal of Analytical and Applied Pyrolysis</i> , <b>2017</b> , 128, 423-436	6	50
153	Kinetic modeling study of benzene and PAH formation in laminar methane flames. <i>Combustion and Flame</i> , <b>2015</b> , 162, 1692-1711	5.3	50
152	Detailed kinetics of substituted phenolic species in pyrolysis bio-oils. <i>Reaction Chemistry and Engineering</i> , <b>2019</b> , 4, 490-506	4.9	48
151	An experimental and kinetic modeling study of the pyrolysis and oxidation of n-C <sub>3</sub> C <sub>5</sub> aldehydes in shock tubes. <i>Combustion and Flame</i> , <b>2015</b> , 162, 265-286	5.3	48
150	Predictive one step kinetic model of coal pyrolysis for CFD applications. <i>Proceedings of the Combustion Institute</i> , <b>2013</b> , 34, 2401-2410	5.9	47
149	Kinetic modeling study of ethanol and dimethyl ether addition to premixed low-pressure propene/oxygen/argon flames. <i>Combustion and Flame</i> , <b>2011</b> , 158, 1264-1276	5.3	47
148	The sensitizing effects of NO <sub>2</sub> and NO on methane low temperature oxidation in a jet stirred reactor. <i>Proceedings of the Combustion Institute</i> , <b>2019</b> , 37, 667-675	5.9	46
147	Detailed kinetic modeling of the thermal degradation of vinyl polymers. <i>Journal of Analytical and Applied Pyrolysis</i> , <b>2007</b> , 78, 343-362	6	46
146	A new procedure for predicting NO <sub>x</sub> emissions from furnaces. <i>Computers and Chemical Engineering</i> , <b>2001</b> , 25, 613-618	4	45
145	Experimental and semi-detailed kinetic modeling study of decalin oxidation and pyrolysis over a wide range of conditions. <i>Proceedings of the Combustion Institute</i> , <b>2013</b> , 34, 289-296	5.9	44

144	Primary Pyrolysis and Oxidation Reactions of Linear and Branched Alkanes. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>1997</b> , 36, 3336-3344	3.9	44
143	A lumped approach to the kinetic modeling of pyrolysis and combustion of biodiesel fuels. <i>Proceedings of the Combustion Institute</i> , <b>2013</b> , 34, 427-434	5.9	43
142	A wide range kinetic modeling study of pyrolysis and oxidation of methyl butanoate and methyl decanoate. Note I: Lumped kinetic model of methyl butanoate and small methyl esters. <i>Energy</i> , <b>2012</b> , 43, 124-139	7.9	41
141	Experimental and kinetic modeling study of sooting atmospheric-pressure cyclohexane flame. <i>Proceedings of the Combustion Institute</i> , <b>2009</b> , 32, 585-591	5.9	41
140	Kinetic modeling of counterflow diffusion flames of butadiene. <i>Combustion and Flame</i> , <b>2002</b> , 131, 273-284	9.5	41
139	Two-dimensional detailed modeling of fuel-rich . <i>Chemical Engineering Science</i> , <b>2008</b> , 63, 2657-2669	4.4	40
138	Kinetic Modelling of Pyrolysis Processes in Gas and Condensed Phase. <i>Advances in Chemical Engineering</i> , <b>2007</b> , 51-166	0.6	40
137	Laminar flame speeds of pentanol isomers: An experimental and modeling study. <i>Combustion and Flame</i> , <b>2016</b> , 166, 1-18	5.3	39
136	A predictive model of biochar formation and characterization. <i>Journal of Analytical and Applied Pyrolysis</i> , <b>2018</b> , 134, 326-335	6	39
135	Comprehensive kinetic model for the low temperature oxidation of hydrocarbons. <i>AIChE Journal</i> , <b>1997</b> , 43, 1278-1286	3.6	39
134	A computational framework for the pyrolysis of anisotropic biomass particles. <i>Chemical Engineering Journal</i> , <b>2017</b> , 321, 458-473	14.7	38
133	Probe effects in soot sampling from a burner-stabilized stagnation flame. <i>Combustion and Flame</i> , <b>2016</b> , 167, 184-197	5.3	38
132	A wide range kinetic modeling study of pyrolysis and oxidation of methyl butanoate and methyl decanoate [Note II: Lumped kinetic model of decomposition and combustion of methyl esters up to methyl decanoate. <i>Combustion and Flame</i> , <b>2012</b> , 159, 2280-2294	5.3	38
131	Detailed kinetic modeling of pyrolysis of tetrabromobisphenol A. <i>Journal of Analytical and Applied Pyrolysis</i> , <b>2007</b> , 80, 325-345	6	38
130	Numerical modeling of auto-ignition of isolated fuel droplets in microgravity. <i>Proceedings of the Combustion Institute</i> , <b>2015</b> , 35, 1621-1627	5.9	37
129	Numerical Modeling of NO <sub>x</sub> Formation in Turbulent Flames Using a Kinetic Post-processing Technique. <i>Energy &amp; Fuels</i> , <b>2013</b> , 27, 1104-1122	4.1	37
128	Oxidation of oxygenated octane improvers: MTBE, ETBE, DIPE, and TAME. <i>Proceedings of the Combustion Institute</i> , <b>1998</b> , 27, 353-360		35
127	A predictive kinetic model of sulfur release from coal. <i>Fuel</i> , <b>2012</b> , 91, 213-223	7.1	34

126	Experimental and kinetic modeling study of PAH formation in methane coflow diffusion flames doped with n-butanol. <i>Combustion and Flame</i> , <b>2014</b> , 161, 657-670	5.3	32
125	A kinetic modeling study of the thermal degradation of halogenated polymers. <i>Journal of Analytical and Applied Pyrolysis</i> , <b>2004</b> , 72, 253-272	6	32
124	A Detailed Kinetic Study of Pyrolysis and Oxidation of Glycerol (Propane-1,2,3-triol). <i>Combustion Science and Technology</i> , <b>2012</b> , 184, 1164-1178	1.5	31
123	Experimental and modeling investigation of the effect of the unsaturation degree on the gas-phase oxidation of fatty acid methyl esters found in biodiesel fuels. <i>Combustion and Flame</i> , <b>2016</b> , 164, 346-362	5.3	30
122	Detailed thermokinetic modelling of alkane autoignition as a tool for the optimization of performance of internal combustion engines. <i>Fuel</i> , <b>1998</b> , 77, 147-155	7.1	30
121	Numerical problems in the solution of oxidation and combustion models. <i>Combustion Theory and Modelling</i> , <b>2001</b> , 5, 185-199	1.5	30
120	A Wide Range Modeling Study of Propane and n-Butane Oxidation. <i>Combustion Science and Technology</i> , <b>1994</b> , 100, 299-330	1.5	30
119	High-temperature chemistry of HCl and Cl <sub>2</sub> . <i>Combustion and Flame</i> , <b>2015</b> , 162, 2693-2704	5.3	29
118	Fully-resolved simulations of coal particle combustion using a detailed multi-step approach for heterogeneous kinetics. <i>Fuel</i> , <b>2019</b> , 240, 75-83	7.1	29
117	Experimental and kinetic modeling study of combustion of JP-8, its surrogates and components in laminar premixed flows. <i>Combustion Theory and Modelling</i> , <b>2011</b> , 15, 569-583	1.5	28
116	An experimental and kinetic modeling study of propyne and allene oxidation. <i>Proceedings of the Combustion Institute</i> , <b>2000</b> , 28, 2601-2608	5.9	28
115	The role of preferential evaporation on the ignition of multicomponent fuels in a homogeneous spray/air mixture. <i>Proceedings of the Combustion Institute</i> , <b>2017</b> , 36, 2483-2491	5.9	27
114	Inhibition of hydrogen oxidation by HBr and Br <sub>2</sub> . <i>Combustion and Flame</i> , <b>2012</b> , 159, 528-540	5.3	27
113	Frequency Response of Counter Flow Diffusion Flames to Strain Rate Harmonic Oscillations. <i>Combustion Science and Technology</i> , <b>2008</b> , 180, 767-784	1.5	27
112	Relative Reactivity of Oxygenated Fuels: Alcohols, Aldehydes, Ketones, and Methyl Esters. <i>Energy &amp; Fuels</i> , <b>2016</b> , 30, 8665-8679	4.1	26
111	Experimental and detailed kinetic modeling study of PAH formation in laminar co-flow methane diffusion flames. <i>Proceedings of the Combustion Institute</i> , <b>2013</b> , 34, 1811-1818	5.9	26
110	Detailed Multi-dimensional Study of Pollutant Formation in a Methane Diffusion Flame. <i>Energy &amp; Fuels</i> , <b>2012</b> , 26, 1598-1611	4.1	26
109	A new predictive multi-zone model for HCCI engine combustion. <i>Applied Energy</i> , <b>2016</b> , 178, 826-843	10.7	25

108	The key role of entrainer inventory for operation and control of heterogeneous azeotropic distillation towers. <i>Computers and Chemical Engineering</i> , <b>1993</b> , 17, 535-547	4	24
107	Soot formation in unsteady counterflow diffusion flames. <i>Proceedings of the Combustion Institute</i> , <b>2009</b> , 32, 1335-1342	5.9	23
106	Experimental and kinetic modeling study of the effect of fuel composition in HCCI engines. <i>Proceedings of the Combustion Institute</i> , <b>2009</b> , 32, 2843-2850	5.9	23
105	Kinetic modeling of soot formation in premixed burner-stabilized stagnation ethylene flames at heavily sooting condition. <i>Fuel</i> , <b>2018</b> , 234, 199-206	7.1	22
104	Pyrolysis, Gasification, and Combustion of Solid Fuels. <i>Advances in Chemical Engineering</i> , <b>2016</b> , 49, 1-94	0.6	22
103	Prediction of flammable range for pure fuels and mixtures using detailed kinetics. <i>Combustion and Flame</i> , <b>2019</b> , 207, 120-133	5.3	21
102	Experimental Study of Tetralin Oxidation and Kinetic Modeling of Its Pyrolysis and Oxidation. <i>Energy &amp; Fuels</i> , <b>2013</b> , 27, 1576-1585	4.1	21
101	Alkyl radicals rule the low temperature oxidation of long chain aldehydes. <i>Proceedings of the Combustion Institute</i> , <b>2017</b> , 36, 393-401	5.9	21
100	Theoretical study of sensitive reactions in phenol decomposition. <i>Reaction Chemistry and Engineering</i> , <b>2020</b> , 5, 452-472	4.9	21
99	A first evaluation of butanoic and pentanoic acid oxidation kinetics. <i>Chemical Engineering Journal</i> , <b>2019</b> , 373, 973-984	14.7	18
98	Experimental and kinetic modeling study of laminar coflow diffusion methane flames doped with 2-butanol. <i>Proceedings of the Combustion Institute</i> , <b>2015</b> , 35, 863-871	5.9	18
97	Fouling phenomena in pyrolysis and combustion processes. <i>Applied Thermal Engineering</i> , <b>2002</b> , 22, 919-928	3.3	18
96	PYROLYSIS AND CHLORINATION OF SMALL HYDROCARBONS. <i>Chemical Engineering Communications</i> , <b>1992</b> , 117, 17-39	2.2	18
95	The kinetic modeling of soot precursors in ethylene flames. <i>Proceedings of the Combustion Institute</i> , <b>1998</b> , 27, 1489-1495		17
94	Extinction of laminar, premixed, counter-flow methane/air flames under unsteady conditions: Effect of H <sub>2</sub> addition. <i>Chemical Engineering Science</i> , <b>2013</b> , 93, 266-276	4.4	16
93	A Kinetic Modelling Study of Alcohols Operating Regimes in a HCCI Engine. <i>SAE International Journal of Engines</i> , <b>2017</b> , 10, 2354-2370	2.4	16
92	Experimental and Modeling Study of a Low NO <sub>x</sub> Combustor for Aero-Engine Turbofan. <i>Combustion Science and Technology</i> , <b>2009</b> , 181, 483-495	1.5	16
91	Numerical investigation of soot formation from microgravity droplet combustion using heterogeneous chemistry. <i>Combustion and Flame</i> , <b>2018</b> , 189, 393-406	5.3	15



90	Oscillatory Behavior in Methane Combustion: Influence of the Operating Parameters. <i>Energy &amp; Fuels</i> , <b>2018</b> , 32, 10088-10099	4.1	15
89	Curve matching, a generalized framework for models/experiments comparison: An application to n-heptane combustion kinetic mechanisms. <i>Combustion and Flame</i> , <b>2016</b> , 168, 186-203	5.3	14
88	Detailed Emissions Prediction for a Turbulent Swirling Nonpremixed Flame. <i>Energy &amp; Fuels</i> , <b>2014</b> , 28, 1470-1488	4.1	14
87	Flame extinction and low-temperature combustion of isolated fuel droplets of n-alkanes. <i>Proceedings of the Combustion Institute</i> , <b>2017</b> , 36, 2531-2539	5.9	14
86	Detailed Kinetic Analysis of HCCI Combustion Using a New Multi-Zone Model and CFD Simulations. <i>SAE International Journal of Engines</i> , <b>2013</b> , 6, 1594-1609	2.4	14
85	Lumped Kinetic Modeling of the Oxidation of Isocetane (2,2,4,4,6,8,8-Heptamethylnonane) in a Jet-Stirred Reactor (JSR). <i>Energy &amp; Fuels</i> , <b>2009</b> , 23, 5287-5289	4.1	14
84	Role of gas-phase chemistry in the rich combustion of H <sub>2</sub> and CO over a Rh/Al <sub>2</sub> O <sub>3</sub> catalyst in annular reactor. <i>Chemical Engineering Science</i> , <b>2007</b> , 62, 4992-4997	4.4	14
83	Kinetic Modeling of Knock Properties in Internal Combustion Engines <b>2006</b> ,		14
82	Rigorous dynamics and control of continuous distillation systems: simulation and experimental results. <i>Computers and Chemical Engineering</i> , <b>1990</b> , 14, 871-887	4	14
81	Ammonia-methane interaction in jet-stirred and flow reactors: An experimental and kinetic modeling study. <i>Proceedings of the Combustion Institute</i> , <b>2021</b> , 38, 345-353	5.9	14
80	Automatic Generation of Detailed Mechanisms. <i>Green Energy and Technology</i> , <b>2013</b> , 59-92	0.6	14
79	An experimental and kinetic modelling study of n-C <sub>4</sub> C <sub>6</sub> aldehydes oxidation in a jet-stirred reactor. <i>Proceedings of the Combustion Institute</i> , <b>2019</b> , 37, 389-397	5.9	13
78	A fully coupled, parallel approach for the post-processing of CFD data through reactor network analysis. <i>Computers and Chemical Engineering</i> , <b>2014</b> , 60, 197-212	4	13
77	Kinetic modelling of extinction and autoignition of condensed hydrocarbon fuels in non-premixed flows with comparison to experiment. <i>Combustion and Flame</i> , <b>2012</b> , 159, 130-141	5.3	13
76	Kinetic Modeling of Soot Formation in Turbulent Nonpremixed Flames. <i>Environmental Engineering Science</i> , <b>2008</b> , 25, 1407-1422	2	13
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