R P Lindstedt

List of Publications by Year
in descending order

105 papers	5,297 citations	101543 36 h-index	85541 71 g-index
106 all docs	106 docs citations	106 times ranked	2534 citing authors

#	Article	IF	Citations
1	Global reaction schemes for hydrocarbon combustion. Combustion and Flame, 1988, 73, 233-249.	5.2	847
2	A simplified reaction mechanism for soot formation in nonpremixed flames. Combustion and Flame, 1991, 87, 289-305.	5.2	519
3	Detailed kinetic modeling of C1 â€" C3 alkane diffusion flames. Combustion and Flame, 1995, 102, 129-160.	5.2	228
4	Detailed Kinetic Modelling of Chemistry and Temperature Effects on Ammonia Oxidation. Combustion Science and Technology, 1994, 99, 253-276.	2.3	156
5	Predictions of radiative transfer from a turbulent reacting jet in a cross-wind. Combustion and Flame, 1992, 89, 45-63.	5.2	155
6	DETAILED KINETIC MODELLING OF N-HEPTANE COMBUSTION. Combustion Science and Technology, 1995, 107, 317-353.	2.3	147
7	Detailed Chemical-Kinetic Model for Aviation Fuels. Journal of Propulsion and Power, 2000, 16, 187-195.	2.2	147
8	Joint scalar probability density function modeling of pollutant formation in piloted turbulent jet diffusion flames with comprehensive chemistry. Proceedings of the Combustion Institute, 2000, 28, 149-156.	3.9	143
9	Chemistry of Acetylene Flames. Combustion Science and Technology, 1997, 125, 73-137.	2.3	126
10	Thermodynamic and kinetic issues in the formation and oxidation of aromatic species. Faraday Discussions, 2001, 119, 409-432.	3.2	117
11	Large-eddy simulation of a bluff-body stabilized nonpremixed flame. Combustion and Flame, 2006, 144, 170-189.	5.2	117
12	Detailed kinetic modeling of premixed benzene flames. Combustion and Flame, 1994, 99, 551-561.	5.2	109
13	Modeling of premixed turbulent flames with second moment methods. Combustion and Flame, 1999, 116, 461-485.	5.2	98
14	Detailed Kinetic Modelling of Toluene Combustion. Combustion Science and Technology, 1996, 120, 119-167.	2.3	94
15	Transported PDF modeling of high-Reynolds-number premixed turbulent flames. Combustion and Flame, 2006, 145, 495-511.	5.2	92
16	Deflagration to detonation transitions and strong deflagrations in alkane and alkene air mixtures. Combustion and Flame, 1989, 76, 169-181.	5.2	90
17	Joint-scalar transported PDF modeling of soot formation and oxidation. Proceedings of the Combustion Institute, 2005, 30, 775-783.	3.9	90
18	Modeling of soot particle size distributions in premixed stagnation flow flames. Proceedings of the Combustion Institute, 2013, 34, 1861-1868.	3.9	73

#	Article	IF	Citations
19	On the chemical kinetics of cyclopentadiene oxidation. Combustion and Flame, 2011, 158, 666-686.	5.2	72
20	Systematically reduced chemical mechanisms for sulfur oxidation and pyrolysis. Combustion and Flame, 2006, 146, 437-455.	5.2	70
21	A Detailed Kinetic Study of Ammonia Oxidation. Combustion Science and Technology, 1995, 108, 231-254.	2.3	69
22	Investigations to improve and assess the accuracy of computational fluid dynamic based explosion models. Journal of Hazardous Materials, 1996, 45, 1-25.	12.4	65
23	Transported PDF modelling with detailed chemistry of pre- and auto-ignition in CH4/air mixtures. Proceedings of the Combustion Institute, 2007, 31, 1559-1566.	3.9	64
24	Predictions of a turbulent reacting jet in a cross-flow. Combustion and Flame, 1991, 84, 361-375.	5.2	61
25	A dimensionally reduced reaction mechanism for methanol oxidation. Proceedings of the Combustion Institute, 2002, 29, 1395-1402.	3.9	61
26	Premixed turbulent burning velocities derived from mixing controlled reaction models with cold front quenching. Combustion and Flame, 1991, 85, 427-439.	5.2	57
27	Predictions of soot formation in turbulent, non-premixed propane flames. Proceedings of the Combustion Institute, 1992, 24, 1067-1074.	0.3	57
28	Absolute radical concentration measurements and modeling of low-pressure CH4/O2/NO flames. Proceedings of the Combustion Institute, 1998, 27, 469-476.	0.3	52
29	The chemistry of ethane dehydrogenation over a supported platinum catalyst. Journal of Catalysis, 2008, 260, 37-64.	6.2	52
30	Analysis of the impact of agglomeration and surface chemistry models on soot formation and oxidation. Proceedings of the Combustion Institute, 2009, 32, 713-720.	3.9	45
31	Benene formation chemistry in premixed 1,3-butadiene flames. Proceedings of the Combustion Institute, 1996, 26, 703-709.	0.3	44
32	The formation and oxidation of aromatics in cyclopentene and methyl-cyclopentadiene mixtures. Proceedings of the Combustion Institute, 2002, 29, 2291-2298.	3.9	42
33	Fractal-Generated Turbulence in Opposed Jet Flows. Flow, Turbulence and Combustion, 2010, 85, 397-419.	2.6	42
34	A comparative ab initio study of hydrogen abstraction from n-propyl benzene. Combustion and Flame, 2013, 160, 2642-2653.	5.2	41
35	Lean premixed opposed jet flames in fractal grid generated multiscale turbulence. Combustion and Flame, 2014, 161, 2419-2434.	5.2	41
36	A systematically reduced reaction mechanism for sulphur oxidation. Proceedings of the Combustion Institute, 2005, 30, 1227-1235.	3.9	38

#	Article	IF	Citations
37	Molecular growth and oxygenated species formation in laminar ethylene flames. Proceedings of the Combustion Institute, 2000, 28, 1801-1807.	3.9	35
38	Joint scalar transported probability density function modeling of turbulent methanol jet diffusion flames. Proceedings of the Combustion Institute, 2002, 29, 2147-2154.	3.9	35
39	Velocity and Strain-Rate Characteristics of Opposed Isothermal Flows. Flow, Turbulence and Combustion, 2005, 74, 169-194.	2.6	35
40	Deflagration to detonation transition in mixtures of alkane LNG/LPG constituents with O2N2. Combustion and Flame, 1988, 72, 63-72.	5.2	32
41	The Calculation of the Structure of Laminar Counterflow Diffusion Flames Using a Global Reaction Mechanism. Combustion Science and Technology, 1988, 61, 31-49.	2.3	32
42	Reduced Reaction Mechanisms for Ammonia Oxidation in Premixed Laminar Flames. Combustion Science and Technology, 1994, 99, 277-298.	2.3	30
43	Regime transition from premixed to flameless oxidation in turbulent JP-10 flames. Proceedings of the Combustion Institute, 2013, 34, 3311-3318.	3.9	30
44	Time Resolved Velocity and Turbulence Measurements in Turbulent Gaseous Explosions. Combustion and Flame, 1998, 114, 469-483.	5.2	29
45	Transported probability density function modeling of a bluff body stabilized turbulent flame. Proceedings of the Combustion Institute, 2005, 30, 767-774.	3.9	28
46	Itâ€™s a Gas: Oxidative Dehydrogenation of Propane over Boron Nitride Catalysts. Journal of Physical Chemistry C, 2021, 125, 5623-5634.	3.1	28
47	Quantification of combustion regime transitions in premixed turbulent DME flames. Combustion and Flame, 2017, 182, 248-268.	5.2	27
48	Ignition of fuel/air mixtures by radiatively heated particles. Proceedings of the Combustion Institute, 2013, 34, 2065-2072.	3.9	26
49	Experimental study of turbulent explosions in hydrogen enriched syngas related fuels. Chemical Engineering Research and Design, 2018, 116, 663-676.	5.6	26
50	The impact of reduced chemistry on auto-ignition of H₂ in turbulent flows. Combustion Theory and Modelling, 2009, 13, 607-643.	1.9	24
51	Transported probability density function based modelling of soot particle size distributions in non-premixed turbulent jet flames. Proceedings of the Combustion Institute, 2019, 37, 1049-1056.	3.9	24
52	Finite Rate Chemistry Effects in Turbulent Reacting Flows. Flow, Turbulence and Combustion, 2004, 72, 407-426.	2.6	23
53	Flames in fractal grid generated turbulence. Fluid Dynamics Research, 2013, 45, 061403.	1.3	23
54	Microkinetic Mechanisms for Partial Oxidation of Methane over Platinum and Rhodium. Journal of Physical Chemistry C, 2017, 121, 9442-9453.	3.1	22

#	Article	IF	Citations
55	Joint scalar transported PDF modeling of nonpiloted turbulent diffusion flames. Combustion and Flame, 2005, 143, 471-490.	5.2	21
56	Progression of localized extinction in high Reynolds number turbulent jet flames. Proceedings of the Combustion Institute, 2007, 31, 1551-1558.	3.9	20
57	Piloted jet flames of CH4/H2/air: Experiments on localized extinction in the near field at high Reynolds numbers. Combustion and Flame, 2009, 156, 2117-2128.	5.2	19
58	Thermal radiation from vapour cloud explosions. Chemical Engineering Research and Design, 2015, 94, 517-527.	5.6	19
59	Evaluation of reaction progress variable - mixture fraction statistics in partially premixed flames. Proceedings of the Combustion Institute, 2019, 37, 2241-2248.	3.9	18
60	Fully coupled sectional modelling of soot particle dynamics in a turbulent diffusion flame. Proceedings of the Combustion Institute, 2021, 38, 1365-1373.	3.9	18
61	Hybrid multiple mapping conditioning modeling of local extinction. Proceedings of the Combustion Institute, 2013, 34, 1365-1372.	3.9	17
62	Velocity fields of fuel lean premixed turbulent opposed jet flames. Proceedings of the Combustion Institute, 2007, 31, 1459-1466.	3.9	16
63	Hybrid binomial Langevin-multiple mapping conditioning modeling of a reacting mixing layer. Physics of Fluids, 2009, 21, .	4.0	16
64	Turbulent burning velocity predictions using transported PDF methods. Proceedings of the Combustion Institute, 2011, 33, 1277-1284.	3.9	16
65	Second moment modeling of premixed turbulent flames stabilized in impinging jet geometries. Proceedings of the Combustion Institute, 1998, 27, 957-962.	0.3	15
66	Joint Scalar-velocity pdf Modelling of Finite Rate Chemistry in a Scalar Mixing Layer. Combustion Science and Technology, 1998, 136, 303-331.	2.3	15
67	Time-resolved temperature measurements for inert and reactive particles in explosive atmospheres. Proceedings of the Combustion Institute, 2015, 35, 2067-2074.	3.9	15
68	Strain distribution on material surfaces during combustion regime transitions. Proceedings of the Combustion Institute, 2017, 36, 1911-1918.	3.9	15
69	Joint-scalar transported PDF modelling of soot in a turbulent non-premixed natural gas flame. Combustion Theory and Modelling, 2018, 22, 1134-1175.	1.9	15
70	Turbulent transport in premixed flames approaching extinction. Proceedings of the Combustion Institute, 2015, 35, 1469-1476.	3.9	14
71	Reduced Kinetic Mechanisms for Propane Diffusion Flames. Lecture Notes in Physics Monographs, 1993, , 259-283.	0.5	13
72	Counterflow flames of air and methane, propane and ethylene, with and without periodic forcing. Experiments in Fluids, 2003, 35, 618-626.	2.4	13

#	Article	IF	Citations
73	Transported PDF Modelling of a High Velocity Bluff-Body Stabilised Flame (HM2) Using Detailed Chemistry. Flow, Turbulence and Combustion, 2009, 82, 493-509.	2.6	12
74	The impact of hydrogen enrichment on the flow field evolution in turbulent explosions. Combustion and Flame, 2019, 203, 105-119.	5.2	12
75	Laser-induced fluorescence measurements and modeling of absolute CH concentrations in strained laminar methane/air diffusion flames. Proceedings of the Combustion Institute, 2005, 30, 455-463.	3.9	11
76	The reactivity of hydrogen enriched turbulent flames. Chemical Engineering Research and Design, 2020, 143, 66-75.	5.6	11
77	The impact of dilatation, scrambling, and pressure transport in turbulent premixed flames. Combustion Theory and Modelling, 2017, 21, 1114-1147.	1.9	9
78	Quantification of PAH concentrations in premixed turbulent flames crossing the soot inception limit. Proceedings of the Combustion Institute, 2021, 38, 1163-1172.	3.9	9
79	Reaction class-based frameworks for heterogeneous catalytic systems. Proceedings of the Combustion Institute, 2017, 36, 4329-4338.	3.9	8
80	Thermal radiation induced ignition of multipoint turbulent explosions. Chemical Engineering Research and Design, 2017, 107, 108-121.	5.6	8
81	Quantification of low DamkÃ¶hler number turbulent premixed flames. Proceedings of the Combustion Institute, 2019, 37, 2373-2381.	3.9	8
82	The dynamics of partial oxidation of ethane over platinum. Proceedings of the Combustion Institute, 2011, 33, 1809-1817.	3.9	7
83	The Response of Transient Inhomogeneous Flames to Pressure Fluctuations and Stretch: Planar and Outwardly Propagating Hydrogen/Air Flames. Combustion Science and Technology, 2010, 182, 1171-1192.	2.3	6
84	A mixture-fraction-based hybrid binomial Langevin-multiple mapping conditioning model. Proceedings of the Combustion Institute, 2019, 37, 2151-2158.	3.9	6
85	Soot Modeling in Gas Turbine Combustors. , 1997, , .		5
86	The modelling of direct chemical kinetic effects in turbulent flames. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2000, 214, 177-189.	1.3	5
87	The Response of Transient Inhomogeneous Flames to Pressure Fluctuations and Stretch: Planar and Outwardly Propagating Methane/Air Flames. Combustion Science and Technology, 2012, 184, 1799-1817.	2.3	5
88	Variational Transition State Theory-Based Surface Chemistry for the C₂H₆/H₂/O₂/Pt System. Energy & Fuels, 2017, 31, 2217-2227.	5.1	5
89	The impact of molecular diffusion on auto-ignition in a turbulent flow. Combustion and Flame, 2022, 239, 111665.	5.2	5
90	Reduced Kinetic Mechanisms for Acetylene Diffusion Flames. Lecture Notes in Physics Monographs, 1993, , 241-258.	0.5	5

#	Article	IF	Citations
91	A Simple Reaction Mechanism for Soot Formation in Non-Premixed Flames. , 1992, , 145-156.		5
92	Modelling of unclosed nonlinear terms in a pdf closure for turbulent flames. Mathematical and Computer Modelling, 1996, 24, 137-147.	2.0	4
93	Impact of molecular mixing and scalar dissipation rate closures on turbulent bluff-body flames with increasing local extinction. Combustion and Flame, 2019, 206, 51-67.	5.2	4
94	Quantification of fuel chemistry effects on burning modes in turbulent premixed flames. Combustion and Flame, 2020, 218, 134-149.	5.2	4
95	Fractal Grid Generated Turbulenceâ€"A Bridge to Practical Combustion Applications. CISM International Centre for Mechanical Sciences, Courses and Lectures, 2016, , 75-102.	0.6	3
96	The evolution of species concentrations in turbulent premixed flames crossing the soot inception limit. Combustion and Flame, 2022, 235, 111726.	5.2	3
97	NO Reburn and Formation Chemistry in Methane Diffusion Flames. Zeitschrift Fur Physikalische Chemie, 2005, 219, 679-698.	2.8	2
98	Particle size distributions in turbulent premixed ethylene flames crossing the soot inception limit. Combustion and Flame, 2022, 243, 111978.	5.2	2
99	Quantification of External Enthalpy Controlled Combustion at Unity DamkÃ¶hler Number. Green Energy and Technology, 2018, , 189-215.	0.6	1
100	Parametric sensitivities of the generalized binomial Langevinâ€"multiple mapping conditioning model. Physics of Fluids, 2021, 33, 045109.	4.0	1
101	Parallel Processing and Direct Simulation of Transient Premixed Laminar Flames with Detailed Chemical Kinetics. , 1999, , 417-428.		1
102	Transient Flame Growth in a Developing Shear Layer. , 1995, , 389-409.		1
103	Evaluation of Hazard Correlations for Hydrogen-Rich Fuels Using Stretched Transient Flames. Green Energy and Technology, 2022, , 197-222.	0.6	0
104	Gas turbine related technologies for carbon capture. Sustainable Technologies Systems & Policies, 2012, , 12.	0.0	0
105	Auto-Ignition of Hydrogen-Rich Syngas-Related Fuels in a Turbulent Shear Layer. Green Energy and Technology, 2020, , 333-356.	0.6	0