

# Jeffrey M Bergthorson

## List of PR Articles by Year in descending order

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92

PR articles

3,783

PR citations

89004

34

PR h-index

105932

59

g-index

100

documents

4089

doc citations

100455

35

h-index

2546

citing authors

#	ARTICLE	IF	PR CITATIONS
1	Injector spacing influences on flame blow-off in a linear array. Proceedings of the Combustion Institute, 2023, , .	4.4	3
2	Nitric oxide concentration measurements in low-temperature, premixed hydrogen-air stagnation flames at elevated pressures. Proceedings of the Combustion Institute, 2023, 39, 541-550.	4.4	5
3	Effect of Initial Reactant Temperature on Flame Speeds in Aluminum Dust Suspensions. Combustion Science and Technology, 2022, 194, 1513-1526.	2.0	10
4	A quantitative analysis of the ignition characteristics of fine iron particles. Combustion and Flame, 2022, 240, 112011.	6.0	101
5	Some fundamental aspects of laminar flames in nonvolatile solid fuel suspensions. Progress in Energy and Combustion Science, 2022, 91, 100994.	39.5	67
6	Hydrogen production rates of aluminum reacting with varying densities of supercritical water. RSC Advances, 2022, 12, 12335-12343.	4.4	35
7	Hydrogen production via reaction of metals with supercritical water. Sustainable Energy and Fuels, 2022, 6, 3394-3401.	3.9	13
8	Impact of Boundary Condition and Kinetic Parameter Uncertainties On Nox Predictions in Methane-Air Stagnation Flame Experiments. Journal of Engineering for Gas Turbines and Power, 2022, , .	1.3	0
9	Large eddy simulation of an ignition sequence and the resulting steady combustion in a swirl-stabilized combustor using FGM-based tabulated chemistry. International Journal of Numerical Methods for Heat and Fluid Flow, 2021, 31, 1857-1883.	4.4	8
10	Back to basics – NO concentration measurements in atmospheric lean-to-rich, low-temperature, premixed hydrogen-air flames diluted with argon. Proceedings of the Combustion Institute, 2021, 38, 2093-2100.	4.4	19
11	Aluminum-propane-air hybrid flames in a Hele-Shaw cell. Proceedings of the Combustion Institute, 2021, 38, 4461-4468.	4.4	10
12	Attached and lifted flame stabilization in a linear array of swirl injectors. Proceedings of the Combustion Institute, 2021, 38, 6279-6287.	4.4	9
13	Investigation of the hydrodynamic effect of nanosecond repetitively pulsed discharges on a laminar stagnation flame. Proceedings of the Combustion Institute, 2021, 38, 6567-6574.	4.4	4
14	Effect of High Pressures on the Formation of Nitric Oxide in Lean, Premixed Flames. Journal of Engineering for Gas Turbines and Power, 2021, 143, .	1.3	7
15	Flame stabilization mechanisms and shape transitions in a 3D printed, hydrogen enriched, methane/air low-swirl burner. International Journal of Hydrogen Energy, 2021, 46, 14764-14779.	9.1	46
16	Analysis of Auto-Ignition Chemistry in Aeroderivative Premixers at Engine Conditions. Journal of Engineering for Gas Turbines and Power, 2021, 143, .	1.3	12
17	Measurements of the laminar flame speed of premixed, hydrogen-air-argon stagnation flames. Applications in Energy and Combustion Science, 2021, 7, 100028.	1.8	1
18	Impact of Kinetic Uncertainties on Accurate Prediction of NO Concentrations in Premixed Alkane-Air Flames. Combustion Science and Technology, 2020, 192, 959-985.	2.0	6

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19	Percolating Reaction "Diffusion Waves (PERWAVES)" Sounding rocket combustion experiments. <i>Acta Astronautica</i> , 2020, 177, 639-651.	3.2	21
20	The use of supercritical water for the catalyst-free oxidation of coarse aluminum for hydrogen production. <i>Sustainable Energy and Fuels</i> , 2020, 4, 5628-5635.	3.9	41
21	Quantifying the Effect of Kinetic Uncertainties on NO Predictions at Engine-Relevant Pressures in Premixed Methane "Air Flames. <i>Journal of Engineering for Gas Turbines and Power</i> , 2020, 142, .	1.3	5
22	Modeling the formation and growth of instabilities during spherical flame propagation. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 3669-3676.	4.4	27
23	Fuel Variation Effects in Propagation and Stabilization of Turbulent Counter-Flow Premixed Flames. <i>Journal of Engineering for Gas Turbines and Power</i> , 2019, 141, .	1.3	2
24	Nitric oxide formation in lean, methane-air stagnation flames at supra-atmospheric pressures. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 711-718.	4.4	26
25	Stabilized, flat iron flames on a hot counterflow burner. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 3185-3191.	4.4	84
26	The effects of differential diffusion in counter-flow premixed flames with dilution and hydrogen enrichment. <i>Combustion and Flame</i> , 2019, 209, 337-352.	6.0	16
27	A new kind of flame: Observation of the discrete flame propagation regime in iron particle suspensions in microgravity. <i>Combustion and Flame</i> , 2019, 209, 180-186.	6.0	67
28	Energy efficiency of a nanosecond repetitively pulsed discharge for methane reforming. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 274002.	3.0	14
29	Differential diffusion effects in counter-flow premixed hydrogen-enriched methane and propane flames. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 2399-2406.	4.4	20
30	Measurements of the reactivity of premixed, stagnation, methane-air flames at gas turbine relevant pressures. <i>Journal of Engineering for Gas Turbines and Power</i> , 2019, 141, .	1.3	6
31	Propagation and quenching of dual-front flames in binary-fuel mixtures. <i>Combustion Science and Technology</i> , 2018, 190, 1557-1579.	2.0	13
32	Combustion of particles, agglomerates, and suspensions " A basic thermophysical analysis. <i>Combustion and Flame</i> , 2018, 192, 384-400.	6.0	81
33	Thermochemical Mechanism Optimization for Accurate Predictions of CH Concentrations in Premixed Flames of C1 "C3 Alkane Fuels. <i>Journal of Engineering for Gas Turbines and Power</i> , 2018, 140, .	1.3	10
34	Strategic spatial and temporal design of renewable diesel and biojet fuel supply chains: Case study of California, USA. <i>Energy</i> , 2018, 156, 181-195.	9.1	15
35	Recyclable metal fuels for clean and compact zero-carbon power. <i>Progress in Energy and Combustion Science</i> , 2018, 68, 169-196.	39.5	360
36	NO formation in rich premixed flames of C1 "C4 alkanes and alcohols. <i>Proceedings of the Combustion Institute</i> , 2017, 36, 627-635.	4.4	31

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37	Experimental investigation of spherical-flame acceleration in lean hydrogen-air mixtures. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 7691-7697.	9.1	95
38	Enabling the metal fuel economy: green recycling of metal fuels. <i>Sustainable Energy and Fuels</i> , 2017, 1, 615-625.	3.9	133
39	Emission and laser absorption spectroscopy of flat flames in aluminum suspensions. <i>Combustion and Flame</i> , 2017, 180, 230-238.	6.0	58
40	Experimental investigations on the combustion of lithium particles in CO <sub>2</sub> and CO <sub>2</sub> -N <sub>2</sub> mixtures. <i>Fuel</i> , 2017, 199, 28-37.	7.5	7
41	Experimental and numerical study on NO <sub>x</sub> formation in CH <sub>4</sub> air mixtures diluted with exhaust gas components. <i>Combustion and Flame</i> , 2017, 179, 325-337.	6.0	39
42	Propagation of isobaric spherical flames in hybrid aluminum-methane fuel mixtures. <i>Journal of Loss Prevention in the Process Industries</i> , 2017, 49, 472-480.	3.9	17
43	Compact Nanosecond Magnetic Pulse Compression Generator for High-Pressure Diffuse Plasma Generation. <i>IEEE Transactions on Plasma Science</i> , 2017, 45, 2358-2365.	1.2	10
44	Thermal structure and burning velocity of flames in non-volatile fuel suspensions. <i>Proceedings of the Combustion Institute</i> , 2017, 36, 2351-2358.	4.4	32
45	Metal-water combustion for clean propulsion and power generation. <i>Applied Energy</i> , 2017, 186, 13-27.	10.6	188
46	The influence of spatial discreteness on the thermo-diffusive instability of flame propagation with infinite Lewis number. <i>Proceedings of the Combustion Institute</i> , 2017, 36, 2359-2366.	4.4	21
47	Flame speed measurements in aluminum suspensions using a counterflow burner. <i>Proceedings of the Combustion Institute</i> , 2017, 36, 2291-2298.	4.4	55
48	On the interaction of the Darrieus-Landau instability with weak initial turbulence. <i>Proceedings of the Combustion Institute</i> , 2017, 36, 2815-2822.	4.4	41
49	Effect of external heat loss on the propagation and quenching of flames in small heat-recirculating tubes. <i>Combustion and Flame</i> , 2016, 173, 27-38.	6.0	33
50	High-Voltage, High-Frequency Pulse Generator for Nonequilibrium Plasma Generation and Combustion Enhancement. <i>IEEE Transactions on Plasma Science</i> , 2016, 44, 2429-2437.	1.2	8
51	Comments on: "Combustion of nano-sized aluminum particles in steam: Numerical modeling", by V.B. Storzhev and A.N. Yermakov. <i>Combustion and Flame</i> , 2016, 171, 262-263.	6.0	5
52	NO formation in premixed flames of C <sub>1</sub> -C <sub>3</sub> alkanes and alcohols. <i>Combustion and Flame</i> , 2016, 169, 242-260.	6.0	41
53	Quantitative CH measurements in atmospheric-pressure, premixed flames of C <sub>1</sub> -C <sub>4</sub> alkanes. <i>Combustion and Flame</i> , 2016, 165, 109-124.	6.0	58
54	NO <sub>x</sub> Emissions Modeling and Uncertainty From Exhaust-Gas-Diluted Flames. <i>Journal of Engineering for Gas Turbines and Power</i> , 2016, 138, .	1.3	12

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55	A review on lithium combustion. <i>Applied Energy</i> , 2016, 162, 948-965.	10.6	93
56	Reaction of a Particle Suspension in a Rapidly Heated Oxidizing Gas. <i>Propellants, Explosives, Pyrotechnics</i> , 2015, 40, 604-612.	1.8	47
57	Flame structure and particle-combustion regimes in premixed methane-air suspensions. <i>Proceedings of the Combustion Institute</i> , 2015, 35, 2431-2438.	4.4	98
58	Experimental study of spherical-flame acceleration mechanisms in large-scale propane-air flames. <i>Proceedings of the Combustion Institute</i> , 2015, 35, 2059-2066.	4.4	84
59	Quenching distance of flames in hybrid methane-aluminum mixtures. <i>Proceedings of the Combustion Institute</i> , 2015, 35, 2463-2470.	4.4	34
60	Comparative Analysis of Chemical Kinetic Models Using the Alternate Species Elimination Approach. <i>Journal of Engineering for Gas Turbines and Power</i> , 2015, 137, .	1.3	5
61	Freely-propagating flames in aluminum dust clouds. <i>Combustion and Flame</i> , 2015, 162, 4241-4253.	6.0	127
62	Effect of scale on freely propagating flames in aluminum dust clouds. <i>Journal of Loss Prevention in the Process Industries</i> , 2015, 36, 230-236.	3.9	52
63	Maximum stretched flame speeds of laminar premixed counter-flow flames at variable Lewis number. <i>Combustion and Flame</i> , 2015, 162, 3324-3332.	6.0	26
64	Comparative reactivity of industrial metal powders with water for hydrogen production. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 1026-1036.	9.1	89
65	A review of the combustion and emissions properties of advanced transportation biofuels and their impact on existing and future engines. <i>Renewable and Sustainable Energy Reviews</i> , 2015, 42, 1393-1417.	16.7	390
66	NO formation in model syngas and biogas blends. <i>Fuel</i> , 2014, 124, 113-124.	7.5	43
67	Distribution of large biomass particles in a sand-biomass fluidized bed: Experiments and modeling. <i>AIChE Journal</i> , 2014, 60, 869-880.	3.7	61
68	Increased Flame Reactivity of a Lean Premixed Flame Through the Use of a Custom-Built High-Voltage Pulsed Plasma Source. <i>IEEE Transactions on Plasma Science</i> , 2014, 42, 2844-2845.	1.2	6
69	Burning rates and temperatures of flames in excess-enthalpy burners: A numerical study of flame propagation in small heat-recirculating tubes. <i>Combustion and Flame</i> , 2014, 161, 2348-2360.	6.0	39
70	Stabilized flames in hybrid aluminum-methane-air mixtures. <i>Proceedings of the Combustion Institute</i> , 2013, 34, 2213-2220.	4.4	61
71	Diagnostics and Modeling of Stagnation Flames for the Validation of Thermochemical Combustion Models for NO <sub>x</sub> Predictions. <i>Energy &amp; Fuels</i> , 2013, 27, 7031-7043.	5.2	31
72	Enhanced hydrogen generation from aluminum-water reactions. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 14992-15002.	9.1	134

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73	NO formation and flame velocity profiles of iso- and n-isomers of butane and butanol. Proceedings of the Combustion Institute, 2013, 34, 831-838.	4.4	24
74	Skeletal Chemical Kinetic Mechanisms for Syngas, Methyl Butanoate, n-Heptane, and n-Decane. Energy & Fuels, 2013, 27, 2316-2326.	5.2	23
75	The effect of biomass particles on the gas distribution and dilute phase characteristics of sand-biomass mixtures fluidized in the bubbling regime. Chemical Engineering Science, 2013, 102, 129-138.	4.0	51
76	Optimized Laminar Axisymmetrical Nozzle Design Using a Numerically Validated Thwaites Method. Journal of Fluids Engineering, Transactions of the ASME, 2012, 134, .	1.9	18
77	The effect of chemical energy release on heat transfer from flames in small channels. Combustion and Flame, 2012, 159, 1239-1252.	6.0	13
78	EXPERIMENTS IN DILUTED PREMIXED TURBULENT STAGNATION FLAMES FOR GAS-TURBINE ENGINE APPLICATIONS. International Journal of Energetic Materials and Chemical Propulsion, 2012, 11, 165-180.	0.4	0
79	Experimental and Modeling Study of Trends in the High-Temperature Ignition of Methyl and Ethyl Esters. Energy & Fuels, 2011, 25, 4345-4356.	5.2	23
80	Ignition of C3 oxygenated hydrocarbons and chemical kinetic modeling of propanal oxidation. Combustion and Flame, 2011, 158, 1877-1889.	6.0	53
81	Structure-reactivity trends of C1-C4 alkanolic acid methyl esters. Combustion and Flame, 2011, 158, 1037-1048.	6.0	65
82	Experiments and modelling of premixed laminar stagnation flame hydrodynamics. Journal of Fluid Mechanics, 2011, 681, 340-369.	3.5	53
83	Shock Tube Study of Methyl Formate Ignition. Energy & Fuels, 2010, 24, 396-403.	5.2	36
84	Comparative High Temperature Shock Tube Ignition of C1-C4 Primary Alcohols. Energy & Fuels, 2010, 24, 5834-5843.	5.2	143
85	Comparative Study of Methyl Butanoate and n-Heptane High Temperature Autoignition. Energy & Fuels, 2010, 24, 2439-2448.	5.2	46
86	Molecular Mixing and Flowfield Measurements in a Recirculating Shear Flow. Part II: Supersonic Flow. Flow, Turbulence and Combustion, 2009, 83, 251-268.	1.9	7
87	Molecular Mixing and Flowfield Measurements in a Recirculating Shear Flow. Part I: Subsonic Flow. Flow, Turbulence and Combustion, 2009, 83, 269-292.	1.9	7
88	Premixed laminar C3H8- and C3H6-air stagnation flames: Experiments and simulations with detailed kinetic models. Proceedings of the Combustion Institute, 2009, 32, 1301-1309.	4.4	23
89	Mixing Measurements in a Supersonic Expansion-Ramp Combustor. Flow, Turbulence and Combustion, 2008, 80, 489-506.	1.9	10
90	Premixed laminar C1-C2 stagnation flames: Experiments and simulations with detailed thermochemistry models. Proceedings of the Combustion Institute, 2007, 31, 1139-1147.	4.4	24

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91	Particle streak velocimetry and CH laser-induced fluorescence diagnostics in strained, premixed, methane-air flames. Proceedings of the Combustion Institute, 2005, 30, 1637-1644.	4.4	29
92	Impinging laminar jets at moderate Reynolds numbers and separation distances. Physical Review E, 2005, 72, .	2.1	50