

Osamu Fujita

List of Publications by Year in descending order

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Version: 2024-02-01

125
papers

2,436
citations

159585

30
h-index

243625

44
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126
all docs

126
docs citations

126
times ranked

702
citing authors

#	ARTICLE	IF	CITATIONS
1	Experimental study of downward flame spread and extinction over inclined electrical wire under horizontal wind. <i>Combustion and Flame</i> , 2022, 237, 111820.	5.2	8
2	Development and validation of evaporation model for a multi-component fuel considering volume-average internal mass and enthalpy. <i>International Journal of Heat and Mass Transfer</i> , 2022, 188, 122318.	4.8	1
3	Turbulent flame propagation mechanism of polymethylmethacrylate particle cloud-ammonia co-combustion. <i>Combustion and Flame</i> , 2022, 241, 112077.	5.2	9
4	Effect of reduced ambient pressures and opposed airflows on the flame spread and dripping of LDPE insulated copper wires. <i>Fire Safety Journal</i> , 2021, 120, 103171.	3.1	4
5	Assessing the soot-related radiative heat feedback in a flame spreading in microgravity: optical designs and associated limitations. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 4805-4814.	3.9	8
6	Exploring a critical diameter for thermo-acoustic instability of downward propagating flames in tubes. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 1945-1954.	3.9	7
7	Effect of ambient pressure on the extinction limit for opposed flame spread over an electrical wire in microgravity. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 4767-4774.	3.9	7
8	Effect of ammonia/oxygen/nitrogen equivalence ratio on spherical turbulent flame propagation of pulverized coal/ammonia co-combustion. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 4043-4052.	3.9	46
9	Turbulent flame propagation limits of ammonia/methane/air premixed mixture in a constant volume vessel. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 5171-5180.	3.9	26
10	Near-limit oscillatory behaviors on wick flames of dimethyl carbonate with trimethyl phosphate additions. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 4691-4698.	3.9	1
11	Effect of flame surface area of downward propagating flames induced by single and double laser irradiation on transition to parametric instability. <i>Combustion and Flame</i> , 2021, 223, 450-459.	5.2	3
12	Experimental Study on Evaporation Characteristics of Light Cycle Oil Droplet under Various Ambient Conditions. <i>Energy & Fuels</i> , 2021, 35, 6219-6230.	5.1	3
13	Quantitative infrared image analysis of simultaneous upstream and downstream microgravity flame spread over thermally thin cellulose fuel in low speed forced flow. <i>Combustion and Flame</i> , 2021, 227, 402-420.	5.2	4
14	Acoustic parametric instability, its suppression and a beating instability in a mesoscale combustion tube. <i>Combustion and Flame</i> , 2021, 228, 277-291.	5.2	9
15	Effect of sample thickness on concurrent steady spread behavior of floor- and ceiling flames. <i>Combustion and Flame</i> , 2021, 233, 111600.	5.2	9
16	Turbulent flame propagation of polymethylmethacrylate particle clouds in an O ₂ /N ₂ atmosphere. <i>Combustion and Flame</i> , 2021, 234, 111616.	5.2	5
17	Effect of fuel ratio of coal on the turbulent flame speed of ammonia/coal particle cloud co-combustion at atmospheric pressure. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 4131-4139.	3.9	44
18	Effect of Ignition Condition on the Extinction Limit for Opposed Flame Spread Over Electrical Wires in Microgravity. <i>Fire Technology</i> , 2020, 56, 149-168.	3.0	12

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19	Experimental Evaluation of Flame Radiative Feedback: Methodology and Application to Opposed Flame Spread Over Coated Wires in Microgravity. <i>Fire Technology</i> , 2020, 56, 185-207.	3.0	18
20	Influence of lithium salts on the combustion characteristics of dimethyl carbonate-based electrolytes using a wick combustion method. <i>Combustion and Flame</i> , 2020, 213, 314-321.	5.2	13
21	Opposed-Flow Flame Spread and Extinction in Electric Wires: The Effects of Gravity, External Radiant Heat Flux, and Wire Characteristics on Wire Flammability. <i>Fire Technology</i> , 2020, 56, 131-148.	3.0	14
22	Range of "complete" instability of flat flames propagating downward in the acoustic field in combustion tube: Lewis number effect. <i>Combustion and Flame</i> , 2020, 216, 326-337.	5.2	13
23	Role of wire core in extinction of opposed flame spread over thin electric wires. <i>Combustion and Flame</i> , 2020, 220, 7-15.	5.2	13
24	Turbulent burning velocity of ammonia/oxygen/nitrogen premixed flame in O ₂ -enriched air condition. <i>Fuel</i> , 2020, 268, 117383.	6.4	53
25	Effect of geometrical parameters on thermo-acoustic instability of downward propagating flames in tubes. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 1869-1877.	3.9	12
26	Downward flame spreading over electric wire under various oxygen concentrations. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 3817-3824.	3.9	31
27	Laser piloted ignition of electrical wire in microgravity. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 4211-4219.	3.9	15
28	Can a spreading flame over electric wire insulation in concurrent flow achieve steady propagation in microgravity?. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 4155-4162.	3.9	27
29	Effects of gas temperature and oxygen concentration on the soot formation of laminar diffusion flames in the ambient gas mixtures of carbon-dioxide and oxygen. <i>Transactions of the JSME (in Japanese)</i> , 2019, 85, 17-24.	0.7843	10
30	Blowout of non-premixed turbulent jet flames with coflow under microgravity condition. <i>Combustion and Flame</i> , 2019, 210, 315-323.	5.2	16
31	Experimental study on flammability limits of electrolyte solvents in lithium-ion batteries using a wick combustion method. <i>Experimental Thermal and Fluid Science</i> , 2019, 109, 109858.	2.7	18
32	Experimental study on flame stability limits of lithium ion battery electrolyte solvents with organophosphorus compounds addition using a candle-like wick combustion system. <i>Combustion and Flame</i> , 2019, 207, 63-70.	5.2	10
33	Effect of Le on criteria of transition to secondary acoustic instability of downward-propagating flame in a tube with controlled curvature induced by external laser. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 1887-1894.	3.9	5
34	Experimental and theoretical study of secondary acoustic instability of downward propagating flames: Higher modes and growth rates. <i>Combustion and Flame</i> , 2019, 205, 316-326.	5.2	11
35	Experimental investigation on the smoldering limit of scraps of paper initiated by a cylindrical rod heater. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 4099-4106.	3.9	4
36	Extinction limits of an ammonia/air flame propagating in a turbulent field. <i>Fuel</i> , 2019, 246, 178-186.	6.4	59

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37	Prediction of soot formation characteristics in a pulverized-coal combustion field by large eddy simulations with the TDP model. Proceedings of the Combustion Institute, 2019, 37, 2883-2891.	3.9	16
38	Broadband modulated absorption/emission technique to probe sooting flames: Implementation, validation, and limitations. Proceedings of the Combustion Institute, 2019, 37, 3959-3966.	3.9	18
39	Spherical turbulent flame propagation of pulverized coal particle clouds in an O ₂ /N ₂ atmosphere. Proceedings of the Combustion Institute, 2019, 37, 2935-2942.	3.9	20
40	Soot formation of dodecane, aviation bio-paraffins and their blends with propylbenzene in diffusion flames. Renewable Energy, 2019, 136, 84-90.	8.9	5
41	Flame spread: Effects of microgravity and scale. Combustion and Flame, 2019, 199, 168-182.	5.2	58
42	Experimental observation of pulsating instability under acoustic field in downward-propagating flames at large Lewis number. Combustion and Flame, 2018, 188, 1-4.	5.2	10
43	Effect of insulation melting and dripping on opposed flame spread over laboratory simulated electrical wires. Fire Safety Journal, 2018, 95, 1-10.	3.1	50
44	The sooting tendency of aviation biofuels and jet range paraffins: effects of adding aromatics, carbon chain length of normal paraffins, and fraction of branched paraffins. Combustion Science and Technology, 2018, 190, 1710-1721.	2.3	12
45	Rapidly mixed combustion of hydrogen/oxygen diluted by N ₂ and CO ₂ in a tubular flame combustor. International Journal of Hydrogen Energy, 2018, 43, 14806-14815.	7.1	14
46	Comparison of thermodynamical potentials of oxy-fuel combustion and regenerative combustion. Transactions of the JSME (in Japanese), 2018, 84, 18-00070-18-00070.	0.2	0
47	A numerical and experimental study of the ignition of insulated electric wire with long-term excess current supply under microgravity. Proceedings of the Combustion Institute, 2017, 36, 3063-3071.	3.9	27
48	Effects of Lewis number on generation of primary acoustic instability in downward-propagating flames. Proceedings of the Combustion Institute, 2017, 36, 1603-1611.	3.9	13
49	Flame spread over inclined electrical wires with AC electric fields. Combustion and Flame, 2017, 185, 82-92.	5.2	29
50	Study of the transient combustion of highly densified biomass briquette (Bio-coke) in an air flow. Fuel, 2017, 188, 595-602.	6.4	6
51	Limiting oxygen concentration for extinction of upward spreading flames over inclined thin polyethylene-insulated NiCr electrical wires with opposed-flow under normal- and micro-gravity. Proceedings of the Combustion Institute, 2017, 36, 3045-3053.	3.9	31
52	Dimensional Analysis for Flammability Limits of Spreading Flame over Electric Wire in Microgravity. The Proceedings of Mechanical Engineering Congress Japan, 2017, 2017, G0600105.	0.0	0
53	Experimental investigation of the effects of cycloparaffins and aromatics on the sooting tendency and the freezing point of soap-derived biokerosene and normal paraffins. Fuel, 2016, 185, 855-862.	6.4	14
54	Limiting oxygen concentration (LOC) of burning polyethylene insulated wires under external radiation. Fire Safety Journal, 2016, 86, 32-40.	3.1	51

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55	Onset mechanism of primary acoustic instability in downward-propagating flames. <i>Combustion and Flame</i> , 2016, 170, 1-11.	5.2	23
56	Fire safety in space – Investigating flame spread interaction over wires. <i>Acta Astronautica</i> , 2016, 126, 500-509.	3.2	47
57	Solid combustion research in microgravity as a basis of fire safety in space. <i>Proceedings of the Combustion Institute</i> , 2015, 35, 2487-2502.	3.9	76
58	Microgravity flammability limits of ETFE insulated wires exposed to external radiation. <i>Proceedings of the Combustion Institute</i> , 2015, 35, 2683-2689.	3.9	47
59	Flame spread over electric wire with high thermal conductivity metal core at different inclinations. <i>Proceedings of the Combustion Institute</i> , 2015, 35, 2607-2614.	3.9	88
60	Fire safety in space – beyond flammability testing of small samples. <i>Acta Astronautica</i> , 2015, 109, 208-216.	3.2	53
61	Flame spread over electrical wire with AC electric fields: Internal circulation, fuel vapor-jet, spread rate acceleration, and molten insulator dripping. <i>Combustion and Flame</i> , 2015, 162, 1167-1175.	5.2	41
62	Study on one-dimensional steady combustion of highly densified biomass briquette (bio-coke) in air flow. <i>Proceedings of the Combustion Institute</i> , 2015, 35, 2415-2422.	3.9	9
63	Effects of aromatic on soot characteristics of aviation fuel surrogates in diffusion flames. <i>Science and Technology Development Journal</i> , 2015, 18, 55-64.	0.1	0
64	Initiation and formation of the corrugated structure leading to the self-turbulization of downward propagating flames in a combustion tube with external laser absorption. <i>Combustion and Flame</i> , 2014, 161, 1558-1565.	5.2	12
65	Interaction Between Propagation Speed and Flame Structure in Downward Cellular Propagating Flame in a Combustion Tube with Co ₂ Laser Irradiation. <i>Combustion Science and Technology</i> , 2014, 186, 1434-1446.	2.3	3
66	Ignition limit of electric wire insulation with continuous excess current in several microgravity periods. , 2013, , .		0
67	Extinction limits of spreading flames over wires in microgravity. <i>Combustion and Flame</i> , 2013, 160, 1900-1902.	5.2	41
68	Study on unsteady molten insulation volume change during flame spreading over wire insulation in microgravity. <i>Proceedings of the Combustion Institute</i> , 2013, 34, 2657-2664.	3.9	50
69	Ignition limits of short-term overloaded electric wires in microgravity. <i>Proceedings of the Combustion Institute</i> , 2013, 34, 2665-2673.	3.9	41
70	A study on developing aviation biofuel for the Tropics: Production process – Experimental and theoretical evaluation of their blends with fossil kerosene. <i>Chemical Engineering and Processing: Process Intensification</i> , 2013, 74, 124-130.	3.6	49
71	Downstream interaction between stretched premixed syngas – air flames. <i>Fuel</i> , 2013, 104, 739-748.	6.4	9
72	Development of Large-Scale Spacecraft Fire Safety Experiments. , 2013, , .		1

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73	Investigation of applying DC electric field effect on carbon nanotube synthesis. Asia-Pacific Journal of Chemical Engineering, 2013, 8, 246-253.	1.5	2
74	Prediction Performance of Chemical Mechanisms for Numerical Simulation of Methane Jet MILD Combustion. Advances in Mechanical Engineering, 2013, 5, 138729.	1.6	3
75	A124 Change in the Extinction Limit of Electrolyte for Li-ion Batteries by Addition of Fire Retardant. The Proceedings of the Thermal Engineering Conference, 2013, 2013, 17-18.	0.0	0
76	Formation Characteristics of High-density and High-hardness New Briquette Based on Herby Biomass. Nihon Enerugi Gakkaishi/Journal of the Japan Institute of Energy, 2012, 91, 41-47.	0.2	10
77	Transition Phenomenon from a Flat Flame to Turbulent Flame Motions by External Laser. Transactions of the Korean Society of Mechanical Engineers, B, 2012, 36, 1209-1215.	0.1	0
78	Ignition Behavior of Bio-Coke (Highly Densified Biomass Fuel) in High-Temperature Air Flows. Journal of Thermal Science and Technology, 2011, 6, 111-122.	1.1	13
79	Effect of AC electric fields on flame spread over electrical wire. Proceedings of the Combustion Institute, 2011, 33, 1145-1151.	3.9	38
80	Transition of flat flames to turbulent motion induced by external laser irradiation. Proceedings of the Combustion Institute, 2011, 33, 1105-1112.	3.9	12
81	Ignition of electrical wire insulation with short-term excess electric current in microgravity. Proceedings of the Combustion Institute, 2011, 33, 2617-2623.	3.9	56
82	Phenomena in oscillating downward propagating flames induced by external laser irradiation method. Experimental Thermal and Fluid Science, 2010, 34, 1290-1294.	2.7	3
83	Observation of Flame Spreading over Electric Wire under Reduced Gravity Condition Given by Parabolic Flight and Drop Tower Experiments. Transactions of the Japan Society for Aeronautical and Space Sciences Aerospace Technology Japan, 2010, 8, Ph_19-Ph_24.	0.2	5
84	Research on the relation of flame front curvature and oscillatory flame propagation by external laser irradiation method. Proceedings of the Combustion Institute, 2009, 32, 1003-1009.	3.9	17
85	Flame spread over electric wire in sub-atmospheric pressure. Proceedings of the Combustion Institute, 2009, 32, 2559-2566.	3.9	105
86	Experimental study on thermophoretic deposition of soot particles in laminar diffusion flames along a solid wall in microgravity. Experimental Thermal and Fluid Science, 2008, 32, 1484-1491.	2.7	5
87	Effect of Gravity and Beam Diameter on Flame Oscillation Phenomena Induced by External Laser Absorption. Combustion Science and Technology, 2008, 180, 1803-1811.	2.3	4
88	Opposed-wind Effect on Flame Spread of Electric Wire in Sub-atmospheric Pressure. Journal of Thermal Science and Technology, 2008, 3, 430-441.	1.1	44
89	Improvements in Pyrolysis of Wastes in an Externally Heated Rotary Kiln (Experimental Study on Heat) Tj ETQq1 1 0,784314 rgBT /Overl	1.1	6
90	The Flame Oscillation Phenomena Induced by External Radiation. 880-02 Nihon Kikai Gakkai RonbunshÅ« Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2007, 73, 803-808.	0.2	3

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91	Effect of Co-Axial Flow Velocity on Soot Formation in a Laminar Jet Diffusion Flame under Microgravity. Journal of Thermal Science and Technology, 2007, 2, 281-290.	1.1	14
92	In-Situ Observation of the Soot Deposition Process on a Solid Wall with a Diffusion Flame along the Wall. JSME International Journal Series B, 2006, 49, 167-175.	0.3	6
93	Numerical simulation and flight experiment on oscillating lifted flames in coflow jets with gravity level variation. Combustion and Flame, 2006, 145, 181-193.	5.2	10
94	An Overview of Challenges in Modeling Heat and Mass Transfer for Living on Mars. Annals of the New York Academy of Sciences, 2006, 1077, 232-243.	3.8	26
95	Microgravity combustion researches by utilizing th.... , 2005, , .		3
96	A Study of the Effect of Oxygen Concentration on the Soot Deposition Process in a Diffusion Flame along a Solid Wall by In-Situ Observations in Microgravity. JSME International Journal Series B, 2005, 48, 839-848.	0.3	6
97	Two-sided ignition of a thin PMMA sheet in microgravity. Proceedings of the Combustion Institute, 2005, 30, 2319-2325.	3.9	16
98	The effect of irradiation angle on laser ignition of cellulose sheet in microgravity. Proceedings of the Combustion Institute, 2005, 30, 2311-2317.	3.9	7
99	315 Catalytic Purification of NOx in DME Engine Exhaust Gas with Injection of Reducing Agent. The Proceedings of Conference of Hokkaido Branch, 2005, 2005.44, 108-109.	0.0	0
100	The Effect of Core Material on Combustion Behaviour over Polyethylene Insulated Wire under Microgravity. 880-02 Nihon Kikai Gakkai RonbunshÅ« Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2004, 70, 1555-1562.	0.2	2
101	The Space Exposure Experiment of PEEK Sheets under Tensile Stress. JSME International Journal Series A-Solid Mechanics and Material Engineering, 2004, 47, 365-370.	0.4	5
102	Changes of mechanical properties on PEEK sheet in LEO environment. The Proceedings of the JSME Annual Meeting, 2004, 2004.5, 445-446.	0.0	0
103	Propagation speed of tribrachial (triple) flame of propane in laminar jets under normal and micro gravity conditions. Combustion and Flame, 2003, 134, 411-420.	5.2	44
104	Experimental Study on Radiative Ignition of Filter Paper with Near Infrared Radiation Under Microgravity. JSME International Journal Series B, 2003, 46, 625-632.	0.3	1
105	GS(1)-2(GSW0339) The Degradation of PEEK Sheets Accelerated by Stress in a Real Space Environment Based on the Space Exposure Experiment. The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics, 2003, 12.	0.0	0
106	Normal and microgravity experiment of oscillating lifted flames in coflow. Proceedings of the Combustion Institute, 2002, 29, 37-44.	3.9	41
107	Effect of low external flow on flame spread over polyethylene-insulated wire in microgravity. Proceedings of the Combustion Institute, 2002, 29, 2545-2552.	3.9	90
108	Effect of wind velocity on flame spread in microgravity. Proceedings of the Combustion Institute, 2002, 29, 2553-2560.	3.9	26

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109	Observation of soot agglomeration process with aid of thermophoretic force in a microgravity jet diffusion flame. <i>Experimental Thermal and Fluid Science</i> , 2002, 26, 305-311.	2.7	15
110	Atomic Oxygen Irradiation on PEEK Sheet under Tensile Loads. <i>The Proceedings of Conference of Hokkaido Branch</i> , 2002, 2002.42, 122-123.	0.0	0
111	Amplification of irrelevant sequence from <i>Bacillus subtilis</i> using a primer set designed for detection of the <i>pag</i> gene of <i>Bacillus anthracis</i> . <i>Japanese Journal of Infectious Diseases</i> , 2002, 55, 99-100.	1.2	1
112	Experimental observations of spot radiative ignition and subsequent three-dimensional flame spread over thin cellulose fuels. <i>Combustion and Flame</i> , 2001, 125, 852-864.	5.2	56
113	Experimental study on radiative ignition of a paper sheet in microgravity. <i>Proceedings of the Combustion Institute</i> , 2000, 28, 2761-2767.	3.9	14
114	Effective mechanisms to determine flame spread rate over ethylene-tetrafluoroethylene wire insulation: Discussion on dilution gas effect based on temperature measurements. <i>Proceedings of the Combustion Institute</i> , 2000, 28, 2905-2911.	3.9	52
115	Experimental study on flame spread over wire insulation in microgravity. <i>Proceedings of the Combustion Institute</i> , 1998, 27, 2507-2514.	0.3	83
116	Effects of slow wind on localied radiative ignition and transition to flame spread in microgravity. <i>Proceedings of the Combustion Institute</i> , 1996, 26, 1345-1352.	0.3	47
117	Fundamental Studies of Oral Contrast Agents for MR : Comparison of Manganese Agent and Iron Agent. <i>Japanese Journal of Radiological Technology</i> , 1996, 52, 1613-1618.	0.1	3
118	Agglomeration of soot particles in diffusion flames under microgravity. <i>Combustion and Flame</i> , 1994, 99, 363-370.	5.2	31
119	Adaptation and Evolution of Behavior : An Ecological Approach to the Study of Behavior. <i>Japanese Journal of Animal Psychology</i> , 1990, 40, 2-17.	0.3	0
120	An Application of the Selective Contact Reduction Method by NO _x -NH ₃ Reaction to a Methanol Fueled S. I. Engine Exhaust System. <i>Bulletin of the JSME</i> , 1986, 29, 4291-4296.	0.1	0
121	The situational determinants of open-field behavior in ICR/JCL mice. <i>Japanese Psychological Research</i> , 1981, 23, 169-173.	1.1	2
122	Effects of Early Rearing Conditions and Age upon Open-field Behavior in Chicks. <i>The Annual of Animal Psychology</i> , 1971, 21, 31-42.	0.1	5
123	The Effect of Emotional Stimuli on Behavior in the Multiple Choice Situation. <i>The Annual of Animal Psychology</i> , 1963, 13, 17-26.	0.1	1
124	Studies on curiosity drive in rats IV. <i>The Annual of Animal Psychology</i> , 1961, 11, 19-27.	0.1	0
125	CONDITIONED DRIVES AS MOTIVES IN THE RAT.. <i>The Annual of Animal Psychology</i> , 1955, 5, 1-11.	0.1	0