Junji Shinjo

List of Publications by Year
in descending order

42 papers	1,103 citations	623574 14 h-index	580701 25 g-index
42 all docs	42 docs citations	42 times ranked	780 citing authors

#	Article	IF	Citations
1	Simulation of liquid jet primary breakup: Dynamics of ligament and droplet formation. International Journal of Multiphase Flow, 2010, 36, 513-532.	1.6	366
2	Physics of puffing and microexplosion of emulsion fuel droplets. Physics of Fluids, 2014, 26, .	1.6	150
3	A numerical study on the formation of diffusion flame islands in a turbulent hydrogen jet lifted flame. Proceedings of the Combustion Institute, 2005, 30, 611-619.	2.4	91
4	Surface instability and primary atomization characteristics of straight liquid jet sprays. International Journal of Multiphase Flow, 2011, 37, 1294-1304.	1.6	87
5	Detailed simulation of primary atomization mechanisms in Diesel jet sprays (isolated identification of) Tj ETQq1 1 0.784314 rgBT /Ove	2.4	86
6	Combustion characteristics of a single decane/ethanol emulsion droplet and a droplet group under puffing conditions. Proceedings of the Combustion Institute, 2017, 36, 2513-2521.	2.4	34
7	MODELING TEMPERATURE DISTRIBUTION INSIDE AN EMULSION FUEL DROPLET UNDER CONVECTIVE HEATING: A KEY TO PREDICTING MICROEXPLOSION AND PUFFING. Atomization and Sprays, 2016, 26, 551-583.	0.3	31
8	Droplet/ligament modulation of local small-scale turbulence and scalar mixing in a dense fuel spray. Proceedings of the Combustion Institute, 2015, 35, 1595-1602.	2.4	29
9	Digital materials design by thermal-fluid science for multi-metal additive manufacturing. Acta Materialia, 2021, 210, 116825.	3.8	29
10	Puffing-enhanced fuel/air mixing of an evaporating -decane/ethanol emulsion droplet and a droplet group under convective heating. Journal of Fluid Mechanics, 2016, 793, 444-476.	1.4	27
11	Recent Advances in Computational Modeling of Primary Atomization of Liquid Fuel Sprays. Energies, 2018, 11, 2971.	1.6	23
12	Droplet/turbulence interaction and early flame kernel development in an autoigniting realistic dense spray. Proceedings of the Combustion Institute, 2013, 34, 1553-1560.	2.4	21
13	Detailed SGS atomization model and its implementation to two-phase flow LES. Combustion and Flame, 2018, 195, 232-252.	2.8	20
14	Study on flame dynamics with secondary fuel injection control by large eddy simulation. Combustion and Flame, 2007, 150, 277-291.	2.8	19
15	A Numerical Investigation on Shear Coaxial LOX/GH2 Jet Flame at Supercritical Pressure. , 2006, , .		10
16	Large Eddy Simulation of LOX/GH2 Shear-Coaxial Jet Flame at Supercritical Pressure. , 2010, , .		10
17	Numerical simulation of secondary atomization of an emulsion fuel droplet due to puffing: Dynamics of wall interaction of a sessile droplet and comparison with a free droplet. Fuel, 2019, 252, 475-487.	3.4	10
18	Detailed nonlinear dynamics of the liquid spike development in gaseous medium caused by a three-dimensional Rayleigh-Taylor instability. International Journal of Multiphase Flow, 2019, 120, 103107.	1.6	9

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19	Fluid dynamic and autoignition characteristics of early fuel sprays using hybrid atomization LES. Combustion and Flame, 2019, 203, 313-333.	2.8	7
20	Characterization of Surface Wave Propagation Due to Capillary Force. Journal of the Japan Society for Aeronautical and Space Sciences, 2007, 55, 273-281.	0.0	5
21	Development of a hybrid multi-scale simulation approach for spray processes. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2016, 230, 322-331.	1.1	5
22	A new LES approach to trans-critical mixing and combustion processes in high-pressure liquid-injectant engines. Proceedings of the Combustion Institute, 2021, 38, 3107-3129.	2.4	5
23	On acoustic damping of a cylindrical chamber in resonant modes. Fluid Dynamics Research, 2012, 44, 045506.	0.6	4
24	LES of High-Frequency Combustion Instability in a Rocket Combustor. , 2013, , .		4
25	Large Eddy Simulation of High-Frequency Combustion Instability of Supercritical LO_X/GH₂ Flame. , 2010, , .		3
26	LES of High-Frequency Combustion Instability in a Single Element Rocket Combustor. , 2012, , .		3
27	Coherent Capillary Wave Structure Revealed by ISS Experiments for Spontaneous Nozzle Jet Disintegration. Microgravity Science and Technology, 2020, 32, 369-397.	0.7	3
28	Additive manufacturability of superalloys: Process-induced porosity, cooling rate and metal vapour. Additive Manufacturing, 2021, 47, 102339.	1.7	3
29	LES of H2/O2 Coaxial Jet Flames in a Multiple-Injector Combustor. , 2011, , .		2
30	Numerical Simulation of Combustion Dynamics at ISTA/JAXA. , 2005, , 414-426.		2
31	Chemical species mixing during direct energy deposition of bimetallic systems using titanium and dissimilar refractory metals for repair and biomedical applications. Additive Manufacturing, 2022, 51, 102654.	1.7	2
32	A Numerical Study on Propagation Speed of H2/O2 Edge Flame Under High Pressure Condition. , 2008, , .		1
33	Theoretical and Numerical Estimation of Acoustic Damping of a Model Combustion Chamber. , 2010, , .		1
34	Towards High-fidelity Multi-scale Simulation of Spray Atomization. Energy Procedia, 2015, 66, 309-312.	1.8	1
35	Detailed Numerical Simulation toward Understanding the Liquid Spray Formation Mechanisms. Japanese Journal of Multiphase Flow, 2011, 25, 331-338.	0.1	0
36	Digital Materials Design by Thermal-Fluid Science for Multi-Metals Additive Manufacturing. SSRN Electronic Journal, 0, , .	0.4	0

#	Article	IF	Citations
37	Numerical Analysis of Hydrogen / Air Jet Diffusion Flame. Fluid Mechanics and Its Applications, 2002, , 337-345.	0.1	0
38	Numerical Simulation of Surface Melting Due to Aerodynamic Heating. Transactions of the Japan Society for Aeronautical and Space Sciences, 2005, 47, 281-286.	0.4	0
39	Parallel Numerical Simulation of Shear Coaxial LOX/GH2 Jet Flame in Rocket Engine Combustor. , 2007, , 91-98.		0
40	Findings from Microgravity Experiments on Low-Speed Water Jet Disintegration. Journal of the Japan Society for Aeronautical and Space Sciences, 2010, 58, 245-253.	0.0	0
41	Detailed Prediction of Liquid Fuel Spray and Mixture Formation by Large Scale Computation. Journal of the Japan Institute of Marine Engineering, 2013, 48, 643-648.	0.0	0
42	Microexplosion and Puffing of an Emulsion Fuel Droplet. , 0, , .		0