Michael J Gollner

List of Publications by Year
in descending order

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71	2,009	236925	254184
papers	citations	25 h-index	43 g-index

72	72	72	823
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Role of buoyant flame dynamics in wildfire spread. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 9833-9838.	7.1	263
2	Review of Pathways for Building Fire Spread in the Wildland Urban Interface Part I: Exposure Conditions. Fire Technology, 2017, 53, 429-473.	3.0	130
3	Experimental study of upward flame spread of an inclined fuel surface. Proceedings of the Combustion Institute, 2013, 34, 2531-2538.	3.9	127
4	Role of firebrand combustion in large outdoor fire spread. Progress in Energy and Combustion Science, 2020, 76, 100801.	31.2	84
5	A methodology for estimation of local heat fluxes in steady laminar boundary layer diffusion flames. Combustion and Flame, 2015, 162, 2214-2230.	5.2	80
6	Fire Whirls. Annual Review of Fluid Mechanics, 2018, 50, 187-213.	25.0	79
7	Upward flame spread over corrugated cardboard. Combustion and Flame, 2011, 158, 1404-1412.	5.2	67
8	Local flame attachment and heat fluxes in wind-driven line fires. Proceedings of the Combustion Institute, 2017, 36, 3253-3261.	3.9	60
9	Sample width and thickness effects on horizontal flame spread over a thin PMMA surface. Proceedings of the Combustion Institute, 2017, 36, 2987-2994.	3.9	60
10	A Review of Pathways for Building Fire Spread in the Wildland Urban Interface Part II: Response of Components and Systems and Mitigation Strategies in the United States. Fire Technology, 2017, 53, 475-515.	3.0	56
11	The effect of flow and geometry on concurrent flame spread. Fire Safety Journal, 2017, 91, 68-78.	3.1	54
12	Upward flame spread over discrete fuels. Fire Safety Journal, 2015, 77, 36-45.	3.1	52
13	Summary of workshop large outdoor fires and the built environment. Fire Safety Journal, 2018, 100, 76-92.	3.1	51
14	From fire whirls to blue whirls and combustion with reduced pollution. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 9457-9462.	7.1	46
15	IAFSS agenda 2030 for a fire safe world. Fire Safety Journal, 2019, 110, 102889.	3.1	43
16	Burning Behavior of Vertical Matchstick Arrays. Combustion Science and Technology, 2012, 184, 585-607.	2.3	40
17	Thermal characterization of firebrand piles. Fire Safety Journal, 2019, 104, 34-42.	3.1	37
18	Estimation of local mass burning rates for steady laminar boundary layer diffusion flames. Proceedings of the Combustion Institute, 2015, 35, 2527-2534.	3.9	35

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19	Downstream radiative and convective heating from methane and propane fires with cross wind. Combustion and Flame, 2019, 204, 1-12.	5.2	35
20	Correlations for Evaluation of Flame Spread over an Inclined Fuel Surface. Fire Safety Science, 2014, 11, 222-233.	0.3	32
21	Autonomous kinetic modeling of biomass pyrolysis using chemical reaction neural networks. Combustion and Flame, 2022, 240, 111992.	5.2	32
22	Towards an Integrated Cyberinfrastructure for Scalable Data-driven Monitoring, Dynamic Prediction and Resilience of Wildfires. Procedia Computer Science, 2015, 51, 1633-1642.	2.0	30
23	Flame spread and burning rates through vertical arrays of wooden dowels. Proceedings of the Combustion Institute, 2019, 37, 3767-3774.	3.9	30
24	Warehouse commodity classification from fundamental principles. Part II: Flame heights and flame spread. Fire Safety Journal, 2011, 46, 317-329.	3.1	28
25	Evaluation of a data-driven wildland fire spread forecast model with spatially-distributed parameter estimation in simulations of the FireFlux I field-scale experiment. Fire Safety Journal, 2017, 91, 758-767.	3.1	24
26	Experimental and theoretical study on downward flame spread over uninhibited PMMA slabs under different pressure environments. Applied Thermal Engineering, 2018, 136, 1-8.	6.0	24
27	Thermal structure of the blue whirl. Proceedings of the Combustion Institute, 2019, 37, 4285-4293.	3.9	24
28	An investigation of coherent structures in laminar boundary layer flames. Combustion and Flame, 2017, 181, 123-135.	5.2	22
29	Steady and transient pyrolysis of a non-charring solid fuel under forced flow. Proceedings of the Combustion Institute, 2017, 36, 3157-3165.	3.9	21
30	The blue whirl: Boundary layer effects, temperature and OH* measurements. Combustion and Flame, 2019, 203, 352-361.	5.2	21
31	Local Burning Rates and Heat Flux for Forced Flow Boundary-Layer Diffusion Flames. AIAA Journal, 2016, 54, 408-418.	2.6	20
32	An experimental study on the intermittent extension of flames in wind-driven fires. Fire Safety Journal, 2017, 91, 742-748.	3.1	20
33	Conditions for formation of the blue whirl. Combustion and Flame, 2019, 205, 147-153.	5.2	20
34	Effect of firebrand size and geometry on heating from a smoldering pile under wind. Fire Safety Journal, 2021, 120, 103031.	3.1	20
35	Warehouse commodity classification from fundamental principles. Part I: Commodity & burning rates. Fire Safety Journal, 2011, 46, 305-316.	3.1	19
36	Firebrand Generation From Thermally-Degraded Cylindrical Wooden Dowels. Frontiers in Mechanical Engineering, 2019, 5, .	1.8	16

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37	Temperature measurement of a turbulent buoyant ethylene diffusion flame using a dual-thermocouple technique. Fire Safety Journal, 2021, 120, 103061.	3.1	16
38	Boundary layer instabilities in mixed convection and diffusion flames with an unheated starting length. International Journal of Heat and Mass Transfer, 2018, 118, 1243-1256.	4.8	13
39	An examination of fuel moisture, energy release and emissions during laboratory burning of live wildland fuels. International Journal of Wildland Fire, 2019, 28, 187.	2.4	10
40	Flame attachment and downstream heating effect of inclined line fires. Combustion and Flame, 2022, 240, 112004.	5.2	9
41	Burning on flat wicks at various orientations. Journal of Fire Sciences, 2014, 32, 52-71.	2.0	8
42	Detection and Suppression of Fires: A Cornerstone of Fire Protection Engineering. Fire Technology, 2016, 52, 1193-1196.	3.0	8
43	Critical Ignition Conditions of Wood by Cylindrical Firebrands. Frontiers in Mechanical Engineering, 2021, 7, .	1.8	8
44	Effects of circulation and buoyancy on the transition from a fire whirl to a blue whirl. Physical Review Fluids, 2020, 5, .	2.5	8
45	Effect of moisture content and fuel type on emissions from vegetation using a steady state combustion apparatus. International Journal of Wildland Fire, 2022, 31, 14-23.	2.4	8
46	Lateral Flame Spread over PMMA Under Forced Air Flow. Fire Technology, 2020, 56, 801-820.	3.0	7
47	Experimental Methodology for Estimation of Local Heat Fluxes and Burning Rates in Steady Laminar Boundary Layer Diffusion Flames. Journal of Visualized Experiments, 2016, , .	0.3	6
48	A Methodology for Experimental Quantification of Firebrand Generation from WUI Fuels. Fire Technology, 2021, 57, 2367-2385.	3.0	6
49	Comparison of particulate-matter emissions from liquid-fueled pool fires and fire whirls. Combustion and Flame, 2021, 227, 483-496.	5.2	6
50	Scaling analysis of downstream heating and flow dynamics of fires over an inclined surface. Combustion and Flame, 2022, 242, 112203.	5.2	6
51	Investigating coherent streaks in wildfires via heated plates in crosswind. Fire Safety Journal, 2017, 91, 735-741.	3.1	5
52	An Experimental Study of Intermittent Heating Frequencies From Wind-Driven Flames. Frontiers in Mechanical Engineering, 2019, 5, .	1.8	5
53	Effect of freestream turbulence on the structure of boundary-layer flames. Combustion and Flame, 2022, 236, 111750.	5.2	5
54	Wind Effects on Smoldering Behavior of Simulated Wildland Fuels. Combustion Science and Technology, 2023, 195, 3212-3229.	2.3	5

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55	Smoldering ignition using a concentrated solar irradiation spot. Fire Safety Journal, 2022, 129, 103549.	3.1	5
56	The Propensity of Wooden Crevices to Smoldering Ignition by Firebrands. Fire Technology, 2022, 58, 2167-2188.	3.0	5
57	On the heat transferred to the air surrounding a semi-infinite inclined hot plate. Journal of Fluid Mechanics, 2013, 732, 304-315.	3.4	3
58	Stability of laminar flames on upper and lower inclined fuel surfaces. Proceedings of the Combustion Institute, 2021, 38, 4515-4523.	3.9	2
59	Experimental evidence of buoyancy controlled flame spread in wildland fires. , 0, , 190-195.		2
60	Effects of Natural and Forced Entrainment on PM Emissions from Fire Whirls. Environmental Science & Technology, 2022, 56, 3480-3491.	10.0	2
61	Downward Flame Spread Rate Over PMMA Rods Under External Radiant Heating. Fire Technology, 2022, 58, 2229-2250.	3.0	2
62	Local Burning Rates and Heat Flux for Boundary Layer Diffusion Flames under Forced Flow. , 2015, , .		1
63	Video: Understanding whirling flames. , 0, , .		1
64	Professional wildfire mitigation competency: a potential policy gap. International Journal of Wildland Fire, 2022, , .	2.4	1
65	A Survey of Transient Fire Load on Passenger Ferry Vessels. Fire Technology, 2017, 53, 1471-1478.	3.0	0
66	Fires. , 2020, , 140-175.		0
67	Ignition-Resistant Communities. , 2020, , 1-3.		0
68	Fire Emissions. , 2020, , 1-7.		0
69	Fire Emissions. , 2020, , 372-379.		0
70	Ignition-Resistant Communities. , 2020, , 676-679.		0
71	Improved In Situ Burn Efficiencies: An Overview of New Techniques and Technologies Resulting in Cleaner Burns. International Oil Spill Conference Proceedings, 2021, 2021, .	0.1	0