Timothy Bo Yuan Chen

List of Publications by Year
in descending order

47	1,423	304743	345221
papers	citations	22 h-index	36 g-index

48	48	48	1007
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Numerical assessment of LES subgrid-scale turbulence models for expandable particles in fire suppression. Experimental and Computational Multiphase Flow, 2023, 5, 99-110.	3.9	5
2	Numerical investigation of expandable graphite suppression on metal-based fire. Heat and Mass Transfer, 2022, 58, 65-81.	2.1	9
3	Multiphase CFD modelling for enclosure firesâ€"A review on past studies and future perspectives. Experimental and Computational Multiphase Flow, 2022, 4, 1-25.	3.9	13
4	A Large-Eddy Simulation study on the effect of fuel configuration and pan distance towards chemical species for under-ventilated compartment fire scenario. International Journal of Heat and Mass Transfer, 2022, 184, 122306.	4.8	6
5	An Investigation towards Coupling Molecular Dynamics with Computational Fluid Dynamics for Modelling Polymer Pyrolysis. Molecules, 2022, 27, 292.	3.8	12
6	MXene-based films via scalable fabrication with improved mechanical and antioxidant properties for electromagnetic interference shielding. Composites Communications, 2022, 31, 101112.	6.3	14
7	Developing a solid decomposition kinetics extraction framework for detailed chemistry pyrolysis and combustion modelling of building polymer composites. Journal of Analytical and Applied Pyrolysis, 2022, 163, 105500.	5.5	13
8	Pyrolysis and combustion characterisation of HDPE/APP composites via molecular dynamics and CFD simulations. Journal of Analytical and Applied Pyrolysis, 2022, 163, 105499.	5.5	9
9	Atomistic characterisation of graphite oxidation and thermal decomposition mechanism under isothermal and Non-Isothermal heating scheme. Computational Materials Science, 2022, 210, 111458.	3.0	2
10	Integration of Computational Fluid Dynamics and Artificial Neural Network for Optimization Design of Battery Thermal Management System. Batteries, 2022, 8, 69.	4.5	26
11	Characterisation of pyrolysis kinetics and detailed gas species formations of engineering polymers via reactive molecular dynamics (ReaxFF). Journal of Analytical and Applied Pyrolysis, 2021, 153, 104931.	5.5	26
12	A novel stochastic approach to study water droplet/flame interaction of water mist systems. Numerical Heat Transfer; Part A: Applications, 2021, 79, 570-593.	2.1	10
13	Experimental and numerical perspective on the fire performance of MXene/Chitosan/Phytic acid coated flexible polyurethane foam. Scientific Reports, 2021, 11, 4684.	3.3	24
14	Evaluating the fire risk associated with cladding panels: An overview of fire incidents, policies, and future perspective in fire standards. Fire and Materials, 2021, 45, 663-689.	2.0	27
15	Study of structure morphology and layer thickness of Ti3C2 MXene with Small-Angle Neutron Scattering (SANS). Composites Part C: Open Access, 2021, 5, 100155.	3.2	17
16	BODIPY coated on MXene nanosheets for improving mechanical and fire safety properties of ABS resin. Composites Part B: Engineering, 2021, 223, 109130.	12.0	70
17	A Review on Lithium-Ion Battery Separators towards Enhanced Safety Performances and Modelling Approaches. Molecules, 2021, 26, 478.	3.8	49
18	Peanut Shell Derived Carbon Combined with Nano Cobalt: An Effective Flame Retardant for Epoxy Resin. Molecules, 2021, 26, 6662.	3.8	5

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19	Characterisation of soot particle size distribution through population balance approach and soot diagnostic techniques for a buoyant non-premixed flame. Journal of the Energy Institute, 2020, 93, 112-128.	5.3	16
20	MXene/chitosan nanocoating for flexible polyurethane foam towards remarkable fire hazards reductions. Journal of Hazardous Materials, 2020, 381, 120952.	12.4	174
21	Utilising genetic algorithm to optimise pyrolysis kinetics for fire modelling and characterisation of chitosan/graphene oxide polyurethane composites. Composites Part B: Engineering, 2020, 182, 107619.	12.0	51
22	Numerical Study of the Comparison of Symmetrical and Asymmetrical Eddy-Generation Scheme on the Fire Whirl Formulation and Evolution. Applied Sciences (Switzerland), 2020, 10, 318.	2.5	6
23	Investigation of door width towards flame tilting behaviours and combustion species in compartment fire scenarios using large eddy simulation. International Journal of Heat and Mass Transfer, 2020, 150, 119373.	4.8	18
24	Influence of Eddy-Generation Mechanism on the Characteristic of On-Source Fire Whirl. Applied Sciences (Switzerland), 2019, 9, 3989.	2.5	11
25	Recent progress in bio-based aerogel absorbents for oil/water separation. Cellulose, 2019, 26, 6449-6476.	4.9	102
26	Computational Study of Wet Steam Flow to Optimize Steam Ejector Efficiency for Potential Fire Suppression Application. Applied Sciences (Switzerland), 2019, 9, 1486.	2.5	18
27	Natural Ventilated Smoke Control Simulation Case Study Using Different Settings of Smoke Vents and Curtains in a Large Atrium. Fire, 2019, 2, 7.	2.8	20
28	Fire Risk Assessment of Combustible Exterior Cladding Using a Collective Numerical Database. Fire, 2019, 2, 11.	2.8	44
29	Sensitivity Analysis of Key Parameters for Population Balance Based Soot Model for Low-Speed Diffusion Flames. Energies, 2019, 12, 910.	3.1	8
30	Pectin-assisted dispersion of exfoliated boron nitride nanosheets for assembled bio-composite aerogels. Composites Part A: Applied Science and Manufacturing, 2019, 119, 196-205.	7.6	29
31	Color-ratio pyrometry methods for flameâ€“wall impingement study. Journal of the Energy Institute, 2019, 92, 1968-1976.	5.3	18
32	Numerical study of the development and angular speed of a small-scale fire whirl. Journal of Computational Science, 2018, 27, 21-34.	2.9	30
33	Manufacturing, mechanical and flame retardant properties of poly(lactic acid) biocomposites based on calcium magnesium phytate and carbon nanotubes. Composites Part A: Applied Science and Manufacturing, 2018, 110, 227-236.	7.6	136
34	Numerical study of fire spread using the level-set method with large eddy simulation incorporating detailed chemical kinetics gas-phase combustion model. Journal of Computational Science, 2018, 24, 8-23.	2.9	33
35	Establishing pyrolysis kinetics for the modelling of the flammability and burning characteristics of solid combustible materials. Journal of Fire Sciences, 2018, 36, 494-517.	2.0	39
36	Synthesis of anhydrous manganese hypophosphite microtubes for simultaneous flame retardant and mechanical enhancement on poly(lactic acid). Composites Science and Technology, 2018, 164, 44-50.	7.8	47

#	Article	IF	Citations
37	Predicting the fire spread rate of a sloped pine needle board utilizing pyrolysis modelling with detailed gas-phase combustion. International Journal of Heat and Mass Transfer, 2018, 125, 310-322.	4.8	36
38	Comparative Studies on Thermal, Mechanical, and Flame Retardant Properties of PBT Nanocomposites via Different Oxidation State Phosphorus-Containing Agents Modified Amino-CNTs. Nanomaterials, 2018, 8, 70.	4.1	26
39	Synthesis of phosphorus-containing silane coupling agent for surface modification of glass fibers: Effective reinforcement and flame retardancy in poly(1,4-butylene terephthalate). Chemical Engineering Journal, 2017, 321, 257-267.	12.7	71
40	Comparison of detailed soot formation models for sooty and non-sooty flames in an under-ventilated ISO room. International Journal of Heat and Mass Transfer, 2017, 115, 717-729.	4.8	39
41	On the influences of key modelling constants of large eddy simulations forÂlarge-scale compartment fires predictions. International Journal of Computational Fluid Dynamics, 2017, 31, 324-337.	1.2	32
42	Simultaneous enhancements in the mechanical, thermal stability, and flame retardant properties of poly(1,4-butylene terephthalate) nanocomposites with a novel phosphorusâ€“nitrogen-containing polyhedral oligomeric silsesquioxane. RSC Advances, 2017, 7, 54021-54030.	3.6	20
43	Study of three LES subgrid-scale turbulence models for predictions of heat and mass transfer in large-scale compartment fires. Numerical Heat Transfer; Part A: Applications, 2016, 69, 1223-1241.	2.1	28
44	Numerical Simulation of a Ceiling Jet Fire in a Large Compartment. Procedia Engineering, 2013, 52, 3-12.	1.2	26
45	Development of Wall-Adapting Local Eddy Viscosity Model for Study of Fire Dynamics in a Large Compartment. Applied Mechanics and Materials, 0, 444-445, 1579-1591.	0.2	0
46	A systematic approach to formulate numerical kinetics for furnishing materials fire simulation with validation procedure using cone/FT-IR data. Heat and Mass Transfer, 0, , 1.	2.1	5
47	A multiphase approach for pyrolysis modelling of polymeric materials. Experimental and Computational Multiphase Flow, 0, , 1.	3.9	3