

Timothy Bo Yuan Chen

List of Publications by Year in descending order

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47
papers

1,423
citations

304743

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36
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all docs

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docs citations

48
times ranked

1007
citing authors

#	ARTICLE	IF	CITATIONS
1	MXene/chitosan nanocoating for flexible polyurethane foam towards remarkable fire hazards reductions. <i>Journal of Hazardous Materials</i> , 2020, 381, 120952.	12.4	174
2	Manufacturing, mechanical and flame retardant properties of poly(lactic acid) biocomposites based on calcium magnesium phytate and carbon nanotubes. <i>Composites Part A: Applied Science and Manufacturing</i> , 2018, 110, 227-236.	7.6	136
3	Recent progress in bio-based aerogel absorbents for oil/water separation. <i>Cellulose</i> , 2019, 26, 6449-6476.	4.9	102
4	Synthesis of phosphorus-containing silane coupling agent for surface modification of glass fibers: Effective reinforcement and flame retardancy in poly(1,4-butylene terephthalate). <i>Chemical Engineering Journal</i> , 2017, 321, 257-267.	12.7	71
5	BODIPY coated on MXene nanosheets for improving mechanical and fire safety properties of ABS resin. <i>Composites Part B: Engineering</i> , 2021, 223, 109130.	12.0	70
6	Utilising genetic algorithm to optimise pyrolysis kinetics for fire modelling and characterisation of chitosan/graphene oxide polyurethane composites. <i>Composites Part B: Engineering</i> , 2020, 182, 107619.	12.0	51
7	A Review on Lithium-Ion Battery Separators towards Enhanced Safety Performances and Modelling Approaches. <i>Molecules</i> , 2021, 26, 478.	3.8	49
8	Synthesis of anhydrous manganese hypophosphite microtubes for simultaneous flame retardant and mechanical enhancement on poly(lactic acid). <i>Composites Science and Technology</i> , 2018, 164, 44-50.	7.8	47
9	Fire Risk Assessment of Combustible Exterior Cladding Using a Collective Numerical Database. <i>Fire</i> , 2019, 2, 11.	2.8	44
10	Comparison of detailed soot formation models for sooty and non-sooty flames in an under-ventilated ISO room. <i>International Journal of Heat and Mass Transfer</i> , 2017, 115, 717-729.	4.8	39
11	Establishing pyrolysis kinetics for the modelling of the flammability and burning characteristics of solid combustible materials. <i>Journal of Fire Sciences</i> , 2018, 36, 494-517.	2.0	39
12	Predicting the fire spread rate of a sloped pine needle board utilizing pyrolysis modelling with detailed gas-phase combustion. <i>International Journal of Heat and Mass Transfer</i> , 2018, 125, 310-322.	4.8	36
13	Numerical study of fire spread using the level-set method with large eddy simulation incorporating detailed chemical kinetics gas-phase combustion model. <i>Journal of Computational Science</i> , 2018, 24, 8-23.	2.9	33
14	On the influences of key modelling constants of large eddy simulations for large-scale compartment fires predictions. <i>International Journal of Computational Fluid Dynamics</i> , 2017, 31, 324-337.	1.2	32
15	Numerical study of the development and angular speed of a small-scale fire whirl. <i>Journal of Computational Science</i> , 2018, 27, 21-34.	2.9	30
16	Pectin-assisted dispersion of exfoliated boron nitride nanosheets for assembled bio-composite aerogels. <i>Composites Part A: Applied Science and Manufacturing</i> , 2019, 119, 196-205.	7.6	29
17	Study of three LES subgrid-scale turbulence models for predictions of heat and mass transfer in large-scale compartment fires. <i>Numerical Heat Transfer; Part A: Applications</i> , 2016, 69, 1223-1241.	2.1	28
18	Evaluating the fire risk associated with cladding panels: An overview of fire incidents, policies, and future perspective in fire standards. <i>Fire and Materials</i> , 2021, 45, 663-689.	2.0	27

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19	Numerical Simulation of a Ceiling Jet Fire in a Large Compartment. <i>Procedia Engineering</i> , 2013, 52, 3-12.	1.2	26
20	Comparative Studies on Thermal, Mechanical, and Flame Retardant Properties of PBT Nanocomposites via Different Oxidation State Phosphorus-Containing Agents Modified Amino-CNTs. <i>Nanomaterials</i> , 2018, 8, 70.	4.1	26
21	Characterisation of pyrolysis kinetics and detailed gas species formations of engineering polymers via reactive molecular dynamics (ReaxFF). <i>Journal of Analytical and Applied Pyrolysis</i> , 2021, 153, 104931.	5.5	26
22	Integration of Computational Fluid Dynamics and Artificial Neural Network for Optimization Design of Battery Thermal Management System. <i>Batteries</i> , 2022, 8, 69.	4.5	26
23	Experimental and numerical perspective on the fire performance of MXene/Chitosan/Phytic acid coated flexible polyurethane foam. <i>Scientific Reports</i> , 2021, 11, 4684.	3.3	24
24	Simultaneous enhancements in the mechanical, thermal stability, and flame retardant properties of poly(1,4-butylene terephthalate) nanocomposites with a novel phosphorus-nitrogen-containing polyhedral oligomeric silsesquioxane. <i>RSC Advances</i> , 2017, 7, 54021-54030.	3.6	20
25	Natural Ventilated Smoke Control Simulation Case Study Using Different Settings of Smoke Vents and Curtains in a Large Atrium. <i>Fire</i> , 2019, 2, 7.	2.8	20
26	Computational Study of Wet Steam Flow to Optimize Steam Ejector Efficiency for Potential Fire Suppression Application. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 1486.	2.5	18
27	Color-ratio pyrometry methods for flame-wall impingement study. <i>Journal of the Energy Institute</i> , 2019, 92, 1968-1976.	5.3	18
28	Investigation of door width towards flame tilting behaviours and combustion species in compartment fire scenarios using large eddy simulation. <i>International Journal of Heat and Mass Transfer</i> , 2020, 150, 119373.	4.8	18
29	Study of structure morphology and layer thickness of Ti3C2 MXene with Small-Angle Neutron Scattering (SANS). <i>Composites Part C: Open Access</i> , 2021, 5, 100155.	3.2	17
30	Characterisation of soot particle size distribution through population balance approach and soot diagnostic techniques for a buoyant non-premixed flame. <i>Journal of the Energy Institute</i> , 2020, 93, 112-128.	5.3	16
31	MXene-based films via scalable fabrication with improved mechanical and antioxidant properties for electromagnetic interference shielding. <i>Composites Communications</i> , 2022, 31, 101112.	6.3	14
32	Multiphase CFD modelling for enclosure fires-A review on past studies and future perspectives. <i>Experimental and Computational Multiphase Flow</i> , 2022, 4, 1-25.	3.9	13
33	Developing a solid decomposition kinetics extraction framework for detailed chemistry pyrolysis and combustion modelling of building polymer composites. <i>Journal of Analytical and Applied Pyrolysis</i> , 2022, 163, 105500.	5.5	13
34	An Investigation towards Coupling Molecular Dynamics with Computational Fluid Dynamics for Modelling Polymer Pyrolysis. <i>Molecules</i> , 2022, 27, 292.	3.8	12
35	Influence of Eddy-Generation Mechanism on the Characteristic of On-Source Fire Whirl. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 3989.	2.5	11
36	A novel stochastic approach to study water droplet/flame interaction of water mist systems. <i>Numerical Heat Transfer; Part A: Applications</i> , 2021, 79, 570-593.	2.1	10

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37	Numerical investigation of expandable graphite suppression on metal-based fire. <i>Heat and Mass Transfer</i> , 2022, 58, 65-81.	2.1	9
38	Pyrolysis and combustion characterisation of HDPE/APP composites via molecular dynamics and CFD simulations. <i>Journal of Analytical and Applied Pyrolysis</i> , 2022, 163, 105499.	5.5	9
39	Sensitivity Analysis of Key Parameters for Population Balance Based Soot Model for Low-Speed Diffusion Flames. <i>Energies</i> , 2019, 12, 910.	3.1	8
40	Numerical Study of the Comparison of Symmetrical and Asymmetrical Eddy-Generation Scheme on the Fire Whirl Formulation and Evolution. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 318.	2.5	6
41	A Large-Eddy Simulation study on the effect of fuel configuration and pan distance towards chemical species for under-ventilated compartment fire scenario. <i>International Journal of Heat and Mass Transfer</i> , 2022, 184, 122306.	4.8	6
42	Numerical assessment of LES subgrid-scale turbulence models for expandable particles in fire suppression. <i>Experimental and Computational Multiphase Flow</i> , 2023, 5, 99-110.	3.9	5
43	A systematic approach to formulate numerical kinetics for furnishing materials fire simulation with validation procedure using cone/FT-IR data. <i>Heat and Mass Transfer</i> , 0, , 1.	2.1	5
44	Peanut Shell Derived Carbon Combined with Nano Cobalt: An Effective Flame Retardant for Epoxy Resin. <i>Molecules</i> , 2021, 26, 6662.	3.8	5
45	A multiphase approach for pyrolysis modelling of polymeric materials. <i>Experimental and Computational Multiphase Flow</i> , 0, , 1.	3.9	3
46	Atomistic characterisation of graphite oxidation and thermal decomposition mechanism under isothermal and Non-Isothermal heating scheme. <i>Computational Materials Science</i> , 2022, 210, 111458.	3.0	2
47	Development of Wall-Adapting Local Eddy Viscosity Model for Study of Fire Dynamics in a Large Compartment. <i>Applied Mechanics and Materials</i> , 0, 444-445, 1579-1591.	0.2	0