

Qing Nian Chan

List of Publications by Year in descending order

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89
papers

2,706
citations

201674

27
h-index

223800

46
g-index

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90
docs citations

90
times ranked

1978
citing authors

#	ARTICLE	IF	CITATIONS
1	Robust, Lightweight, Hydrophobic, and Fire-Retarded Polyimide/MXene Aerogels for Effective Oil/Water Separation. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 40512-40523.	8.0	230
2	A Review of Hydrogen Direct Injection for Internal Combustion Engines: Towards Carbon-Free Combustion. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 4842.	2.5	204
3	MXene/chitosan nanocoating for flexible polyurethane foam towards remarkable fire hazards reductions. <i>Journal of Hazardous Materials</i> , 2020, 381, 120952.	12.4	174
4	Soot volume fraction in a piloted turbulent jet non-premixed flame of natural gas. <i>Combustion and Flame</i> , 2009, 156, 1339-1347.	5.2	117
5	Functionalization of MXene Nanosheets for Polystyrene towards High Thermal Stability and Flame Retardant Properties. <i>Polymers</i> , 2019, 11, 976.	4.5	93
6	Effects of injection pressure on the structural transformation of flash-boiling sprays of gasoline and ethanol in a spark-ignition direct-injection (SIDI) engine. <i>Fuel</i> , 2014, 130, 228-240.	6.4	77
7	Recent advances in the measurement of strongly radiating, turbulent reacting flows. <i>Progress in Energy and Combustion Science</i> , 2012, 38, 41-61.	31.2	72
8	Development of temperature imaging using two-line atomic fluorescence. <i>Applied Optics</i> , 2009, 48, 1237.	2.1	57
9	Performance and emissions of hydrogen-diesel dual direct injection (H2DDI) in a single-cylinder compression-ignition engine. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 1302-1314.	7.1	57
10	Experimental and computational study of soot evolution in a turbulent nonpremixed bluff body ethylene flame. <i>Combustion and Flame</i> , 2013, 160, 1298-1309.	5.2	55
11	A Review on Lithium-Ion Battery Separators towards Enhanced Safety Performances and Modelling Approaches. <i>Molecules</i> , 2021, 26, 478.	3.8	49
12	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
13	Novel 3D Network Architected Hybrid Aerogel Comprising Epoxy, Graphene, and Hydroxylated Boron Nitride Nanosheets. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 40032-40043.	8.0	45
14	Combustion characterization of waste cooking oil and canola oil based biodiesels under simulated engine conditions. <i>Fuel</i> , 2018, 224, 167-177.	6.4	44
15	Fire Risk Assessment of Combustible Exterior Cladding Using a Collective Numerical Database. <i>Fire</i> , 2019, 2, 11.	2.8	44
16	Automated Detection of Primary Particles from Transmission Electron Microscope (TEM) Images of Soot Aggregates in Diesel Engine Environments. <i>SAE International Journal of Engines</i> , 0, 9, 279-296.	0.4	42
17	Simultaneous imaging of temperature and soot volume fraction. <i>Proceedings of the Combustion Institute</i> , 2011, 33, 791-798.	3.9	41
18	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

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19	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
20	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
21	A comprehensive experimental characterisation of a novel porous media combustion-based thermophotovoltaic system with controlled emission. <i>Applied Energy</i> , 2019, 254, 113721.	10.1	34
22	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
23	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
24	Fabrication of Fully Bio-Based Aerogels via Microcrystalline Cellulose and Hydroxyapatite Nanorods with Highly Effective Flame-Retardant Properties. <i>ACS Applied Nano Materials</i> , 2018, 1, 1921-1931.	5.0	32
25	Spray and Combustion Investigation of Post Injections under Low-Temperature Combustion Conditions with Biodiesel. <i>Energy & Fuels</i> , 2018, 32, 8727-8742.	5.1	31
26	Automated determination of size and morphology information from soot transmission electron microscope (TEM)-generated images. <i>Journal of Nanoparticle Research</i> , 2016, 18, 1.	1.9	30
27	Hydrodynamic and chemical effects of hydrogen addition on soot evolution in turbulent nonpremixed bluff body ethylene flames. <i>Proceedings of the Combustion Institute</i> , 2017, 36, 807-814.	3.9	29
28	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
29	Emissions characteristics of NO _x and SO ₂ in the combustion of microalgae biomass using a tube furnace. <i>Journal of the Energy Institute</i> , 2017, 90, 806-812.	5.3	28
30	Effects of flame-plane wall impingement on diesel combustion and soot processes. <i>Fuel</i> , 2019, 255, 115726.	6.4	28
31	Visualization of hydrogen jet evolution and combustion under simulated direct-injection compression-ignition engine conditions. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 32562-32578.	7.1	27
32	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
33	Spray Penetrations of Ethanol, Gasoline and Iso-Octane in an Optically Accessible Spark-Ignition Direct-Injection Engine. <i>SAE International Journal of Fuels and Lubricants</i> , 0, 7, 1010-1026.	0.2	26
34	Influence of turbulent fluctuations on radiation heat transfer, NO and soot formation under ECN Spray A conditions. <i>Proceedings of the Combustion Institute</i> , 2017, 36, 3551-3558.	3.9	26
35	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
36	Critical assessment on operating water droplet sizes for fire sprinkler and water mist systems. <i>Journal of Building Engineering</i> , 2020, 28, 100999.	3.4	26

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37	The influence on the soot distribution within a laminar flame of radiation at fluxes of relevance to concentrated solar radiation. <i>Combustion and Flame</i> , 2011, 158, 1814-1821.	5.2	24
38	Stable flame limits for optimal radiant performance of porous media reactors for thermophotovoltaic applications using packed beds of alumina. <i>Applied Energy</i> , 2018, 229, 736-744.	10.1	24
39	Development of an evacuation model considering the impact of stress variation on evacuees under fire emergency. <i>Safety Science</i> , 2021, 138, 105232.	4.9	24
40	Temperature measurements in turbulent non-premixed flames by two-line atomic fluorescence. <i>Proceedings of the Combustion Institute</i> , 2013, 34, 3619-3627.	3.9	23
41	Soot sheet dimensions in turbulent nonpremixed flames. <i>Combustion and Flame</i> , 2011, 158, 2458-2464.	5.2	22
42	The Effect of Fuel-Injection Timing on In-cylinder Flow and Combustion Performance in a Spark-Ignition Direct-Injection (SIDI) Engine Using Particle Image Velocimetry (PIV). <i>Flow, Turbulence and Combustion</i> , 2018, 101, 191-218.	2.6	21
43	Instantaneous Temperature Imaging of Diffusion Flames Using Two-Line Atomic Fluorescence. <i>Applied Spectroscopy</i> , 2010, 64, 173-176.	2.2	20
44	External irradiation effect on the growth and evolution of in-flame soot species. <i>Carbon</i> , 2016, 102, 161-171.	10.3	20
45	Effect of jet-jet interactions on soot formation in a small-bore diesel engine. <i>Proceedings of the Combustion Institute</i> , 2017, 36, 3559-3566.	3.9	20
46	Flame-Wall Interaction Effects on Diesel Post-injection Combustion and Soot Formation Processes. <i>Energy & Fuels</i> , 2019, 33, 7759-7769.	5.1	20
47	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
48	Solvent effects on two-line atomic fluorescence of indium. <i>Applied Optics</i> , 2010, 49, 1257.	2.1	18
49	Flow seeding with elemental metal species via an optical method. <i>Applied Physics B: Lasers and Optics</i> , 2012, 107, 665-668.	2.2	18
50	Algorithm for soot sheet quantification in a piloted turbulent jet non-premixed natural gas flame. <i>Experiments in Fluids</i> , 2014, 55, 1.	2.4	18
51	Double Injection Strategies for Ethanol-Fuelled Gasoline Compression Ignition (GCI) Combustion in a Single-Cylinder Light-Duty Diesel Engine. , 0, , .		18
52	Color-ratio pyrometry methods for flame-wall impingement study. <i>Journal of the Energy Institute</i> , 2019, 92, 1968-1976.	5.3	18
53	Assessment of interferences to nonlinear two-line atomic fluorescence (NTLAF) in sooty flames. <i>Applied Physics B: Lasers and Optics</i> , 2011, 104, 189-198.	2.2	17
54	Application of a multiple mapping conditioning mixing model to ECN Spray A. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 3263-3270.	3.9	17

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55	Downstream evolution of n-heptane/toluene flames in hot and vitiated coflows. <i>Combustion and Flame</i> , 2019, 202, 78-89.	5.2	17
56	CO ₂ Emission of Electric and Gasoline Vehicles under Various Road Conditions for China, Japan, Europe and World Average—Prediction through Year 2040. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 2295.	2.5	17
57	Laminar Flame Calculations for Analyzing Trends in Autoignitive Jet Flames in a Hot and Vitiated Coflow. <i>Energy & Fuels</i> , 2016, 30, 8680-8690.	5.1	16
58	Influence of Injection Timing for Split-Injection Strategies on Well-Mixed High-Load Combustion Performance in an Optically Accessible Spark-Ignition Direct-Injection (SIDI) Engine. , 0, , .		16
59	Influence of Engine Speed on Gasoline Compression Ignition (GCI) Combustion in a Single-Cylinder Light-Duty Diesel Engine. , 0, , .		16
60	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
61	New Seeding Methodology for Gas Concentration Measurements. <i>Applied Spectroscopy</i> , 2012, 66, 803-809.	2.2	15
62	Modeling the Response of Magnetorheological Fluid Dampers under Seismic Conditions. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 4189.	2.5	15
63	Study of Morphology and Optical Properties of Gold Nanoparticle Aggregates under Different pH Conditions. <i>Langmuir</i> , 2018, 34, 10340-10352.	3.5	14
64	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
65	An Investigation towards Coupling Molecular Dynamics with Computational Fluid Dynamics for Modelling Polymer Pyrolysis. <i>Molecules</i> , 2022, 27, 292.	3.8	12
66	Influence of Eddy-Generation Mechanism on the Characteristic of On-Source Fire Whirl. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 3989.	2.5	11
67	Ignition and flame stabilisation of primary reference fuel sprays at engine-relevant conditions. <i>Combustion and Flame</i> , 2021, 233, 111620.	5.2	11
68	A Comparative Analysis on the Spray Penetration of Ethanol, Gasoline and Iso-Octane Fuel in a Spark-Ignition Direct-Injection Engine. , 0, , .		10
69	A comparison of high-temperature reaction and soot processes of conventional diesel and methyl decanoate. <i>Fuel</i> , 2018, 226, 635-643.	6.4	10
70	Study of Ignition and Combustion Characteristics of Consecutive Injections with <i>iso</i> -Octane and <i>n</i> -Heptane as Fuels. <i>Energy & Fuels</i> , 2020, 34, 14741-14756.	5.1	10
71	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
72	Co-Combustion Characteristics and Kinetics of Microalgae <i>Chlorella Vulgaris</i> and Coal through TGA. <i>Combustion Science and Technology</i> , 2020, 192, 26-45.	2.3	9

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73	Experimental investigation of the flame structure of dilute sprays issuing into a hot and low-oxygen coflow. <i>Combustion and Flame</i> , 2021, 230, 111439.	5.2	9
74	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
75	Application of LED-based thermographic phosphorescent technique to diesel combustion chamber walls in a pre-burn-type optical constant-volume vessel. <i>Experiments in Fluids</i> , 2019, 60, 1.	2.4	8
76	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
77	Multiple Injection Strategy Investigation for Well-Mixed Operation in an Optical Wall-Guided Spark-Ignition Direct-Injection (WG-SIDI) Engine through Flame Shape Analysis. , 0, , .		7
78	A parametric study of autoigniting hydrogen jets under compression-ignition engine conditions. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 21307-21322.	7.1	7
79	Spray and Combustion Characteristics of Gasoline-like Fuel under Compression-Ignition Conditions. <i>Energy & Fuels</i> , 2020, 34, 16585-16598.	5.1	6
80	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
81	Dilute spray flames of ethanol and α -heptane in the transition to mild combustion. <i>Combustion and Flame</i> , 2022, 238, 111918.	5.2	6
82	Laser ignition of iso-octane and n-heptane jets under compression-ignition conditions. <i>Fuel</i> , 2022, 311, 122555.	6.4	5
83	Influence of flash boiling and swirl ratio on the gasoline spray structure in a spark-ignition optical engine: An experimental study. <i>Journal of the Energy Institute</i> , 2021, 94, 233-241.	5.3	3
84	Controlling the clustering behavior of particulate colloidal systems using alternating and rotating magnetic fields. <i>Computational Particle Mechanics</i> , 0, , 1.	3.0	2
85	Soot: A review of computational models at different length scales. <i>Experimental and Computational Multiphase Flow</i> , 2023, 5, 1-14.	3.9	2
86	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
87	Recent Advances in Measurement of Turbulent Reacting Flows in Which Heat Transfer is Dominated by Radiation. , 2010, , .		0
88	In-Cylinder Soot Reduction Using Microwave Generated Plasma in an Optically Accessible Small-Bore Diesel Engine. , 2018, , .		0
89	Progress in Combustion Diagnostics, Science and Technology. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 1586.	2.5	0