Jerome Bellettre

List of Publications by Year
in descending order

78 papers	2,419 citations	186265 28 h-index	214800 47 g-index
78 all docs	78 docs citations	78 times ranked	1587 citing authors

#	Article	IF	Citations
1	Analysis of a new type of high pressure homogeniser. A study of the flow pattern. Chemical Engineering Science, 2004, 59, 843-853.	3.8	241
2	A review on catalytic methane combustion at low temperatures: Catalysts, mechanisms, reaction conditions and reactor designs. Renewable and Sustainable Energy Reviews, 2020, 119, 109589.	16.4	161
3	Study of the micro-explosion temperature of water in oil emulsion droplets during the Leidenfrost effect. Experimental Thermal and Fluid Science, 2012, 43, 63-70.	2.7	117
4	Experimental investigations on the use of preheated animal fat as fuel in a compression ignition engine. Renewable Energy, 2005, 30, 1443-1456.	8.9	108
5	A new indicator for knock detection in gas SI engines. International Journal of Thermal Sciences, 2003, 42, 523-532.	4.9	97
6	Ethanol animal fat emulsions as a diesel engine fuel â€“ Part 2: Engine test analysis. Fuel, 2006, 85, 2646-2652.	6.4	92
7	Numerical investigation of the partial oxidation in a two-stage downdraft gasifier. Fuel, 2008, 87, 1383-1393.	6.4	91
8	EFFECT OF DISPERSED WATER DROPLET SIZE IN MICROEXPLOSION PHENOMENON FORWATER IN OIL EMULSION. Atomization and Sprays, 2010, 20, 791-799.	0.8	84
9	Emulsion droplet micro-explosion: Analysis of two experimental approaches. Experimental Thermal and Fluid Science, 2014, 56, 69-74.	2.7	73
10	Prediction of micro-explosion delay of emulsified fuel droplets. International Journal of Thermal Sciences, 2009, 48, 449-460.	4.9	66
11	Distribution of thermal energy of child-droplets issued from an optimal micro-explosion. International Journal of Heat and Mass Transfer, 2014, 77, 1043-1054.	4.8	64
12	The use of biofuel emulsions as fuel for diesel engines: A review. Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, 2009, 223, 729-742.	1.4	61
13	3-D numerical simulations of flows in a cylindrical pleated filter packed with activated carbon cloth. Chemical Engineering Science, 2003, 58, 4965-4973.	3.8	57
14	Parametric study of the micro-explosion occurrence of W/O emulsions. International Journal of Thermal Sciences, 2018, 133, 90-97.	4.9	57
15	Ethanol animal fat emulsions as a diesel engine fuel â€“ Part 1: Formulations and influential parameters. Fuel, 2006, 85, 2640-2645.	6.4	55
16	The balance between surface and kinetic energies within an optimal micro-explosion. International Journal of Thermal Sciences, 2016, 107, 179-183.	4.9	48
17	Transient state study of electric motor heating and phase change solid-liquid cooling. Applied Thermal Engineering, 1997, 17, 17-31.	6.0	47
18	A new approach for the study of turbulent boundarylayers with blowing. International Journal of Heat and Mass Transfer, 1999, 42, 2905-2920.	4.8	46

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19	Comparison between unique and coalesced water drops in micro-explosions scanned by differential calorimetry. International Journal of Heat and Mass Transfer, 2016, 95, 689-692.	4.8	44
20	Use of animal fats as CI engine fuel by making stable emulsions with water and methanol. Fuel, 2005, 84, 1713-1713.	6.4	40
21	A Comparative Study of Different Methods of Using Animal Fat as a Fuel in a Compression Ignition Engine. Journal of Engineering for Gas Turbines and Power, 2006, 128, 907-914.	1.1	39
22	Detection of knock occurrence in a gas SI engine from a heat transfer analysis. Energy Conversion and Management, 2006, 47, 879-893.	9.2	37
23	Preparation of Pt/Î³-Al2O3 catalyst coating in microreactors for catalytic methane combustion. Chemical Engineering Journal, 2020, 380, 122424.	12.7	37
24	Experimental investigation of emulsified fuels produced with a micro-channel emulsifier: Puffing and micro-explosion analyses. Fuel, 2018, 219, 320-330.	6.4	34
25	Impact of Holder Materials on the Heating and Explosive Breakup of Two-Component Droplets. Energies, 2018, 11, 3307.	3.1	34
26	Optical investigations in a CI engine fueled with water in diesel emulsion produced through microchannels. Experimental Thermal and Fluid Science, 2018, 95, 96-103.	2.7	30
27	Dispersed phase structure and micro-explosion behavior under different schemes of water-fuel droplets heating. Fuel, 2020, 259, 116241.	6.4	30
28	Investigation on the conditions leading to the micro-explosion of emulsified fuel droplet using two colors LIF method. Experimental Thermal and Fluid Science, 2020, 116, 110106.	2.7	30
29	First Study on Ammonia Spray Characteristics with a Current GDI Engine Injector. Fuels, 2021, 2, 253-271.	2.7	27
30	Knock prevention of CHP engines by addition of N2 and CO2 to the natural gas fuel. Applied Thermal Engineering, 2003, 23, 1359-1371.	6.0	25
31	Water-in-oil emulsification in a microfluidic impinging flow at high capillary numbers. International Journal of Multiphase Flow, 2015, 72, 11-23.	3.4	23
32	Investigations on a CI Engine Using Animal Fat and Its Emulsions With Water and Methanol as Fuel. , 2005, , .		22
33	Effect of water and methanol fractions on the performance of a CI engine using animal fat emulsions as fuel. Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, 2005, 219, 583-592.	1.4	22
34	Prediction of thermal protection of walls by blowing with different fluids. International Journal of Thermal Sciences, 1999, 38, 492-500.	4.9	21
35	Thermal Behavior of Porous Plates Subjected to Air Blowing. Journal of Thermophysics and Heat Transfer, 2000, 14, 523-532.	1.6	21
36	Dimensional modelling of wood pyrolysis using a nodal approach. Fuel, 2008, 87, 3292-3303.	6.4	21

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37	Study of two impinging flow microsystems arranged in series. Application to emulsified biofuel production. Fuel, 2016, 170, 185-196.	6.4	21
38	Child droplets from micro-explosion of emulsion and immiscible two-component droplets. International Journal of Heat and Mass Transfer, 2021, 169, 120931.	4.8	19
39	INSIGHT OF AWATER-IN-OIL EMULSION DROP UNDER LEIDENFROST HEATING USING LASER-INDUCED FLUORESCENCE OPTICAL DIAGNOSTICS. Atomization and Sprays, 2019, 29, 1-17.	0.8	18
40	Experimental study of the water in oil emulsions features by differential scanning calorimetry analysis. Applied Energy, 2012, 97, 834-840.	10.1	16
41	Comparing the integral characteristics of secondary droplet atomization under different situations. International Communications in Heat and Mass Transfer, 2019, 108, 104329.	5.6	16
42	STUDIES OF THE TRANSPIRATION COOLING THROUGH A SINTERED STAINLESS STEEL PLATE. Experimental Heat Transfer, 2005, 18, 33-44.	3.2	15
43	Fast oil-in-water emulsification in microchannel using head-on impinging configuration: Effect of swirl motion. International Journal of Multiphase Flow, 2020, 131, 103402.	3.4	15
44	Energy analysis of secondary droplet atomization schemes. International Communications in Heat and Mass Transfer, 2020, 117, 104666.	5.6	14
45	Mass transfer and emulsification by chaotic advection. International Journal of Heat and Mass Transfer, 2014, 71, 228-235.	4.8	13
46	Unsteady Heat Transfer Enhancement Around an Engine Cylinder in Order to Detect Knock. Journal of Heat Transfer, 2005, 127, 278-286.	2.1	12
47	Influence of Viscosity Ratio on Droplets Formation in a Chaotic Advection Flow. International Journal of Chemical Reactor Engineering, 2009, 7, .	1.1	12
48	Clarification of the surface wettability effects on two-phase flow patterns in PEMFC gas channels. International Journal of Hydrogen Energy, 2016, 41, 15518-15527.	7.1	12
49	Production of oil in water emulsions in microchannels at high throughput: Evaluation of emulsions in view of cosmetic, nutraceutical or pharmaceutical applications. Chemical Engineering and Processing: Process Intensification, 2021, 161, 108301.	3.6	12
50	Measuring temperature of emulsion and immiscible two-component drops until micro-explosion using two-color LIF. International Journal of Heat and Mass Transfer, 2020, 163, 120505.	4.8	11
51	Eruptive water transport in PEMFC: A single-drop capillary model. International Journal of Hydrogen Energy, 2015, 40, 14667-14675.	7.1	10
52	Experimental Determination of Knock in Gas SI Engine. , 0, , .		9
53	Biofuel Emulsifier Using High-Velocity Impinging Flows and Singularities in Microchannels. Journal of Energy Resources Technology, Transactions of the ASME, 2018, 140, .	2.3	9
54	Catalytic methane combustion in plate-type microreactors with different channel configurations: An experimental study. Chemical Engineering Science, 2021, 236, 116517.	3.8	9

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55	Experimental investigation on single drop breakage in two-stream impinging microchannels. Experiments in Fluids, 2021, 62, 1.	2.4	8
56	Prediction of turbulent heat transfer with surface blowing using a non-linear algebraic heat flux model. International Journal of Heat and Fluid Flow, 2003, 24, 680-684.	2.4	6
57	A Numerical Comparison of Spray Combustion between Raw and Water-in-Oil Emulsified Fuel. International Journal of Spray and Combustion Dynamics, 2010, 2, 1-19.	1.0	6
58	A Model of Energetic Interactions Between a Car Engine, the Cabin Heating System and the Electrical System. , 2002, , .		5
59	A Diesel Engine Thermal Transient Simulation: Coupling Between a Combustion Model and a Thermal Model. , 0, , .		5
60	Numerical Study of Heat Losses in Automotive Engines during Cold Starts. Application to Prediction of Thermal Deficit.. , 2005, , .		5
61	Microfluidic Assisted Flash Precipitation of Photocrosslinkable Fluorescent Organic Nanoparticles for Fine Size Tuning and Enhanced Photoinduced Processes. ChemPhysChem, 2020, 21, 2502-2515.	2.1	4
62	Effect of cross-slot configuration in microfluidics on o/w emulsification at high throughput. Microfluidics and Nanofluidics, 2021, 25, 1.	2.2	4
63	Convection velocities in gas and liquid phases during fragmentation of droplets. Experimental Thermal and Fluid Science, 2021, 129, 110476.	2.7	4
64	LIQUID FUEL RECOVERY THROUGH PYROLYSIS OF POLYETHYLENE WASTE. Environmental Engineering and Management Journal, 2010, 9, 1371-1374.	0.6	4
65	Performance and Emissions of a Spark Ignition Engine Fueled with Water-in-Gasoline Emulsion Produced through Micro-Channels Emulsification. Applied Sciences (Switzerland), 2021, 11, 9453.	2.5	4
66	Experimental Investigation of the Mixing Between Hot and Cold Gas in Two Cooling Processes. Heat Transfer Engineering, 2004, 25, 24-29.	1.9	3
67	A Non Intrusive Method for Knock Detection Based on the Exhaust Gas Temperature. , 0, , .		3
68	Heat transfer analysis during the hydrothermal degradation of an epoxy resin using differential scanning calorimetry (DSC). Journal of Thermal Analysis and Calorimetry, 2016, 125, 861-869.	3.6	3
69	Optical diagnostics for W/O emulsification within impinging flow and right angle mini-channel. Houille Blanche, 2013, 99, 52-59.	0.3	3
70	Formulation and combustion of emulsified fuel: The changes in emission of carbonaceous residue. International Journal of Energy Research, 2009, 34, n/a-n/a.	4.5	2
71	Comparison of micro-explosive fragmentation regimes and characteristics of two- and three-component droplets on a heated substrate. International Journal of Heat and Mass Transfer, 2021, 179, 121651.	4.8	2
72	Model Reduction for Automotive Engine to Enhance Thermal Management of European Modern Cars. , 2005, , .		1

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73	Biofuel Emulsifier Using High Velocity Impinging Flows and Singularities in Micro-Channels. , 2016, , .		1
74	Comparison between numerical and experimental water-in-oil dispersion in a microchannel. , 0, , .		1
75	An Experimental Study of a Wine Batch Distillation in a Copper Pot Still Heated by Gas. Energies, 2021, 14, 3352.	3.1	0
76	The Use of a Phase Change Material within a Cylinder Wall in order to Detect Knock in a Gas SI Engine. , 2004, , .		0
77	Recyclage dâ€™un composite Ã base dâ€™une rÃ©sine thermodurcissable par de lâ€™eau en condition subcritique. Materiaux Et Techniques, 2012, 100, 517-524.	0.9	0
78	Experimental investigation on puffing and micro-explosion occurrence of water in rapeseed oil emulsions droplets. Effect of the surfactant concentration.. , 0, , .		0