

Simone Hochgreb

List of Publications by Year in descending order

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148
papers

4,523
citations

117625

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144013

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all docs

148
docs citations

148
times ranked

2569
citing authors

#	ARTICLE	IF	CITATIONS
1	Experimental study of thiophene and ferrocene in synthesis of single-walled carbon nanotubes in rich premixed hydrogen/air flames. <i>Combustion and Flame</i> , 2022, 238, 111939.	5.2	9
2	Open-source modelling of aerosol dynamics and computational fluid dynamics: bipolar and unipolar diffusion charging and photoelectric charging. <i>Computer Physics Communications</i> , 2022, , 108399.	7.5	0
3	Instantaneous flame front identification by Mie scattering vs. OH PLIF in low turbulence Bunsen flame. <i>Experiments in Fluids</i> , 2022, 63, .	2.4	8
4	Experimental and numerical study on soot formation in laminar diffusion flames of biodiesels and methyl esters. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 1335-1344.	3.9	10
5	Measurement of the effect of water droplets on strained laminar flames using two-phase PIV. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 3183-3192.	3.9	7
6	Compositional and entropy indirect noise generated in subsonic non-isentropic nozzles. <i>Journal of Fluid Mechanics</i> , 2021, 910, .	3.4	12
7	Evaluation of manifold representations of chemistry in stratified, swirl-stabilized flames. <i>Combustion and Flame</i> , 2021, 229, 111418.	5.2	4
8	Measurement and simulation of sooting characteristics by an ATJ-SKA biojet fuel and blends with Jet A-1 fuel in laminar non-premixed flames. <i>Combustion and Flame</i> , 2021, 233, 111582.	5.2	11
9	Three dimensional measurements of surface areas and burning velocities of turbulent spherical flames. <i>Combustion and Flame</i> , 2021, 233, 111586.	5.2	12
10	Numerical investigation on the generation, mixing and convection of entropic and compositional waves in a flow duct. <i>Journal of Sound and Vibration</i> , 2020, 472, 115155.	3.9	9
11	Synthesis of single-walled carbon nanotubes in rich hydrogen/air flames. <i>Materials Chemistry and Physics</i> , 2020, 254, 123479.	4.0	8
12	Quantification of carbon particulates produced under open liquid pool and prevaporised flame conditions: Waste cooking oil biodiesel and diesel blends. <i>Fuel</i> , 2020, 270, 117469.	6.4	12
13	A Simple Method for Measuring Fine-to-Ultrafine Aerosols Using Bipolar Charge Equilibrium. <i>ACS Sensors</i> , 2020, 5, 447-453.	7.8	17
14	Mind the gap: Turbulent combustion model validation and future needs. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 2091-2107.	3.9	19
15	Soot volume fraction measurements over laminar pool flames of biofuels, diesel and blends. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 877-884.	3.9	22
16	Soot mass concentration sensor using quartz-enhanced photoacoustic spectroscopy. <i>Aerosol Science and Technology</i> , 2019, 53, 971-975.	3.1	8
17	Measuring aerosol active surface area by direct ultraviolet photoionization and charge capture in continuous flow. <i>Aerosol Science and Technology</i> , 2019, 53, 1429-1440.	3.1	9
18	Uncertainty analysis in structured laser illumination planar imaging (SLIPI) applied to non-linear signals: gas-phase phosphor thermometry. <i>Measurement Science and Technology</i> , 2019, 30, 084003.	2.6	2

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19	Temperature and water measurements in flames using 1064Ånm Laser-Induced Grating Spectroscopy (LIGS). <i>Combustion and Flame</i> , 2019, 205, 336-344.	5.2	18
20	Mapping the parameter space for direct-spun carbon nanotube aerogels. <i>Carbon</i> , 2019, 146, 789-812.	10.3	86
21	Modelling the effect of aerosol polydispersity on unipolar charging and measurement in low-cost sensors. <i>Journal of Aerosol Science</i> , 2019, 130, 10-21.	3.8	16
22	Dust Explosion Propagation in Small Diameter Pipes. <i>Process Safety Progress</i> , 2019, 38, e12033.	1.0	8
23	A generalised model for acoustic and entropic transfer function of nozzles with losses. <i>Journal of Sound and Vibration</i> , 2019, 440, 212-230.	3.9	23
24	Reconciling turbulent burning velocity with flame surface area in small-scale turbulence. <i>Journal of Fluid Mechanics</i> , 2019, 858, .	3.4	15
25	Quantitative measurement of temperature in oxygen enriched CH ₄ /O ₂ /N ₂ premixed flames using Laser Induced Thermal Grating Spectroscopy (LITGS) up to 1.0MPa. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 1427-1434.	3.9	6
26	High Frequency Measurement of Temperature and Composition Spots With LITGS. <i>Journal of Engineering for Gas Turbines and Power</i> , 2019, 141, .	1.1	6
27	Gas-phase Raman spectroscopy of non-reacting flows: comparison between free-space and cavity-based spontaneous Raman emission. <i>Applied Optics</i> , 2019, 58, C92.	1.8	6
28	Tracer-free laser-induced grating spectroscopy using a pulse burst laser at 100 kHz. <i>Optics Express</i> , 2019, 27, 31217.	3.4	6
29	Flame thermometry using laser-induced-grating spectroscopy of nitric oxide. <i>Applied Physics B: Lasers and Optics</i> , 2018, 124, 43.	2.2	11
30	Explosion hazards of aluminum finishing operations. <i>Journal of Loss Prevention in the Process Industries</i> , 2018, 51, 84-93.	3.3	36
31	Soot measurement in diluted methane diffusion flames by multi-pass extinction and laser-induced incandescence. <i>Combustion and Flame</i> , 2018, 192, 224-237.	5.2	16
32	Measuring ultrafine aerosols by direct photoionization and charge capture in continuous flow. <i>Aerosol Science and Technology</i> , 2018, 52, 546-556.	3.1	9
33	Laser-induced incandescence particle image velocimetry (LII-PIV) for two-phase flow velocity measurement. <i>Experiments in Fluids</i> , 2018, 59, 1.	2.4	16
34	Direct and Indirect Noise Generated by Entropic and Compositional Inhomogeneities. <i>Journal of Engineering for Gas Turbines and Power</i> , 2018, 140, .	1.1	21
35	Flame structure, spectroscopy and emissions quantification of rapeseed biodiesel under model gas turbine conditions. <i>Applied Energy</i> , 2017, 185, 1383-1392.	10.1	43
36	Extracting flame describing functions in the presence of self-excited thermoacoustic oscillations. <i>Proceedings of the Combustion Institute</i> , 2017, 36, 3851-3861.	3.9	26

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37	Scalar dissipation rate and scales in swirling turbulent premixed flames. Proceedings of the Combustion Institute, 2017, 36, 1957-1965.	3.9	7
38	Modelling of direct ultraviolet photoionization and charge recombination of aerosol nanoparticles in continuous flow. Journal of Applied Physics, 2017, 121, 023104.	2.5	12
39	Detection of direct and indirect noise generated by synthetic hot spots in a duct. Journal of Sound and Vibration, 2017, 394, 220-236.	3.9	29
40	Simultaneous, two-camera, 2D gas-phase temperature and velocity measurements by thermographic particle image velocimetry with ZnO tracers. Experiments in Fluids, 2017, 58, 1.	2.4	14
41	Theory and application of reverberated direct and indirect noise. Journal of Fluid Mechanics, 2017, 819, 435-464.	3.4	19
42	Igniter-induced hybrids in the 20-l sphere. Journal of Loss Prevention in the Process Industries, 2017, 49, 348-356.	3.3	21
43	Planar 2-color time-resolved laser-induced incandescence measurements of soot in a diffusion flame. Aerosol Science and Technology, 2017, 51, 1345-1353.	3.1	16
44	Study on hybrid combustion of aero-suspensions of boron-aluminum powders in a quiescent reaction medium. Journal of Loss Prevention in the Process Industries, 2017, 49, 645-651.	3.3	10
45	Advances in rapid compression machine studies of low- and intermediate-temperature autoignition phenomena. Progress in Energy and Combustion Science, 2017, 63, 1-78.	31.2	180
46	Modeling quenching distance and flame propagation speed through an iron dust cloud with spatially random distribution of particles. Journal of Loss Prevention in the Process Industries, 2016, 43, 138-146.	3.3	11
47	Effect of mixture flow stratification on premixed flame structure and emissions under counter-rotating swirl burner configuration. Applied Thermal Engineering, 2016, 105, 905-912.	6.0	33
48	Scalar structure of turbulent stratified swirl flames conditioned on local equivalence ratio. Combustion and Flame, 2016, 166, 76-79.	5.2	6
49	Direct comparison of PDF and scalar dissipation rates between LEM simulations and experiments for turbulent, premixed methane air flames. Combustion and Flame, 2016, 165, 208-222.	5.2	5
50	Quantitative Temperature Measurement of Toluene/air Mixture using Laser Induced Thermal Grating Spectroscopy (LITGS). The Proceedings of Mechanical Engineering Congress Japan, 2016, 2016, G0600101.	0.0	0
51	High spatial resolution laser cavity extinction and laser-induced incandescence in low-soot-producing flames. Applied Physics B: Lasers and Optics, 2015, 120, 469-487.	2.2	36
52	Spray and combustion characteristics of biodiesel: Non-reacting and reacting. International Biodeterioration and Biodegradation, 2015, 102, 353-360.	3.9	19
53	Spatial Analysis on Forced Heat Release Response of Turbulent Stratified Flames. Journal of Engineering for Gas Turbines and Power, 2015, 137, .	1.1	11
54	The response of stratified swirling flames to acoustic forcing: Experiments and comparison to model. Proceedings of the Combustion Institute, 2015, 35, 3309-3315.	3.9	28

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55	Measurements of non-reacting and reacting flow fields of a liquid swirl flame burner. Chinese Journal of Mechanical Engineering (English Edition), 2015, 28, 394-401.	3.7	10
56	Laser diagnostics of pulverized coal combustion in O ₂ /N ₂ and O ₂ /CO ₂ conditions: velocity and scalar field measurements. Experiments in Fluids, 2015, 56, 1.	2.4	43
57	Conditional analysis of turbulent premixed and stratified flames on local equivalence ratio and progress of reaction. Combustion and Flame, 2015, 162, 3896-3913.	5.2	33
58	Fundamental Spray Combustion Characteristics of Rapeseed Biodiesel, Diesel and Blend. Energy Procedia, 2015, 75, 2394-2399.	1.8	3
59	Nonlinear dynamics of a self-excited thermoacoustic system subjected to acoustic forcing. Proceedings of the Combustion Institute, 2015, 35, 3229-3236.	3.9	89
60	Large-eddy simulation of pulverized coal jet flame " Effect of oxygen concentration on NO formation. Fuel, 2015, 142, 152-163.	6.4	79
61	Favre- and Reynolds-averaged velocity measurements: Interpreting PIV and LDA measurements in combustion. Proceedings of the Combustion Institute, 2015, 35, 3803-3811.	3.9	15
62	EFFECT OF ATOMIZING AIR FLOW ON SPRAY ATOMIZATION OF AN INTERNAL-MIX TWIN-FLUID ATOMIZER. Atomization and Sprays, 2015, 25, 657-673.	0.8	26
63	Proper Orthogonal Decomposition Analysis of Non-Swirling Turbulent Stratified and Premixed Methane/Air Flames. , 2014, , .		1
64	OxyCAP UK: Oxyfuel Combustion - academic Programme for the UK. Energy Procedia, 2014, 63, 504-510.	1.8	1
65	Discrete multicomponent model for biodiesel spray combustion simulation. Fuel, 2014, 126, 44-54.	6.4	20
66	Spray flame structure of rapeseed biodiesel and Jet-A1 fuel. Fuel, 2014, 115, 551-558.	6.4	55
67	Temperature measurements of the bluff body surface of a Swirl Burner using phosphor thermometry. Combustion and Flame, 2014, 161, 2842-2848.	5.2	27
68	Spatial Analysis on Forced Heat Release Response of Turbulent Stratified Flames. , 2014, , .		1
69	Flow field measurements of a series of turbulent premixed and stratified methane/air flames. Combustion and Flame, 2013, 160, 2017-2028.	5.2	65
70	Planar Laser-Induced Fluorescence Fuel Imaging During Gas-Turbine Relight. Journal of Propulsion and Power, 2013, 29, 961-974.	2.2	13
71	Flow field measurements of pulverized coal combustion using optical diagnostic techniques. Experiments in Fluids, 2013, 54, 1.	2.4	36
72	Multiply conditioned analyses of stratification in highly swirling methane/air flames. Combustion and Flame, 2013, 160, 322-334.	5.2	46

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73	The behaviour of laminar stratified methane/air flames in counterflow. <i>Combustion and Flame</i> , 2013, 160, 1070-1082.	5.2	40
74	Forced and Self-Excited Instabilities From Lean Premixed, Liquid-Fuelled Aeroengine Injectors at High Pressures and Temperatures. , 2013, , .		15
75	Spray Flame Study Using a Model Gas Turbine Swirl Burner. <i>Applied Mechanics and Materials</i> , 2013, 316-317, 17-22.	0.2	16
76	Comparison of Acoustic Velocity Perturbation Measurements Using PIV vs. Two-Microphone Technique. , 2013, , .		1
77	Effects of Nonuniform Reactant Stoichiometry on Thermoacoustic Instability in a Lean-Premixed Gas Turbine Combustor. <i>Combustion Science and Technology</i> , 2012, 184, 608-628.	2.3	27
78	Effects of preferential transport in turbulent bluff-body-stabilized lean premixed CH ₄ /air flames. <i>Combustion and Flame</i> , 2012, 159, 2563-2575.	5.2	129
79	The structure of turbulent stratified and premixed methane/air flames II: Swirling flows. <i>Combustion and Flame</i> , 2012, 159, 2912-2929.	5.2	136
80	The structure of turbulent stratified and premixed methane/air flames I: Non-swirling flows. <i>Combustion and Flame</i> , 2012, 159, 2896-2911.	5.2	136
81	Spray Combustion Characteristics of Palm Biodiesel. <i>Combustion Science and Technology</i> , 2012, 184, 1093-1107.	2.3	45
82	Measurements of triggering and transient growth in a model lean-premixed gas turbine combustor. <i>Combustion and Flame</i> , 2012, 159, 1215-1227.	5.2	67
83	Effects of Nonuniform Reactant Stoichiometry on Combustion Instability. , 2011, , .		3
84	The nonlinear heat release response of stratified lean-premixed flames to acoustic velocity oscillations. <i>Combustion and Flame</i> , 2011, 158, 2482-2499.	5.2	98
85	The structure of premixed and stratified low turbulence flames. <i>Combustion and Flame</i> , 2011, 158, 935-948.	5.2	64
86	Measurements of laminar flame speeds of liquid fuels: Jet-A1, diesel, palm methyl esters and blends using particle imaging velocimetry (PIV). <i>Proceedings of the Combustion Institute</i> , 2011, 33, 979-986.	3.9	129
87	Measurements of laminar flame speeds of acetone/methane/air mixtures. <i>Combustion and Flame</i> , 2011, 158, 490-500.	5.2	77
88	A comparative analysis of flame surface density metrics in premixed and stratified flames. <i>Proceedings of the Combustion Institute</i> , 2011, 33, 1419-1427.	3.9	35
89	Effect of Cooling Liner on Acoustic Energy Absorption and Flame Response. , 2010, , .		5
90	Isothermal flow measurements in a gas turbine combustor using a fast flame ionization detector. <i>Measurement Science and Technology</i> , 2010, 21, 055107.	2.6	2

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91	Flame Imaging of Gas-Turbine Relight. AIAA Journal, 2010, 48, 1916-1927.	2.6	40
92	Investigation of the Effect of Combustor Cooling Geometry on Acoustic Energy Absorption. , 2010, , .		2
93	The Effects of Small-Scale Mixing Models on the Prediction of Turbulent Premixed and Stratified Combustion. Combustion Science and Technology, 2010, 182, 1141-1170.	2.3	28
94	Experimental measurements of geometric properties of turbulent stratified flames. Proceedings of the Combustion Institute, 2009, 32, 1763-1770.	3.9	69
95	Application of Raman/Rayleigh/LIF diagnostics in turbulent stratified flames. Proceedings of the Combustion Institute, 2009, 32, 945-953.	3.9	97
96	Autonomous extraction of optimal flame fronts in OH planar laser-induced fluorescence images. Applied Optics, 2009, 48, 3866.	2.1	26
97	Application of Multiscalar Laser Diagnostics to Turbulent Stratified Methane/Air Flames. , 2008, , .		0
98	Relight Imaging at Low Temperature, Low Pressure Conditions. , 2008, , .		13
99	Time-resolved laser-induced incandescence of soot: the influence of experimental factors and microphysical mechanisms. Applied Optics, 2003, 42, 5577.	2.1	71
100	Impact of Biomass Pyrolysis Oil Process Conditions on Ignition Delay in Compression Ignition Engines. Energy & Fuels, 2002, 16, 552-561.	5.1	57
101	Analysis of the Piston Ring/Liner Oil Film Development During Warm-Up for an SI-Engine. Journal of Engineering for Gas Turbines and Power, 2001, 123, 109-116.	1.1	25
102	Time-resolved laser-induced incandescence and laser elastic-scattering measurements in a propane diffusion flame. Applied Optics, 2001, 40, 2443.	2.1	63
103	Liquid Fuel Impingement on the Piston Bowl of a Direct-Injection, Spark-Ignited (DISI) Engine under Stratified Operation. , 2001, , .		13
104	Effects of Fuel Volatility and Operating Conditions on Fuel Sprays in DISI Engines: (2) PDPA Investigation. , 2000, , .		21
105	Detailed Calculation of Heating, Evaporation, and Reaction Processes of a Thin Liquid Layer of Hydrocarbon Fuel. , 2000, , .		7
106	Particulate Matter Emission During Start-up and Transient Operation of a Spark-Ignition Engine (2): Effect of Speed, Load, and Real-World Driving Cycles. , 2000, , .		19
107	Diesel Engine Combustion of Biomass Pyrolysis Oils. Energy & Fuels, 2000, 14, 260-274.	5.1	130
108	Particulate Matter Emission During Start-up and Transient Operation of a Spark-Ignition Engine. , 1999, , .		9

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109	Quantitative shearography in axisymmetric gas temperature measurements. Optics and Lasers in Engineering, 1999, 31, 21-39.	3.8	22
110	Mechanisms of Particulate Matter Formation in Spark-Ignition Engines. 1. Effect of Engine Operating Conditions. Environmental Science & Technology, 1999, 33, 3957-3967.	10.0	87
111	Mechanisms of Particulate Matter Formation in Spark-Ignition Engines. 3. Model of PM Formation. Environmental Science & Technology, 1999, 33, 3978-3992.	10.0	42
112	Mechanisms of Particulate Matter Formation in Spark-Ignition Engines. 2. Effect of Fuel, Oil, and Catalyst Parameters. Environmental Science & Technology, 1999, 33, 3968-3977.	10.0	41
113	Rapid Compression Machines: Heat Transfer and Suppression of Corner Vortex. Combustion and Flame, 1998, 114, 531-545.	5.2	182
114	Hydrogen autoignition at pressures above the second explosion limit (0.6-4.0 MPa). International Journal of Chemical Kinetics, 1998, 30, 385-406.	1.6	73
115	The effect of fuel volatility on sprays from high-pressure swirl injectors. Proceedings of the Combustion Institute, 1998, 27, 1865-1871.	0.3	36
116	Plasma Reforming of Methane. Energy & Fuels, 1998, 12, 11-18.	5.1	117
117	Combustion-Related Emissions in SI Engines. , 1998, , 118-170.		26
118	Liquid Fuel Visualization Using Laser-Induced Fluorescence During Cold Start. , 1998, , .		10
119	Early Spray Development in Gasoline Direct-Injected Spark Ignition Engines. , 1998, , .		29
120	Hydrogen autoignition at pressures above the second explosion limit (0.6-4.0 MPa). International Journal of Chemical Kinetics, 1998, 30, 385-406.	1.6	3
121	The Roles of Chemistry and Diffusion on Hydrocarbon Post-Flame Oxidation. Combustion Science and Technology, 1997, 130, 365-398.	2.3	18
122	Time, Space, and Species Resolved Measurements of Engine-Out Hydrocarbon Emissions from Spark-Ignited Engines. Combustion Science and Technology, 1997, 127, 333-362.	2.3	15
123	Development of a Time and Space Resolved Sampling Probe Diagnostic for Engine Exhaust Hydrocarbons. , 1996, , .		8
124	Measurement of Gasoline Absorption into Engine Lubricating Oil. , 1996, , .		11
125	Chemical kinetic simulation of hydrocarbon oxidation through the exhaust port of a spark ignition engine. Combustion and Flame, 1996, 107, 383-400.	5.2	8
126	Oxidation of hydrocarbons from lubricant oil layers in spark-ignition engines. Proceedings of the Combustion Institute, 1996, 26, 2645-2652.	0.3	2

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127	Chemical kinetic modeling of exhaust hydrocarbon oxidation. Combustion and Flame, 1995, 100, 193-201.	5.2	14
128	Analytical Scaling Model for Hydrocarbon Emissions From Fuel Absorption in Oil Layers in Spark Ignition Engines. Combustion Science and Technology, 1995, 109, 205-226.	2.3	10
129	Auto-Oil Program Phase II Heavy Hydrocarbon Study: Fuel Species Oxidation Chemistry and Its Relationship to the Auto-Oil Data. , 1994, , .		6
130	Auto-Oil Program Phase II Heavy Hydrocarbon Study: Analysis of Engine-Out Hydrocarbon Emissions Data. , 1994, , .		5
131	Decomposition of 1,3,5-trioxane at 700-800 K. The Journal of Physical Chemistry, 1992, 96, 295-297.	2.9	34
132	A comprehensive study on CH ₂ O oxidation kinetics. Combustion and Flame, 1992, 91, 257-284.	5.2	50
133	The oxidation of CH ₂ O in the intermediate temperature range (943â€“995 K). Proceedings of the Combustion Institute, 1991, 23, 171-177.	0.3	12
134	Chemical Kinetic Modeling of the Oxidation of Unburned Hydrocarbons. , 0, , .		10
135	An Overview of Hydrocarbon Emissions Mechanisms in Spark-Ignition Engines. , 0, , .		216
136	Autoignition of Alcohols and Ethers in a Rapid Compression Machine. , 0, , .		15
137	Novel Experiment on In-Cylinder Desorption of Fuel from the Oil Layer. , 0, , .		10
138	Extent of Oxidation of Hydrocarbons Desorbing from the Lubricant Oil Layer in Spark-ignition Engines. , 0, , .		15
139	Hydrogen production via plasma reformers. , 0, , .		2
140	Numerical Simulation of Post-Flame Oxidation of Hydrocarbons in Spark Ignition Engines. , 0, , .		20
141	Investigation of the Dilution Process for Measurement of Particulate Matter from Spark-Ignition Engines. , 0, , .		22
142	Effect of Operating Conditions and Fuel Type on Crevice HC Emissions: Model Results and Comparison with Experiments. , 0, , .		6
143	Numerical Modeling of Fuel Sprays in DISI Engines Under Early-Injection Operating Conditions. , 0, , .		10
144	Effects of Fuel Volatility and Operating Conditions on Fuel Sprays in DISI Engines: (1) Imaging Investigation. , 0, , .		27

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145	Fuel Distribution and Combustion Characteristics in a Direct-Injection, Spark-Ignited (DISI) Engine Under Stratified Operation. , 0, , .		13
146	Flow Field of a Model Gas Turbine Swirl Burner. Advanced Materials Research, 0, 622-623, 1119-1124.	0.3	7
147	Effects of the Biodiesel Fuel Physical Properties on the Swirl Stabilised Spray Combustion Characteristics. , 0, , .		2
148	Spray Characteristics of an Internal-Mix Airblast Atomizer. Applied Mechanics and Materials, 0, 629, 125-130.	0.2	5