Diagnostic techniques for the monitoring and control o

Progress in Energy and Combustion Science
36, 375-411
DOI: 10.1016/j.pecs.2009.11.005

Citation Report

#	Article	IF	Citations
1	Compositive Assessment Model of Flame Combustion Stability Based on Grey Theory. , 2010, , .		0
2	Three-dimensional reconstruction of combustion flames through optical fiber sensing and CCD imaging. , 2011, , .		16
3	Intelligent system for monitoring and stoichiometric optimization of combustion. , 2011, , .		1
4	A tailor-made development for time domain data series pre-processing in the power industry. , 2011, , .		0
5	A Medial Axis Extraction Algorithm for the Processing of Combustion Flame Images. , 2011, , .		2
6	Experimental and Numerical Characterization of Lean Hydrogen Combustion in a Premix Burner Prototype. , 2011, , .		4
7	Profiling and Characterization of Flame Radicals by Combining Spectroscopic Imaging and Neural Network Techniques. IEEE Transactions on Instrumentation and Measurement, 2011, 60, 1854-1860.	2.4	30
9	Influence of pulverized coal properties on heat release region in turbulent jet pulverized coal flames. Experimental Thermal and Fluid Science, 2011, 35, 694-699.	1.5	23
10	Flame stability monitoring and characterization through digital imaging and spectral analysis. Measurement Science and Technology, 2011, 22, 114007.	1.4	35
11	Measurement of flame temperature distribution using optical tomographic and two-color pyrometric techniques. , 2012, , .		7
12	Three-dimensional reconstruction of flame temperature and emissivity through tomographic imaging and pyrometric measurement. , 2012, , .		7
13	Diagnosing steam production systems on their multivariable steady states. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 254-259.	0.4	0
14	Method for determining effective flame emissivity in a rotary kiln incinerator burning solid waste. Journal of Zhejiang University: Science A, 2012, 13, 969-978.	1.3	3
15	Three-Dimensional Temperature Distribution of Impinging Flames in an Opposed Multiburner Gasifier. Industrial & Engineering Chemistry Research, 2012, 51, 7828-7837.	1.8	91
16	Chemiluminescence-based multivariate sensing of local equivalence ratios in premixed atmospheric methaneâ€“air flames. Fuel, 2012, 93, 684-691.	3.4	40
17	A two-step discrete method for reconstruction of temperature distribution in a three-dimensional participating medium. International Journal of Heat and Mass Transfer, 2012, 55, 2636-2646.	2.5	6
18	Coal flame characterization by means of digital image processing in a semi-industrial scale PF swirl burner. Applied Energy, 2012, 94, 375-384.	5.1	61
19	Investigation on a new methodology for thermal power plant assessment through live diagnosis monitoring of selected process parameters; application to a case study. Energy, 2012, 42, 170-180.	4.5	18

#	Article	IF	Citations
20	Large area Agâ€“TiO2 UV radiation sensor fabricated on a thermally oxidized titanium chip. Sensors and Actuators A: Physical, 2012, 173, 116-121.	2.0	43
21	Optical Fiber Imaging Based Tomographic Reconstruction of Burner Flames. IEEE Transactions on Instrumentation and Measurement, 2012, 61, 1417-1425.	2.4	89
22	Diagnosis of iso-octane combustion in a shock tube by emission spectroscopy. Chemical Physics Letters, 2013, 556, 13-17.	1.2	4
23	A simple index based quantitative assessment of flame stability. , 2013, , .		5
24	Combustion chemistry probed by synchrotron VUV photoionization mass spectrometry. Proceedings of the Combustion Institute, 2013, 34, 33-63.	2.4	340
25	Characterization of PF flames under different swirl conditions based on visualization systems. Fuel, 2013, 113, 798-809.	3.4	27
26	Study of the phase-varying mechanisms of ion current signals for combustion phasing in a gasoline HCCI engine. Fuel, 2013, 113, 209-215.	3.4	17
27	Theoretical fast non-intrusive 3-D temperature distribution measurement within scattering medium from flame emission image analysis. Optics Communications, 2013, 292, 25-30.	1.0	7
28	Chemiluminescence-based sensing of flame stoichiometry: Influence of the measurement method. Measurement: Journal of the International Measurement Confederation, 2013, 46, 3084-3097.	2.5	36
29	Imaging based chemiluminescence characterisation of partially premixed syngas flames through DFCD technique. International Journal of Hydrogen Energy, 2013, 38, 4839-4847.	3.8	10
30	Combustion Characteristics of Coalâ€“Water Slurry in a Slag-Tap Vertical Cyclone Furnace through Digital Imaging. Energy & Fuels, 2013, 27, 3427-3437.	2.5	12
31	New investigation on diagnosing steam production systems from multivariate time series applied to thermal power plants. Applied Energy, 2013, 101, 589-599.	5.1	18
32	A new apparatus for study of pressure-dependent laminar premixed flames with vacuum ultraviolet photoionization mass spectrometry. Review of Scientific Instruments, 2013, 84, 014101.	0.6	14
33	Three-dimensional reconstruction of flame temperature and emissivity distribution using optical tomographic and two-colour pyrometric techniques. Measurement Science and Technology, 2013, 24, 074010.	1.4	103
34	Flame stability monitoring through statistical analysis of the medial axis. , 2013, , .		0
35	Assessment of Chemical Markers for Heat-Release Rate Correlations in Laminar Premixed Flames. Combustion Science and Technology, 2013, 185, 1482-1508.	1.2	21
36	Condition Monitoring of Combustion Processes Through Flame Imaging and Kernel Principal Component Analysis. Combustion Science and Technology, 2013, 185, 1400-1413.	1.2	23
37	Flame spectra-temperature estimation based on a color imaging camera and a spectral reconstruction technique. Applied Optics, 2014, 53, 6351.	0.9	22

#	Article	IF	Citations
38	Analysis of chemiluminescence measurements by grey-scale ICCD and colour digital cameras. Measurement Science and Technology, 2014, 25, 055202.	1.4	15
39	Combustion Monitoring in Gas Turbines and Enhanced Stability at Very Lean Conditions. , 2014, , .		1
40	Characterization of linearity and uniformity of fiber-based endoscopes for 3D combustion measurements. Applied Optics, 2014, 53, 5961.	0.9	10
41	Application of fiber optic flame monitoring system for estimation burner input parameters. , 2014, , .		0
42	Tomographic imaging based measurement of three-dimensional geometric parameters of a burner flame. , 2014, , .		4
43	Characterization of Combustion Chemiluminescence: An Image Processing Approach. Procedia Technology, 2014, 17, 194-201.	1.1	11
44	Influence of fuel composition on chemiluminescence emission in premixed flames of CH4/CO2/H2/CO blends. International Journal of Hydrogen Energy, 2014, 39, 20255-20265.	3.8	29
45	Fiber-based endoscopes for 3D combustion measurements: View registration and spatial resolution. Combustion and Flame, 2014, 161, 3063-3072.	2.8	48
46	Flame chemiluminescence in premixed combustion of hydrogen-enriched fuels. International Journal of Hydrogen Energy, 2014, 39, 11299-11307.	3.8	32
47	Slope effects on the fluid dynamics of a fire spreading across a fuel bed: PIV measurements and OH* chemiluminescence imaging. Experiments in Fluids, 2014, 55, 1.	1.1	20
48	A numerical study on the ability to predict the heat release rate using CH* chemiluminescence in non-sooting counterflow diffusion flames. Combustion and Flame, 2014, 161, 162-172.	2.8	54
49	Effect of local flame properties on chemiluminescence-based stoichiometry measurement. Experimental Thermal and Fluid Science, 2014, 53, 93-103.	1.5	27
50	Calibration of Fiber Bundles for Flow and Combustion Measurements. , 2014, , .		5
51	Identification of biomass co-combustion operating point using image processing. Proceedings of SPIE, 2014, , .	0.8	0
52	A Structure from Motion Approach for the Analysis of Adhesions in Rotating Vessels. , 2014, , .		2
53	On the use of flame analysis and optical variables for an optimized operation in ladle furnace preheating process. , 2015, , .		7
54	Effect of Air Coflow on Lean Premixed Flames on a Stratified Burner. Combustion Science and Technology, 2015, 187, 1317-1334.	1.2	1
55	Stagnant regions estimation in fluidized beds from bed surface observation. Chemical Engineering Journal, 2015, 281, 109-118.	6.6	4

#	Article	IF	Citations
56	Wide band study of silicon-on-insulator photodiodes on suspended micro-hotplates platforms. , 2015, , .		5
57	Chemiluminescence Studies of Coke Oven Gas/O2 Coflow Normal/Inverse Diffusion Flames. Journal of Engineering for Gas Turbines and Power, 2015, 137, .	0.5	7
58	Study on the phase relation between ion current signal and combustion phase in an HCCI combustion engine. Proceedings of the Combustion Institute, 2015, 35, 3097-3105.	2.4	37
59	Experimental Study on Spectral Characteristics of Kerosene Swirl Combustion. Procedia Engineering, 2015, 99, 304-312.	1.2	13
60	Passive Optical Combustion Sensors for Scramjet Engine Control. , 2015, , .		9
61	Temperature measurement of gas turbine swirling flames using tomographic imaging techniques. , 2015, , .		0
62	Three-dimensional combined pyrometric sizing and velocimetry of combusting coal particles I Velocimetry. Applied Optics, 2015, 54, 4049.	2.1	6
63	Quantitative Assessment of Flame Stability Through Image Processing and Spectral Analysis. IEEE Transactions on Instrumentation and Measurement, 2015, 64, 3323-3333.	2.4	42
64	Open-Path FTIR Spectral Radiation Intensity Of Hot Combustion Gases â€“ Measurement And Interpretation. Metrology and Measurement Systems, 2015, 22, 193-204.	1.4	7
65	Spectroscopic analysis of crude rapeseed oil flame. Fuel Processing Technology, 2015, 139, 61-66.	3.7	30
66	Combustion characteristics of premixed propane flame with added H 2 and CO on a V-shaped impinging burner. International Journal of Hydrogen Energy, 2015, 40, 1244-1255.	3.8	9
67	Online monitoring of the two-dimensional temperature field in a boiler furnace based on acoustic computed tomography. Applied Thermal Engineering, 2015, 75, 958-966.	3.0	74
68	Experimental analysis of biomass co-firing flames in a pulverized fuel swirl burner using a CCD based visualization system. Fuel Processing Technology, 2015, 130, 299-310.	3.7	27
69	Radiation sensor in a oil boiler based on flame spectral analysis. , 2016, , .		0
70	Experimental and Numerical Investigations on the Effect of Different Air-Fuel Mixing Strategies on the Performance of a Lean Liquid Fueled Swirled Combustor. Energy Procedia, 2016, 101, 925-932.	1.8	3
71	A high-speed camera based approach for the on-line analysis of particles in multi-fuel burner flames. Experimental Thermal and Fluid Science, 2016, 73, 10-17.	1.5	21
72	Simultaneously reconstruction of inhomogeneous temperature and radiative properties by radiation image processing. International Journal of Thermal Sciences, 2016, 107, 121-130.	2.6	28
73	An experimental study on the spectroscopic characteristics in coal-water slurry diffusion flames based on hot-oxygen burner technology. Fuel Processing Technology, 2016, 154, 168-177.	3.7	17

#	Article	IF	Citations
74	Suppression of Spontaneous Gas Oscillations by Acoustic Self-Feedback. Physical Review Applied, 2016, 6, .	1.5	13
75	Shock Tube and Modeling Study of Chemical Ionization in the Oxidation of Acetylene and Methane Mixtures. Combustion Science and Technology, 2016, 188, 1815-1830.	1.2	8
76	OH* Chemiluminescence Characteristics and Structures of the Impinging Reaction Region in Opposed Impinging Diffusion Flames. Energy & Fuels, 0, , .	2.5	4
77	Three-dimensional temperature field measurement of flame using a single light field camera. Optics Express, 2016, 24, 1118.	1.7	91
78	Radiation measurement based on spectral emissions in industrial flames. Measurement: Journal of the International Measurement Confederation, 2016, 87, 62-73.	2.5	37
79	Experimental investigation of the response of laminar premixed flames to equivalence ratio oscillations. Combustion and Flame, 2016, 167, 172-183.	2.8	9
80	Multi-angular Flame Measurements and Analysis in a Supersonic Wind Tunnel Using Fiber-Based Endoscopes. Journal of Engineering for Gas Turbines and Power, 2016, 138, .	0.5	8
81	A skeletal gasoline flame ionization mechanism for combustion timing prediction on HCCI engines. Proceedings of the Combustion Institute, 2017, 36, 3669-3676.	2.4	22
82	A novel calibration method of focused light field camera for 3-D reconstruction of flame temperature. Optics Communications, 2017, 390, 7-15.	1.0	35
83	Quantitative and qualitative relationship between swirl burner operatingconditions and pulverized coal flame length. Fuel Processing Technology, 2017, 156, 138-155.	3.7	13
84	Experimental Characterization and Modeling for Equivalence Ratio Sensing in Non-premixed Flames Using Chemiluminescence and Laser-Induced Breakdown Spectroscopy Techniques. Energy & Fuels, 2017, 31, 3227-3233.	2.5	13
85	Multiple-Wavelength Detection in SOI Lateral PIN Diodes With Backside Reflectors. IEEE Transactions on Industrial Electronics, 2017, 64, 7368-7376.	5.2	6
86	Experimental Study on the Spectroscopy of Opposed Impinging Diesel Flames Based on a Bench-Scale Gasifier. Energy & Fuels, 2017, 31, 4469-4478.	2.5	7
87	Experimental study on CH* chemiluminescence characteristics of impinging flames in an opposed multiâ€burner gasifier. AICHE Journal, 2017, 63, 2007-2018.	1.8	15
88	Image-based deep neural network prediction of the heat output of a step-grate biomass boiler. Applied Energy, 2017, 200, 155-169.	5.1	42
89	Development of a flame monitoring and control system for oxy-coal flames. , 2017, , .		3
90	Flame chemiluminescence from CO2- and N2-diluted laminar CH4/air premixed flames. Combustion and Flame, 2017, 181, 110-122.	2.8	49
91	Liquid lens-based optical sectioning tomography for three-dimensional flame temperature measurement. Fuel, 2017, 196, 550-563.	3.4	55

#	Article	IF	Citations
92	Combining flame monitoring techniques and support vector machine for the online identification of coal blends. Journal of Zhejiang University: Science A, 2017, 18, 677-689.	1.3	9
93	Combustion Diagnostics by Calibrated Radiation Sensing and Spectral Estimation. IEEE Sensors Journal, 2017, 17, 5871-5879.	2.4	7
94	The use of combined classification for analysis of the combustion process state. , 2017, , .		0
95	Multimode Monitoring of Oxy-Gas Combustion Through Flame Imaging, Principal Component Analysis, and Kernel Support Vector Machine. Combustion Science and Technology, 2017, 189, 776-792.	1.2	10
96	Luminescent Characteristics of the Shock-Wave Ignition of an Ethyleneâ^'Oxygen Mixture. Combustion Science and Technology, 2017, 189, 854-868.	1.2	16
97	Real-time in situ multi-parameter TDLAS sensing in the reactor core of an entrained-flow biomass gasifier. Proceedings of the Combustion Institute, 2017, 36, 4541-4548.	2.4	56
98	Soot particle size distributions in premixed stretch-stabilized flat ethyleneâ€“oxygenâ€“argon flames. Proceedings of the Combustion Institute, 2017, 36, 1001-1009.	2.4	35
99	Experimental and numerical investigations on oxy-coal combustion in a 35 MW large pilot boiler. Fuel, 2017, 187, 315-327.	3.4	84
100	Probing soot formation, chemical and physical evolution, and oxidation: A review of in situ diagnostic techniques and needs. Proceedings of the Combustion Institute, 2017, 36, 717-735.	2.4	241
101	Optical experimental study on the characteristics of impinging coal-water slurry flame in an opposed multi-burner gasifier. Fuel, 2017, 188, 132-139.	3.4	9
102	Tomographic absorption spectroscopy for the study of gas dynamics and reactive flows. Progress in Energy and Combustion Science, 2017, 59, 1-31.	15.8	203
103	Identification and control of total radiation in a combustion process based on Hammerstein systems. , 2017, , .		2
104	Energy Efficiency Monitoring in a Coal Boiler Based on Optical Variables and Artificial Intelligence. IFAC-PapersOnLine, 2017, 50, 13904-13909.	0.5	5
105	Development of a beam optimization method for absorption-based tomography. Optics Express, 2017, 25, 5982.	1.7	36
106	Demonstration of 3D computed tomography of chemiluminescence with a restricted field of view. Applied Optics, 2017, 56, 7107.	0.9	31
107	In Situ Measurement of Alkali Metals in an MSW Incinerator Using a Spontaneous Emission Spectrum. Applied Sciences (Switzerland), 2017, 7, 263.	1.3	23
108	Pollutant Formation during the Occurrence of Flame Instabilities under Very-Lean Combustion Conditions in a Liquid-Fuel Burner. Energies, 2017, 10, 352.	1.6	16
109	An Investigation of Fuel Mixing and Reaction in a CH4/Syngas/Air Premixed Impinging Flame with Varied H2/CO Proportion. Energies, 2017, 10, 900.	1.6	7

#	Article	IF	Citations
110	Modeling Methods for Combustion Characteristics. Advanced Topics in Science and Technology in China, 2018, , 21-145.	0.0	1
111	Combustion Process Analysis and Diagnostic Using Optical Flame Scanners in Front-Fired Pulverized Coal Boiler. Journal of Energy Resources Technology, Transactions of the ASME, 2018, 140, .	1.4	6
112	Rapid tomographic reconstruction based on machine learning for time-resolved combustion diagnostics. Review of Scientific Instruments, 2018, 89, 043101.	0.6	25
113	Soot propensity by image magnification and artificial intelligence. Fuel, 2018, 225, 256-265.	3.4	10
114	Enhancing the performance of self-powered ultraviolet photosensor using rapid aqueous chemical-grown aluminum-doped titanium oxide nanorod arrays as electron transport layer. Thin Solid Films, 2018, 655, 1-12.	0.8	16
115	Image-Based Characterization of Alternative Fuel Combustion With Multifuel Burners. IEEE Transactions on Industrial Informatics, 2018, 14, 588-597.	7.2	11
116	Characterization of Highly-Confined, Low-Swirl, Non-Premixed Oxygen-Methane Injectors. , 2018, , .		0
117	Development of MIR TLAS System with Applications to Reacting Hot Gas Flows. , 2018, , .		1
118	Effect of producer gas addition and air excess ratio on natural gas flame luminescence. Fuel, 2018, 217, 478-489.	3.4	15
119	Reaction zone monitoring in biomass combustion. Control Engineering Practice, 2018, 74, 95-106.	3.2	5
120	Probing the equivalence ratio in partially premixed flames by combining optical techniques and modeling results. Combustion Science and Technology, 2018, 190, 1442-1454.	1.2	1
121	Investigations of CHâ^— chemiluminescence and blackbody radiation in opposed impinging coal-water slurry flames based on an entrained-flow gasifier. Fuel, 2018, 211, 688-696.	3.4	5
122	Chemical Ionization ofn-Hexane, Acetylene, and Methane behind Reflected Shock Waves. Combustion Science and Technology, 2018, 190, 57-81.	1.2	10
123	Optimal Controllers for Combustion Processes: a Preliminary Approach. IFAC-PapersOnLine, 2018, 51, 56-61.	0.5	0
124	Stabilization and Tracking for P/PI Combustion Control over a Communication Channel âž âžHugo GarcÃ©s acknowledge the support of DirecciÃ³n de InvestigaciÃ³n e InnovaciÃ³n at Universidad CatÃ³lica de la SantÃsima ConcepciÃ³n. Alejandro Rojas is grateful for the support from the Chilean Research Agency CONICYT, through Project Grant FONDECYT Regular No. 1150116 and Basal Project FB0008.. IFAC-PapersOnLine, 2018, 51, 438-443.	0.5	0
125	Hâˆž output-feedback control design for combustion systems using optical instrumentation. IFAC-PapersOnLine, 2018, 51, 134-139.	0.5	1
126	Control of Total Radiation in an Industrial Furnace by Optical Sensing of Flame Emissions. IEEE Latin America Transactions, 2018, 16, 2409-2417.	1.2	2
127	Visualisation and measurement of flames in a gas-fired multi-burner boiler. Journal of Physics: Conference Series, 2018, 1065, 202009.	0.3	0

#	Article	IF	Citations
128	Monitoring Oxy-Coal Flame Stability. , 2018, , .		0
129	Experimental study on the effects of co-firing coal mine waste residues with coal in PF swirl burners. Energy, 2018, 157, 45-53.	4.5	8
130	Analysis of the dynamic response of premixed flames through chemiluminescence cross-correlation maps. Combustion and Flame, 2018, 194, 296-308.	2.8	16
131	Automated rapid blood culture sensor system based on diode laser wavelength-modulation spectroscopy for microbial growth analysis. Sensors and Actuators B: Chemical, 2018, 273, 656-663.	4.0	10
132	Alkalis atomic emission spectroscopy and flame temperature measurement of diesel impinging flames in an opposed multi-burner gasifier. Experimental Thermal and Fluid Science, 2018, 98, 445-453.	1.5	8
133	Application of optical signals for combustion process diagnosis. , 2018, , .		0
134	Preliminary Characterization of the Flame Response of an Acoustically Forced, Swirled, Non-Premixed Injector. , 2018, , .		0
135	Two-color pyrometer-based method for measuring temperature profiles and attenuation coefficients in a coal power plant. Combustion Science and Technology, 2018, 190, 2018-2029.	1.2	9
136	Combustion state monitoring of premixed heating appliances with flame ionization current and chemiluminescence. Combustion Science and Technology, 2019, 191, 382-401.	1.2	9
137	Effect of stoichiometric mixture fraction on soot fraction and emission spectra with application to oxy-combustion. Proceedings of the Combustion Institute, 2019, 37, 4571-4578.	2.4	11
138	Optical variables for optimization of industrial combustion processes: Fundamentals, key aspects and applications. IEEE Latin America Transactions, 2019, 17, 245-252.	1.2	1
139	A Brief Review of the Combustion Diagnosing Techniques for Coal-Fired Boilers of Power Plants in China. IEEE Access, 2019, 7, 126127-126136.	2.6	7
140	Analysis of changes in flame luminosity for process diagnostics. , 2019, , .		1
141	Ion sensors: application to combustion monitoring in gas turbines. , 2019, , .		1
142	Emissivity Characteristics of Hydrocarbon Flame and Temperature Measurement by Color Image Processing. Energies, 2019, 12, 2185.	1.6	5
143	Dilution effects of N2 and CO2 on flame structure and reaction characteristics in CH4/O2 flames. Experimental Thermal and Fluid Science, 2019, 108, 16-24.	1.5	16
144	Effects of CO and H2 addition on OH* chemiluminescence characteristics in laminar rich inverse diffusion flames. Fuel, 2019, 254, 115554.	3.4	10
145	Chemiluminescence usage in finding optimum operating range of multi-hole burners. Energy, 2019, 180, 398-404.	4.5	14

#	Article	IF	Citations
146	Investigation and optimization of sampling characteristics of light field camera for flame temperature measurement. Chinese Physics B, 2019, 28, 034207.	0.7	7
147	Online blendâ€type identification during coâ€firing coal and biomass using SVM and flame emission spectrum in a pilotâ€scale furnace. IET Renewable Power Generation, 2019, 13, 253-261.	1.7	4
148	Multispectral pyrometer for high temperature measurements inside combustion chamber of gas turbine engines. Measurement: Journal of the International Measurement Confederation, 2019, 139, 355-360.	2.5	36
149	Hyperspectral imaging and analysis of swirling flames issued from two and four slots circumferential burners. IOP Conference Series: Materials Science and Engineering, 2019, 610, 012023.	0.3	0
150	Experimental Demonstration of Deterministic Chaos in a Waste Oil Biodiesel Semi-Industrial Furnace Combustion System. Energies, 2019, 12, 4479.	1.6	2
151	Automatic near-infrared hyperspectral image analysis of copper concentrates. IFAC-PapersOnLine, 2019, 52, 94-98.	0.5	6
152	Chemiluminescence based operating point control of domestic gas boilers with variable natural gas composition. Applied Thermal Engineering, 2019, 149, 1052-1060.	3.0	15
153	Review of impacts of gas qualities with regard to quality determination and energy metering of natural gas. Measurement Science and Technology, 2019, 30, 022001.	1.4	19
154	Use of Flame Color and Chemiluminescence for Early Detection of Lean Blowout in Gas Turbine Combustors at Different Levels of Fuelâ€“Air Premixing. Combustion Science and Technology, 2020, 192, 933-957.	1.2	12
155	chemiluminescence technique for equivalence ratio mapping in turbulent stratified flames. Energy, 2020, 192, 116485.	4.5	26
156	In-situ measurement of temperature and alkali metal concentration in municipal solid waste incinerators using flame emission spectroscopy. Waste Management, 2020, 102, 486-491.	3.7	24
157	Algebraic Model for Chemiluminescence Emissions Suitable for Using in Complex Turbulent Propane Flame Simulations. Combustion, Explosion and Shock Waves, 2020, 56, 278-291.	0.3	5
158	Electrical characteristics of laminar propane flame during head-on quenching. Science China Technological Sciences, 2020, 63, 1497-1508.	2.0	2
159	Investigation of Waste Biogas Flame Stability Under Oxygen or Hydrogen-Enriched Conditions. Energies, 2020, 13, 4760.	1.6	5
160	Characterization of laminar flame using high speed camera and spectrometer. Sadhana - Academy Proceedings in Engineering Sciences, 2020, 45, 1.	0.8	0
161	Diesel/syngas co-combustion in a swirl-stabilised gas turbine combustor. International Journal of Thermofluids, 2020, 3-4, 100026.	4.0	10
162	Effects of image positions on temperature reconstruction using light field camera. Results in Physics, 2020, 17, 103146.	2.0	2
163	Experimental studies of the effects of global equivalence ratio and CO2 dilution level on the OH* and CH* chemiluminescence in CH4/O2 diffusion flames. Fuel, 2020, 278, 118307.	3.4	28

#	Article	IF	Citations
164	Visualisation and performance evaluation of biodiesel/methane co-combustion in a swirl-stabilised gas turbine combustor. Fuel, 2020, 277, 118172.	3.4	10
165	Sound Pressure Level Analysis of a Liquid-Fueled Lean Premixed Swirl Burner with Various Quarls. Acoustics, 2020, 2, 131-146.	0.8	1
166	Effect of direct injection dimethyl ether on the micro-flame ignited (MFI) hybrid combustion characteristics of an optical gasoline engine at ultra-lean conditions. Fuel Processing Technology, 2020, 203, 106383.	3.7	13
167	Combustion characteristics and flame stability of linear esters of palmitic acid based on OH-PLIF technology. Journal of the Energy Institute, 2020, 93, 1439-1448.	2.7	6
168	Correlation analysis of chemiluminescent and pollutant emissions of a liquid-fueled turbulent swirl burner. Journal of the Energy Institute, 2020, 93, 1390-1398.	2.7	6
169	Ion Sensor-Based Measurement Systems: Application to Combustion Monitoring in Gas Turbines. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 1474-1483.	2.4	10
170	Effects of self-pulsation on combustion instability in a liquid rocket engine. Experimental Thermal and Fluid Science, 2020, 114, 110038.	1.5	16
171	Pattern recognition for measuring the flame stability of gas-fired combustion based on the image processing technology. Fuel, 2020, 270, 117486.	3.4	23
172	One approach to temperature distribution control in thermal power plant boilers. Automatika, 2020, 61, 273-283.	1.2	3
173	In-Situ Measurement of Soot Volume Fraction and Temperature in Axisymmetric Soot-Laden Flames Using TR-GSVD Algorithm. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-12.	2.4	5
174	An in-situ method for time-resolved sodium release behaviour during coal combustion and its application in industrial coal-fired boilers. Proceedings of the Combustion Institute, 2021, 38, 4199-4206.	2.4	12
175	Study on micro-flame ignited (MFI) hybrid combustion characteristics of a dual-fuel optical engine at different lambdas. Fuel, 2021, 290, 119796.	3.4	7
176	Prediction of combustion state through a semi-supervised learning model and flame imaging. Fuel, 2021, 289, 119745.	3.4	26
177	Investigation of OHâˆ— chemiluminescence with lift-off characteristic in methane-oxygen inverse diffusion flame. International Journal of Hydrogen Energy, 2021, 46, 1461-1472.	3.8	11
178	An investigation of ammonia primary flame combustor concepts for emissions reduction with OH*, NH2* and NH* chemiluminescence at elevated conditions. Proceedings of the Combustion Institute, 2021, 38, 6451-6459.	2.4	51
179	Analysis of the Dynamics of Premixed Methane and Biogas Flames Based on Cross-correlation Maps. Combustion Science and Technology, 2021, 193, 485-510.	1.2	1
180	Deep Learning Based Stable and Unstable Candle Flame Detection. Communications in Computer and Information Science, 2021, , 54-62.	0.4	0
181	Turbulent Flame Monitoring Using Spectral Estimation Techniques. , 2021, , .		0

#	Article	IF	Citations
182	A new approach of Hâˆž filtering for combustion systems using optical instrumentation. ISA Transactions, 2021, , .	3.1	1
183	Identification of CO$$_{mathrm{2}}$$ and O$$_{mathrm{2}}$$ emissions dynamics in a natural gas furnace through flame images, ARMAX models, and Kalman filtering. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2021, 43, 1.	0.8	1
184	Flame characteristics of glycerol/methanol blends in a swirl-stabilised gas turbine burner. Fuel, 2021, 290, 119968.	3.4	11
185	Combustion Using Oxygen-Lancing in a Reheating Furnace. ACS Omega, 2021, 6, 16905-16912.	1.6	0
186	Estimation of excess air coefficient on coal combustion processes via gauss model and artificial neural network. AEJ - Alexandria Engineering Journal, 2022, 61, 1079-1089.	3.4	7
187	Planar Light Extinction Measurement of Soot Volume Fraction in Laminar Counterflow Diffusion Flames. Frontiers in Mechanical Engineering, 2021, 7, .	0.8	1
188	Chemiluminescence signature of premixed ammonia-methane-air flames. Combustion and Flame, 2021, 231, 111508.	2.8	43
189	High Load Lean SI-Combustion Analysis of DI Methane and Gasoline Using Optical Diagnostics with Endoscope. , 0, , .		1
190	Diesel spray and combustion of multi-hole injectors with micro-hole under ultra-high injection pressure â€“ Combustion characteristics. Fuel, 2021, 300, 120949.	3.4	13
191	Flame structure and fuel reaction on a non-premixed shuttlecock-like conical burner. International Communications in Heat and Mass Transfer, 2021, 127, 105467.	2.9	0
192	Mixture Temperature-Controlled combustion of different biodiesels and conventional fuels. Energy, 2021, 234, 121219.	4.5	6
193	Flame establishment and flameholding modes spontaneous transformation in kerosene axisymmetric supersonic combustor with a plasma igniter. Aerospace Science and Technology, 2021, 119, 107080.	2.5	6
194	Thermal performance investigation of a premixed surface flame burner used in the domestic heating boilers. Energy, 2021, 236, 121481.	4.5	3
195	Parameter Determination and Ion Current Improvement of the Ion Current Sensor Used for Flame Monitoring. Sensors, 2021, 21, 697.	2.1	4
196	Flame emission spectroscopy measurement of a steam blast and air blast burner. Thermal Science, 2017, 21, 1021-1030.	0.5	19
197	Methane Direct Injection in an Optical SI Engine - Comparison between Different Combustion Modes. , 0, , .		9
198	Measurement of Charge Density in Methane Fired Diffusion and Premixed Flames Using Electrostatic Probes. IEEE Sensors Journal, 2021, 21, 26115-26123.	2.4	1
199	An experimental investigation into the wildland fire burning characteristics of loblolly pine needles. Fire Safety Journal, 2021, 126, 103471.	1.4	7

#	Article	IF	Citations
200	The use of molecular spectra simulation for diagnostics of reactive flows. Journal of Aerospace Technology and Management, 2011, 3, 13-20.	0.3	2
201	Research on simultaneous reconstruction of the temperature distribution of a 3D participating medium and its boundary. Wuli Xuebao/Acta Physica Sinica, 2012, 61, 134702.	0.2	3
203	Recent Research Works on Chemiluminescence as Measures of Combustion Characteristics. Journal of the Korean Society of Propulsion Engineers, 2014, 18, 73-84.	0.1	0
204	Characteristics of Chemiluminescence Intensities of Kerosene/Air Swirl Flames. Transactions of the Korean Society of Mechanical Engineers, B, 2015, 39, 485-496.	0.0	0
205	Ekstrakcja cech obrazÃ³w pÅ‚omienia wspÃ³Å‚spalania wÄ™gla i biomasy z wykorzystaniem wizyjnego systemu diagnostycznego. Przeglad Elektrotechniczny, 2016, 1, 135-138.	0.1	1
206	KLASYFIKACJA STANU PROCESU SPALANIA NA PODSTAWIE ANALIZY OBRAZU PŁOMIENIA. Informatyka Automatyka Pomiary W Gospodarce I Ochronie Åšrodowiska, 2016, 6, 77-80.	0.2	1
207	ANALYSIS OF THE FLAME PULSATION SIGNALS USING A SHORT-TIME FOURIER TRANSFORM. Informatyka Automatyka Pomiary W Gospodarce I Ochronie Åšrodowiska, 2018, 8, 51-54.	0.2	0
208	Digital industrial furnaces: Challenges for energy efficiency under VULKANO project. Journal of Energy Systems, 0, , 204-223.	0.8	2
209	DIAGNOSTIC OF THE COMBUSTION PROCESS USING THE ANALYSIS OF CHANGES IN FLAME LUMINOSITY. Informatyka Automatyka Pomiary W Gospodarce I Ochronie Åšrodowiska, 2019, 9, 70-73.	0.2	0
210	On the dynamics of flame images identified through computer vision and modal methods. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2020, 42, 1.	0.8	0
211	A novel parametric level set method coupled with Tikhonov regularization for tomographic laser absorption reconstruction. Applied Thermal Engineering, 2022, 201, 117819.	3.0	36
212	In situ diagnostic investigation on the structure distribution of inverse diffusion flames based on laser-induced breakdown spectroscopy. Fuel, 2022, 311, 122540.	3.4	5
213	Swirler effects on combustion instabilities analyzed with measured FDFs, injector impedances and damping rates. Combustion and Flame, 2022, 238, 111947.	2.8	7
214	Gabor-GLCM-Based Texture Feature Extraction Using Flame Image to Predict the O₂ Content and NO_x. ACS Omega, 2022, 7, 3889-3899.	1.6	7
215	Prediction model of combustion characteristics of methane-air using hyperspectral imaging. Applied Optics, 2022, 61, D75.	0.9	1
216	Analysis of the Single Coal Particle Combustion Process under O₂/CO₂ Atmosphere Based on Spectral Diagnostics Technology: Combination of Spectroscopic Characteristics and Flame Temperature. Energy & Fuels, 2022, 36, 1697-1706.	2.5	1
217	Chemiluminescence diagnosis of oxygen/fuel ratio in fuel-rich jet diffusion flames. Fuel Processing Technology, 2022, 232, 107284.	3.7	8
218	Experimental investigation of OH*/CH* ratio variations in turbulent, disk stabilized, lean propane-air flames with inlet mixture preheat and stratification. Experimental Thermal and Fluid Science, 2022, 136, 110670.	1.5	3

#	Article	IF	Citations
219	U-Net applied to retrieve two-dimensional temperature and CO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e623" altimg="si76.svg"><mml:msub><mml:mrow /><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:math> concentration fields of laminar diffusion flames. Fuel, 2022, 324, 124447.	3.4	11
220	Schlieren Analysis of Non-Mild Distributed Combustion in a Mixture Temperature-Controlled Burner. SSRN Electronic Journal, 0, , .	0.4	0
221	Characterization of diesel spray combustion using two-color pyrometry and OHâˆ— chemiluminescence imaging- comparison between micro-hole and ultra-high injection pressure effects. Journal of the Energy Institute, 2022, 103, 104-116.	2.7	11
222	An Automatic Spectral Baseline Estimation Method and its Application in Industrial Alkali-Pulverized Coal Flames. SSRN Electronic Journal, 0, , .	0.4	0
223	Understanding the difference in combustion and flame propagation characteristics between ammonia and methane using an optical SI engine. Fuel, 2022, 324, 124794.	3.4	36
224	Release characteristics of potassium and sodium during pellet combustion of typical MSW fractions using the FES method. Combustion and Flame, 2022, 244, 112233.	2.8	12
225	A Self-diagnostic Flame Monitoring System Incorporating Acoustic, Optical, and Electrostatic Sensors. , 2022, , .		0
226	Numerical study of experimental feasible heat release rate markers for NH3â€“H2-air premixed flames. International Journal of Hydrogen Energy, 2022, 47, 28165-28175.	3.8	7
227	1D TEMPERATURE TOMOGRAPHY OF A FLAME, BASED ON VIS-NIR SPECTROMETRY. Combustion Science and Technology, 2024, 196, 629-643.	1.2	0
228	Investigation of soot inception limits and chemiluminescence characteristics of laminar coflow diffusion flames in C/O ratio space. Fuel, 2022, 327, 125140.	3.4	3
229	The Trace Gas Monitoring Method Based on Diode Laser Wavelength-Modulation Spectroscopy Technology for the Detection of Clinical Blood Infection. Processes, 2022, 10, 1450.	1.3	0
230	UV-visible chemiluminescence signature of laminar ammonia-hydrogen-air flames. Proceedings of the Combustion Institute, 2023, 39, 4227-4235.	2.4	8
231	Evolution of N2O production at lean combustion condition in NH3/H2/air premixed swirling flames. Combustion and Flame, 2022, 244, 112299.	2.8	25
232	MILD combustion of methane in a model combustor with an inverse-diffusion flame configuration. Fuel, 2022, 328, 125315.	3.4	8
233	Four-Line C2*/CH* Optical Sensor for Chemiluminescence Based Imaging of Flame Stoichiometry. Sensors, 2022, 22, 5665.	2.1	3
234	Revealing the competitive relationship between soot formation and chemiluminescence. Combustion and Flame, 2022, 245, 112335.	2.8	5
235	Nitrogen oxide emissions analyses in ammonia/hydrogen/air premixed swirling flames. Energy, 2022, 260, 125183.	4.5	27
236	Two-color pyrometry for backface temperature and emissivity measurement of burning materials. International Journal of Thermal Sciences, 2023, 184, 107894.	2.6	1

#	Article	IF	Citations
237	Flame Chemiluminescence Sensing and Analysis for Scramjet Control. , 2022, , .		1
238	Quantitative Assessment of Burner Flame Stability Through Digital Image Processing. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-13.	2.4	2
239	Online Pyrometry Calibration for Industrial Combustion Process Monitoring. Processes, 2022, 10, 1694.	1.3	2
240	Experimental investigation on reactivity-controlled compression ignition (RCCI) combustion characteristic of n-heptane/ammonia based on an optical engine. International Journal of Engine Research, 2023, 24, 2478-2488.	1.4	12
241	Comparison of Flame Describing Functions Measured in Single and Multiple Injector Configurations. Journal of Engineering for Gas Turbines and Power, 2022, 144, .	0.5	1
242	Combustion performances of premixed ammonia/hydrogen/air laminar and swirling flames for a wide range of equivalence ratios. International Journal of Hydrogen Energy, 2022, 47, 41170-41182.	3.8	10
243	Chemiluminescent footprint of premixed ammonia-methane-air swirling flames. Proceedings of the Combustion Institute, 2023, 39, 1415-1423.	2.4	8
244	Volumetric emission tomography for combustion processes. Progress in Energy and Combustion Science, 2023, 94, 101024.	15.8	29
245	Quantitative measurement of the stability of a pulverized coal fired flame through digital image processing and statistical analysis. Measurement: Journal of the International Measurement Confederation, 2023, 206, 112328.	2.5	2
246	An Artificial Intelligence Regression Model for Prediction of NOx Emission from Flame Image. , 2022, 3, 93-101.		2
247	A Review of On-Line Measurement Methods of Alkali Metal Emissions from Combustion by Passive Spontaneous Emission Spectroscopy. Energies, 2022, 15, 9392.	1.6	2
248	Research on flame temperature measurement method based on water vapor emission spectrum. Measurement Science and Technology, 2023, 34, 054001.	1.4	2
249	Flame stability measurement through image moments and texture analysis. Measurement Science and Technology, 2023, 34, 045404.	1.4	2
250	Estimation of temperature, local and global radiation of flames, using retrieved hyperspectral imaging. Measurement: Journal of the International Measurement Confederation, 2023, 208, 112459.	2.5	5
251	Effects of recess ratio on combustion characteristics of LOX/methane swirl coaxial injectors. Fuel, 2023, 337, 127205.	3.4	1
252	Alkaline gases emission estimation and paraconsistent logic techniques application to label bagasse combustion conditions. Thermal Science and Engineering Progress, 2023, 40, 101773.	1.3	0
253	Schlieren analysis of non-MILD distributed combustion in a mixture temperature-controlled burner. Energy, 2023, 273, 127230.	4.5	2
254	An automatic spectral baseline estimation method and its application in industrial alkali-pulverized coal flames. Measurement: Journal of the International Measurement Confederation, 2023, 214, 112804.	2.5	3

#	Article	IF	Citations
255	Ammonia and hydrogen blending effects on combustion stabilities in optical SI engines. Energy Conversion and Management, 2023, 280, 116827.	4.4	39
256	Copper concentrate dual-band joint classification using reflectance hyperspectral images in the VIS-NIR and SWIR bands. Applied Optics, 2023, 62, 2970.	0.9	0
257	Dual Phase Renewable Fuel Combustion in an Atmospheric Gas Turbine Burner. Journal of Thermal Science, 2023, 32, 1278-1291.	0.9	2
258	Simultaneous imaging of CH[*], C2â^—, and temperature in flames using a DSLR camera and structured illumination. Applied Optics, 2023, 62, 3737.	0.9	2
267	Flame-Millimeter-Wave-Interactions: A Radar-Based Sensor Concept. , 2023, , .		0
274	Online Fuel Measurement and Optimized Combustion Process Control in a Thermal Power Station Boiler. , 2023, , .		0
281	Design of a Multi-Anode Photomultiplier Tube Sensor for Dual-Mode Scramjet Engine Control. , 2024, , .		0
282	Effect of Pintiles on Fuel-Air Ratio Distributions in a Liquid Fueled, Rearward Facing Step Combustor. , 2024, , .		0
285	Enhancing Flame Analysis in Industrial Combustion: A Comparative Evaluation of Spectral Emission Reconstruction Techniques Using Low-Cost Sensor. , 2023, , .		0