

Christof Schulz

List of Publications by Year in descending order

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384
papers

10,709
citations

41258

49
h-index

66788

78
g-index

395
all docs

395
docs citations

395
times ranked

5466
citing authors

#	ARTICLE	IF	CITATIONS
1	Tracer-LIF diagnostics: quantitative measurement of fuel concentration, temperature and fuel/air ratio in practical combustion systems. <i>Progress in Energy and Combustion Science</i> , 2005, 31, 75-121.	15.8	492
2	Laser-induced incandescence: recent trends and current questions. <i>Applied Physics B: Lasers and Optics</i> , 2006, 83, 333-354.	1.1	427
3	Laser-induced incandescence: Particulate diagnostics for combustion, atmospheric, and industrial applications. <i>Progress in Energy and Combustion Science</i> , 2015, 51, 2-48.	15.8	295
4	Modeling laser-induced incandescence of soot: a summary and comparison of LII models. <i>Applied Physics B: Lasers and Optics</i> , 2007, 87, 503-521.	1.1	197
5	Measurement of temperature, fuel concentration and equivalence ratio fields using tracer LIF in IC engine combustion. <i>Applied Physics B: Lasers and Optics</i> , 2000, 71, 717-723.	1.1	158
6	Absorption and fluorescence of toluene vapor at elevated temperatures. <i>Physical Chemistry Chemical Physics</i> , 2004, 6, 2940.	1.3	140
7	Autoignition of gasoline surrogates mixtures at intermediate temperatures and high pressures. <i>Combustion and Flame</i> , 2008, 152, 276-281.	2.8	131
8	Innovative Ultra-low NO _x Controlled Auto-Ignition Combustion Process for Gasoline Engines: the 4-SPACE Project. , 0, , .		128
9	Parasitic Reactions in Nanosized Silicon Anodes for Lithium-Ion Batteries. <i>Nano Letters</i> , 2017, 17, 1512-1519.	4.5	122
10	Auto-ignition of toluene-doped n-heptane and iso-octane/air mixtures: High-pressure shock-tube experiments and kinetics modeling. <i>Combustion and Flame</i> , 2011, 158, 172-178.	2.8	118
11	Shock-tube study of the autoignition of n-heptane/toluene/air mixtures at intermediate temperatures and high pressures. <i>Combustion and Flame</i> , 2007, 149, 25-31.	2.8	115
12	VCSEL-based, high-speed, in situ TDLAS for in-cylinder water vapor measurements in IC engines. <i>Optics Express</i> , 2013, 21, 19951.	1.7	113
13	Study of the H+O+M reaction forming OH [*] —: Kinetics of OH [*] — chemiluminescence in hydrogen combustion systems. <i>Combustion and Flame</i> , 2010, 157, 1261-1273.	2.8	108
14	Plasma synthesis of nanostructures for improved thermoelectric properties. <i>Journal Physics D: Applied Physics</i> , 2011, 44, 174034.	1.3	101
15	Quantitative multi-line NO-LIF temperature imaging. <i>Applied Physics B: Lasers and Optics</i> , 2004, 78, 519-533.	1.1	98
16	Simultaneous single-shot laser-based imaging of formaldehyde, OH, and temperature in turbulent flames. <i>Proceedings of the Combustion Institute</i> , 2000, 28, 279-286.	2.4	97
17	Ignition delay times of ethanol-containing multi-component gasoline surrogates: Shock-tube experiments and detailed modeling. <i>Fuel</i> , 2011, 90, 1238-1244.	3.4	92
18	Gas-phase synthesis of functional nanomaterials: Challenges to kinetics, diagnostics, and process development. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 83-108.	2.4	92

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19	Two-color time-resolved LII applied to soot particle sizing in the cylinder of a Diesel engine. <i>Combustion and Flame</i> , 2006, 147, 79-92.	2.8	91
20	SpraySyn® A standardized burner configuration for nanoparticle synthesis in spray flames. <i>Review of Scientific Instruments</i> , 2019, 90, 085108.	0.6	89
21	Toluene laser-induced fluorescence for in-cylinder temperature imaging in internal combustion engines. <i>Applied Physics B: Lasers and Optics</i> , 2008, 91, 669-675.	1.1	88
22	Autoignition of gasoline surrogate mixtures at intermediate temperatures and high pressures: Experimental and numerical approaches. <i>Proceedings of the Combustion Institute</i> , 2009, 32, 501-508.	2.4	84
23	Oxygen quenching of toluene fluorescence at elevated temperatures. <i>Applied Physics B: Lasers and Optics</i> , 2005, 80, 777-784.	1.1	81
24	Measurement and Chemical Kinetics Modeling of Shock-Induced Ignition of Ethanol-Air Mixtures. <i>Energy & Fuels</i> , 2010, 24, 2830-2840.	2.5	80
25	Laser-induced incandescence for soot diagnostics at high pressures. <i>Applied Optics</i> , 2003, 42, 2052.	2.1	79
26	A direct-flame solid oxide fuel cell (DFFC) operated on methane, propane, and butane. <i>Journal of Power Sources</i> , 2007, 166, 120-126.	4.0	78
27	Electrical properties of aluminum-doped zinc oxide (AZO) nanoparticles synthesized by chemical vapor synthesis. <i>Nanotechnology</i> , 2009, 20, 445701.	1.3	77
28	Stabilization of mid-sized silicon nanoparticles by functionalization with acrylic acid. <i>Nanoscale Research Letters</i> , 2012, 7, 76.	3.1	74
29	Ignition delay times of diethyl ether measured in a high-pressure shock tube and a rapid compression machine. <i>Proceedings of the Combustion Institute</i> , 2015, 35, 259-266.	2.4	73
30	Ultraviolet absorption spectra of shock-heated carbon dioxide and water between 900 and 3050 K. <i>Chemical Physics Letters</i> , 2002, 355, 82-88.	1.2	72
31	Instantaneous 3D imaging of highly turbulent flames using computed tomography of chemiluminescence. <i>Applied Optics</i> , 2017, 56, 7385.	0.9	70
32	Strategies for laser-induced fluorescence detection of nitric oxide in high-pressure flames III Comparison of A ² X excitation schemes. <i>Applied Optics</i> , 2003, 42, 4922.	2.1	68
33	Silicon/Polyaniline Nanocomposites as Anode Material for Lithium Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2014, 161, A40-A45.	1.3	68
34	High-capacity cathodes for lithium-ion batteries from nanostructured LiFePO ₄ synthesized by highly-flexible and scalable flame spray pyrolysis. <i>Journal of Power Sources</i> , 2012, 216, 76-83.	4.0	66
35	Predicting LIF signal strength for toluene and 3-pentanone under engine-related temperature and pressure conditions. <i>Proceedings of the Combustion Institute</i> , 2005, 30, 1545-1553.	2.4	65
36	In situ nanoparticle size measurements of gas-borne silicon nanoparticles by time-resolved laser-induced incandescence. <i>Applied Physics B: Lasers and Optics</i> , 2014, 116, 623-636.	1.1	62

#	ARTICLE	IF	CITATIONS
37	Strategies for laser-induced fluorescence detection of nitric oxide in high-pressure flames I A ² X excitation. Applied Optics, 2002, 41, 3547.	2.1	61
38	Combined production of power and syngas in an internal combustion engine – Experiments and simulations in SI and HCCI mode. Fuel, 2018, 215, 40-45.	3.4	61
39	Laser-induced-fluorescence detection of nitric oxide in high-pressure flames with A ² X(0, 2) excitation. Applied Optics, 1997, 36, 3227.	2.1	59
40	The autoignition of practical fuels at HCCI conditions: High-pressure shock tube experiments and phenomenological modeling. Fuel, 2012, 93, 492-501.	3.4	59
41	Thermal stratification in an internal combustion engine due to wall heat transfer measured by laser-induced fluorescence. Proceedings of the Combustion Institute, 2013, 34, 2911-2919.	2.4	58
42	Direct self-assembly of Fe ₂ O ₃ /reduced graphene oxide nanocomposite for high-performance lithium-ion batteries. Journal of Materials Chemistry A, 2015, 3, 11566-11574.	5.2	58
43	Quantitative 2D single-shot imaging of NO concentrations and temperatures in a transparent SI engine. Proceedings of the Combustion Institute, 1996, 26, 2597-2604.	0.3	57
44	NO-flow tagging by photodissociation of NO ₂ . A new approach for measuring small-scale flow structures. Chemical Physics Letters, 1999, 307, 15-20.	1.2	57
45	Quantitative NO-LIF imaging in high-pressure flames. Applied Physics B: Lasers and Optics, 2002, 75, 97-102.	1.1	57
46	Toluene LIF at elevated temperatures: implications for fuel-air ratio measurements. Applied Physics B: Lasers and Optics, 2005, 80, 147-150.	1.1	57
47	Gas-Phase Synthesis of Nanoscale Silicon as an Economical Route towards Sustainable Energy Technology. KONA Powder and Particle Journal, 2011, 29, 191-207.	0.9	56
48	Enhanced coalescence upon laser desorption of fullerene oxides. Journal of Chemical Physics, 1994, 101, 3243-3249.	1.2	55
49	Simultaneous measurement of localized heat-release with OH/CH ₂ O-LIF imaging and spatially integrated OH ⁺ chemiluminescence in turbulent swirl flames. Proceedings of the Combustion Institute, 2013, 34, 3549-3556.	2.4	55
50	A quantum chemical and kinetics modeling study on the autoignition mechanism of diethyl ether. Proceedings of the Combustion Institute, 2017, 36, 195-202.	2.4	55
51	Novel strategies for imaging temperature distribution using Toluene LIF. Journal of Physics: Conference Series, 2006, 45, 133-139.	0.3	52
52	Experimental study of the kinetics of ethanol pyrolysis and oxidation behind reflected shock waves and in laminar flames. Proceedings of the Combustion Institute, 2015, 35, 393-400.	2.4	52
53	A laser-induced fluorescence scheme for imaging nitric oxide in engines. Chemical Physics Letters, 1995, 242, 259-264.	1.2	51
54	Functionalization of silicon nanoparticles via hydrosilylation with 1-alkenes. Colloid and Polymer Science, 2007, 285, 729-736.	1.0	51

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55	Experimental and numerical characterization of a turbulent spray flame. Proceedings of the Combustion Institute, 2007, 31, 2247-2255.	2.4	51
56	Quantitative temperature measurements in high-pressure flames with multiline NO-LIF thermometry. Applied Optics, 2005, 44, 6718.	2.1	49
57	Impact of UV absorption by CO ₂ and H ₂ O on no lif in high-pressure combustion applications. Proceedings of the Combustion Institute, 2002, 29, 2735-2742.	2.4	48
58	High-speed tunable diode laser absorption spectroscopy for sampling-free in-cylinder water vapor concentration measurements in an optical IC engine. Applied Physics B: Lasers and Optics, 2012, 109, 521-532.	1.1	48
59	Temperature, pressure, and bath gas composition dependence of fluorescence spectra and fluorescence lifetimes of toluene and naphthalene. Applied Physics B: Lasers and Optics, 2013, 110, 81-93.	1.1	48
60	Oxygen-distribution imaging with a novel two-tracer laser-induced fluorescence technique. Applied Physics B: Lasers and Optics, 2002, 74, 111-114.	1.1	47
61	Comparison of Micro- and Nanoscale Fe ³⁺ -Containing (Hematite) Particles for Their Toxicological Properties in Human Lung Cells In Vitro. Toxicological Sciences, 2012, 126, 173-182.	1.4	47
62	Quantitative liquid and vapor distribution measurements in evaporating fuel sprays using laser-induced exciplex fluorescence. Measurement Science and Technology, 2009, 20, 125401.	1.4	46
63	Impact of shock-tube facility-dependent effects on incident- and reflected-shock conditions over a wide range of pressures and Mach numbers. Combustion and Flame, 2020, 217, 200-211.	2.8	46
64	Laser-diagnostic and numerical study of strongly swirling natural gas flames. Proceedings of the Combustion Institute, 1998, 27, 1023-1029.	0.3	45
65	Quantification of NO A ² Σ (0, 2) laser-induced fluorescence: investigation of calibration and collisional influences in high-pressure flames. Applied Optics, 1999, 38, 1434.	2.1	45
66	Shock-tube and plug-flow reactor study of the oxidation of fuel-rich CH ₄ /O ₂ mixtures enhanced with additives. Combustion and Flame, 2016, 169, 307-320.	2.8	45
67	Power and syngas production from partial oxidation of fuel-rich methane/DME mixtures in an HCCI engine. Fuel, 2019, 243, 97-103.	3.4	45
68	An experimental and modeling study on the reactivity of extremely fuel-rich methane/dimethyl ether mixtures. Combustion and Flame, 2020, 212, 107-122.	2.8	44
69	Two-line laser-induced fluorescence imaging of vibrational temperatures in a NO-seeded flame. Applied Optics, 2001, 40, 748.	2.1	43
70	Laser-induced incandescence for soot-particle sizing at elevated pressure. Applied Physics B: Lasers and Optics, 2008, 90, 629-639.	1.1	43
71	Gas-temperature imaging in a low-pressure flame reactor for nano-particle synthesis with multi-line NO-LIF thermometry. Applied Physics B: Lasers and Optics, 2007, 88, 373-377.	1.1	42
72	Influence of the bath gas on the condensation of supersaturated iron atom vapour at room temperature. Journal Physics D: Applied Physics, 2008, 41, 055203.	1.3	42

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73	Laser-based diagnostics in the gas-phase synthesis of inorganic nanoparticles. Powder Technology, 2016, 287, 226-238.	2.1	42
74	In-Cylinder Combustion Visualization in an Auto-Igniting Gasoline Engine using Fuel Tracer- and Formaldehyde-LIF Imaging. , 2001, , .		41
75	Initial reaction steps during flame synthesis of iron-oxide nanoparticles. CrystEngComm, 2015, 17, 6930-6939.	1.3	41
76	Two-tracer LIF imaging of preferential evaporation of multi-component gasoline fuel sprays under engine conditions. Proceedings of the Combustion Institute, 2015, 35, 2915-2922.	2.4	41
77	Spray-flame synthesis of La(Fe, Co)O ₃ nano-perovskites from metal nitrates. AIChE Journal, 2020, 66, e16748.	1.8	41
78	Strategies for laser-induced fluorescence detection of nitric oxide in high-pressure flames II A ^{X(0,1)} excitation. Applied Optics, 2003, 42, 2031.	2.1	40
79	All gas-phase synthesis of graphene: Characterization and its utilization for silicon-based lithium-ion batteries. Electrochimica Acta, 2018, 272, 52-59.	2.6	40
80	Electrostatic Self-Assembly Enabling Integrated Bulk and Interfacial Sodium Storage in 3D Titania-Graphene Hybrid. Nano Letters, 2018, 18, 336-346.	4.5	40
81	Study of Soot Formation and Oxidation in the Engine Combustion Network (ECN), Spray A: Effects of Ambient Temperature and Oxygen Concentration. SAE International Journal of Engines, 0, 6, 352-365.	0.4	38
82	Combination of LII and extinction measurements for determination of soot volume fraction and estimation of soot maturity in non-premixed laminar flames. Applied Physics B: Lasers and Optics, 2015, 119, 685-696.	1.1	38
83	Two-dimensional cycle-resolved exhaust valve temperature measurements in an optically accessible internal combustion engine using thermographic phosphors. Applied Physics B: Lasers and Optics, 2012, 106, 945-951.	1.1	37
84	A Genetic Algorithm-Based Method for the Automatic Reduction of Reaction Mechanisms. International Journal of Chemical Kinetics, 2014, 46, 41-59.	1.0	37
85	Laser-induced incandescence from laser-heated silicon nanoparticles. Applied Physics B: Lasers and Optics, 2016, 122, 1.	1.1	37
86	Combustion Diagnostics. , 2007, , 1241-1315.		37
87	A Genetic Algorithm-Based Method for the Optimization of Reduced Kinetics Mechanisms. International Journal of Chemical Kinetics, 2015, 47, 695-723.	1.0	36
88	Laser-Based Experimental and Monte Carlo PDF Numerical Investigation of an Ethanol/Air Spray Flame. Combustion Science and Technology, 2008, 180, 1529-1547.	1.2	35
89	Imaging measurements of atomic iron concentration with laser-induced fluorescence in a nanoparticle synthesis flame reactor. Applied Physics B: Lasers and Optics, 2009, 94, 119-125.	1.1	35
90	Investigation of the kinetics of OH ⁻ and CH ⁻ chemiluminescence in hydrocarbon oxidation behind reflected shock waves. Applied Physics B: Lasers and Optics, 2012, 107, 515-527.	1.1	34

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91	Determination of small soot particles in the presence of large ones from time-resolved laser-induced incandescence. <i>Applied Physics B: Lasers and Optics</i> , 2015, 118, 169-183.	1.1	34
92	Carbon dioxide UV laser-induced fluorescence in high-pressure flames. <i>Chemical Physics Letters</i> , 2003, 375, 344-349.	1.2	33
93	Quantitative in-cylinder NO-LIF imaging in a realistic gasoline engine with spray-guided direct injection. <i>Proceedings of the Combustion Institute</i> , 2005, 30, 2667-2674.	2.4	33
94	UV absorption of CO ₂ for temperature diagnostics of hydrocarbon combustion applications. <i>Proceedings of the Combustion Institute</i> , 2005, 30, 1591-1599.	2.4	33
95	Si/CNT/rGO Nanoheterostructures as High-Performance Lithium-Ion Battery Anodes. <i>ChemElectroChem</i> , 2015, 2, 1983-1990.	1.7	33
96	Temperature and species measurement in a quenching boundary layer on a flat-flame burner. <i>Experiments in Fluids</i> , 2010, 49, 783-795.	1.1	32
97	Shock-tube study of methane pyrolysis in the context of energy-storage processes. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 197-204.	2.4	32
98	Measurements and simulation of in-cylinder UV-absorption in spark ignition and Diesel engines. <i>Applied Physics B: Lasers and Optics</i> , 2001, 73, 173-180.	1.1	31
99	Rayleigh-calibrated fluorescence quantum yield measurements of acetone and 3-pentanone. <i>Applied Optics</i> , 2004, 43, 5901.	2.1	31
100	Investigation of toluene LIF at high pressure and high temperature in an optical engine. <i>Applied Physics B: Lasers and Optics</i> , 2009, 96, 735-739.	1.1	31
101	Mechanism of Iron Oxide Formation from Iron Pentacarbonyl-Doped Low-Pressure Hydrogen/Oxygen Flames. <i>International Journal of Chemical Kinetics</i> , 2013, 45, 487-498.	1.0	31
102	Gas-phase synthesis of iron oxide nanoparticles for improved magnetic hyperthermia performance. <i>Journal of Alloys and Compounds</i> , 2020, 824, 153814.	2.8	31
103	Flexible energy conversion and storage via high-temperature gas-phase reactions: The piston engine as a polygeneration reactor. <i>Renewable and Sustainable Energy Reviews</i> , 2020, 133, 110264.	8.2	31
104	TR-LII for sizing of carbon particles forming at room temperature. <i>Applied Physics B: Lasers and Optics</i> , 2006, 83, 449-454.	1.1	30
105	Measurement of water film thickness by laser-induced fluorescence and Raman imaging. <i>Applied Physics B: Lasers and Optics</i> , 2011, 102, 123-132.	1.1	30
106	Temperature and bath gas composition dependence of effective fluorescence lifetimes of toluene excited at 266nm. <i>Chemical Physics</i> , 2011, 383, 6-11.	0.9	30
107	A shock tube with a high-repetition-rate time-of-flight mass spectrometer for investigations of complex reaction systems. <i>Review of Scientific Instruments</i> , 2011, 82, 084103.	0.6	30
108	Photo-physical properties of anisole: temperature, pressure, and bath gas composition dependence of fluorescence spectra and lifetimes. <i>Applied Physics B: Lasers and Optics</i> , 2013, 112, 203-213.	1.1	30

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109	Surface functionalization of microwave plasma-synthesized silica nanoparticles for enhancing the stability of dispersions. <i>Journal of Nanoparticle Research</i> , 2014, 16, 1.	0.8	30
110	Laser diagnostic analysis of NO formation in a direct injection diesel engine with pump-line-nozzle and common rail injection systems. <i>Proceedings of the Combustion Institute</i> , 2000, 28, 1137-1143.	2.4	29
111	Single-shot laser-induced fluorescence imaging of formaldehyde with XeF excimer excitation. <i>Applied Physics B: Lasers and Optics</i> , 2000, 70, 733-735.	1.1	29
112	A comparison of selected organic tracers for quantitative scalar imaging in the gas phase via laser-induced fluorescence. <i>Applied Physics B: Lasers and Optics</i> , 2014, 117, 183-194.	1.1	29
113	Laser-based in situ measurement and simulation of gas-phase temperature and iron atom concentration in a pilot-plant nanoparticle synthesis reactor. <i>Proceedings of the Combustion Institute</i> , 2015, 35, 2299-2306.	2.4	29
114	Towards Mechanistic Understanding of Liquid-Phase Cinnamyl Alcohol Oxidation with <i>tert</i> -Butyl Hydroperoxide over Noble-Metal-Free LaCo _{1-x} Fe _x O ₃ Perovskites. <i>ChemPlusChem</i> , 2019, 84, 1155-1163.	1.3	29
115	Durability study of platinum nanoparticles supported on gas-phase synthesized graphene in oxygen reduction reaction conditions. <i>Applied Surface Science</i> , 2019, 467-468, 1181-1186.	3.1	29
116	Large-scale synthesis of iron oxide/graphene hybrid materials as highly efficient photo-Fenton catalyst for water remediation. <i>Environmental Technology and Innovation</i> , 2021, 21, 101239.	3.0	29
117	Simultaneous measurement of localized heat release with OH/CH ₂ O-LIF imaging and spatially integrated OH ⁺ chemiluminescence in turbulent swirl flames. <i>Applied Physics B: Lasers and Optics</i> , 2012, 107, 611-617.	1.1	28
118	Autoignition of surrogate biodiesel fuel (B30) at high pressures: Experimental and modeling kinetic study. <i>Combustion and Flame</i> , 2012, 159, 996-1008.	2.8	28
119	Spray-Flame-Synthesized LaCo _{1-x} Fe _x O ₃ Perovskite Nanoparticles as Electrocatalysts for Water and Ethanol Oxidation. <i>ChemElectroChem</i> , 2019, 6, 4266-4274.	1.7	28
120	Selective cyclohexene oxidation with O ₂ , H ₂ O ₂ and <i>tert</i> -butyl hydroperoxide over spray-flame synthesized LaCo _{1-x} Fe _x O ₃ nanoparticles. <i>Catalysis Science and Technology</i> , 2020, 10, 5196-5206.	2.1	28
121	Development of a two-line OH-laser-induced fluorescence thermometry diagnostics strategy for gas-phase temperature measurements in engines. <i>Applied Optics</i> , 2008, 47, 5871.	2.1	27
122	Experiments and modeling of ignition delay times, flame structure and intermediate species of EHN-doped stoichiometric n-heptane/air combustion. <i>Proceedings of the Combustion Institute</i> , 2009, 32, 197-204.	2.4	27
123	Experimental and Numerical Investigation of Fe(CO) ₅ Addition to a Laminar Premixed Hydrogen/Oxygen/Argon Flame. <i>Zeitschrift Fur Physikalische Chemie</i> , 2009, 223, 639-649.	1.4	27
124	An automated thermophoretic soot sampling device for laboratory-scale high-pressure flames. <i>Review of Scientific Instruments</i> , 2014, 85, 045103.	0.6	27
125	A novel magnetically-separable porous iron-oxide nanocomposite as an adsorbent for methylene blue (MB) dye. <i>Journal of Environmental Chemical Engineering</i> , 2016, 4, 3779-3787.	3.3	27
126	Experimental and numerical study of a HMDSO-seeded premixed laminar low-pressure flame for SiO ₂ nanoparticle synthesis. <i>Proceedings of the Combustion Institute</i> , 2017, 36, 1045-1053.	2.4	27

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127	Optical properties and pyrolysis of shock-heated gas-phase anisole. Proceedings of the Combustion Institute, 2017, 36, 4525-4532.	2.4	27
128	Synthesis of freestanding few-layer graphene in microwave plasma: The role of oxygen. Carbon, 2022, 186, 560-573.	5.4	27
129	Simultaneous Mapping of the Distribution of Different Fuel Volatility Classes Using Tracer-LIF Tomography in an IC Engine. , 1998, , .		26
130	Quantitative oxygen imaging in an engine. Applied Physics B: Lasers and Optics, 2002, 75, 137-141.	1.1	26
131	Vibrational and defect states in SnOx nanoparticles. Journal of Applied Physics, 2006, 99, 113108.	1.1	26
132	Heat release of carbon particle formation from hydrogen-free precursors behind shock waves. Proceedings of the Combustion Institute, 2007, 31, 649-656.	2.4	26
133	Unsteady flame and flow field interaction of a premixed model gas turbine burner. Proceedings of the Combustion Institute, 2007, 31, 3197-3205.	2.4	26
134	Sensitivity analysis for soot particle size imaging with laser-induced incandescence at high pressure. Applied Physics B: Lasers and Optics, 2015, 119, 745-763.	1.1	26
135	Detailed modeling and laser-induced fluorescence imaging of nitric oxide in a NH3-seeded non-premixed methane/air flame. Proceedings of the Combustion Institute, 2002, 29, 2195-2202.	2.4	25
136	Gas-phase temperature imaging in spray systems using multi-line NO-LIF thermometry. Applied Physics B: Lasers and Optics, 2005, 81, 1071-1074.	1.1	25
137	Modeling laser-induced incandescence of soot: enthalpy changes during sublimation, conduction, and oxidation. Applied Physics B: Lasers and Optics, 2008, 93, 645-656.	1.1	25
138	Simultaneous measurement of liquid water film thickness and vapor temperature using near-infrared tunable diode laser spectroscopy. Applied Physics B: Lasers and Optics, 2010, 99, 385-390.	1.1	25
139	Quantitative two-dimensional measurement of oil-film thickness by laser-induced fluorescence in a piston-ring model experiment. Applied Optics, 2016, 55, 269.	2.1	25
140	Synthesis of silicon nanoparticles in a pilot-plant-scale microwave plasma reactor: Impact of flow rates and precursor concentration on the nanoparticle size and aggregation. Powder Technology, 2019, 342, 880-886.	2.1	25
141	Room-temperature Fe:ZnSe laser tunable in the spectral range of 3.7â€“5.3â€“â€“ applied for intracavity absorption spectroscopy of CO ₂ isotopes, CO and N ₂ O. Optics Express, 2021, 29, 12033.	1.7	25
142	Advanced direct injection combustion engine technologies and development. , 2010, , .		25
143	Investigation of spatially resolved light absorption in a spark-ignition engine fueled with propane/air. Applied Optics, 1999, 38, 1452.	2.1	24
144	Branching ratios for quenching of nitric oxide A ² Î£ ⁺ (¹ / ₂ â€“ ² = 0) to X ² Î£ ⁺ (¹ / ₂ â€“ ³ = 0). Physical Chemistry Chemical Physics, 2006, 8, 5328-5338.	1.3	24

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145	Direct-Flame Solid-Oxide Fuel Cell (DFFC): A Thermally Self-Sustained, Air Self-Breathing, Hydrocarbon-Operated SOFC System in a Simple, No-Chamber Setup. <i>ECS Transactions</i> , 2007, 7, 555-564.	0.3	24
146	Spectroscopic characterization of the fluorobenzene/DEMA tracer system for laser-induced exciplex fluorescence for the quantitative study of evaporating fuel sprays. <i>Applied Physics B: Lasers and Optics</i> , 2009, 97, 909-918.	1.1	24
147	Visualization of the evaporation of a diesel spray using combined Mie and Rayleigh scattering techniques. <i>Experiments in Fluids</i> , 2009, 47, 439-449.	1.1	24
148	Unburned gas temperature measurements in a surrogate Diesel jet via two-color toluene-LIF imaging. <i>Proceedings of the Combustion Institute</i> , 2011, 33, 783-790.	2.4	24
149	Impact of Ambient Pressure on Titania Nanoparticle Formation During Spray-Flame Synthesis. <i>Journal of Nanoscience and Nanotechnology</i> , 2015, 15, 9449-9456.	0.9	24
150	Ignition delay times of Jet A-1 fuel: Measurements in a high-pressure shock tube and a rapid compression machine. <i>Proceedings of the Combustion Institute</i> , 2017, 36, 3695-3703.	2.4	24
151	Soot formation in shock-wave-induced pyrolysis of acetylene and benzene with H ₂ , O ₂ , and CH ₄ addition. <i>Combustion and Flame</i> , 2018, 198, 158-168.	2.8	24
152	Two-Dimensional Temperature Measurements in an SI Engine Using Two-Line Tracer LIF. , 0, , .		23
153	Imaging of the oxygen distribution in an isothermal turbulent free jet using two-color toluene LIF imaging. <i>Applied Physics B: Lasers and Optics</i> , 2011, 103, 707-715.	1.1	23
154	Tunable diode laser absorption sensor for the simultaneous measurement of water film thickness, liquid- and vapor-phase temperature. <i>Applied Physics B: Lasers and Optics</i> , 2011, 104, 21-27.	1.1	23
155	A single-pulse shock tube coupled with high-repetition-rate time-of-flight mass spectrometry and gas chromatography for high-temperature gas-phase kinetics studies. <i>Review of Scientific Instruments</i> , 2016, 87, 105103.	0.6	23
156	Shock-tube study of the ignition and product formation of fuel-rich CH ₄ /air and CH ₄ /additive/air mixtures at high pressure. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 5705-5713.	2.4	23
157	Characterization of tracers for two-color laser-induced fluorescence liquid-phase temperature imaging in sprays. <i>Experiments in Fluids</i> , 2020, 61, 1.	1.1	23
158	Time-resolved detection of temperature, concentration, and pressure in a shock tube by intracavity absorption spectroscopy. <i>Applied Physics B: Lasers and Optics</i> , 2016, 122, 1.	1.1	22
159	Comparative study of flame-based SiO ₂ nanoparticle synthesis from TMS and HMDSO: SiO-LIF concentration measurement and detailed simulation. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 1221-1229.	2.4	22
160	Discrepancies between shock tube and rapid compression machine ignition at low temperatures and high pressures. , 2009, , 739-744.		22
161	Core and grain boundary sensitivity of tungsten-oxide sensor devices by molecular beam assisted particle deposition. <i>Journal of Applied Physics</i> , 2007, 102, 124305.	1.1	21
162	Synthesis of SnO ₂ nanoparticles tuned between 0.5 and 1.5 nm in a premixed low pressure H ₂ /O ₂ /Ar flame. <i>Proceedings of the Combustion Institute</i> , 2007, 31, 1805-1812.	2.4	21

#	ARTICLE	IF	CITATIONS
163	Synthesis of tailored WO ₃ and WO _x (2.9<x<3) nanoparticles by adjusting the combustion conditions in a H ₂ /O ₂ /Ar premixed flame reactor. Proceedings of the Combustion Institute, 2011, 33, 1883-1890.	2.4	21
164	Calibration-free, high-speed, in-cylinder laser absorption sensor for cycle-resolved, absolute H ₂ O measurements in a production IC engine. Proceedings of the Combustion Institute, 2015, 35, 3653-3661.	2.4	21
165	Assessment of soot particle-size imaging with LII at Diesel engine conditions. Applied Physics B: Lasers and Optics, 2015, 119, 765-776.	1.1	21
166	Spectroscopic models for laser-heated silicon and copper nanoparticles. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 197, 3-11.	1.1	21
167	Direct Measurement of High-Temperature Rate Constants of the Thermal Decomposition of Dimethoxymethane, a Shock Tube and Modeling Study. Journal of Physical Chemistry A, 2018, 122, 7559-7571.	1.1	21
168	Spray-Flame-Prepared LaCo _{1-x} Fe _x O ₃ Perovskite Nanoparticles as Active OER Catalysts: Influence of Fe Content and Low-Temperature Heating. ChemElectroChem, 2020, 7, 2564-2574.	1.7	21
169	Plug-flow reactor and shock-tube study of the oxidation of very fuel-rich natural gas/DME/O ₂ mixtures. Combustion and Flame, 2021, 225, 86-103.	2.8	21
170	Laser-induced incandescence for non-soot nanoparticles: recent trends and current challenges. Applied Physics B: Lasers and Optics, 2022, 128, 72.	1.1	21
171	Laser-induced fluorescence of tracers dissolved in evaporating droplets. Applied Physics B: Lasers and Optics, 2004, 78, 127-131.	1.1	20
172	Endoscopic temperature imaging in a four-cylinder IC engine via two-color toluene fluorescence. Proceedings of the Combustion Institute, 2015, 35, 3697-3705.	2.4	20
173	Measurements of liquid film thickness, concentration, and temperature of aqueous urea solution by NIR absorption spectroscopy. Applied Physics B: Lasers and Optics, 2016, 122, 1.	1.1	20
174	Detailed simulation of iron oxide nanoparticle forming flames: Buoyancy and probe effects. Proceedings of the Combustion Institute, 2019, 37, 1241-1248.	2.4	20
175	Characterization of few-layer graphene aerosols by laser-induced incandescence. Carbon, 2020, 167, 870-880.	5.4	20
176	Experimental and numerical investigation of iron-doped flames: FeO formation and impact on flame temperature. Proceedings of the Combustion Institute, 2021, 38, 1249-1257.	2.4	20
177	Laser Diagnostics of Combustion Processes: From Chemical Dynamics to Technical Devices. Israel Journal of Chemistry, 1999, 39, 1-24.	1.0	19
178	Laser-diagnostic multi-species imaging in strongly swirling natural gas flames. Applied Physics B: Lasers and Optics, 2000, 71, 741-746.	1.1	19
179	Numerical simulation and laser-based imaging of mixture formation, ignition, and soot formation in a diesel spray. Proceedings of the Combustion Institute, 2005, 30, 2029-2036.	2.4	19
180	Endoscopic Imaging of Early Flame Propagation in a Near-Production Engine. SAE International Journal of Engines, 0, 7, 351-365.	0.4	19

#	ARTICLE	IF	CITATIONS
181	High-pressure shock-tube study of the ignition and product formation of fuel-rich dimethoxymethane (DMM)/air and CH ₄ /DMM/air mixtures. <i>Combustion and Flame</i> , 2020, 216, 293-299.	2.8	19
182	Spray-flame synthesis of LaMO ₃ (M = Mn, Fe, Co) perovskite nanomaterials: Effect of spray droplet size and esterification on particle size distribution. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 1279-1287.	2.4	19
183	Laser-induced atomic emission of silicon nanoparticles during laser-induced heating. <i>Applied Optics</i> , 2017, 56, E50.	2.1	19
184	Laser Spectroscopic Investigation of Flow Fields and NO-Formation in a Realistic SI Engine. , 1998, , .		18
185	Nonstationary Collisional Dynamics in Determining Nitric Oxide Laser-Induced Fluorescence Spectra. <i>AIAA Journal</i> , 2005, 43, 458-464.	1.5	18
186	Three-dimensional modeling with Monte Carlo-probability density function methods and laser diagnostics of the combustion in a two-stroke engine. <i>Proceedings of the Combustion Institute</i> , 2000, 28, 1153-1159.	2.4	17
187	Fluorescence lifetime of gas-phase toluene at elevated temperatures. <i>Chemical Physics Letters</i> , 2006, 426, 248-251.	1.2	17
188	Thermal Decomposition of Trimethylgallium Ga(CH ₃) ₃ : A Shock-Tube Study and First-Principles Calculations. <i>Journal of Physical Chemistry A</i> , 2008, 112, 6330-6337.	1.1	17
189	Laser-based diagnostics for the measurement of liquid water film thickness. <i>Applied Optics</i> , 2011, 50, A60.	2.1	17
190	Mass spectrometric analysis of clusters and nanoparticles during the gas-phase synthesis of tungsten oxide. <i>Proceedings of the Combustion Institute</i> , 2017, 36, 1037-1044.	2.4	17
191	SiO multi-line laser-induced fluorescence for quantitative temperature imaging in flame-synthesis of nanoparticles. <i>Applied Physics B: Lasers and Optics</i> , 2017, 123, 1.	1.1	16
192	LISim: a modular signal processing toolbox for laser-induced incandescence measurements. <i>Applied Physics B: Lasers and Optics</i> , 2018, 124, 1.	1.1	16
193	High-Temperature Rate Constants for H + Tetramethylsilane and H + Silane and Implications about Structure-Activity Relationships for Silanes. <i>International Journal of Chemical Kinetics</i> , 2018, 50, 57-72.	1.0	16
194	Response surface and group additivity methodology for estimation of thermodynamic properties of organosilanes. <i>International Journal of Chemical Kinetics</i> , 2018, 50, 681-690.	1.0	16
195	Development and evaluation of a chemical kinetics reaction mechanism for tetramethylsilane-doped flames. <i>Chemical Engineering Science</i> , 2019, 209, 115209.	1.9	16
196	Self-assembled nano-silicon/graphite hybrid embedded in a conductive polyaniline matrix for the performance enhancement of industrial applicable lithium-ion battery anodes. <i>Solid State Ionics</i> , 2020, 344, 115117.	1.3	16
197	Laser-based CO concentration and temperature measurements in high-pressure shock-tube studies of n-heptane partial oxidation. <i>Applied Physics B: Lasers and Optics</i> , 2020, 126, 1.	1.1	16
198	CO-concentration and temperature measurements in reacting CH ₄ /O ₂ mixtures doped with diethyl ether behind reflected shock waves. <i>Combustion and Flame</i> , 2020, 216, 194-205.	2.8	16

#	ARTICLE	IF	CITATIONS
199	Atmospheric-pressure particle mass spectrometer for investigating particle growth in spray flames. <i>Journal of Aerosol Science</i> , 2021, 158, 105827.	1.8	16
200	Multidimensional laser diagnostic and numerical analysis of NO formation in a gasoline engine. <i>Proceedings of the Combustion Institute</i> , 1998, 27, 2085-2092.	0.3	15
201	Multi-Species Laser-Based Imaging Measurements in a Diesel Spray. , 0, , .		15
202	Buoyancy induced limits for nanoparticle synthesis experiments in horizontal premixed low-pressure flat-flame reactors. <i>Combustion Theory and Modelling</i> , 2013, 17, 504-521.	1.0	15
203	Influence of molecular hydrogen on acetylene pyrolysis: Experiment and modeling. <i>Combustion and Flame</i> , 2014, 161, 2263-2269.	2.8	15
204	Measurements of liquid film thickness, concentration and temperature of aqueous NaCl solution by NIR absorption spectroscopy. <i>Applied Physics B: Lasers and Optics</i> , 2015, 120, 397-406.	1.1	15
205	High-yield and scalable synthesis of a Silicon/Aminosilane-functionalized Carbon NanoTubes/Carbon (Si/A-CNT/C) composite as a high-capacity anode for lithium-ion batteries. <i>Journal of Applied Electrochemistry</i> , 2016, 46, 229-239.	1.5	15
206	A Shock Tube and Modeling Study about Anisole Pyrolysis Using Time-Resolved CO Absorption Measurements. <i>International Journal of Chemical Kinetics</i> , 2017, 49, 656-667.	1.0	15
207	Flame-temperature, light-attenuation, and CO measurements by spontaneous Raman scattering in non-sooting diesel-like jets. <i>Combustion and Flame</i> , 2017, 176, 104-116.	2.8	15
208	Water film thickness imaging based on time-multiplexed near-infrared absorption. <i>Optics Express</i> , 2018, 26, 20902.	1.7	15
209	Diffraction/refractive (hybrid) UV-imaging system for minimally invasive metrology: design, performance, and application experiments. <i>Applied Optics</i> , 2012, 51, 1982.	0.9	14
210	Nanoparticles from the Gasphase. <i>Nanoscience and Technology</i> , 2012, , .	1.5	14
211	High-pressure shock-tube investigation of the impact of 3-pentanone on the ignition properties of primary reference fuels. <i>Proceedings of the Combustion Institute</i> , 2013, 34, 393-400.	2.4	14
212	Temporally and spectrally resolved UV absorption and laser-induced fluorescence measurements during the pyrolysis of toluene behind reflected shock waves. <i>Applied Physics B: Lasers and Optics</i> , 2015, 118, 295-307.	1.1	14
213	Two-dimensional-three-dimensional registration for fusion imaging is noninferior to three-dimensional- three-dimensional registration in infrarenal endovascular aneurysm repair. <i>Journal of Vascular Surgery</i> , 2019, 70, 2005-2013.	0.6	14
214	Ethanol ignition in a high-pressure shock tube: Ignition delay time and high-repetition-rate imaging measurements. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 901-909.	2.4	14
215	Experimental Investigation of Ethanol Oxidation and Development of a Reduced Reaction Mechanism for a Wide Temperature Range. <i>Energy & Fuels</i> , 2021, 35, 14780-14792.	2.5	14
216	Comparative study of experimental and numerical NO profiles in SI combustion. <i>Proceedings of the Combustion Institute</i> , 1998, 27, 2077-2084.	0.3	13

#	ARTICLE	IF	CITATIONS
217	In-Cylinder NO-LIF Imaging in a Realistic GDI Engine Using KrF Excimer Laser Excitation. , 1999, , .		13
218	Gas-phase synthesis of non-agglomerated nanoparticles by fast gasdynamic heating and cooling. , 2009, , 857-862.		13
219	A Standard Burner for High Pressure Laminar Premixed Flames: Detailed Soot Diagnostics. Zeitschrift Fur Physikalische Chemie, 2015, 229, 781-805.	1.4	13
220	Shock-tube study of the decomposition of tetramethylsilane using gas chromatography and high-repetition-rate time-of-flight mass spectrometry. Physical Chemistry Chemical Physics, 2018, 20, 10686-10696.	1.3	13
221	Investigating temporal variation in the apparent volume fraction measured by time-resolved laser-induced incandescence. Applied Physics B: Lasers and Optics, 2019, 125, 1.	1.1	13
222	Inline coating of silicon nanoparticles in a plasma reactor: Reactor design, simulation and experiment. Materials Today: Proceedings, 2017, 4, S118-S127.	0.9	13
223	Quantitative Laser Diagnostic Studies of the NO Distribution in a DI Diesel Engine with PLN and CR Injection Systems. , 0, , .		12
224	Spray diagnostics using an all-solid-state Nd:YAlO ₃ laser and fluorescence tracers in commercial gasoline and diesel fuels. Applied Physics B: Lasers and Optics, 2004, 79, 249-254.	1.1	12
225	Quantification of the evaporative cooling in an ethanol spray created by a gasoline direct-injection system measured by multiline NO-LIF gas-temperature imaging. Applied Optics, 2007, 46, 8322.	2.1	12
226	Gas-Temperature Imaging in a Microwave-Plasma Nanoparticle-Synthesis Reactor Using Multi-Line NO-LIF Thermometry. Zeitschrift Fur Physikalische Chemie, 2011, 225, 1225-1235.	1.4	12
227	Experimental and modeling study of carbon suboxide decomposition behind reflected shock waves. Physical Chemistry Chemical Physics, 2012, 14, 1246-1252.	1.3	12
228	Low-pressure effective fluorescence lifetimes and photo-physical rate constants of one- and two-ring aromatics. Applied Physics B: Lasers and Optics, 2015, 121, 549-558.	1.1	12
229	Performance of photomultipliers in the context of laser-induced incandescence. Applied Optics, 2017, 56, 7849.	0.9	12
230	Sequential signal detection for high dynamic range time-resolved laser-induced incandescence. Optics Express, 2017, 25, 2413.	1.7	12
231	The influence of hydrogen and methane on the growth of carbon particles during acetylene pyrolysis in a burnt-gas flow reactor. Proceedings of the Combustion Institute, 2019, 37, 1125-1132.	2.4	12
232	High-Temperature Unimolecular Decomposition of Diethyl Ether: Shock-Tube and Theory Studies. Journal of Physical Chemistry A, 2019, 123, 6813-6827.	1.1	12
233	Absolute SiO concentration imaging in low-pressure nanoparticle-synthesis flames via laser-induced fluorescence. Applied Physics B: Lasers and Optics, 2019, 125, 1.	1.1	12
234	Detector calibration and measurement issues in multi-color time-resolved laser-induced incandescence. Applied Physics B: Lasers and Optics, 2019, 125, 1.	1.1	12

#	ARTICLE	IF	CITATIONS
235	Multi-line SiO fluorescence imaging in the flame synthesis of silica nanoparticles from SiCl ₄ . <i>Combustion and Flame</i> , 2021, 224, 260-272.	2.8	12
236	Formation of carbon nanoparticles by the condensation of supersaturated atomic vapor obtained by the laser photolysis of C ₃ O ₂ . <i>Kinetics and Catalysis</i> , 2007, 48, 194-203.	0.3	11
237	Self-quenching in toluene LIF. <i>Proceedings of the Combustion Institute</i> , 2017, 36, 4505-4514.	2.4	11
238	Quantitative nitrogen oxide measurements by laser-induced fluorescence in diesel-like n-heptane jets with enhanced premixing. <i>Combustion and Flame</i> , 2018, 188, 250-261.	2.8	11
239	A six-compound, high performance gasoline surrogate for internal combustion engines: Experimental and numerical study of autoignition using high-pressure shock tubes. <i>Fuel</i> , 2020, 261, 116439.	3.4	11
240	Monitoring formaldehyde in a shock tube with a fast dual-comb spectrometer operating in the spectral range of 1740–1790 Å. <i>Applied Physics B: Lasers and Optics</i> , 2020, 126, 1.	1.1	11
241	Characterization of tracers for two-color laser-induced fluorescence thermometry of liquid-phase temperature in ethanol, ethylhexanoic acid/ethanol mixtures, 1-butanol, and o-xylene. <i>Applied Optics</i> , 2021, 60, C98.	0.9	11
242	A Cr ⁴⁺ :forsterite laser for intracavity absorption spectroscopy in the spectral range of 12–14 Å. <i>Optics Express</i> , 2019, 27, 11122.	1.7	11
243	LES of nanoparticle synthesis in the spraysyn burner: A comparison against experiments. <i>Powder Technology</i> , 2022, 404, 117466.	2.1	11
244	Fluorescence imaging of natural gas/air mixing without tracers added. <i>Chemical Physics Letters</i> , 2001, 345, 259-264.	1.2	10
245	UV planar laser induced fluorescence imaging of hot carbon dioxide in a high-pressure flame. <i>Applied Physics B: Lasers and Optics</i> , 2004, 79, 427-430.	1.1	10
246	Effects of Bio Diesel Injection in a DI Diesel Engine on Gaseous and Particulate Emission. , 2005, , .		10
247	Experimental investigation and modeling of the kinetics of CCl ₄ pyrolysis behind reflected shock waves using high-repetition-rate time-of-flight mass spectrometry. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 2821.	1.3	10
248	Nitric Oxide Measurements in the Core of Diesel Jets Using a Biofuel Blend. <i>SAE International Journal of Materials and Manufacturing</i> , 2015, 8, 458-471.	0.3	10
249	Effect of fluctuations on time-averaged multi-line NO-LIF thermometry measurements of the gas-phase temperature. <i>Applied Physics B: Lasers and Optics</i> , 2015, 120, 429-440.	1.1	10
250	Micrometer-sized nano-structured silicon/carbon composites for lithium-ion battery anodes synthesized based on a three-step Hansen solubility parameter (HSP) concept. <i>Journal of Industrial and Engineering Chemistry</i> , 2017, 52, 305-313.	2.9	10
251	High-temperature gas-phase kinetics of the thermal decomposition of tetramethoxysilane. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 1133-1141.	2.4	10
252	Laser spectroscopic investigation of diesel-like jet structure using C ₈ oxygenates as the fuel. <i>Fuel</i> , 2019, 235, 1515-1529.	3.4	10

#	ARTICLE	IF	CITATIONS
253	Pyrolysis of diethyl carbonate: Shock-tube and flow-reactor measurements and modeling. Proceedings of the Combustion Institute, 2021, 38, 987-996.	2.4	10
254	Spatial distribution of gas-phase synthesized germanium nanoparticle volume-fraction and temperature using combined in situ line-of-sight emission and extinction spectroscopy. Optics Express, 2021, 29, 8387.	1.7	10
255	Interrogating Gas-Borne Nanoparticles Using Laser-Based Diagnostics and Bayesian Data Fusion. Journal of Physical Chemistry C, 2021, 125, 8382-8390.	1.5	10
256	Liquid-Phase Cyclohexene Oxidation with O_2 over Spray-Flame-Synthesized $La_{1-x}Sr_xCoO_3$ Perovskite Nanoparticles. Chemistry - A European Journal, 2021, 27, 16912-16923.	1.7	10
257	Laser-spectroscopic investigation of OH-radical concentrations in the exhaust plane of jet engines. Geophysical Research Letters, 1999, 26, 1849-1852.	1.5	9
258	Fluorescence quantum yield of carbon dioxide for quantitative UV laser-induced fluorescence in high-pressure flames. Applied Physics B: Lasers and Optics, 2008, 93, 677-685.	1.1	9
259	Influence of carbon content, particle size, and partial manganese substitution on the electrochemical performance of $LiFe_{1-x}Mn_xPO_4$ /carbon composites. Ionics, 2015, 21, 1857-1866.	1.2	9
260	Investigation of the combustion of iron pentacarbonyl and the formation of key intermediates in iron oxide synthesis flames. Chemical Engineering Science, 2021, 230, 116169.	1.9	9
261	Crumpled few-layer graphene: Connection between morphology and optical properties. Carbon, 2021, 182, 677-690.	5.4	9
262	Near-threshold soot formation in premixed flames at elevated pressure. Carbon, 2021, 181, 143-154.	5.4	9
263	Investigating spray flames for nanoparticle synthesis via tomographic imaging using multi-simultaneous measurements (TIMes) of emission. Optics Express, 2022, 30, 15524.	1.7	9
264	Quantitative In-Cylinder NO-LIF Imaging in a Direct-Injected Gasoline Engine with Exhaust Gas Recirculation. , 2001, , .		8
265	Mixing Processes in a Compressible Accelerated Nozzle Flow with Blunt-Body Wakes. AIAA Journal, 2014, 52, 559-568.	1.5	8
266	Diode laser-based standoff absorption measurement of water film thickness in retro-reflection. Applied Physics B: Lasers and Optics, 2016, 122, 1.	1.1	8
267	UV absorption and fluorescence properties of gas-phase p-difluorobenzene. Applied Physics B: Lasers and Optics, 2017, 123, 1.	1.1	8
268	Novel Si-CNT/polyaniline nanocomposites as Lithium-ion battery anodes for improved cycling performance. Materials Today: Proceedings, 2017, 4, S263-S268.	0.9	8
269	High-Temperature Rate Constants for the Reaction of Hydrogen Atoms with Tetramethoxysilane and Reactivity Analogies between Silanes and Oxygenated Hydrocarbons. Journal of Physical Chemistry A, 2018, 122, 5289-5298.	1.1	8
270	Determination of gas-phase absorption cross-sections of FeO in a shock tube using intracavity absorption spectroscopy near 611 nm. Proceedings of the Combustion Institute, 2021, 38, 1637-1645.	2.4	8

#	ARTICLE	IF	CITATIONS
271	Early particle formation and evolution in iron-doped flames. <i>Combustion and Flame</i> , 2022, 244, 112251.	2.8	8
272	Instantaneous three-dimensional visualization of concentration distributions in turbulent flows with crossed-plane laser-induced fluorescence imaging. <i>Applied Physics B: Lasers and Optics</i> , 2005, 80, 125-131.	1.1	7
273	Laser-based temperature imaging close to surfaces with toluene and NO-LIF. <i>Journal of Physics: Conference Series</i> , 2006, 45, 69-76.	0.3	7
274	Probing Species Formed by Pilot Injection During Re-Compression in a Controlled Auto-Ignition Engine by H ₂ CO LIF and Chemiluminescence Imaging. <i>SAE International Journal of Engines</i> , 2014, 7, 772-789.	0.4	7
275	Optical Investigation of Biofuel Effects on NO and PAH Formation in Diesel-Like Jets. , 2015, , .		7
276	A group additivity methodology for predicting the thermochemistry of oxygen-containing organosilanes. <i>International Journal of Chemical Kinetics</i> , 2020, 52, 918-932.	1.0	7
277	Numerical Investigation of Remote Ignition in Shock Tubes. <i>Flow, Turbulence and Combustion</i> , 2021, 106, 471-498.	1.4	7
278	Temperature and Heat Flux. , 2007, , 487-561.		7
279	NIR sensor for aqueous urea solution film thickness and concentration measurement using a broadband light source. <i>Applied Optics</i> , 2019, 58, 4546.	0.9	7
280	Method for absolute OH-concentration measurements in premixed flames by LIF and numerical simulations. <i>Applied Physics B: Lasers and Optics</i> , 2004, 79, 759-766.	1.1	6
281	Nanoparticle formation from supersaturated carbon vapour generated by laser photolysis of carbon suboxide. <i>Journal Physics D: Applied Physics</i> , 2006, 39, 4359-4365.	1.3	6
282	Ga ₂ O ₃ nanoparticles synthesized in a low-pressure flame reactor. <i>Journal of Nanoparticle Research</i> , 2008, 10, 121-127.	0.8	6
283	High temperature shock-tube study of the reaction of gallium with ammonia. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 4149.	1.3	6
284	Strain rate and fuel composition dependence of chemiluminescent species profiles in non-premixed counterflow flames: comparison with model results. <i>Applied Physics B: Lasers and Optics</i> , 2012, 107, 561-569.	1.1	6
285	Mixture-Formation Analysis by PLIF in an HSDI Diesel Engine Using C ₈ -Oxygenates as the Fuel. <i>SAE International Journal of Fuels and Lubricants</i> , 0, 8, 396-414.	0.2	6
286	Reaction-time-resolved measurements of laser-induced fluorescence in a shock tube with a single laser pulse. <i>Review of Scientific Instruments</i> , 2017, 88, 115105.	0.6	6
287	Application of toluene LIF to transonic nozzle flows to identify zones of incomplete molecular mixing. <i>Optics Express</i> , 2018, 26, 10266.	1.7	6
288	Thermochemistry of organosilane compounds and organosilyl radicals. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 1259-1267.	2.4	6

#	ARTICLE	IF	CITATIONS
289	Phase-sensitive detection of gas-borne Si nanoparticles via line-of-sight UV/VIS attenuation. Optics Express, 2021, 29, 21795.	1.7	6
290	Uncertainty quantification and design-of-experiment in absorption-based aqueous film parameter measurements using Bayesian inference. Applied Optics, 2017, 56, E1.	2.1	6
291	Shock-tube study of the decomposition of octamethylcyclotetrasiloxane and hexamethylcyclotrisiloxane. Zeitschrift Fur Physikalische Chemie, 2020, 234, 1395-1426.	1.4	6
292	In situ measurement of gas-borne silicon nanoparticle volume fraction and temperature by spatially and spectrally line-resolved attenuation and emission imaging. Powder Technology, 2022, 396, 535-541.	2.1	6
293	Measurement of the Equivalence Ratio in the Spark Gap Region of a Gasoline Direct Injection Engine With Spark Emission Spectroscopy and Tracer-LIF. , 2004, , .		5
294	Advanced Laser Imaging Diagnostics in Combustion. Zeitschrift Fur Physikalische Chemie, 2005, 219, 509-554.	1.4	5
295	Toluene Laser-Induced Fluorescence (LIF) Under Engine-Related Pressures, Temperatures and Oxygen Mole Fractions. , 2005, , .		5
296	Laser-Induced Incandescence. Applied Physics B: Lasers and Optics, 2006, 83, 331-331.	1.1	5
297	Hybrid Endoscopes for Laser-Based Imaging Diagnostics in IC Engines. , 0, , .		5
298	In-cylinder temperature measurements via time-correlated single-photon counting of toluene laser-induced fluorescence through a fiber-based sensor. Optics Letters, 2012, 37, 5244.	1.7	5
299	Synthesis of Small Carbon Nanoparticles in a Microwave Plasma Flow Reactor. Zeitschrift Fur Physikalische Chemie, 2013, 227, 357-370.	1.4	5
300	Formaldehyde laser-induced fluorescence imaging with a multi-band transmission filter. Optics Letters, 2014, 39, 1873.	1.7	5
301	Ignition delay times of shock-heated tetraethoxysilane, hexamethyldisiloxane, and titanium tetrakisopropoxide. Chemical Physics Letters, 2014, 601, 54-58.	1.2	5
302	Endoscopic Chemiluminescence Measurements as a Robust Experimental Tool in High-Pressure Gas Turbine Combustion Tests. , 2014, , .		5
303	The influence of selected aromatic fluorescence tracers on the combustion kinetics of iso-octane. Fuel, 2019, 244, 559-568.	3.4	5
304	Studying the influence of single droplets on fuel/air ignition in a high-pressure shock tube. Review of Scientific Instruments, 2020, 91, 105107.	0.6	5
305	Kinetics of the Thermal Decomposition of Ethylsilane: Shock-Tube and Modeling Study. Energy & Fuels, 2021, 35, 3266-3282.	2.5	5
306	Flame Front Analysis in Turbulent Combustion. Informatik Aktuell, 2000, , 325-333.	0.4	5

#	ARTICLE	IF	CITATIONS
307	Shock-tube study of the influence of oxygenated additives on benzene pyrolysis: Measurement of optical densities, soot inception times and comparison with simulations. <i>Combustion and Flame</i> , 2022, 243, 111985.	2.8	5
308	Fiber optic spark plug sensor for UV-LIF measurements close to the ignition spark. , 2005, , .		4
309	On the effect of molecular and hydrocarbon-bonded hydrogen on carbon particle formation in C3O2 pyrolysis behind shock waves. <i>Combustion and Flame</i> , 2012, 159, 932-939.	2.8	4
310	Visualization of the gas flow in fuel cell bipolar plates using molecular flow seeding and micro-particle image velocimetry. <i>Experiments in Fluids</i> , 2012, 52, 743-748.	1.1	4
311	Investigation of the Mixing Process and the Fuel Mass Concentration Fields for a Gasoline Direct-Injection Spray at ECN Spray G Conditions and Variants. , 0, , .		4
312	Evaluation of Drude parameters for liquid Germanium nanoparticles through aerosol-based line-of-sight attenuation measurements. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2019, 226, 146-156.	1.1	4
313	Structures of carbonaceous nanoparticles formed in various pyrolysis systems. <i>Carbon</i> , 2019, 150, 244-258.	5.4	4
314	Structure-activity correlation in aerobic cyclohexene oxidation and peroxide decomposition over $\text{Co}_3\text{Fe}_3\text{O}_{10}$ spinel oxides. <i>Catalysis Science and Technology</i> , 2022, 12, 3594-3605.	2.1	4
315	NO Laser-Induced Fluorescence Imaging in the Combustion Chamber of a Spray-Guided Direct-Injection Gasoline Engine. , 0, , .		3
316	Role of Non-Stationary Collisional Dynamics in Determining Nitric Oxide LIF Spectra. , 2004, , .		3
317	Laser-based imaging measurements in combustion: New results for fuel/air mixture and temperature diagnostics. <i>Journal of Physics: Conference Series</i> , 2006, 45, 27-27.	0.3	3
318	Toluene Laser-Induced Fluorescence (LIF) Imaging of Supersonic Flow within a Diverging Duct. , 2012, , 509-514.		3
319	Low temperature diffusion of Li atoms into Si nanoparticles and surfaces. <i>Journal of Applied Physics</i> , 2013, 114, 034310.	1.1	3
320	Ultraviolet absorption and laser-induced fluorescence of shock-heated acetylene. <i>Proceedings of the Combustion Institute</i> , 2017, 36, 4469-4475.	2.4	3
321	Temperature, pressure, and oxygen quenching behavior of fluorescence spectra and lifetimes of gas-phase o-xylene and 1,2,4-trimethylbenzene. <i>Applied Physics B: Lasers and Optics</i> , 2018, 124, 1.	1.1	3
322	Conflict-free railway track assignment at depots. <i>Journal of Rail Transport Planning and Management</i> , 2018, 8, 16-28.	0.8	3
323	Spontaneous-Raman-scattering measurements in diesel-like n-heptane jets: Spectroscopy and flame structure. <i>Fuel</i> , 2019, 236, 1356-1365.	3.4	3
324	Mixing processes in the transonic, accelerated wake of a central injector. <i>Physics of Fluids</i> , 2019, 31, .	1.6	3

#	ARTICLE	IF	CITATIONS
325	Low-temperature and low-pressure effective fluorescence lifetimes and spectra of gaseous anisole and toluene. <i>Applied Physics B: Lasers and Optics</i> , 2021, 127, 1.	1.1	3
326	Simultaneous measurement of liquid-film thickness and solute concentration of aqueous solutions of two urea derivatives using NIR absorption. <i>Applied Optics</i> , 2021, 60, 10087.	0.9	3
327	Shock tube study of the pyrolysis kinetics of Di- and trimethoxy methane. <i>Combustion and Flame</i> , 2022, 242, 112186.	2.8	3
328	Application of advanced laser diagnostics for the investigation of the ionization sensor signal in a combustion bomb. <i>Applied Physics B: Lasers and Optics</i> , 2005, 81, 1135-1142.	1.1	2
329	Effect of active impurities on the condensation of nanoparticles from supersaturated carbon vapor in the combined laser photolysis of C3O2 and H2S. <i>Kinetics and Catalysis</i> , 2008, 49, 167-177.	0.3	2
330	Enhanced long-term stability of functionalized silicon nanoparticles using esters. <i>Materials Research Society Symposia Proceedings</i> , 2009, 1207, 1.	0.1	2
331	Optical diagnostics in diesel combustion engines. , 2010, , 617-643.		2
332	Experimental Investigation of the Influence of the Pressure Gradient on the Transonic Mixing Behavior in Blunt-Body Wakes using Tracer LIF. , 2018, , .		2
333	Methodology for the investigation of ignition near hot surfaces in a high-pressure shock tube. <i>Review of Scientific Instruments</i> , 2018, 89, 055111.	0.6	2
334	Excitation wavelength dependence of the fluorescence lifetime of anisole. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 14562-14570.	1.3	2
335	Virtual Special Issue of Recent Advances in Gas-Phase Synthesis of Functional Materials for Energy. <i>Energy & Fuels</i> , 2021, 35, 6341-6343.	2.5	2
336	Survivability of the thermographic phosphors YAG:Pr and SMP:Sn in a premixed flame. <i>Measurement Science and Technology</i> , 2021, 32, 074001.	1.4	2
337	Direct rate-constant measurements and theoretical insight into the mechanism of the reactions Hâ€‰%+â€‰%hexamethyldisiloxane and Hâ€‰%+â€‰%tetramethyldisiloxane*. <i>Molecular Physics</i> , 0, , e1963871.	0.8	2
338	Thermochemistry of Oxygen-Containing Organosilane Radicals and Uncertainty Estimations of Organosilane Group-Additivity Values. <i>Journal of Physical Chemistry A</i> , 2021, 125, 8699-8711.	1.1	2
339	Temperature Diagnostics Using Laser-Induced Fluorescence (LIF) of Toluene. , 2006, , .		2
340	Spatially-resolved measurements of gas-phase temperature and SiO concentration in a low-pressure nanoparticle synthesis reactor using laser-induced fluorescence. , 2014, , .		2
341	In-cylinder thermographic PIV combined with phosphor thermometry using ZnO:Zn. <i>International Journal of Engine Research</i> , 2023, 24, 113-131.	1.4	2
342	Molecular Emissions from Stretched Excitation-Pulse in Nanosecond Phase-Selective Laser-Induced Breakdown Spectroscopy of TiO₂ Nanoaerosols. <i>Applied Spectroscopy</i> , 2022, , 000370282110725.	1.2	2

#	ARTICLE	IF	CITATIONS
343	Strategies for NO Laser-Induced Fluorescence in Methane/Air Flames at Pressures between 1 and 60 bar. , 2002, , FB4.		1
344	Quantitative NO-LIF Temperature Imaging in High-Pressure Flames. , 2003, , .		1
345	Carbon Dioxide UV Laser-Induced Fluorescence Imaging in High-Pressure Flames. , 2004, , .		1
346	Recent Activities in Silicon Hydride Research in Europe. , 2011, , .		1
347	Application of Endoscopic OH*-Chemiluminescence Measurements at a Full-Scale High-Pressure Gas Turbine Combustion Test Rig. , 2012, , .		1
348	Synthesis of Tailored Nanoparticles in Flames: Chemical Kinetics, In Situ Diagnostics, Numerical Simulation, and Process Development. Nanoscience and Technology, 2012, , 3-48.	1.5	1
349	Experimental and Numerical Investigation of CH* and OH* Chemiluminescence in Acetylene Combustion behind Reflected Shock Waves. , 2012, , 421-426.		1
350	Measurements of Liquid Film Thickness and Solute Concentration of Aqueous NaCl Solution by Absorption Spectroscopy. , 2014, , .		1
351	Numerical Investigation of Transonic Mixing Behavior in the Wake of a Central Injector at different Reynolds numbers. , 2018, , .		1
352	Fuel effects on NO formation in diesel-like jets in a vessel. Combustion and Flame, 2019, 206, 201-210.	2.8	1
353	Toluene Laser-Induced Fluorescence (LIF) Imaging of Supersonic Flow within a Diverging Duct with Injectors in the Supersonic Region. , 2015, , 471-476.		1
354	Shock-tube study of the ignition delay time of tetraethoxysilane (TEOS). , 2009, , 781-785.		1
355	A Shock-Tube with High-Repetition-Rate Time-of-Flight Mass Spectrometry for the Study of Complex Reaction Systems. , 2012, , 191-196.		1
356	In-cylinder temperature measurements via fiber-based toluene-LIF time-correlated single-photon counting. , 2012, , .		1
357	UV-Absorption Measurements by Spontaneous Raman Scattering in Low-Sooting Diesel-Like Jets. , 0, , .		1
358	LASER-INDUCED INCANDESCENCE MEASUREMENTS OF SILICON AND COPPER NANOPARTICLES: SPECTROSCOPIC MODEL. , 2016, , .		1
359	Laser-induced atomic emission of silicon nanoparticles during synthesis in a microwave plasma reactor. , 2016, , .		1
360	A New Methodology to Study the Mechanisms of Combustion-Chamber Deposit Formation and the Effects of Engine Parameters on the Quantity and Morphology of Combustion-Chamber Deposits. , 0, , .		1

#	ARTICLE	IF	CITATIONS
361	Intracavity Absorption Spectroscopy of CO ₂ , CO and N ₂ O Using a Fe:ZnSe Laser Tunable in the Range of 3.7–5.3 μm . , 2021, , .		1
362	A Compact Fiber-Coupled NIR/MIR Laser Absorption Instrument for the Simultaneous Measurement of Gas-Phase Temperature and CO, CO ₂ , and H ₂ O Concentration. Sensors, 2022, 22, 1286.	2.1	1
363	Application of laser diagnostics to engine combustion. , 0, , .		0
364	Laser-induced fluorescence detection of NO in high-pressure flames with A-X(0,0), (0,1), and (0,2) excitation. , 2002, , .		0
365	Thickness imaging of evaporating liquid water films by simultaneous Tracer-LIF, Raman imaging and Diode Laser Absorption Spectroscopy. , 2012, , .		0
366	Selected papers about chemiluminescence of flames. Applied Physics B: Lasers and Optics, 2012, 107, 513-514.	1.1	0
367	In Situ Particle Size Measurements of Gas-Borne Silicon Nanoparticles by Time-Resolved Laser-Induced Incandescence. , 2013, , .		0
368	Laser-Induced Incandescence (LII) Measurements on Gas-Borne Silicon Nanoparticles. , 2014, , .		0
369	Liquid film thickness measurement by two-line TDLAS. , 2014, , .		0
370	Applications of Intracavity Absorption Spectroscopy to Quantitative Gas-Phase Species and Temperature Diagnostics. , 2016, , .		0
371	Transport and Diffusion in Boundary Layers of Turbulent Channel Flow. , 2007, , 419-432.		0
372	Micro-invasive LIF Diagnostics in Engines. , 2008, , .		0
373	Temperature dependence of the soot yield in shock wave pyrolysis of carbon-containing precursors. , 2009, , 183-188.		0
374	In-Situ Laser Diagnostics of Temperature, Intermediate Species Concentration and Particle Sizes in Gas-Phase Nanoparticle Synthesis. , 2010, , .		0
375	Measurements of Liquid Film Thickness by Tracer LIF, Raman Scattering and Diode Laser Absorption Spectroscopy. , 2010, , .		0
376	Functionalization of SiO ₂ Nanoparticles and Their Superhydrophobic Surface Coating. Special Publication - Royal Society of Chemistry, 2012, , 113-120.	0.0	0
377	High speed in-cylinder laser hygrometry for EGR quantification using a wavelength scanned vertical cavity surface emitting laser. , 2012, , .		0
378	In Situ Laser Diagnostics in the Gas-Phase Synthesis of Functional Nanomaterials. , 2014, , .		0

#	ARTICLE	IF	CITATIONS
379	Analysis of Chemical Dynamics and Technical Combustion by Time-Resolved Laser-Induced Fluorescence. , 1999, , 241-275.		0
380	DLAS-based measurement of water film thickness in retro-reflection. , 2016, , .		0
381	Water Film Thickness Imaging based on Time-Multiplexed Near-Infrared Absorption. , 2018, , .		0
382	Strategy for determining absolute concentration levels of SiO in low pressure gas phase synthesis flames for silica nanoparticles. , 2018, , .		0
383	Characterization of Oxygenated-Fuel Combustion by Quantitative Multiscalar SRS/LIF Measurements in a Diesel-Like Jet. , 0, , .		0
384	Characterization of tracers for two-color laser-induced fluorescence liquid-phase temperature imaging in sprays. , 2020, , .		0