

Christof Schulz

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

357
papers

8,364
citations

46
h-index

72
g-index

395
ext. papers

9,545
ext. citations

3.7
avg. IF

6.24
L-index

#	Paper	IF	Citations
357	Molecular Emissions from Stretched Excitation-Pulse in Nanosecond Phase-Selective Laser-Induced Breakdown Spectroscopy of TiO Nanoaerosols.. <i>Applied Spectroscopy</i> , 2022 , 37028211072583	3.1	1
356	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 , 111985	5.3	1
355	Synthesis of freestanding few-layer graphene in microwave plasma: The role of oxygen. <i>Carbon</i> , 2022 , 186, 560-573	10.4	4
354	Laser-induced incandescence for non-soot nanoparticles: recent trends and current challenges.. <i>Applied Physics B: Lasers and Optics</i> , 2022 , 128, 72	1.9	2
353	LES of nanoparticle synthesis in the spraysyn burner: A comparison against experiments. <i>Powder Technology</i> , 2022 , 404, 117466	5.2	0
352	Shock tube study of the pyrolysis kinetics of Di- and trimethoxy methane. <i>Combustion and Flame</i> , 2022 , 242, 112186	5.3	0
351	In situ measurement of gas-borne silicon nanoparticle volume fraction and temperature by spatially and spectrally line-resolved attenuation and emission imaging. <i>Powder Technology</i> , 2021 ,	5.2	1
350	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, 10087-10093	1.7	1
349	Spatial distribution of gas-phase synthesized germanium nanoparticle volume-fraction and temperature using combined in situ line-of-sight emission and extinction spectroscopy. <i>Optics Express</i> , 2021 , 29, 8387-8406	3.3	5
348	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	1.9	2
347	Room-temperature Fe:ZnSe laser tunable in the spectral range of 3.7-5.3 μm applied for intracavity absorption spectroscopy of CO isotopes, CO and NO. <i>Optics Express</i> , 2021 , 29, 12033-12048	3.3	5
346	Survivability of the thermographic phosphors YAG:Pr and SMP:Sn in a premixed flame. <i>Measurement Science and Technology</i> , 2021 , 32, 074001	2	1
345	Interrogating Gas-Borne Nanoparticles Using Laser-Based Diagnostics and Bayesian Data Fusion. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 8382-8390	3.8	4
344	Characterization of tracers for two-color laser-induced fluorescence thermometry of liquid-phase temperature in ethanol, 2-ethylhexanoic-acid/ethanol mixtures, 1-butanol, and o-xylene. <i>Applied Optics</i> , 2021 , 60, C98-C113	1.7	3
343	Crumpled few-layer graphene: connection between morphology and optical properties. <i>Carbon</i> , 2021 ,	10.4	3
342	Phase-sensitive detection of gas-borne Si nanoparticles via line-of-sight UV/VIS attenuation. <i>Optics Express</i> , 2021 , 29, 21795-21809	3.3	3
341	Atmospheric-pressure particle mass spectrometer for investigating particle growth in spray flames. <i>Journal of Aerosol Science</i> , 2021 , 158, 105827	4.3	2

340	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	7	9
339	Experimental and numerical investigation of iron-doped flames: FeO formation and impact on flame temperature. <i>Proceedings of the Combustion Institute</i> , 2021 , 38, 1249-1257	5.9	4
338	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	5.9	5
337	Thermochemistry of organosilane compounds and organosilyl radicals. <i>Proceedings of the Combustion Institute</i> , 2021 , 38, 1259-1267	5.9	3
336	Investigation of the combustion of iron pentacarbonyl and the formation of key intermediates in iron oxide synthesis flames. <i>Chemical Engineering Science</i> , 2021 , 230, 116169	4.4	3
335	Numerical Investigation of Remote Ignition in Shock Tubes. <i>Flow, Turbulence and Combustion</i> , 2021 , 106, 471-498	2.5	3
334	Pyrolysis of diethyl carbonate: Shock-tube and flow-reactor measurements and modeling. <i>Proceedings of the Combustion Institute</i> , 2021 , 38, 987-996	5.9	1
333	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	5.9	6
332	Plug-flow reactor and shock-tube study of the oxidation of very fuel-rich natural gas/DME/O ₂ mixtures. <i>Combustion and Flame</i> , 2021 , 225, 86-103	5.3	8
331	Determination of gas-phase absorption cross-sections of FeO in a shock tube using intracavity absorption spectroscopy near 611 nm. <i>Proceedings of the Combustion Institute</i> , 2021 , 38, 1637-1645	5.9	3
330	Kinetics of the Thermal Decomposition of Ethylsilane: Shock-Tube and Modeling Study. <i>Energy & Fuels</i> , 2021 , 35, 3266-3282	4.1	2
329	Multi-line SiO fluorescence imaging in the flame synthesis of silica nanoparticles from SiCl ₄ . <i>Combustion and Flame</i> , 2021 , 224, 260-272	5.3	3
328	Near-threshold soot formation in premixed flames at elevated pressure. <i>Carbon</i> , 2021 , 181, 143-154	10.4	3
327	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	2.8	0
326	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	4.1	2
325	Liquid-Phase Cyclohexene Oxidation with O over Spray-Flame-Synthesized La Sr CoO Perovskite Nanoparticles. <i>Chemistry - A European Journal</i> , 2021 , 27, 16912-16923	4.8	2
324	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	16.2	10
323	Characterization of few-layer graphene aerosols by laser-induced incandescence. <i>Carbon</i> , 2020 , 167, 870-880	10.4	7

322	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	5.3	8
321	Selective cyclohexene oxidation with O ₂ , H ₂ O ₂ and tert-butyl hydroperoxide over spray-flame synthesized LaCo _{1-x} FexO ₃ nanoparticles. <i>Catalysis Science and Technology</i> , 2020 , 10, 5196-5206	5.5	17
320	Characterization of tracers for two-color laser-induced fluorescence liquid-phase temperature imaging in sprays. <i>Experiments in Fluids</i> , 2020 , 61, 1	2.5	7
319	Impact of shock-tube facility-dependent effects on incident- and reflected-shock conditions over a wide range of pressures and Mach numbers. <i>Combustion and Flame</i> , 2020 , 217, 200-211	5.3	22
318	Spray-Flame-Prepared LaCo _{1-x} FexO ₃ Perovskite Nanoparticles as Active OER Catalysts: Influence of Fe Content and Low-Temperature Heating. <i>ChemElectroChem</i> , 2020 , 7, 2564-2574	4.3	9
317	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	5.3	10
316	Shock-tube study of the decomposition of octamethylcyclotetrasiloxane and hexamethylcyclotrisiloxane. <i>Zeitschrift Fur Physikalische Chemie</i> , 2020 , 234, 1395-1426	3.1	5
315	An experimental and modeling study on the reactivity of extremely fuel-rich methane/dimethyl ether mixtures. <i>Combustion and Flame</i> , 2020 , 212, 107-122	5.3	17
314	Gas-phase synthesis of iron oxide nanoparticles for improved magnetic hyperthermia performance. <i>Journal of Alloys and Compounds</i> , 2020 , 824, 153814	5.7	16
313	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	3.3	9
312	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	7.1	8
311	Monitoring formaldehyde in a shock tube with a fast dual-comb spectrometer operating in the spectral range of 1740–790 cm ⁻¹ . <i>Applied Physics B: Lasers and Optics</i> , 2020 , 126, 1	1.9	6
310	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	1.9	5
309	Studying the influence of single droplets on fuel/air ignition in a high-pressure shock tube. <i>Review of Scientific Instruments</i> , 2020 , 91, 105107	1.7	1
308	A group additivity methodology for predicting the thermochemistry of oxygen-containing organosilanes. <i>International Journal of Chemical Kinetics</i> , 2020 , 52, 918-932	1.4	3
307	Spray-flame synthesis of La(Fe, Co)O ₃ nano-perovskites from metal nitrates. <i>AIChE Journal</i> , 2020 , 66, e16748	3.6	21
306	SpraySyn-A standardized burner configuration for nanoparticle synthesis in spray flames. <i>Review of Scientific Instruments</i> , 2019 , 90, 085108	1.7	44
305	Development and evaluation of a chemical kinetics reaction mechanism for tetramethylsilane-doped flames. <i>Chemical Engineering Science</i> , 2019 , 209, 115209	4.4	11

304	Absolute SiO concentration imaging in low-pressure nanoparticle-synthesis flames via laser-induced fluorescence. <i>Applied Physics B: Lasers and Optics</i> , 2019 , 125, 1	1.9	7
303	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	2.1	3
302	Detector calibration and measurement issues in multi-color time-resolved laser-induced incandescence. <i>Applied Physics B: Lasers and Optics</i> , 2019 , 125, 1	1.9	7
301	Excitation wavelength dependence of the fluorescence lifetime of anisole. <i>Physical Chemistry Chemical Physics</i> , 2019 , 21, 14562-14570	3.6	2
300	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	3.5	8
299	Fuel effects on NO formation in diesel-like jets in a vessel. <i>Combustion and Flame</i> , 2019 , 206, 201-210	5.3	0
298	Power and syngas production from partial oxidation of fuel-rich methane/DME mixtures in an HCCI engine. <i>Fuel</i> , 2019 , 243, 97-103	7.1	27
297	The influence of selected aromatic fluorescence tracers on the combustion kinetics of iso-octane. <i>Fuel</i> , 2019 , 244, 559-568	7.1	2
296	High-temperature gas-phase kinetics of the thermal decomposition of tetramethoxysilane. <i>Proceedings of the Combustion Institute</i> , 2019 , 37, 1133-1141	5.9	9
295	Gas-phase synthesis of functional nanomaterials: Challenges to kinetics, diagnostics, and process development. <i>Proceedings of the Combustion Institute</i> , 2019 , 37, 83-108	5.9	61
294	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	5.9	14
293	The influence of hydrogen and methane on the growth of carbon particles during acetylene pyrolysis in a burnt-gas flow reactor. <i>Proceedings of the Combustion Institute</i> , 2019 , 37, 1125-1132	5.9	7
292	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	5.9	20
291	Shock-tube study of methane pyrolysis in the context of energy-storage processes. <i>Proceedings of the Combustion Institute</i> , 2019 , 37, 197-204	5.9	17
290	Detailed simulation of iron oxide nanoparticle forming flames: Buoyancy and probe effects. <i>Proceedings of the Combustion Institute</i> , 2019 , 37, 1241-1248	5.9	10
289	Towards Mechanistic Understanding of Liquid-Phase Cinnamyl Alcohol Oxidation with tert-Butyl Hydroperoxide over Noble-Metal-Free LaCo Fe O Perovskites. <i>ChemPlusChem</i> , 2019 , 84, 1155-1163	2.8	21
288	High-Temperature Unimolecular Decomposition of Diethyl Ether: Shock-Tube and Theory Studies. <i>Journal of Physical Chemistry A</i> , 2019 , 123, 6813-6827	2.8	8
287	Investigating temporal variation in the apparent volume fraction measured by time-resolved laser-induced incandescence. <i>Applied Physics B: Lasers and Optics</i> , 2019 , 125, 1	1.9	8

286	A Cr:forsterite laser for intracavity absorption spectroscopy in the spectral range of 1.2-1.4 μm . <i>Optics Express</i> , 2019 , 27, 11122-11136	3.3	7
285	NIR sensor for aqueous urea solution film thickness and concentration measurement using a broadband light source. <i>Applied Optics</i> , 2019 , 58, 4546-4552	1.7	2
284	Spray-Flame-Synthesized LaCo _{1-x} FexO ₃ Perovskite Nanoparticles as Electrocatalysts for Water and Ethanol Oxidation. <i>ChemElectroChem</i> , 2019 , 6, 4266-4274	4.3	21
283	Structures of carbonaceous nanoparticles formed in various pyrolysis systems. <i>Carbon</i> , 2019 , 150, 244-258	5.4	2
282	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. <i>Powder Technology</i> , 2019 , 342, 880-886	5.2	20
281	Spontaneous-Raman-scattering measurements in diesel-like n-heptane jets: Spectroscopy and flame structure. <i>Fuel</i> , 2019 , 236, 1356-1365	7.1	2
280	Mixing processes in the transonic, accelerated wake of a central injector. <i>Physics of Fluids</i> , 2019 , 31, 016102	10.2	1
279	Laser spectroscopic investigation of diesel-like jet structure using C8 oxygenates as the fuel. <i>Fuel</i> , 2019 , 235, 1515-1529	7.1	5
278	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	6.7	21
277	All gas-phase synthesis of graphene: Characterization and its utilization for silicon-based lithium-ion batteries. <i>Electrochimica Acta</i> , 2018 , 272, 52-59	6.7	25
276	LISim: a modular signal processing toolbox for laser-induced incandescence measurements. <i>Applied Physics B: Lasers and Optics</i> , 2018 , 124, 1	1.9	11
275	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	1.9	3
274	Conflict-free railway track assignment at depots. <i>Journal of Rail Transport Planning and Management</i> , 2018 , 8, 16-28	2.1	2
273	Shock-tube study of the decomposition of tetramethylsilane using gas chromatography and high-repetition-rate time-of-flight mass spectrometry. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 10686-10696	3.6	12
272	Application of toluene LIF to transonic nozzle flows to identify zones of incomplete molecular mixing. <i>Optics Express</i> , 2018 , 26, 10266-10273	3.3	3
271	Water film thickness imaging based on time-multiplexed near-infrared absorption. <i>Optics Express</i> , 2018 , 26, 20902-20912	3.3	7
270	Combined production of power and syngas in an internal combustion engine Γ Experiments and simulations in SI and HCCI mode. <i>Fuel</i> , 2018 , 215, 40-45	7.1	35
269	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	1.4	13

268	Electrostatic Self-Assembly Enabling Integrated Bulk and Interfacial Sodium Storage in 3D Titania-Graphene Hybrid. <i>Nano Letters</i> , 2018 , 18, 336-346	11.5	37
267	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	5.3	8
266	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	5.3	14
265	Direct Measurement of High-Temperature Rate Constants of the Thermal Decomposition of Dimethoxymethane, a Shock Tube and Modeling Study. <i>Journal of Physical Chemistry A</i> , 2018 , 122, 7559-7571	2.8	17
264	Methodology for the investigation of ignition near hot surfaces in a high-pressure shock tube. <i>Review of Scientific Instruments</i> , 2018 , 89, 055111	1.7	2
263	High-Temperature Rate Constants for the Reaction of Hydrogen Atoms with Tetramethoxysilane and Reactivity Analogies between Silanes and Oxygenated Hydrocarbons. <i>Journal of Physical Chemistry A</i> , 2018 , 122, 5289-5298	2.8	6
262	Response surface and group additivity methodology for estimation of thermodynamic properties of organosilanes. <i>International Journal of Chemical Kinetics</i> , 2018 , 50, 681-690	1.4	12
261	Parasitic Reactions in Nanosized Silicon Anodes for Lithium-Ion Batteries. <i>Nano Letters</i> , 2017 , 17, 1512-1519	1.5	93
260	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	6.3	9
259	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	1.9	10
258	UV absorption and fluorescence properties of gas-phase p-difluorobenzene. <i>Applied Physics B: Lasers and Optics</i> , 2017 , 123, 1	1.9	7
257	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	1.7	6
256	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	1.4	11
255	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	5.3	9
254	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	5.9	18
253	Spectroscopic models for laser-heated silicon and copper nanoparticles. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2017 , 197, 3-11	2.1	17
252	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	5.9	14
251	Ultraviolet absorption and laser-induced fluorescence of shock-heated acetylene. <i>Proceedings of the Combustion Institute</i> , 2017 , 36, 4469-4475	5.9	3

250	Self-quenching in toluene LIF. <i>Proceedings of the Combustion Institute</i> , 2017 , 36, 4505-4514	5.9	10
249	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	5.9	19
248	Optical properties and pyrolysis of shock-heated gas-phase anisole. <i>Proceedings of the Combustion Institute</i> , 2017 , 36, 4525-4532	5.9	21
247	A quantum chemical and kinetics modeling study on the autoignition mechanism of diethyl ether. <i>Proceedings of the Combustion Institute</i> , 2017 , 36, 195-202	5.9	44
246	Novel Si-CNT/polyaniline nanocomposites as Lithium-ion battery anodes for improved cycling performance. <i>Materials Today: Proceedings</i> , 2017 , 4, S263-S268	1.4	7
245	Performance of photomultipliers in the context of laser-induced incandescence. <i>Applied Optics</i> , 2017 , 56, 7849-7860	1.7	10
244	Sequential signal detection for high dynamic range time-resolved laser-induced incandescence. <i>Optics Express</i> , 2017 , 25, 2413-2421	3.3	10
243	Instantaneous 3D imaging of highly turbulent flames using computed tomography of chemiluminescence. <i>Applied Optics</i> , 2017 , 56, 7385-7395	1.7	50
242	Uncertainty quantification and design-of-experiment in absorption-based aqueous film parameter measurements using Bayesian inference. <i>Applied Optics</i> , 2017 , 56, E1-E7	0.2	6
241	Laser-induced atomic emission of silicon nanoparticles during laser-induced heating. <i>Applied Optics</i> , 2017 , 56, E50-E57	0.2	16
240	Inline coating of silicon nanoparticles in a plasma reactor: Reactor design, simulation and experiment. <i>Materials Today: Proceedings</i> , 2017 , 4, S118-S127	1.4	12
239	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	6.8	20
238	Diode laser-based standoff absorption measurement of water film thickness in retro-reflection. <i>Applied Physics B: Lasers and Optics</i> , 2016 , 122, 1	1.9	6
237	Laser-induced incandescence from laser-heated silicon nanoparticles. <i>Applied Physics B: Lasers and Optics</i> , 2016 , 122, 1	1.9	28
236	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	1.9	14
235	Measurements of liquid film thickness, concentration, and temperature of aqueous urea solution by NIR absorption spectroscopy. <i>Applied Physics B: Lasers and Optics</i> , 2016 , 122, 1	1.9	11
234	Quantitative two-dimensional measurement of oil-film thickness by laser-induced fluorescence in a piston-ring model experiment. <i>Applied Optics</i> , 2016 , 55, 269-79	0.2	18
233	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	2.6	11

232	Laser-based diagnostics in the gas-phase synthesis of inorganic nanoparticles. <i>Powder Technology</i> , 2016 , 287, 226-238	5.2	35
231	Laser-induced atomic emission of silicon nanoparticles during synthesis in a microwave plasma reactor 2016 ,		1
230	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	1.7	20
229	Laser-Based Combustion Diagnostics 2016 , 1-44		3
228	Shock-tube and plug-flow reactor study of the oxidation of fuel-rich CH ₄ /O ₂ mixtures enhanced with additives. <i>Combustion and Flame</i> , 2016 , 169, 307-320	5.3	38
227	Influence of carbon content, particle size, and partial manganese substitution on the electrochemical performance of LiFexMn _{1-x} PO ₄ /carbon composites. <i>Ionics</i> , 2015 , 21, 1857-1866	2.7	7
226	Sensitivity analysis for soot particle size imaging with laser-induced incandescence at high pressure. <i>Applied Physics B: Lasers and Optics</i> , 2015 , 119, 745-763	1.9	20
225	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	1.9	5
224	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	1.9	31
223	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	1.9	11
222	Combination of LII and extinction measurements for determination of soot volume fraction and estimation of soot maturity in non-premixed laminar flames. <i>Applied Physics B: Lasers and Optics</i> , 2015 , 119, 685-696	1.9	29
221	Assessment of soot particle-size imaging with LII at Diesel engine conditions. <i>Applied Physics B: Lasers and Optics</i> , 2015 , 119, 765-776	1.9	19
220	Direct self-assembly of Fe ₂ O ₃ /reduced graphene oxide nanocomposite for high-performance lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 11566-11574	13	49
219	Laser-induced incandescence: Particulate diagnostics for combustion, atmospheric, and industrial applications. <i>Progress in Energy and Combustion Science</i> , 2015 , 51, 2-48	33.6	208
218	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	5.9	22
217	Experimental study of the kinetics of ethanol pyrolysis and oxidation behind reflected shock waves and in laminar flames. <i>Proceedings of the Combustion Institute</i> , 2015 , 35, 393-400	5.9	35
216	Low-pressure effective fluorescence lifetimes and photo-physical rate constants of one- and two-ring aromatics. <i>Applied Physics B: Lasers and Optics</i> , 2015 , 121, 549-558	1.9	11
215	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	1.9	12

214	A Genetic Algorithm-Based Method for the Optimization of Reduced Kinetics Mechanisms. <i>International Journal of Chemical Kinetics</i> , 2015 , 47, 695-723	1.4	22
213	SiCNT/rGO Nanoheterostructures as High-Performance Lithium-Ion-Battery Anodes. <i>ChemElectroChem</i> , 2015 , 2, 1983-1990	4.3	29
212	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	1	9
211	Mixture-Formation Analysis by PLIF in an HSDI Diesel Engine Using C8-Oxygenates as the Fuel. <i>SAE International Journal of Fuels and Lubricants</i> , 2015 , 8, 396-414	1.8	5
210	Optical Investigation of Biofuel Effects on NO and PAH Formation in Diesel-Like Jets 2015 ,		6
209	Investigation of the Mixing Process and the Fuel Mass Concentration Fields for a Gasoline Direct-Injection Spray at ECN Spray G Conditions and Variants 2015 ,		4
208	Initial reaction steps during flame synthesis of iron-oxide nanoparticles. <i>CrystEngComm</i> , 2015 , 17, 6930-6939	5.9	28
207	A Standard Burner for High Pressure Laminar Premixed Flames: Detailed Soot Diagnostics. <i>Zeitschrift Fur Physikalische Chemie</i> , 2015 , 229, 781-805	3.1	11
206	Impact of Ambient Pressure on Titania Nanoparticle Formation During Spray-Flame Synthesis. <i>Journal of Nanoscience and Nanotechnology</i> , 2015 , 15, 9449-56	1.3	17
205	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	5.9	59
204	Endoscopic temperature imaging in a four-cylinder IC engine via two-color toluene fluorescence. <i>Proceedings of the Combustion Institute</i> , 2015 , 35, 3697-3705	5.9	18
203	Two-tracer LIF imaging of preferential evaporation of multi-component gasoline fuel sprays under engine conditions. <i>Proceedings of the Combustion Institute</i> , 2015 , 35, 2915-2922	5.9	34
202	Calibration-free, high-speed, in-cylinder laser absorption sensor for cycle-resolved, absolute H ₂ O measurements in a production IC engine. <i>Proceedings of the Combustion Institute</i> , 2015 , 35, 3653-3661	5.9	16
201	Toluene Laser-Induced Fluorescence (LIF) Imaging of Supersonic Flow within a Diverging Duct with Injectors in the Supersonic Region 2015 , 471-476		0
200	Mixing Processes in a Compressible Accelerated Nozzle Flow with Blunt-Body Wakes. <i>AIAA Journal</i> , 2014 , 52, 559-568	2.1	5
199	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	1.9	51
198	Silicon/Polyaniline Nanocomposites as Anode Material for Lithium Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2014 , 161, A40-A45	3.9	55
197	Surface functionalization of microwave plasma-synthesized silica nanoparticles for enhancing the stability of dispersions. <i>Journal of Nanoparticle Research</i> , 2014 , 16, 1	2.3	22

196	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	1.9	26
195	Ignition delay times of shock-heated tetraethoxysilane, hexamethyldisiloxane, and titanium tetraisopropoxide. <i>Chemical Physics Letters</i> , 2014 , 601, 54-58	2.5	5
194	Endoscopic Chemiluminescence Measurements as a Robust Experimental Tool in High-Pressure Gas Turbine Combustion Tests 2014 ,		1
193	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	2.4	6
192	Endoscopic Imaging of Early Flame Propagation in a Near-Production Engine. <i>SAE International Journal of Engines</i> , 2014 , 7, 351-365	2.4	16
191	An automated thermophoretic soot sampling device for laboratory-scale high-pressure flames. <i>Review of Scientific Instruments</i> , 2014 , 85, 045103	1.7	21
190	Measurements of Liquid Film Thickness and Solute Concentration of Aqueous NaCl Solution by Absorption Spectroscopy 2014 ,		1
189	Formaldehyde laser-induced fluorescence imaging with a multi-band transmission filter. <i>Optics Letters</i> , 2014 , 39, 1873-6	3	3
188	A Genetic Algorithm-Based Method for the Automatic Reduction of Reaction Mechanisms. <i>International Journal of Chemical Kinetics</i> , 2014 , 46, 41-59	1.4	29
187	Influence of molecular hydrogen on acetylene pyrolysis: Experiment and modeling. <i>Combustion and Flame</i> , 2014 , 161, 2263-2269	5.3	12
186	Spatially-resolved measurements of gas-phase temperature and SiO concentration in a low-pressure nanoparticle synthesis reactor using laser-induced fluorescence 2014 ,		2
185	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	1.4	22
184	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	1.9	26
183	Temperature, pressure, and bath gas composition dependence of fluorescence spectra and fluorescence lifetimes of toluene and naphthalene. <i>Applied Physics B: Lasers and Optics</i> , 2013 , 110, 81-93 ¹⁻⁹		44
182	Simultaneous measurement of localized heat-release with OH/CH ₂ O LIF imaging and spatially integrated OH* chemiluminescence in turbulent swirl flames. <i>Proceedings of the Combustion Institute</i> , 2013 , 34, 3549-3556	5.9	43
181	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, 2821-8	3.6	8
180	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	5.9	11
179	Synthesis of Small Carbon Nanoparticles in a Microwave Plasma Flow Reactor. <i>Zeitschrift Fur Physikalische Chemie</i> , 2013 , 227, 357-370	3.1	5

178	Thermal stratification in an internal combustion engine due to wall heat transfer measured by laser-induced fluorescence. <i>Proceedings of the Combustion Institute</i> , 2013 , 34, 2911-2919	5.9	51
177	VCSEL-based, high-speed, in situ TDLAS for in-cylinder water vapor measurements in IC engines. <i>Optics Express</i> , 2013 , 21, 19951-65	3.3	89
176	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	1.5	15
175	Low temperature diffusion of Li atoms into Si nanoparticles and surfaces. <i>Journal of Applied Physics</i> , 2013 , 114, 034310	2.5	3
174	Study of Soot Formation and Oxidation in the Engine Combustion Network (ECN), Spray A: Effects of Ambient Temperature and Oxygen Concentration. <i>SAE International Journal of Engines</i> , 2013 , 6, 352-365	2.4	34
173	Stabilization of mid-sized silicon nanoparticles by functionalization with acrylic acid. <i>Nanoscale Research Letters</i> , 2012 , 7, 76	5	54
172	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	2.5	3
171	High-speed tunable diode laser absorption spectroscopy for sampling-free in-cylinder water vapor concentration measurements in an optical IC engine. <i>Applied Physics B: Lasers and Optics</i> , 2012 , 109, 521-532	1.9	43
170	Experimental and modeling study of carbon suboxide decomposition behind reflected shock waves. <i>Physical Chemistry Chemical Physics</i> , 2012 , 14, 1246-52	3.6	12
169	Synthesis of Tailored Nanoparticles in Flames: Chemical Kinetics, In Situ Diagnostics, Numerical Simulation, and Process Development. <i>Nanoscience and Technology</i> , 2012 , 3-48	0.6	1
168	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	8.9	54
167	Toluene Laser-Induced Fluorescence (LIF) Imaging of Supersonic Flow within a Diverging Duct 2012 , 509-514		2
166	Nanoparticles from the Gasphase. <i>Nanoscience and Technology</i> , 2012 ,	0.6	12
165	Experimental and Numerical Investigation of CH* and OH* Chemiluminescence in Acetylene Combustion behind Reflected Shock Waves 2012 , 421-426		1
164	Two-dimensional cycle-resolved exhaust valve temperature measurements in an optically accessible internal combustion engine using thermographic phosphors. <i>Applied Physics B: Lasers and Optics</i> , 2012 , 106, 945-951	1.9	32
163	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	1.9	5
162	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	1.9	23
161	Investigation of the kinetics of OH* and CH* chemiluminescence in hydrocarbon oxidation behind reflected shock waves. <i>Applied Physics B: Lasers and Optics</i> , 2012 , 107, 515-527	1.9	29

160	The autoignition of practical fuels at HCCI conditions: High-pressure shock tube experiments and phenomenological modeling. <i>Fuel</i> , 2012 , 93, 492-501	7.1	49
159	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	5.3	4
158	Autoignition of surrogate biodiesel fuel (B30) at high pressures: Experimental and modeling kinetic study. <i>Combustion and Flame</i> , 2012 , 159, 996-1008	5.3	24
157	Diffraction/refractive (hybrid) UV-imaging system for minimally invasive metrology: design, performance, and application experiments. <i>Applied Optics</i> , 2012 , 51, 1982-96	1.7	10
156	In-cylinder temperature measurements via time-correlated single-photon counting of toluene laser-induced fluorescence through a fiber-based sensor. <i>Optics Letters</i> , 2012 , 37, 5244-6	3	4
155	Comparison of micro- and nanoscale Fe ²⁺ -containing (Hematite) particles for their toxicological properties in human lung cells in vitro. <i>Toxicological Sciences</i> , 2012 , 126, 173-82	4.4	42
154	Application of Endoscopic OH*-Chemiluminescence Measurements at a Full-Scale High-Pressure Gas Turbine Combustion Test Rig 2012 ,		1
153	In-cylinder temperature measurements via fiber-based toluene-LIF time-correlated single-photon counting 2012 ,		1
152	A Shock-Tube with High-Repetition-Rate Time-of-Flight Mass Spectrometry for the Study of Complex Reaction Systems 2012 , 191-196		1
151	Gas-Temperature Imaging in a Microwave-Plasma Nanoparticle-Synthesis Reactor Using Multi-Line NO-LIF Thermometry. <i>Zeitschrift Fur Physikalische Chemie</i> , 2011 , 225, 1225-1235	3.1	10
150	Plasma synthesis of nanostructures for improved thermoelectric properties. <i>Journal Physics D: Applied Physics</i> , 2011 , 44, 174034	3	88
149	Laser-based diagnostics for the measurement of liquid water film thickness. <i>Applied Optics</i> , 2011 , 50, A60-7	0.2	11
148	Laser-Based Combustion Diagnostics * Update based on original article by Jürgen Wolfrum, Thomas Dreier, Volker Ebert, and Christof Schulz, Encyclopedia of Analytical Chemistry, © 2000, John Wiley & Sons Ltd. 2011 ,		2
147	Gas-Phase Synthesis of Nanoscale Silicon as an Economical Route towards Sustainable Energy Technology. <i>KONA Powder and Particle Journal</i> , 2011 , 29, 191-207	3.4	47
146	High temperature shock-tube study of the reaction of gallium with ammonia. <i>Physical Chemistry Chemical Physics</i> , 2011 , 13, 4149-54	3.6	6
145	Measurement of water film thickness by laser-induced fluorescence and Raman imaging. <i>Applied Physics B: Lasers and Optics</i> , 2011 , 102, 123-132	1.9	24
144	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	1.9	22
143	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	1.9	16

142	Synthesis of tailored WO ₃ and WO _x (2.9. <i>Proceedings of the Combustion Institute</i> , 2011 , 33, 1883-1890	5.9	19
141	Temperature and bath gas composition dependence of effective fluorescence lifetimes of toluene excited at 266 nm. <i>Chemical Physics</i> , 2011 , 383, 6-11	2.3	29
140	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	5.3	94
139	Ignition delay times of ethanol-containing multi-component gasoline surrogates: Shock-tube experiments and detailed modeling. <i>Fuel</i> , 2011 , 90, 1238-1244	7.1	74
138	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	5.9	23
137	Recent Activities in Silicon Hydride Research in Europe 2011 ,		1
136	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	1.7	28
135	Optical diagnostics in diesel combustion engines 2010 , 617-643		1
134	Measurement and Chemical Kinetics Modeling of Shock-Induced Ignition of Ethanol/Air Mixtures. <i>Energy & Fuels</i> , 2010 , 24, 2830-2840	4.1	68
133	Simultaneous measurement of liquid water film thickness and vapor temperature using near-infrared tunable diode laser spectroscopy. <i>Applied Physics B: Lasers and Optics</i> , 2010 , 99, 385-390	1.9	22
132	Temperature and species measurement in a quenching boundary layer on a flat-flame burner. <i>Experiments in Fluids</i> , 2010 , 49, 783-795	2.5	28
131	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	5.3	83
130	Advanced direct injection combustion engine technologies and development 2010 ,		18
129	Hybrid Endoscopes for Laser-Based Imaging Diagnostics in IC Engines 2009 ,		4
128	Enhanced long-term stability of functionalized silicon nanoparticles using esters. <i>Materials Research Society Symposia Proceedings</i> , 2009 , 1207, 1		0
127	Quantitative liquid and vapor distribution measurements in evaporating fuel sprays using laser-induced exciplex fluorescence. <i>Measurement Science and Technology</i> , 2009 , 20, 125401	2	35
126	Imaging measurements of atomic iron concentration with laser-induced fluorescence in a nanoparticle synthesis flame reactor. <i>Applied Physics B: Lasers and Optics</i> , 2009 , 94, 119-125	1.9	29
125	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	1.9	31

124	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	1.9	19
123	Visualization of the evaporation of a diesel spray using combined Mie and Rayleigh scattering techniques. <i>Experiments in Fluids</i> , 2009 , 47, 439-449	2.5	17
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	5.9	19
121	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	5.9	67
120	Electrical properties of aluminum-doped zinc oxide (AZO) nanoparticles synthesized by chemical vapor synthesis. <i>Nanotechnology</i> , 2009 , 20, 445701	3.4	67
119	Gas-phase synthesis of non-agglomerated nanoparticles by fast gasdynamic heating and cooling 2009 , 857-862		9
118	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	3.1	21
117	Discrepancies between shock tube and rapid compression machine ignition at low temperatures and high pressures 2009 , 739-744		17
116	Shock-tube study of the ignition delay time of tetraethoxysilane (TEOS) 2009 , 781-785		1
115	Temperature dependence of the soot yield in shock wave pyrolysis of carbon-containing precursors 2009 , 183-188		
114	Effect of active impurities on the condensation of nanoparticles from supersaturated carbon vapor in the combined laser photolysis of C ₃ O ₂ and H ₂ S. <i>Kinetics and Catalysis</i> , 2008 , 49, 167-177	1.5	2
113	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, 5871-85	0.2	19
112	Laser-Based Experimental and Monte Carlo PDF Numerical Investigation of an Ethanol/Air Spray Flame. <i>Combustion Science and Technology</i> , 2008 , 180, 1529-1547	1.5	27
111	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, 6330-7	2.8	16
110	Influence of the bath gas on the condensation of supersaturated iron atom vapour at room temperature. <i>Journal Physics D: Applied Physics</i> , 2008 , 41, 055203	3	40
109	Ga ₂ O ₃ nanoparticles synthesized in a low-pressure flame reactor. <i>Journal of Nanoparticle Research</i> , 2008 , 10, 121-127	2.3	6
108	Laser-induced incandescence for soot-particle sizing at elevated pressure. <i>Applied Physics B: Lasers and Optics</i> , 2008 , 90, 629-639	1.9	33
107	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	1.9	79

106	Fluorescence quantum yield of carbon dioxide for quantitative UV laser-induced fluorescence in high-pressure flames. <i>Applied Physics B: Lasers and Optics</i> , 2008 , 93, 677-685	1.9	9
105	Modeling laser-induced incandescence of soot: enthalpy changes during sublimation, conduction, and oxidation. <i>Applied Physics B: Lasers and Optics</i> , 2008 , 93, 645-656	1.9	20
104	Autoignition of gasoline surrogates mixtures at intermediate temperatures and high pressures. <i>Combustion and Flame</i> , 2008 , 152, 276-281	5.3	110
103	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	5.3	102
102	Heat release of carbon particle formation from hydrogen-free precursors behind shock waves. <i>Proceedings of the Combustion Institute</i> , 2007 , 31, 649-656	5.9	23
101	Unsteady flame and flow field interaction of a premixed model gas turbine burner. <i>Proceedings of the Combustion Institute</i> , 2007 , 31, 3197-3205	5.9	19
100	Formation of carbon nanoparticles by the condensation of supersaturated atomic vapor obtained by the laser photolysis of C3O2. <i>Kinetics and Catalysis</i> , 2007 , 48, 194-203	1.5	10
99	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	1.9	163
98	Gas-temperature imaging in a low-pressure flame reactor for nano-particle synthesis with multi-line NO-LIF thermometry. <i>Applied Physics B: Lasers and Optics</i> , 2007 , 88, 373-377	1.9	37
97	Functionalization of silicon nanoparticles via hydrosilylation with 1-alkenes. <i>Colloid and Polymer Science</i> , 2007 , 285, 729-736	2.4	48
96	Synthesis of SnO ₂ nanoparticles tuned between 0.2-1 in a premixed low pressure H ₂ /O ₂ /Ar flame. <i>Proceedings of the Combustion Institute</i> , 2007 , 31, 1805-1812	5.9	19
95	Experimental and numerical characterization of a turbulent spray flame. <i>Proceedings of the Combustion Institute</i> , 2007 , 31, 2247-2255	5.9	42
94	A direct-flame solid oxide fuel cell (DFFC) operated on methane, propane, and butane. <i>Journal of Power Sources</i> , 2007 , 166, 120-126	8.9	63
93	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	2.5	18
92	Quantification of the evaporative cooling in an ethanol spray created by a gasoline direct-injection system measured by multiline NO-LIF gas-temperature imaging. <i>Applied Optics</i> , 2007 , 46, 8322-7	1.7	11
91	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 ¹		21
90	Transport and Diffusion in Boundary Layers of Turbulent Channel Flow 2007 , 419-432		
89	Combustion Diagnostics 2007 , 1241-1315		34

88	Temperature and Heat Flux 2007 , 487-561		4
87	Nanoparticle formation from supersaturated carbon vapour generated by laser photolysis of carbon suboxide. <i>Journal Physics D: Applied Physics</i> , 2006 , 39, 4359-4365	3	6
86	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	2
85	Vibrational and defect states in SnOx nanoparticles. <i>Journal of Applied Physics</i> , 2006 , 99, 113108	2.5	21
84	Branching ratios for quenching of nitric oxide A 2Sigma+ (nu= 0) to X 2Pi(nu= 0). <i>Physical Chemistry Chemical Physics</i> , 2006 , 8, 5328-38	3.6	19
83	Novel strategies for imaging temperature distribution using Toluene LIF. <i>Journal of Physics: Conference Series</i> , 2006 , 45, 133-139	0.3	47
82	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	6
81	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	5.3	78
80	Fluorescence lifetime of gas-phase toluene at elevated temperatures. <i>Chemical Physics Letters</i> , 2006 , 426, 248-251	2.5	17
79	TR-LII for sizing of carbon particles forming at room temperature. <i>Applied Physics B: Lasers and Optics</i> , 2006 , 83, 449-454	1.9	25
78	Laser-induced incandescence: recent trends and current questions. <i>Applied Physics B: Lasers and Optics</i> , 2006 , 83, 333-354	1.9	366
77	Temperature Diagnostics Using Laser-Induced Fluorescence (LIF) of Toluene 2006 ,		2
76	UV absorption of CO2 for temperature diagnostics of hydrocarbon combustion applications. <i>Proceedings of the Combustion Institute</i> , 2005 , 30, 1591-1599	5.9	31
75	Quantitative temperature measurements in high-pressure flames with multiline NO-LIF thermometry. <i>Applied Optics</i> , 2005 , 44, 6718-28	1.7	43
74	Advanced Laser Imaging Diagnostics in Combustion. <i>Zeitschrift Fur Physikalische Chemie</i> , 2005 , 219, 509-554		4
73	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	5.9	63
72	Numerical simulation and laser-based imaging of mixture formation, ignition, and soot formation in a diesel spray. <i>Proceedings of the Combustion Institute</i> , 2005 , 30, 2029-2036	5.9	17
71	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	33.6	407

70	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	1.9	7
69	Toluene LIF at elevated temperatures: implications for fuel/air ratio measurements. <i>Applied Physics B: Lasers and Optics</i> , 2005 , 80, 147-150	1.9	53
68	Oxygen quenching of toluene fluorescence at elevated temperatures. <i>Applied Physics B: Lasers and Optics</i> , 2005 , 80, 777-784	1.9	74
67	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	1.9	1
66	Gas-phase temperature imaging in spray systems using multi-line NO-LIF thermometry. <i>Applied Physics B: Lasers and Optics</i> , 2005 , 81, 1071-1074	1.9	23
65	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	5.9	29
64	Toluene Laser-Induced Fluorescence (LIF) Under Engine-Related Pressures, Temperatures and Oxygen Mole Fractions 2005 ,		5
63	Effects of Bio Diesel Injection in a DI Diesel Engine on Gaseous and Particulate Emission 2005 ,		9
62	Fiber optic spark plug sensor for UV-LIF measurements close to the ignition spark 2005 ,		4
61	Nonstationary Collisional Dynamics in Determining Nitric Oxide Laser-Induced Fluorescence Spectra. <i>AIAA Journal</i> , 2005 , 43, 458-464	2.1	18
60	Multi-Species Laser-Based Imaging Measurements in a Diesel Spray 2004 ,		12
59	NO Laser-Induced Fluorescence Imaging in the Combustion Chamber of a Spray-Guided Direct-Injection Gasoline Engine 2004 ,		2
58	Measurement of the Equivalence Ratio in the Spark Gap Region of a Gasoline Direct Injection Engine With Spark Emission Spectroscopy and Tracer-LIF 2004 ,		3
57	Laser-induced fluorescence of tracers dissolved in evaporating droplets. <i>Applied Physics B: Lasers and Optics</i> , 2004 , 78, 127-131	1.9	19
56	Quantitative multi-line NO-LIF temperature imaging. <i>Applied Physics B: Lasers and Optics</i> , 2004 , 78, 519-533		78
55	Spray diagnostics using an all-solid-state Nd:YAlO ₃ laser and fluorescence tracers in commercial gasoline and diesel fuels. <i>Applied Physics B: Lasers and Optics</i> , 2004 , 79, 249-254	1.9	12
54	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	1.9	4
53	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	1.9	9

52	Absorption and fluorescence of toluene vapor at elevated temperatures. <i>Physical Chemistry Chemical Physics</i> , 2004 , 6, 2940	3.6	130
51	Carbon Dioxide UV Laser-Induced Fluorescence Imaging in High-Pressure Flames 2004 ,		1
50	Role of Non-Stationary Collisional Dynamics in Determining Nitric Oxide LIF Spectra 2004 ,		2
49	Rayleigh-calibrated fluorescence quantum yield measurements of acetone and 3-pentanone. <i>Applied Optics</i> , 2004 , 43, 5901-10	1.7	30
48	Carbon dioxide UV laser-induced fluorescence in high-pressure flames. <i>Chemical Physics Letters</i> , 2003 , 375, 344-349	2.5	32
47	Strategies for laser-induced fluorescence detection of nitric oxide in high-pressure flames. II. A-X(0,1) excitation. <i>Applied Optics</i> , 2003 , 42, 2031-42	1.7	30
46	Laser-induced incandescence for soot diagnostics at high pressures. <i>Applied Optics</i> , 2003 , 42, 2052-62	1.7	65
45	Strategies for laser-induced fluorescence detection of nitric oxide in high-pressure flames. III. Comparison of A-X excitation schemes. <i>Applied Optics</i> , 2003 , 42, 4922-36	1.7	45
44	Quantitative NO-LIF Temperature Imaging in High-Pressure Flames 2003 ,		1
43	Strategies for NO laser-induced fluorescence in methane/air flames at pressures between 1 and 60 bar 2002 , FB4		
42	Quantitative NO-LIF imaging in high-pressure flames. <i>Applied Physics B: Lasers and Optics</i> , 2002 , 75, 97-102		45
41	Quantitative oxygen imaging in an engine. <i>Applied Physics B: Lasers and Optics</i> , 2002 , 75, 137-141	1.9	23
40	Oxygen-distribution imaging with a novel two-tracer laser-induced fluorescence technique. <i>Applied Physics B: Lasers and Optics</i> , 2002 , 74, 111-114	1.9	43
39	Detailed modeling and laser-induced fluorescence imaging of nitric oxide in a NH ₃ -seeded non-premixed methane/air flame. <i>Proceedings of the Combustion Institute</i> , 2002 , 29, 2195-2202	5.9	21
38	Impact of UV absorption by CO ₂ and H ₂ O on no lif in high-pressure combustion applications. <i>Proceedings of the Combustion Institute</i> , 2002 , 29, 2735-2742	5.9	43
37	Ultraviolet absorption spectra of shock-heated carbon dioxide and water between 900 and 3050 K. <i>Chemical Physics Letters</i> , 2002 , 355, 82-88	2.5	62
36	Strategies for laser-induced fluorescence detection of nitric oxide in high-pressure flames. I. A-X(0,0) excitation. <i>Applied Optics</i> , 2002 , 41, 3547-57	1.7	47
35	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	1.9	28

34	Fluorescence imaging of natural gas/air mixing without tracers added. <i>Chemical Physics Letters</i> , 2001 , 345, 259-264	2.5	8
33	Two-Line Laser-Induced Fluorescence Imaging of Vibrational Temperatures in a NO-Seeded Flame. <i>Applied Optics</i> , 2001 , 40, 748-56	1.7	38
32	Quantitative Laser Diagnostic Studies of the NO Distribution in a DI Diesel Engine with PLN and CR Injection Systems 2001 ,		8
31	In-Cylinder Combustion Visualization in an Auto-Igniting Gasoline Engine using Fuel Tracer- and Formaldehyde-LIF Imaging 2001 ,		37
30	Quantitative In-Cylinder NO-LIF Imaging in a Direct-Injected Gasoline Engine with Exhaust Gas Recirculation 2001 ,		7
29	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	5.9	89
28	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	5.9	25
27	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	5.9	16
26	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	1.9	141
25	Laser-diagnostic multi-species imaging in strongly swirling natural gas flames. <i>Applied Physics B: Lasers and Optics</i> , 2000 , 71, 741-746	1.9	16
24	Single-shot laser-induced fluorescence imaging of formaldehyde with XeF excimer excitation. <i>Applied Physics B: Lasers and Optics</i> , 2000 , 70, 733-735	1.9	27
23	Innovative Ultra-low NOx Controlled Auto-Ignition Combustion Process for Gasoline Engines: the 4-SPACE Project 2000 ,		105
22	Laser-Based Combustion Diagnostics 2000 ,		3
21	Flame Front Analysis in Turbulent Combustion. <i>Informatik Aktuell</i> , 2000 , 325-333	0.3	3
20	In-Cylinder NO-LIF Imaging in a Realistic GDI Engine Using KrF Excimer Laser Excitation 1999 ,		11
19	NO-flow tagging by photodissociation of NO ₂ . A new approach for measuring small-scale flow structures. <i>Chemical Physics Letters</i> , 1999 , 307, 15-20	2.5	55
18	Laser-spectroscopic investigation of OH-radical concentrations in the exhaust plane of jet engines. <i>Geophysical Research Letters</i> , 1999 , 26, 1849-1852	4.9	8
17	Quantification of NO A-X (0, 2) laser-induced fluorescence: investigation of calibration and collisional influences in high-pressure flames. <i>Applied Optics</i> , 1999 , 38, 1434-43	1.7	37

16	Investigation of spatially resolved light absorption in a spark-ignition engine fueled with propane/air. <i>Applied Optics</i> , 1999 , 38, 1452-8	1.7	20
15	Laser Diagnostics of Combustion Processes: From Chemical Dynamics to Technical Devices. <i>Israel Journal of Chemistry</i> , 1999 , 39, 1-24	3-4	15
14	Analysis of Chemical Dynamics and Technical Combustion by Time-Resolved Laser-Induced Fluorescence 1999 , 241-275		
13	Comparative study of experimental and numerical no profiles in SI combustion. <i>Proceedings of the Combustion Institute</i> , 1998 , 27, 2077-2084		9
12	Multidimensional laser diagnostic and numerical analysis of no formation in a gasoline engine. <i>Proceedings of the Combustion Institute</i> , 1998 , 27, 2085-2092		12
11	Laser-diagnostic and numerical study of strongly swirling natural gas flames. <i>Proceedings of the Combustion Institute</i> , 1998 , 27, 1023-1029		41
10	Simultaneous Mapping of the Distribution of Different Fuel Volatility Classes Using Tracer-LIF Tomography in an IC Engine 1998 ,		22
9	Laser Spectroscopic Investigation of Flow Fields and NO-Formation in a Realistic SI Engine 1998 ,		16
8	Two-Dimensional Temperature Measurements in an SI Engine Using Two-Line Tracer LIF 1998 ,		20
7	Laser-induced-fluorescence detection of nitric oxide in high-pressure flames with A-X(0, 2) excitation. <i>Applied Optics</i> , 1997 , 36, 3227-32	1.7	46
6	Quantitative 2D single-shot imaging of no concentrations and temperatures in a transparent SI engine. <i>Proceedings of the Combustion Institute</i> , 1996 , 26, 2597-2604		47
5	A laser-induced fluorescence scheme for imaging nitric oxide in engines. <i>Chemical Physics Letters</i> , 1995 , 242, 259-264	2.5	45
4	Enhanced coalescence upon laser desorption of fullerene oxides. <i>Journal of Chemical Physics</i> , 1994 , 101, 3243-3249	3.9	51
3	UV-Absorption Measurements by Spontaneous Raman Scattering in Low-Sooting Diesel-Like Jets		1
2	In-cylinder thermographic PIV combined with phosphor thermometry using ZnO:Zn. <i>International Journal of Engine Research</i> , 146808742110485	2.7	1
1	Direct rate-constant measurements and theoretical insight into the mechanism of the reactions H + hexamethyldisiloxane and H + tetramethyldisiloxane*. <i>Molecular Physics</i> , e1963871	1.7	0