

# Andreas Ehn

## List of Publications by Year in descending order

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Version: 2024-02-01

61  
papers

1,150  
citations

361413

20  
h-index

414414

32  
g-index

61  
all docs

61  
docs citations

61  
times ranked

709  
citing authors

#	ARTICLE	IF	CITATIONS
1	FRAME: femtosecond videography for atomic and molecular dynamics. Light: Science and Applications, 2017, 6, e17045-e17045.	16.6	103
2	Translational, rotational, vibrational and electron temperatures of a gliding arc discharge. Optics Express, 2017, 25, 20243.	3.4	77
3	Dynamics, OH distributions and UV emission of a gliding arc at various flow-rates investigated by optical measurements. Journal Physics D: Applied Physics, 2014, 47, 295203.	2.8	72
4	Sustained diffusive alternating current gliding arc discharge in atmospheric pressure air. Applied Physics Letters, 2014, 105, .	3.3	58
5	Measurements of 3D slip velocities and plasma column lengths of a gliding arc discharge. Applied Physics Letters, 2015, 106, .	3.3	53
6	Advanced Laser-Based Techniques for Gas-Phase Diagnostics in Combustion and Aerospace Engineering. Applied Spectroscopy, 2017, 71, 341-366.	2.2	52
7	Spatiotemporally resolved characteristics of a gliding arc discharge in a turbulent air flow at atmospheric pressure. Physics of Plasmas, 2017, 24, .	1.9	50
8	Stray light suppression in spectroscopy using periodic shadowing. Optics Express, 2014, 22, 7711.	3.4	43
9	Visualization of instantaneous structure and dynamics of large-scale turbulent flames stabilized by a gliding arc discharge. Proceedings of the Combustion Institute, 2019, 37, 5629-5636.	3.9	42
10	Skeletal Methane-Air Reaction Mechanism for Large Eddy Simulation of Turbulent Microwave-Assisted Combustion. Energy & Fuels, 2017, 31, 1904-1926.	5.1	40
11	Investigation of flue-gas treatment with O <sub>3</sub> injection using NO and NO <sub>2</sub> planar laser-induced fluorescence. Fuel, 2010, 89, 2346-2352.	6.4	31
12	Plasma assisted combustion: Effects of O <sub>3</sub> on large scale turbulent combustion studied with laser diagnostics and Large Eddy Simulations. Proceedings of the Combustion Institute, 2015, 35, 3487-3495.	3.9	30
13	Characterization of an AC glow-type gliding arc discharge in atmospheric air with a current-voltage lumped model. Physics of Plasmas, 2017, 24, .	1.9	30
14	Investigations of microwave stimulation of a turbulent low-swirl flame. Proceedings of the Combustion Institute, 2017, 36, 4121-4128.	3.9	30
15	Effect of turbulent flow on an atmospheric-pressure AC powered gliding arc discharge. Journal of Applied Physics, 2018, 123, .	2.5	30
16	Photofragmentation laser-induced fluorescence imaging in premixed flames. Combustion and Flame, 2011, 158, 1908-1919.	5.2	29
17	Fluorescence lifetime imaging in a flame. Proceedings of the Combustion Institute, 2011, 33, 807-813.	3.9	27
18	Stabilization of a turbulent premixed flame by a plasma filament. Combustion and Flame, 2019, 208, 79-85.	5.2	25

#	ARTICLE	IF	CITATIONS
19	Investigation of formaldehyde enhancement by ozone addition in CH <sub>4</sub> /air premixed flames. <i>Combustion and Flame</i> , 2015, 162, 1284-1293.	5.2	22
20	Simultaneous multispectral imaging of flame species using Frequency Recognition Algorithm for Multiple Exposures (FRAME). <i>Combustion and Flame</i> , 2018, 192, 160-169.	5.2	22
21	Single-laser shot fluorescence lifetime imaging on the nanosecond timescale using a Dual Image and Modeling Evaluation algorithm. <i>Optics Express</i> , 2012, 20, 3043.	3.4	20
22	In-Situ Non-intrusive Diagnostics of Toluene Removal by a Gliding Arc Discharge Using Planar Laser-Induced Fluorescence. <i>Plasma Chemistry and Plasma Processing</i> , 2017, 37, 433-450.	2.4	20
23	Observation of gliding arc surface treatment. <i>Surface Engineering</i> , 2015, 31, 282-288.	2.2	19
24	Femtosecond two-photon laser-induced fluorescence imaging of atomic hydrogen in a laminar methane-air flame assisted by nanosecond repetitively pulsed discharges. <i>Plasma Sources Science and Technology</i> , 2020, 29, 065011.	3.1	17
25	Electrochemical Investigation of Nickel Pattern Electrodes in H <sub>2</sub> /H <sub>2</sub> O and CO/CO <sub>2</sub> Atmospheres. <i>Journal of the Electrochemical Society</i> , 2010, 157, B1588.	2.9	16
26	Stability of alternating current gliding arcs. <i>European Physical Journal D</i> , 2014, 68, 1.	1.3	16
27	High dynamic spectroscopy using a digital micromirror device and periodic shadowing. <i>Optics Express</i> , 2017, 25, 212.	3.4	16
28	Simultaneous one-dimensional fluorescence lifetime measurements of OH and CO in premixed flames. <i>Applied Physics B: Lasers and Optics</i> , 2014, 115, 35-43.	2.2	13
29	Re-igniting the afterglow plasma column of an AC powered gliding arc discharge in atmospheric-pressure air. <i>Applied Physics Letters</i> , 2018, 112, .	3.3	11
30	Single-shot, spatially-resolved stand-off detection of atomic hydrogen via backward lasing in flames. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 1281-1288.	3.9	11
31	Beyond MHz image recordings using LEDs and the FRAME concept. <i>Scientific Reports</i> , 2020, 10, 16650.	3.3	11
32	Instantaneous imaging of ozone in a gliding arc discharge using photofragmentation laser-induced fluorescence. <i>Journal Physics D: Applied Physics</i> , 2018, 51, 135203.	2.8	10
33	Single-shot photofragment imaging by structured illumination. <i>Optics Letters</i> , 2015, 40, 5019.	3.3	9
34	Development of a temporal filtering technique for suppression of interferences in applied laser-induced fluorescence diagnostics. <i>Applied Optics</i> , 2009, 48, 2373.	2.1	8
35	Setup for microwave stimulation of a turbulent low-swirl flame. <i>Journal Physics D: Applied Physics</i> , 2016, 49, 185601.	2.8	8
36	Detection of atomic oxygen in a plasma-assisted flame via a backward lasing technique. <i>Optics Letters</i> , 2019, 44, 5477.	3.3	8

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37	Characteristics of a Gliding Arc Discharge Under the Influence of a Laminar Premixed Flame. IEEE Transactions on Plasma Science, 2019, 47, 403-409.	1.3	7
38	Fiber-based stray light suppression in spectroscopy using periodic shadowing. Optics Express, 2021, 29, 7232.	3.4	7
39	Temporal dynamics of femtosecond-TALIF of atomic hydrogen and oxygen in a nanosecond repetitively pulsed discharge-assisted methane-air flame. Journal Physics D: Applied Physics, 2021, 54, 275201.	2.8	7
40	Quantitative Imaging of Ozone Vapor Using Photofragmentation Laser-Induced Fluorescence (LIF). Applied Spectroscopy, 2017, 71, 1578-1585.	2.2	6
41	Temporal filtering with fast ICCD cameras in Raman studies. Journal of Raman Spectroscopy, 2013, 44, 622-629.	2.5	5
42	Quantitative oxygen concentration imaging in toluene atmospheres using Dual Imaging with Modeling Evaluation. Experiments in Fluids, 2013, 54, 1.	2.4	5
43	A setup for studies of laminar flame under microwave irradiation. Review of Scientific Instruments, 2019, 90, 113502.	1.3	5
44	Time-resolved polarization lock-in filtering for background suppression in Raman spectroscopy of biomass pyrolysis. Combustion and Flame, 2021, 224, 219-224.	5.2	5
45	Single-shot 3D imaging of hydroxyl radicals in the vicinity of a gliding arc discharge. Plasma Sources Science and Technology, 2021, 30, 04LT04.	3.1	5
46	Layered structure around an extended gliding discharge column in a methane-nitrogen mixture at high pressure. Applied Physics Letters, 2019, 114, .	3.3	3
47	Thermal analysis of a high-power glow discharge in flowing atmospheric air by combining Rayleigh scattering thermometry and numerical simulation. Journal Physics D: Applied Physics, 2020, 53, 085502.	2.8	3
48	Improved temporal contrast of streak camera measurements with periodic shadowing. Optics Letters, 2021, 46, 5723.	3.3	2
49	Snapshot multicolor fluorescence imaging using double multiplexing of excitation and emission on a single detector. Scientific Reports, 2021, 11, 20454.	3.3	2
50	Laminar Burning Velocity of Lean Methane/Air Flames under Pulsed Microwave Irradiation. Processes, 2021, 9, 2076.	2.8	2
51	Plasma Effects on Swirl Flames in a Scaled Dry Low Emission Burner. AIAA Journal, 0, , 1-8.	2.6	2
52	Understanding the characteristics of non-equilibrium alternating current gliding arc discharge in a variety of gas mixtures (air, N <sub>2</sub> , Ar, Ar/O <sub>2</sub> , and Ar/CH <sub>4</sub> ) at elevated pressures (1-5 atm). Physics of Plasmas, 2022, 29, .	1.9	2
53	Infrared Spectroscopy as Molecular Probe of the Macroscopic Metal-Liquid Interface. Applied Sciences (Switzerland), 2017, 7, 1229.	2.5	1
54	Improved spectral sensitivity by combining periodic shadowing and high dynamic range imaging. Spectroscopy Letters, 2016, 49, 91-95.	1.0	1

#	ARTICLE	IF	CITATIONS
55	Non-thermal gliding arc discharge assisted turbulent combustion (up to 80 kW) at extended conditions: phenomenological analysis. Combustion Science and Technology, 0, , 1-16.	2.3	1
56	Experiments on plasma assisted combustion using a dielectric barrier surface discharge. , 2013, , .		0
57	Experiments on plasma assisted combustion using a dielectric barrier surface discharge. , 2013, , .		0
58	Investigations of Microwave Stimulation of Turbulent Flames with Implications to Gas Turbine Combustors. , 2017, , .		0
59	Experimental Investigation of Plasma Discharge Effect on Swirl Flames at a Scaled Siemens Dry Low Emission Burner. , 2021, , .		0
60	Development of new laser-based concepts for diagnostic challenges in combustion research. , 2013, , .		0
61	Hydroxyl radical dynamics in a gliding arc discharge using high-speed PLIF imaging. Plasma Research Express, 2022, 4, 025007.	0.9	0