

Luis L Alves

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3677634/publications.pdf>

Version: 2024-02-01

86
papers

2,614
citations

185998

28
h-index

197535

49
g-index

89
all docs

89
docs citations

89
times ranked

1623
citing authors

#	ARTICLE	IF	CITATIONS
1	N-Graphene-Metal-Oxide(Sulfide) hybrid Nanostructures: Single-step plasma-enabled approach for energy storage applications. Chemical Engineering Journal, 2022, 430, 133153.	6.6	13
2	The 2022 Plasma Roadmap: low temperature plasma science and technology. Journal Physics D: Applied Physics, 2022, 55, 373001.	1.3	139
3	On the quasi-stationary approach to solve the electron Boltzmann equation in pulsed plasmas. Plasma Sources Science and Technology, 2021, 30, 065008.	1.3	19
4	Mars in situ oxygen and propellant production by non-equilibrium plasmas. Plasma Sources Science and Technology, 2021, 30, 065005.	1.3	27
5	Influence of N_2 on the CO_2 vibrational distribution function and dissociation yield in non-equilibrium plasmas. Journal Physics D: Applied Physics, 2020, 53, 094002.	1.3	31
6	Sensitivity Analysis in Plasma Chemistry: Application to Oxygen Cold Plasmas and the LoKI Simulation Tool. Journal of Physical Chemistry A, 2020, 124, 4354-4366.	1.1	0
7	N_2/H_2 capacitively coupled radio-frequency discharges at low pressure. Part I. Experimental results: effect of the H_2 amount on electrons, positive ions and ammonia formation. Plasma Sources Science and Technology, 2020, 29, 085019.	1.3	10
8	N_2/H_2 capacitively coupled radio-frequency discharges at low pressure: II. Modeling results: the relevance of plasma-surface interaction. Plasma Sources Science and Technology, 2020, 29, 085023.	1.3	9
9	Electron impact cross sections for carbon monoxide and their importance in the electron kinetics of CO_2/CO mixtures. Plasma Sources Science and Technology, 2020, 29, 015002.	1.3	23
10	A reaction mechanism for vibrationally-cold low-pressure CO_2 plasmas. Plasma Sources Science and Technology, 2020, 29, 125020.	1.3	26
11	Modelling N_2/O_2 plasmas: volume and surface kinetics. Plasma Sources Science and Technology, 2019, 28, 073001.	1.3	66
12	The LisbOn Kinetics Boltzmann solver. Plasma Sources Science and Technology, 2019, 28, 043001.	1.3	79
13	Foundations of modelling of nonequilibrium low-temperature plasmas. Plasma Sources Science and Technology, 2018, 27, 023002.	1.3	92
14	Reply to Comment on "The case for in situ resource utilisation for oxygen production on Mars by non-equilibrium plasmas". Plasma Sources Science and Technology, 2018, 27, 028002.	1.3	0
15	Tunable Deep UV to UV radiation source in plasma-core fiber. , 2018, , .		0
16	Topical issue "Plasma Sources and Plasma Processes (PSPP)" EPJ Applied Physics, 2018, 82, 10801.	0.3	0
17	Special Issue on Numerical Modelling of Low-Temperature Plasmas for Various Applications "Part I: Review and Tutorial Papers on Numerical Modelling Approaches. Plasma Processes and Polymers, 2017, 14, 1690011.	1.6	4
18	Special issue on numerical modelling of low-temperature plasmas for various applications "part II: Research papers on numerical modelling for various plasma applications. Plasma Processes and Polymers, 2017, 14, 1790041.	1.6	2

#	ARTICLE	IF	CITATIONS
19	The case for <i>in situ</i> resource utilisation for oxygen production on Mars by non-equilibrium plasmas. Plasma Sources Science and Technology, 2017, 26, 11LT01.	1.3	51
20	Deep-UV plasma emission in hollow-core photonic crystal fiber. , 2017, , .		0
21	Towards large-scale in free-standing graphene and N-graphene sheets. Scientific Reports, 2017, 7, 10175.	1.6	71
22	LXCat: an Open-Access, Web-Based Platform for Data Needed for Modeling Low Temperature Plasmas. Plasma Processes and Polymers, 2017, 14, 1600098.	1.6	188
23	Gas mixture for deep-UV plasma emission in a hollow-core photonic crystal fiber. Optics Letters, 2017, 42, 3363.	1.7	9
24	Extreme ultraviolet radiation emitted by helium microwave driven plasmas. Journal of Applied Physics, 2016, 119, 243305.	1.1	6
25	Microwave air plasmas in capillaries at low pressure I. Self-consistent modeling. Journal Physics D: Applied Physics, 2016, 49, 235207.	1.3	28
26	Microwave air plasmas in capillaries at low pressure II. Experimental investigation. Journal Physics D: Applied Physics, 2016, 49, 435202.	1.3	12
27	Electron-neutral scattering cross sections for CO ₂ : a complete and consistent set and an assessment of dissociation. Journal Physics D: Applied Physics, 2016, 49, 395207.	1.3	90
28	Electron scattering cross sections for the modelling of oxygen-containing plasmas*. European Physical Journal D, 2016, 70, 1.	0.6	30
29	Towards a plasma-core PCF for tunable UV-DUV radiation. , 2015, , .		0
30	The role of rotational mechanisms in electron swarm parameters at low reduced electric field in N ₂ , O ₂ and H ₂ . Plasma Sources Science and Technology, 2015, 24, 035002.	1.3	21
31	Microwave-driven plasmas in hollow-core photonic crystal fibres. Plasma Sources Science and Technology, 2014, 23, 015022.	1.3	14
32	The European Integrated Tokamak Modelling (ITM) effort: achievements and first physics results. Nuclear Fusion, 2014, 54, 043018.	1.6	45
33	Microwave capillary plasmas in helium at atmospheric pressure. Journal Physics D: Applied Physics, 2014, 47, 265201.	1.3	30
34	The IST-LISBON database on LXCat. Journal of Physics: Conference Series, 2014, 565, 012007.	0.3	127
35	Comparisons of sets of electron-neutral scattering cross sections and swarm parameters in noble gases: I. Argon. Journal Physics D: Applied Physics, 2013, 46, 334001.	1.3	70
36	Comparisons of sets of electron-neutral scattering cross sections and swarm parameters in noble gases: II. Helium and neon. Journal Physics D: Applied Physics, 2013, 46, 334002.	1.3	61

#	ARTICLE	IF	CITATIONS
37	Experimental study of micro electrical discharge machining discharges. Journal of Applied Physics, 2013, 113, 233301.	1.1	9
38	Comparisons of sets of electron-neutral scattering cross sections and swarm parameters in noble gases: III. Krypton and xenon. Journal Physics D: Applied Physics, 2013, 46, 334003.	1.3	35
39	Generation and confinement of microwave gas-plasma in photonic dielectric microstructure. Optics Express, 2013, 21, 25509.	1.7	28
40	Numerical analysis of JET discharges with the European Transport Simulator. Nuclear Fusion, 2013, 53, 123007.	1.6	26
41	Micro-confinement of microwave-plasma in photonic structures. , 2013, , .		0
42	Capacitively coupled radio-frequency discharges in nitrogen at low pressures. Plasma Sources Science and Technology, 2012, 21, 045008.	1.3	38
43	Fluid modelling of capacitively coupled radio-frequency discharges: a review. Plasma Physics and Controlled Fusion, 2012, 54, 124012.	0.9	20
44	Self-consistent modelling of atmospheric micro-plasmas produced by a microwave source. Plasma Sources Science and Technology, 2012, 21, 015013.	1.3	29
45	Study of Gas Heating by a Microwave Plasma Torch. Journal of Modern Physics, 2012, 03, 1603-1615.	0.3	6
46	Hydrodynamic study of a microwave plasma torch. EPJ Applied Physics, 2011, 56, 24008.	0.3	6
47	Images of Atmospheric-Pressure Microplasmas Produced by Continuous 2.45-GHz Excitation. IEEE Transactions on Plasma Science, 2011, 39, 2674-2675.	0.6	1
48	Special issue on Plasma Processes. EPJ Applied Physics, 2011, 56, 24001.	0.3	1
49	Special Issue on the Numerical Simulation of Plasmas. IEEE Transactions on Plasma Science, 2010, 38, 2082-2084.	0.6	0
50	Fluid modeling of a microwave micro-plasma at atmospheric pressure. EPJ Applied Physics, 2010, 50, 21601.	0.3	1
51	Focus on Plasma Processes. EPJ Applied Physics, 2010, 49, 13101.	0.3	0
52	Fluid modeling of a microwave micro-plasma at atmospheric pressure. EPJ Applied Physics, 2010, 49, 13102.	0.3	3
53	Microwave microplasma sources based on microstrip-like transmission lines. European Physical Journal D, 2010, 60, 627-635.	0.6	17
54	Fast Time-Relaxation Algorithm to Solve Plasma Fluid Equations. IEEE Transactions on Plasma Science, 2010, 38, 2312-2321.	0.6	1

#	ARTICLE	IF	CITATIONS
55	Electromagnetic modeling of axis-symmetric microwave devices. Journal of Physics: Conference Series, 2010, 207, 012027.	0.3	0
56	Global model and diagnostic of a low-pressure SF6/Ar inductively coupled plasma. Plasma Sources Science and Technology, 2009, 18, 025001.	1.3	50
57	Modeling of surface-wave discharges with cylindrical symmetry. Physical Review E, 2009, 79, 016403.	0.8	23
58	Design of a Microwave Microplasma Source at Atmospheric Pressure. IEEE Transactions on Plasma Science, 2009, 37, 797-808.	0.6	24
59	Modeling of an axial injection torch. EPJ Applied Physics, 2009, 46, 21001.	0.3	10
60	Images of the Electromagnetic-Field Distribution in a Microwave Reactor Excited by an Axial Injection Torch. IEEE Transactions on Plasma Science, 2008, 36, 1378-1379.	0.6	2
61	Numerical solution to an electromagnetic model with Neumann boundary conditions, for a microwave-driven plasma reactor. Journal Physics D: Applied Physics, 2008, 41, 215204.	1.3	1
62	Modelling of a CCP-RF Discharge Used For The Simulation Of Titanâ€™s Chemistry. AIP Conference Proceedings, 2008, , .	0.3	0
63	Fluid modelling of the positive column of direct-current glow discharges. Plasma Sources Science and Technology, 2007, 16, 557-569.	1.3	43
64	Two-dimensional electromagnetic model of a microwave plasma reactor operated by an axial injection torch. Journal of Applied Physics, 2007, 101, 103303.	1.1	20
65	Capacitively coupled radio-frequency hydrogen discharges: The role of kinetics. Journal of Applied Physics, 2007, 102, 063305.	1.1	47
66	Electrical Characterization of Capacitively Coupled Radio Frequency Discharges in Hydrogen. Plasma Processes and Polymers, 2007, 4, S937-S941.	1.6	2
67	Electron-drift detection using directional planar probes in a low-pressure coaxial surface-wave discharge. Applied Physics Letters, 2006, 89, 241502.	1.5	5
68	An update of argon inelastic cross sections for plasma discharges. Journal Physics D: Applied Physics, 2005, 38, 1588-1598.	1.3	129
69	Double sheaths in RF discharges. IEEE Transactions on Plasma Science, 2005, 33, 358-359.	0.6	0
70	Fluid description of the energy absorption in microwave discharges: a new perspective. EPJ Applied Physics, 2004, 26, 195-201.	0.3	4
71	Systematic characterization of low-pressure capacitively coupled hydrogen discharges. Journal of Applied Physics, 2004, 95, 4605-4620.	1.1	80
72	CAPACITIVELY COUPLED HYDROGEN DISCHARGES: MODELING VS. EXPERIMENT. High Temperature Material Processes, 2004, 8, 499-518.	0.2	5

#	ARTICLE	IF	CITATIONS
73	Nonequilibrium positive column revisited. IEEE Transactions on Plasma Science, 2003, 31, 572-586.	0.6	11
74	Charged particle transport modelling in silane-hydrogen radio-frequency capacitively coupled discharges. Vacuum, 2002, 69, 213-219.	1.6	5
75	Two-dimensional fluid modelling of charged particle transport in radio-frequency capacitively coupled discharges. Plasma Sources Science and Technology, 2002, 11, 448-465.	1.3	84
76	Numerical Modeling of a He-N ₂ Capillary Surface Wave Discharge at Atmospheric Pressure. Plasma Chemistry and Plasma Processing, 2000, 20, 183-207.	1.1	39
77	Simulation of pulsed high-frequency breakdown in hydrogen. Journal of Applied Physics, 2000, 88, 3170-3181.	1.1	8
78	Calculated Plasma Parameters and Excitation Spectra of High-Pressure Helium Discharges. Plasma Chemistry and Plasma Processing, 1999, 19, 467-486.	1.1	18
79	Two-dimensional modelling of - radio-frequency discharges for a-Si:H deposition. Plasma Sources Science and Technology, 1998, 7, 348-358.	1.3	68
80	Calculation of spatially inhomogeneous electron distribution functions. European Physical Journal Special Topics, 1998, 08, Pr7-33-Pr7-42.	0.2	0
81	Nonlocal Electron Kinetics in DC Discharges. European Physical Journal Special Topics, 1997, 07, C4-143-C4-154.	0.2	1
82	Self-contained solution to the spatially inhomogeneous electron Boltzmann equation in a cylindrical plasma positive column. Physical Review E, 1997, 55, 890-906.	0.8	77
83	A collisional-radiative model for microwave discharges in helium at low and intermediate pressures. Journal Physics D: Applied Physics, 1992, 25, 1713-1732.	1.3	86
84	Modeling of low-pressure microwave discharges in Ar, He, and O ₂ : similarity laws for the maintenance field and mean power transfer. IEEE Transactions on Plasma Science, 1991, 19, 229-239.	0.6	78
85	Electron kinetics in weakly ionized helium under DC and HF applied electric fields. Journal Physics D: Applied Physics, 1991, 24, 581-592.	1.3	69
86	Effect of anisotropic scattering for rotational collisions on electron transport parameters in CO. Plasma Sources Science and Technology, 0, , .	1.3	8