Manuel Gamero-Castano

List of Publications by Year
in descending order

60	2,097	24	45
papers	citations	h-index	g-index

257357 233338

60	60	60	1123
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Electrospray propulsion: Modeling of the beams of droplets and ions of highly conducting propellants. Journal of Applied Physics, 2022, 131, .	1.1	10
2	Conformal CVD of WO3â^' on electrospun carbon nanofiber mats assisted by Joule heating. Carbon, 2022, 195, 27-34.	5.4	3
3	Energy barrier for ion field emission from a dielectric liquid sphere. Physical Review E, 2022, 105, .	0.8	2
4	Leaky-dielectric phase field model for the axisymmetric breakup of an electrified jet. Physical Review Fluids, 2022, 7, .	1.0	3
5	Electrosprays of highly conducting liquids: A study of droplet and ion emission based on retarding potential and time-of-flight spectrometry. Physical Review Fluids, 2021, 6, .	1.0	29
6	Controlled joule-heating of suspended glassy carbon wires for localized chemical vapor deposition. Carbon, 2020, 156, 329-338.	5.4	6
7	A numerical simulation of coaxial electrosprays. Journal of Fluid Mechanics, 2020, 885, .	1.4	11
8	The minimum flow rate of electrosprays in the cone-jet mode. Journal of Fluid Mechanics, 2019, 876, 553-572.	1.4	20
9	Dissipation in cone-jet electrosprays and departure from isothermal operation. Physical Review E, 2019, 99, 061101.	0.8	13
10	Molecular dynamics of nanodroplet impact: The effect of particle resolution in the projectile model. AIP Advances, 2019, 9, .	0.6	3
11	Study of the electrostatic jet initiation in near-field electrospinning. Journal of Colloid and Interface Science, 2019, 543, 106-113.	5.0	11
12	Investigation of the electrostatic focusing of beams of electrosprayed nanodroplets for microfabrication applications. AIP Advances, 2019, 9, 125006.	0.6	3
13	Numerical simulation of electrospraying in the cone-jet mode. Journal of Fluid Mechanics, 2019, 859, 247-267.	1.4	37
14	Microfabricated Electrospray Thruster Array with High Hydraulic Resistance Channels. Journal of Propulsion and Power, 2017, 33, 984-991.	1.3	34
15	Molecular dynamics of nanodroplet impact: The effect of the projectileâ€™s molecular mass on sputtering. AIP Advances, 2016, 6, .	0.6	8
16	Plasma Activated Bonding for an Enhanced Alignment Electrostatic Lens. International Symposium on Microelectronics, 2016, 2016, 000075-000078.	0.3	2
17	The Effect of the Molecular Mass on the Sputtering of Si, SiC, Ge, and GaAs by Electrosprayed Nanodroplets at Impact Velocities up to 17Âkm/s. Aerosol Science and Technology, 2015, 49, 256-266.	1.5	9
18	Ultrafast physical sputtering of GaN by electrosprayed nanodroplet beams. Materials Letters, 2015, 159, 110-113.	1.3	7

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19	The effect of the molecular mass on the sputtering by electrosprayed nanodroplets. Applied Surface Science, 2015, 344, 163-170.	3.1	11
20	Amorphization of hard crystalline materials by electrosprayed nanodroplet impact. Journal of Applied Physics, 2014, 116, .	1.1	11
21	Atomistic modeling of the sputtering of silicon by electrosprayed nanodroplets. Journal of Applied Physics, 2014, 116, 054303.	1.1	10
22	Sputtering of Si, SiC, InAs, InP, Ge, GaAs, GaSb, and GaN by electrosprayed nanodroplets. Journal of Applied Physics, 2013, 114, .	1.1	14
23	The influence of the projectile's velocity and diameter on the amorphization of silicon by electrosprayed nanodroplets. Journal of Applied Physics, 2013, 114, 034304.	1.1	11
24	Amorphization of silicon induced by nanodroplet impact: A molecular dynamics study. Journal of Applied Physics, 2012, 112, .	1.1	17
25	Energy dissipation in electrosprays and the geometric scaling of the transition region of coneâ€"jets. Journal of Fluid Mechanics, 2010, 662, 493-513.	1.4	29
26	Pressure-Induced Amorphization in Silicon Caused by the Impact of Electrosprayed Nanodroplets. Physical Review Letters, 2010, 105, 145701.	2.9	38
27	Sputtering yields of Si, SiC, and B4C under nanodroplet bombardment at normal incidence. Journal of Applied Physics, 2009, 106, 054305.	1.1	28
28	Sputtering of silicon by a beamlet of electrosprayed nanodroplets. Applied Surface Science, 2009, 255, 8556-8561.	3.1	23
29	Retarding potential and induction charge detectors in tandem for measuring the charge and mass of nanodroplets. Review of Scientific Instruments, 2009, 80, 053301.	0.6	34
30	Characterization of the electrosprays of 1-ethyl-3-methylimidazolium bis(trifluoromethylsulfonyl) imide in vacuum. Physics of Fluids, 2008, 20, .	1.6	51
31	Comment on â€œEnhanced Stability of Electrohydrodynamic Jets through Gas Ionizationâ€• Physical Review Letters, 2008, 101, 059401; author reply 059402.	2.9	1
32	The structure of electrospray beams in vacuum. Journal of Fluid Mechanics, 2008, 604, 339-368.	1.4	58
33	Induction charge detector with multiple sensing stages. Review of Scientific Instruments, 2007, 78, 043301.	0.6	48
34	Charge Detection Mass Spectrometer with Integrated Retarding Potential Analyzer for Study of Colloid Thruster Plumes. , 2007, , .		1
35	Plasma Potential Measurements in the Plume of a Colloid Micro-Newton Thruster. , 2006, , .		2
36	Characterization and Modeling of Colloid Thruster Beams. , 2006, , .		1

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37	Tandem mobility mass spectrometry study of electrosprayed tetraheptyl ammonium bromide clusters. Journal of the American Society for Mass Spectrometry, 2005, 16, 717-732.	1.2	40
38	Colloid Micro-Newton Thruster Development for the ST7-DRS and LISA Missions. , 2005, , .		22
39	Ammonium Electrolytes Quench Ion Evaporation in Colloidal Propulsion. Journal of Propulsion and Power, 2004, 20, 728-735.	1.3	13
40	Characterization of a Six-Emitter Colloid Thruster Using a Torsional Balance. Journal of Propulsion and Power, 2004, 20, 736-741.	1.3	30
41	Using a Torsional Balance to Characterize Thrust at Micro Newton Levels. , 2003, , .		3
42	Micro Newton Colloid Thruster System Development for ST7-DRS Mission. , 2003, , .		9
43	Colloid Thruster Propellant Stability After Radiation Exposure. , 2003, , .		4
44	A torsional balance for the characterization of microNewton thrusters. Review of Scientific Instruments, 2003, 74, 4509-4514.	0.6	82
45	Source of heavy molecular ions based on Taylor cones of ionic liquids operating in the pure ion evaporation regime. Journal of Applied Physics, 2003, 94, 3599-3605.	1.1	300
46	Disturbance reduction system: testing technology for precision formation control. , 2003, , .		9
47	Disturbance reduction system: testing technology for drag-free operation. , 2003, 4856, 9.		7
48	Electric-Field-Induced Ion Evaporation from Dielectric Liquid. Physical Review Letters, 2002, 89, 147602.	2.9	64
49	Ion-induced nucleation: Measurement of the effect of embryoâ€™s size and charge state on the critical supersaturation. Journal of Chemical Physics, 2002, 117, 3345-3353.	1.2	51
50	Electric measurements of charged sprays emitted by cone-jets. Journal of Fluid Mechanics, 2002, 459, 245-276.	1.4	89
51	Electrospray as a Source of Nanoparticles for Efficient Colloid Thrusters. Journal of Propulsion and Power, 2001, 17, 977-987.	1.3	231
52	Kinetics of small ion evaporation from the charge and mass distribution of multiply charged clusters in electrosprays. Journal of Mass Spectrometry, 2000, 35, 790-803.	0.7	106
53	Mechanisms of electrospray ionization of singly and multiply charged salt clusters. Analytica Chimica Acta, 2000, 406, 67-91.	2.6	136
54	Modulations in the Abundance of Salt Clusters in Electrosprays. Analytical Chemistry, 2000, 72, 1426-1429.	3.2	28

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55	A CONDENSATION NUCLEUS COUNTER (CNC) SENSITIVE TO SINGLY CHARGED SUB-NANOMETER PARTICLES. Journal of Aerosol Science, 2000, 31, 757-772.	1.8	97
56	Direct measurement of ion evaporation kinetics from electrified liquid surfaces. Journal of Chemical Physics, 2000, 113, 815-832.	1.2	131
57	Electron field emission from carbon nanotubes, and its relevance in space applications. , 2000, , .		8
58	Electrospray as a source of nanoparticles for efficient colloid thrusters. , 2000, , .		9
59	On the current emitted by Taylor cone-jets of electrolytes in vacuo: Implications for liquid metal ion sources. Journal of Applied Physics, 1998, 83, 2428-2434.	1.1	24
60	Colloid thrusters for the new millennium, ST7 DRS mission. , 0, , .		5