

Alessandro Gomez

List of Publications by Year in descending order

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39
papers

3,241
citations

201674

27
h-index

330143

37
g-index

40
all docs

40
docs citations

40
times ranked

2393
citing authors

#	ARTICLE	IF	CITATIONS
1	Charge and fission of droplets in electrostatic sprays. <i>Physics of Fluids</i> , 1994, 6, 404-414.	4.0	539
2	Increase of electro spray throughput using multiplexed microfabricated sources for the scalable generation of monodisperse droplets. <i>Journal of Aerosol Science</i> , 2006, 37, 696-714.	3.8	275
3	On the structure of an electrostatic spray of monodisperse droplets. <i>Physics of Fluids</i> , 1994, 6, 2317-2332.	4.0	231
4	Controlling the morphology of electro spray-generated PLGA microparticles for drug delivery. <i>Journal of Colloid and Interface Science</i> , 2010, 343, 125-133.	9.4	226
5	Monodisperse Electro sprays of Low Electric Conductivity Liquids in the Cone-Jet Mode. <i>Journal of Colloid and Interface Science</i> , 1996, 184, 500-511.	9.4	181
6	Compact multiplexing of monodisperse electro sprays. <i>Journal of Aerosol Science</i> , 2009, 40, 907-918.	3.8	131
7	Thermophoretic Effects on Particles in Counterflow Laminar Diffusion Flames. <i>Combustion Science and Technology</i> , 1993, 89, 335-362.	2.3	117
8	Generation of Monodisperse Water Droplets from Electro sprays in a Corona-Assisted Cone-Jet Mode. <i>Journal of Colloid and Interface Science</i> , 1995, 175, 326-332.	9.4	112
9	Electro spray cooling for microelectronics. <i>International Journal of Heat and Mass Transfer</i> , 2011, 54, 2270-2275.	4.8	109
10	Optimization of a catalytic combustor using electro sprayed liquid hydrocarbons for mesoscale power generation. <i>Combustion and Flame</i> , 2004, 139, 77-89.	5.2	89
11	Mesoscale combustion: a first step towards liquid fueled batteries. <i>Experimental Thermal and Fluid Science</i> , 2004, 28, 763-770.	2.7	87
12	A multiplexed electro spray process for single-step synthesis of stabilized polymer particles for drug delivery. <i>Journal of Controlled Release</i> , 2011, 154, 203-210.	9.9	87
13	Electro spray synthesis of monodisperse polymer particles in a broad (60nm-21/4m) diameter range: guiding principles and formulation recipes. <i>Journal of Colloid and Interface Science</i> , 2014, 417, 121-130.	9.4	87
14	Mesoscale power generation by a catalytic combustor using electro sprayed liquid hydrocarbons. <i>Proceedings of the Combustion Institute</i> , 2002, 29, 965-972.	3.9	86
15	Influence of space charge on the scale-up of multiplexed electro sprays. <i>Journal of Aerosol Science</i> , 2007, 38, 1062-1078.	3.8	80
16	Pressure-Driven Operation of Microfabricated Multiplexed ElectroSprays of Ionic Liquid Solutions for Space Propulsion Applications. <i>Journal of Microelectromechanical Systems</i> , 2014, 23, 689-698.	2.5	65
17	Liquid fuel microcombustor using microfabricated multiplexed electro spray sources. <i>Proceedings of the Combustion Institute</i> , 2007, 31, 2239-2246.	3.9	60
18	Stabilization of monodisperse electro sprays in the multi-jet mode via electric field enhancement. <i>Journal of Aerosol Science</i> , 2006, 37, 306-322.	3.8	59

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19	The role of electric charge in microdroplets impacting on conducting surfaces. <i>Physics of Fluids</i> , 2010, 22, .	4.0	55
20	From jet fuel to electric power using a mesoscale, efficient Stirling cycle. <i>Proceedings of the Combustion Institute</i> , 2007, 31, 3251-3259.	3.9	50
21	Effects of strain rate, turbulence, reactant stoichiometry and heat losses on the interaction of turbulent premixed flames with stoichiometric counterflowing combustion products. <i>Combustion and Flame</i> , 2013, 160, 2442-2456.	5.2	47
22	Laminar counterflow steady diffusion flames under high pressure ($P \approx 3$ MPa) conditions. <i>Combustion and Flame</i> , 2012, 159, 142-150.	5.2	46
23	Electrospray synthesis and properties of hierarchically structured PLGA TIPS microspheres for use as controlled release technologies. <i>Journal of Colloid and Interface Science</i> , 2016, 467, 220-229.	9.4	46
24	Dilute laminar spray diffusion flames near the transition from group combustion to individual droplet burning. <i>Combustion and Flame</i> , 1997, 110, 392-404.	5.2	45
25	Challenges of measuring nascent soot in flames as evidenced by high-resolution differential mobility analysis. <i>Aerosol Science and Technology</i> , 2016, 50, 740-757.	3.1	43
26	Comprehensive study of the evolution of an annular edge flame during extinction and reignition of a counterflow diffusion flame perturbed by vortices. <i>Combustion and Flame</i> , 2007, 150, 292-319.	5.2	34
27	Controlled mesoporous film formation from the deposition of electrosprayed nanoparticles. <i>Aerosol Science and Technology</i> , 2017, 51, 755-765.	3.1	31
28	The Electrospray and Combustion at the Mesoscale.. <i>Journal of the Mass Spectrometry Society of Japan</i> , 2003, 51, 42-49.	0.1	28
29	Full transient response of Taylor cones to a step change in electric field. <i>Microfluidics and Nanofluidics</i> , 2012, 12, 383-393.	2.2	25
30	Charge-Induced Secondary Atomization in Diffusion Flames of Electrostatic Sprays. <i>Combustion Science and Technology</i> , 1994, 96, 47-59.	2.3	24
31	High Performance Metal Oxide-Graphene Hybrid Nanomaterials Synthesized via Opposite-Polarity Electrosprays. <i>Advanced Materials</i> , 2016, 28, 10298-10303.	21.0	24
32	Computational and experimental study of standing methane edge flames in the two-dimensional axisymmetric counterflow geometry. <i>Combustion and Flame</i> , 2006, 147, 133-149.	5.2	23
33	The electrospray and its application to targeted drug inhalation. <i>Respiratory Care</i> , 2002, 47, 1419-31; discussion 1431-3.	1.6	21
34	Electrospray Synthesis of Poly(lactide-co-glycolide) Nanoparticles Encapsulating Peptides to Enhance Proliferation of Antigen-Specific CD8+ T Cells. <i>Journal of Pharmaceutical Sciences</i> , 2017, 106, 3316-3327.	3.3	18
35	Digital electrospray for controlled deposition. <i>Review of Scientific Instruments</i> , 2010, 81, 035114.	1.3	17
36	Controlled nanoparticle synthesis via opposite-polarity electrospray pyrolysis. <i>Journal of Aerosol Science</i> , 2017, 113, 201-211.	3.8	17

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37	Multiplexed Electrospray for Space Propulsion Applications. , 2010, , .		8
38	The Whirl Cookstove: A Novel Development for Clean Biomass Burning. Combustion Science and Technology, 2016, 188, 594-610.	2.3	6
39	Variable thrust/specific-impulse of multiplexed electrospray microthrusters. , 2013, , .		1