Carles Corbella Roca

List of Publications by Year
in descending order

33 papers	431 citations	759233 12 h-index	752698 20 g-index
33 all docs	33 docs citations	33 times ranked	573 citing authors

#	Article	IF	Citations
1	Nanosynthesis by atmospheric arc discharges excited with pulsed-DC power: a review. Nanotechnology, 2022, 33, 342001.	2.6	2
2	Arc plasma ablation of quartz crystals. Plasma Research Express, 2021, 3, 025004.	0.9	1
3	Non-thermal plasma multi-jet platform based on a flexible matrix. Review of Scientific Instruments, 2021, 92, 083505.	1.3	4
4	Relative calibration of a retarding field energy analyzer sensor array for spatially resolved measurements of the ion flux and ion energy in low temperature plasmas. Review of Scientific Instruments, 2021, 92, 103503.	1.3	3
5	Flexible plasma multi-jet source operated in radial discharge configuration. Review of Scientific Instruments, 2021, 92, 123502.	1.3	3
6	Energy considerations regarding pulsed arc production of nanomaterials. Journal of Applied Physics, 2020, 128, 033303.	2.5	4
7	Anodic arc discharge: Why pulsed?. Physics of Plasmas, 2020, 27, 054501.	1.9	3
8	Tracking nanoparticle growth in pulsed carbon arc discharge. Journal of Applied Physics, 2020, 127, 243301.	2.5	5
9	Current Understanding of Mechanisms in Plasma Cancer Therapy and Recent Advances in Technology. Springer Series on Atomic, Optical, and Plasma Physics, 2020, , 271-287.	0.2	1
10	White paper on the future of plasma science and technology in plastics and textiles. Plasma Processes and Polymers, 2019, 16, 1700228.	3.0	73
11	Reverse battery model for anodic arc discharges near atmospheric pressure. Journal Physics D: Applied Physics, 2019, 52, 485201.	2.8	5
12	MoS₂-based nanostructures: synthesis and applications in medicine. Journal Physics D: Applied Physics, 2019, 52, 183001.	2.8	53
13	Surface nanopatterning by colloidal lithography. , 2019, , 63-95.		1
14	Pulsed anodic arc discharge for the synthesis of carbon nanomaterials. Plasma Sources Science and Technology, 2019, 28, 045016.	3.1	19
15	Plasma-enabled healing of graphene nano-platelets layer. Frontiers of Chemical Science and Engineering, 2019, 13, 350-359.	4.4	12
16	Validation of etching model of polypropylene layers exposed to argon plasmas. Plasma Processes and Polymers, 2019, 16, 1900019.	3.0	11
17	Two-Temperature Simulation of Subatmospheric Arc Discharge. , 2019, , .		1
18	Few-layer flakes of Molybdenum Disulphide produced by anodic arc discharge in pulsed mode. Plasma Research Express, 2019, 1, 045009.	0.9	6

#	Article	IF	Citations
19	Decoupling of ionâ€•and photonâ€activation mechanisms in polymer surfaces exposed to lowâ€temperature plasmas. Plasma Processes and Polymers, 2018, 15, 1700230.	3.0	5
20	Connection between target poisoning and current waveforms in reactive high-power impulse magnetron sputtering of chromium. Plasma Sources Science and Technology, 2018, 27, 084004.	3.1	8
21	Electric potential screening on metal targets submitted to reactive sputtering. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2017, 35, .	2.1	7
22	Review Article: Unraveling synergistic effects in plasma-surface processes by means of beam experiments. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2017, 35, 050801.	2.1	16
23	Composite targets in HiPIMS plasmas: Correlation of in-vacuum XPS characterization and optical plasma diagnostics. Journal of Applied Physics, 2017, 121, 171912.	2.5	10
24	Revising secondary electron yields of ion-sputtered metal oxides. Journal Physics D: Applied Physics, 2016, 49, 16LT01.	2.8	30
25	Note: Ion-induced secondary electron emission from oxidized metal surfaces measured in a particle beam reactor. Review of Scientific Instruments, 2015, 86, 106102.	1.3	31
26	Elementary surface processes during reactive magnetron sputtering of chromium. Journal of Applied Physics, 2015, 118, 133301.	2.5	7
27	Exploring the Structure of the Modified Top Layer of Polypropylene During Plasma Treatment. Plasma Processes and Polymers, 2015, 12, 564-573.	3.0	15
28	Combined In Situ XPS and UHV-Chemical Force Microscopy (CFM) Studies of the Plasma Induced Surface Oxidation of Polypropylene. Plasma Processes and Polymers, 2014, 11, 256-262.	3.0	10
29	Upscaling plasma deposition: The influence of technological parameters. Surface and Coatings Technology, 2014, 242, 237-245.	4.8	16
30	Particle beam experiments for the analysis of reactive sputtering processes in metals and polymer surfaces. Review of Scientific Instruments, 2013, 84, 103303.	1.3	20
31	Chemical and Physical Sputtering of Polyethylene Terephthalate (PET). Plasma Processes and Polymers, 2013, 10, 225-234.	3.0	17
32	Surface Modification of Polypropylene (<scp>PP</scp>) by Argon Ions and <scp>UV</scp> Photons. Plasma Processes and Polymers, 2013, 10, 1110-1119.	3.0	22
33	Ion-induced oxidation of aluminum during reactive magnetron sputtering. Journal of Applied Physics, 2013, 113, 143303.	2.5	10