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	White paper on the future of plasma science and technology in plastics and textiles. Plasma Processes and Polymers, 2019, 16, 1700228.	3.0	73
2	MoS₂-based nanostructures: synthesis and applications in medicine. Journal Physics D: Applied Physics, 2019, 52, 183001.	2.8	53
3	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
4	Revising secondary electron yields of ion-sputtered metal oxides. Journal Physics D: Applied Physics, 2016, 49, 16LT01.	2.8	30
5	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
6	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
7	Pulsed anodic arc discharge for the synthesis of carbon nanomaterials. Plasma Sources Science and Technology, 2019, 28, 045016.	3.1	19
8	Chemical and Physical Sputtering of Polyethylene Terephthalate (PET). Plasma Processes and Polymers, 2013, 10, 225-234.	3.0	17
9	Upscaling plasma deposition: The influence of technological parameters. Surface and Coatings Technology, 2014, 242, 237-245.	4.8	16
10	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
11	Exploring the Structure of the Modified Top Layer of Polypropylene During Plasma Treatment. Plasma Processes and Polymers, 2015, 12, 564-573.	3.0	15
12	Plasma-enabled healing of graphene nano-platelets layer. Frontiers of Chemical Science and Engineering, 2019, 13, 350-359.	4.4	12
13	Validation of etching model of polypropylene layers exposed to argon plasmas. Plasma Processes and Polymers, 2019, 16, 1900019.	3.0	11
14	Ion-induced oxidation of aluminum during reactive magnetron sputtering. Journal of Applied Physics, 2013, 113, 143303.	2.5	10
15	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
16	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
17	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
18	Elementary surface processes during reactive magnetron sputtering of chromium. Journal of Applied Physics, 2015, 118, 133301.	2.5	7

#	Article	IF	Citations
19	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
20	Few-layer flakes of Molybdenum Disulphide produced by anodic arc discharge in pulsed mode. Plasma Research Express, 2019, 1, 045009.	0.9	6
21	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
22	Reverse battery model for anodic arc discharges near atmospheric pressure. Journal Physics D: Applied Physics, 2019, 52, 485201.	2.8	5
23	Tracking nanoparticle growth in pulsed carbon arc discharge. Journal of Applied Physics, 2020, 127, 243301.	2.5	5
24	Energy considerations regarding pulsed arc production of nanomaterials. Journal of Applied Physics, 2020, 128, 033303.	2.5	4
25	Non-thermal plasma multi-jet platform based on a flexible matrix. Review of Scientific Instruments, 2021, 92, 083505.	1.3	4
26	Anodic arc discharge: Why pulsed?. Physics of Plasmas, 2020, 27, 054501.	1.9	3
27	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
28	Flexible plasma multi-jet source operated in radial discharge configuration. Review of Scientific Instruments, 2021, 92, 123502.	1.3	3
29	Nanosynthesis by atmospheric arc discharges excited with pulsed-DC power: a review. Nanotechnology, 2022, 33, 342001.	2.6	2
30	Surface nanopatterning by colloidal lithography. , 2019, , 63-95.		1
31	Two-Temperature Simulation of Subatmospheric Arc Discharge. , 2019, , .		1
32	Arc plasma ablation of quartz crystals. Plasma Research Express, 2021, 3, 025004.	0.9	1
33	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