M Carmen LÃ³pez-Santos

List of Publications by Year
in descending order

68 papers	1,238 citations	331259 21 h-index	414034 32 g-index
68 all docs	68 docs citations	68 times ranked	1986 citing authors

#	Article	IF	Citations
1	Impact of moisture on efficiency-determining electronic processes in perovskite solar cells. Journal of Materials Chemistry A, 2017, 5, 10917-10927.	5.2	95
2	Surface chemistry and germination improvement of Quinoa seeds subjected to plasma activation. Scientific Reports, 2017, 7, 5924.	1.6	81
3	Effect of Visible and UV Illumination on the Water Contact Angle of TiO2Thin Films with Incorporated Nitrogen. Journal of Physical Chemistry C, 2007, 111, 1801-1808.	1.5	71
4	Perovskite Solar Cells Based on Nanocolumnar Plasmaâ€Deposited ZnO Thin Films. ChemPhysChem, 2014, 15, 1148-1153.	1.0	59
5	Effect of visible light on the water contact angles on illuminated oxide semiconductors other than TiO2. Solar Energy Materials and Solar Cells, 2006, 90, 2944-2949.	3.0	47
6	Influence of irrigation conditions in the germination of plasma treated Nasturtium seeds. Scientific Reports, 2018, 8, 16442.	1.6	43
7	Nanocolumnar growth of thin films deposited at oblique angles: Beyond the tangent rule. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2014, 32, .	0.6	42
8	Formation of Subsurface W⁵⁺ Species in Gasochromic Pt/WO₃ Thin Films Exposed to Hydrogen. Journal of Physical Chemistry C, 2017, 121, 15719-15727.	1.5	40
9	On the Deposition Rates of Magnetron Sputtered Thin Films at Oblique Angles. Plasma Processes and Polymers, 2014, 11, 571-576.	1.6	38
10	Cholesterol biosensing with a polydopamine-modified nanostructured platinum electrode prepared by oblique angle physical vacuum deposition. Sensors and Actuators B: Chemical, 2017, 240, 37-45.	4.0	38
11	Robust anti-icing superhydrophobic aluminum alloy surfaces by grafting fluorocarbon molecular chains. Applied Materials Today, 2020, 21, 100815.	2.3	37
12	Plasma-Enabled Amorphous TiO₂ Nanotubes as Hydrophobic Support for Molecular Sensing by SERS. ACS Applied Materials & Interfaces, 2020, 12, 50721-50733.	4.0	35
13	Improved wear performance of ultra high molecular weight polyethylene coated with hydrogenated diamond like carbon. Wear, 2010, 269, 458-465.	1.5	34
14	Surface Functionalization, Oxygen Depth Profiles, and Wetting Behavior of PET Treated with Different Nitrogen Plasmas. ACS Applied Materials & Interfaces, 2010, 2, 980-990.	4.0	34
15	Effect of surface roughness and sterilization on bacterial adherence to ultra-high molecular weight polyethylene. Clinical Microbiology and Infection, 2010, 16, 1036-1041.	2.8	32
16	Enhanced Stability of Perovskite Solar Cells Incorporating Dopantâ€Free Crystalline Spiroâ€OMeTAD Layers by Vacuum Sublimation. Advanced Energy Materials, 2020, 10, 1901524.	10.2	30
17	Hydrophobicity, Freezing Delay, and Morphology of Laser-Treated Aluminum Surfaces. Langmuir, 2019, 35, 6483-6491.	1.6	29
18	Plasmas and atom beam activation of the surface of polymers. Journal Physics D: Applied Physics, 2008, 41, 225209.	1.3	25

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19	Anisotropic Resistivity Surfaces Produced in ITO Films by Laserâ€Induced Nanoscale Selfâ€organization. Advanced Optical Materials, 2021, 9, 2001086.	3.6	24
20	Non-destructive depth compositional profiles by XPS peak-shape analysis. Analytical and Bioanalytical Chemistry, 2010, 396, 2757-2768.	1.9	23
21	Nanocolumnar association and domain formation in porous thin films grown by evaporation at oblique angles. Nanotechnology, 2016, 27, 395702.	1.3	23
22	In Situ Determination of the Water Condensation Mechanisms on Superhydrophobic and Superhydrophilic Titanium Dioxide Nanotubes. Langmuir, 2017, 33, 6449-6456.	1.6	23
23	Lateral and in-depth distribution of functional groups on diamond-like carbon after oxygen plasma treatments. Diamond and Related Materials, 2011, 20, 49-56.	1.8	20
24	Tunable In-Plane Optical Anisotropy of Ag Nanoparticles Deposited by DC Sputtering onto SiO2 Nanocolumnar Films. Plasmonics, 2010, 5, 241-250.	1.8	18
25	Nitrogen plasma functionalization of low density polyethylene. Surface and Coatings Technology, 2011, 205, 3356-3364.	2.2	18
26	Formation of Nitrogen Functional Groups on Plasma Treated DLC. Plasma Processes and Polymers, 2009, 6, 555-565.	1.6	17
27	Investigation of the Growth Mechanisms of a-CH_x Coatings Deposited by Pulsed Reactive Magnetron Sputtering. Journal of Physical Chemistry C, 2012, 116, 12017-12026.	1.5	16
28	Anisotropic In-Plane Conductivity and Dichroic Gold Plasmon Resonance in Plasma-Assisted ITO Thin Films e-Beam-Evaporated at Oblique Angles. ACS Applied Materials & Interfaces, 2015, 7, 10993-11001.	4.0	15
29	Plasma Enabled Conformal and Damage Free Encapsulation of Fragile Molecular Matter: from Surfaceâ€Supported to Onâ€Device Nanostructures. Advanced Functional Materials, 2019, 29, 1903535.	7.8	13
30	3D Organic Nanofabrics: Plasma-Assisted Synthesis and Antifreezing Behavior of Superhydrophobic and Lubricant-Infused Slippery Surfaces. Langmuir, 2019, 35, 16876-16885.	1.6	13
31	Enhancement of visible light-induced surface photo-activity of nanostructured Nâ€“TiO2 thin films modified by ion implantation. Chemical Physics Letters, 2013, 582, 95-99.	1.2	12
32	Physiological Degradation Mechanisms of PLGA Membrane Films under Oxygen Plasma Treatment. Journal of Physical Chemistry C, 2015, 119, 20446-20452.	1.5	12
33	Plasma engineering of microstructured piezo â€“ Triboelectric hybrid nanogenerators for wide bandwidth vibration energy harvesting. Nano Energy, 2022, 91, 106673.	8.2	12
34	Effects of plasma surface treatments of diamond-like carbon and polymeric substrata on the cellular behavior of human fibroblasts. Journal of Biomaterials Applications, 2013, 27, 669-683.	1.2	11
35	Bioactivity and hemocompatibility study of amorphous hydrogenated carbon coatings produced by pulsed magnetron discharge. Journal of Biomedical Materials Research - Part A, 2013, 101A, 1800-1812.	2.1	10
36	c-C₄F₈Plasmas for the Deposition of Fluorinated Carbon Films. Plasma Processes and Polymers, 2014, 11, 289-299.	1.6	10

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37	Highâ€Rate Deposition of Stoichiometric Compounds by Reactive Magnetron Sputtering at Oblique Angles. Plasma Processes and Polymers, 2016, 13, 960-964.	1.6	10
38	Lowâ€Temperature Plasma Processing of Platinum Porphyrins for the Development of Metal Nanostructured Layers. Advanced Materials Interfaces, 2017, 4, 1601233.	1.9	10
39	Influence of Titanium Oxide Pillar Array Nanometric Structures and Ultraviolet Irradiation on the Properties of the Surface of Dental Implantsâ€"A Pilot Study. Nanomaterials, 2019, 9, 1458.	1.9	10
40	Modulating Low Energy Ion Plasma Fluxes for the Growth of Nanoporous Thin Films. Plasma Processes and Polymers, 2015, 12, 719-724.	1.6	9
41	Multifunctional antimicrobial chlorhexidine polymers by remote plasma assisted vacuum deposition. Frontiers of Chemical Science and Engineering, 2019, 13, 330-339.	2.3	8
42	Stoichiometric Control of SiO_x Thin Films Grown by Reactive Magnetron Sputtering at Oblique Angles. Plasma Processes and Polymers, 2016, 13, 1242-1248.	1.6	7
43	Highly Porous ZnO Thin Films and 1D Nanostructures by Remote Plasma Processing of Zn-Phthalocyanine. Plasma Processes and Polymers, 2016, 13, 287-297.	1.6	7
44	In Vitro and in Vivo Study of Poly(Lacticâ€"coâ€"Glycolic) (PLGA) Membranes Treated with Oxygen Plasma and Coated with Nanostructured Hydroxyapatite Ultrathin Films for Guided Bone Regeneration Processes. Polymers, 2017, 9, 410.	2.0	7
45	Electron Beam Evaporated vs. Magnetron Sputtered Nanocolumnar Porous Stainless Steel: Corrosion Resistance, Wetting Behavior and Anti-bacterial Activity. Materials Today Communications, 2022, 31, 103266.	0.9	7
46	Structural control in porous/compact multilayer systems grown by magnetron sputtering. Nanotechnology, 2017, 28, 465605.	1.3	6
47	Nanostructural Analysis of Porous Oblique Angle Deposited (OAD) Multilayer Systems by Grazingâ€Incidence Smallâ€Angle Xâ€Ray Scattering. Advanced Materials Interfaces, 2018, 5, 1800530.	1.9	6
48	Environmentally Tight TiO₂â€"SiO₂ Porous 1Dâ€Photonic Structures. Advanced Materials Interfaces, 2019, 6, 1801212.	1.9	6
49	Plasmaâ€Assisted Deposition of TiO₂ 3D Nanomembranes: Selective Wetting, Superomniphobicity, and Selfâ€Cleaning. Advanced Materials Interfaces, 2021, 8, 2100767.	1.9	6
50	Microstructural characterization of hydrophobic Ti1â^'xAlxN coatings with moth-eye-like surface morphology. Journal of Alloys and Compounds, 2012, 536, S398-S406.	2.8	5
51	Highly Anisotropic Organometal Halide Perovskite Nanowalls Grown by Glancingâ€Angle Deposition. Advanced Materials, 2022, 34, e2107739.	11.1	5
52	â€˜Reliability of new poly (lactic-co-glycolic acid) membranes treated with oxygen plasma plus silicon dioxide layers for pre-prosthetic guided bone regeneration processesâ€™. Medicina Oral, Patologia Oral Y Cirugia Bucal, 2017, 22, 0-0.	0.7	4
53	In Vitro Comparative Study of Oxygen Plasma Treated Poly(Lacticâ€"Coâ€"Glycolic) (PLGA) Membranes and Supported Nanostructured Oxides for Guided Bone Regeneration Processes. Materials, 2018, 11, 752.	1.3	4
54	Factors triggering germination in plasma-activated cotton seeds: water imbibition vs. reactive speciesâ€™ formation. Journal Physics D: Applied Physics, 2021, 54, 325205.	1.3	4

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55	Comparative analysis of the germination of barley seeds subjected to drying, hydrogen peroxide, or oxidative air plasma treatments. Plasma Processes and Polymers, 2022, 19, .	1.6	4
56	2D compositional self-patterning in magnetron sputtered thin films. Applied Surface Science, 2019, 480, 115-121.	3.1	3
57	Micronâ€scale wedge thin films prepared by plasma enhanced chemical vapor deposition. Plasma Processes and Polymers, 2017, 14, 1700043.	1.6	2
58	Optofluidic liquid sensing on electromicrofluidic devices. Materials Research Express, 2020, 7, 036407.	0.8	2
59	Mechanically Switchable Wetting Petal Effect in Self-Patterned Nanocolumnar Films on Poly(dimethylsiloxane). Nanomaterials, 2021, 11, 2566.	1.9	2
60	Attenuation lengths of high energy photoelectrons in compact and mesoporous SiO2 films. Surface Science, 2012, 606, 820-824.	0.8	1
61	(Invited) Plasma Assisted Oblique Angle Deposition of Transparent and Conductive in-Plane Anisotropic ITO Thin Films. ECS Transactions, 2017, 77, 9-15.	0.3	1
62	Form Birefringence in Resonant Transducers for the Selective Monitoring of VOCs under Ambient Conditions. ACS Applied Materials & Interfaces, 2021, 13, 19148-19158.	4.0	1
63	Highly Anisotropic Organometal Halide Perovskite Nanowalls Grown by Glancingâ€Angle Deposition (Adv. Mater. 18/2022). Advanced Materials, 2022, 34, .	11.1	1
64	Anisotropic Resistivity ITO Surfaces produced by Laser-induced Self-organization at the Nanoscale. , 2021, , .		0
65	Vapor and liquid optical monitoring with sculptured Bragg microcavities. , 2017, , .		0
66	Plasmaâ€Assisted Deposition of TiO₂ 3D Nanomembranes: Selective Wetting, Superomniphobicity, and Selfâ€Cleaning (Adv. Mater. Interfaces 21/2021). Advanced Materials Interfaces, 2021, 8, 2170122.	1.9	0
67	Experimento docente sobre DinÃ¡mica I (Leyes de Newton): una propuesta de innovaciÃ³n teÃ³rico-prÃ¡ctica. , 0, , 1985-2001.		0
68	Two Step Glancing Angle Deposition of Supported Vertically Aligned Organometallic Halide Perovskite Nanostructures. , 0, , .		0