M Carmen López-Santos

List of Publications by Year in descending order

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68 papers

1,238 citations

331538 21 h-index 414303 32 g-index

68 all docs

68 docs citations

68 times ranked 1986 citing authors

#	Article	IF	CITATIONS
1	Plasma engineering of microstructured piezo – Triboelectric hybrid nanogenerators for wide bandwidth vibration energy harvesting. Nano Energy, 2022, 91, 106673.	8.2	12
2	Highly Anisotropic Organometal Halide Perovskite Nanowalls Grown by Glancingâ€Angle Deposition. Advanced Materials, 2022, 34, e2107739.	11.1	5
3	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
4	Highly Anisotropic Organometal Halide Perovskite Nanowalls Grown by Glancingâ€Angle Deposition (Adv. Mater. 18/2022). Advanced Materials, 2022, 34, .	11.1	1
5	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
6	Anisotropic Resistivity Surfaces Produced in ITO Films by Laserâ€Induced Nanoscale Selfâ€organization. Advanced Optical Materials, 2021, 9, 2001086.	3.6	24
7	Form Birefringence in Resonant Transducers for the Selective Monitoring of VOCs under Ambient Conditions. ACS Applied Materials & Samp; Interfaces, 2021, 13, 19148-19158.	4.0	1
8	Factors triggering germination in plasma-activated cotton seeds: water imbibition vs. reactive species' formation. Journal Physics D: Applied Physics, 2021, 54, 325205.	1.3	4
9	Anisotropic Resistivity ITO Surfaces produced by Laser-induced Self-organization at the Nanoscale. , 2021, , .		O
10	Mechanically Switchable Wetting Petal Effect in Self-Patterned Nanocolumnar Films on Poly(dimethylsiloxane). Nanomaterials, 2021, 11, 2566.	1.9	2
11	Plasmaâ€Assisted Deposition of TiO ₂ 3D Nanomembranes: Selective Wetting, Superomniphobicity, and Selfâ€Cleaning. Advanced Materials Interfaces, 2021, 8, 2100767.	1.9	6
12	Plasmaâ€Assisted Deposition of TiO ₂ 3D Nanomembranes: Selective Wetting, Superomniphobicity, and Selfâ€Cleaning (Adv. Mater. Interfaces 21/2021). Advanced Materials Interfaces, 2021, 8, 2170122.	1.9	0
13	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
14	Robust anti-icing superhydrophobic aluminum alloy surfaces by grafting fluorocarbon molecular chains. Applied Materials Today, 2020, 21, 100815.	2.3	37
15	Plasma-Enabled Amorphous TiO ₂ Nanotubes as Hydrophobic Support for Molecular Sensing by SERS. ACS Applied Materials & Sensing by SERS. ACS	4.0	35
16	Optofluidic liquid sensing on electromicrofluidic devices. Materials Research Express, 2020, 7, 036407.	0.8	2
17	Plasma Enabled Conformal and Damage Free Encapsulation of Fragile Molecular Matter: from Surfaceâ€6upported to Onâ€Device Nanostructures. Advanced Functional Materials, 2019, 29, 1903535.	7.8	13
18	Influence of Titanium Oxide Pillar Array Nanometric Structures and Ultraviolet Irradiation on the Properties of the Surface of Dental Implants—A Pilot Study. Nanomaterials, 2019, 9, 1458.	1.9	10

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19	Hydrophobicity, Freezing Delay, and Morphology of Laser-Treated Aluminum Surfaces. Langmuir, 2019, 35, 6483-6491.	1.6	29
20	Multifunctional antimicrobial chlorhexidine polymers by remote plasma assisted vacuum deposition. Frontiers of Chemical Science and Engineering, 2019, 13, 330-339.	2.3	8
21	2D compositional self-patterning in magnetron sputtered thin films. Applied Surface Science, 2019, 480, 115-121.	3.1	3
22	3D Organic Nanofabrics: Plasma-Assisted Synthesis and Antifreezing Behavior of Superhydrophobic and Lubricant-Infused Slippery Surfaces. Langmuir, 2019, 35, 16876-16885.	1.6	13
23	Environmentally Tight TiO ₂ â€"SiO ₂ Porous 1Dâ€Photonic Structures. Advanced Materials Interfaces, 2019, 6, 1801212.	1.9	6
24	Influence of irrigation conditions in the germination of plasma treated Nasturtium seeds. Scientific Reports, 2018, 8, 16442.	1.6	43
25	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
26	In Vitro Comparative Study of Oxygen Plasma Treated Poly(Lactic–Co–Glycolic) (PLGA) Membranes and Supported Nanostructured Oxides for Guided Bone Regeneration Processes. Materials, 2018, 11, 752.	1.3	4
27	Lowâ€Temperature Plasma Processing of Platinum Porphyrins for the Development of Metal Nanostructured Layers. Advanced Materials Interfaces, 2017, 4, 1601233.	1.9	10
28	Impact of moisture on efficiency-determining electronic processes in perovskite solar cells. Journal of Materials Chemistry A, 2017, 5, 10917-10927.	5.2	95
29	In Situ Determination of the Water Condensation Mechanisms on Superhydrophobic and Superhydrophilic Titanium Dioxide Nanotubes. Langmuir, 2017, 33, 6449-6456.	1.6	23
30	(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
31	Structural control in porous/compact multilayer systems grown by magnetron sputtering. Nanotechnology, 2017, 28, 465605.	1.3	6
32	Micronâ€scale wedge thin films prepared by plasma enhanced chemical vapor deposition. Plasma Processes and Polymers, 2017, 14, 1700043.	1.6	2
33	Surface chemistry and germination improvement of Quinoa seeds subjected to plasma activation. Scientific Reports, 2017, 7, 5924.	1.6	81
34	Formation of Subsurface W ⁵⁺ Species in Gasochromic Pt/WO ₃ Thin Films Exposed to Hydrogen. Journal of Physical Chemistry C, 2017, 121, 15719-15727.	1.5	40
35	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
36	In Vitro and in Vivo Study of Poly(Lactic–co–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

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37	†Reliability of new poly (lactic-co-glycolic acid) membranes treated with oxygen plasma plus silicon dioxide layers for pre-prosthetic guided bone regeneration processes'. Medicina Oral, Patologia Oral Y Cirugia Bucal, 2017, 22, 0-0.	0.7	4
38	Vapor and liquid optical monitoring with sculptured Bragg microcavities. , 2017, , .		0
39	Highâ€Rate Deposition of Stoichiometric Compounds by Reactive Magnetron Sputtering at Oblique Angles. Plasma Processes and Polymers, 2016, 13, 960-964.	1.6	10
40	Nanocolumnar association and domain formation in porous thin films grown by evaporation at oblique angles. Nanotechnology, 2016, 27, 395702.	1.3	23
41	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
42	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
43	Modulating Low Energy Ion Plasma Fluxes for the Growth of Nanoporous Thin Films. Plasma Processes and Polymers, 2015, 12, 719-724.	1.6	9
44	Physiological Degradation Mechanisms of PLGA Membrane Films under Oxygen Plasma Treatment. Journal of Physical Chemistry C, 2015, 119, 20446-20452.	1.5	12
45	Anisotropic In-Plane Conductivity and Dichroic Gold Plasmon Resonance in Plasma-Assisted ITO Thin Films e-Beam-Evaporated at Oblique Angles. ACS Applied Materials & Evaporated at Oblique Angles. ACS Applied Materials & Evaporated & Plasma-Assisted ITO Thin Films e-Beam-Evaporated at Oblique Angles. ACS Applied Materials & Evaporated & Plasma-Assisted ITO Thin Films e-Beam-Evaporated & Plasma-Assisted & Plasma-A	4.0	15
46	Perovskite Solar Cells Based on Nanocolumnar Plasmaâ€Deposited ZnO Thin Films. ChemPhysChem, 2014, 15, 1148-1153.	1.0	59
47	On the Deposition Rates of Magnetron Sputtered Thin Films at Oblique Angles. Plasma Processes and Polymers, 2014, 11, 571-576.	1.6	38
48	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
49	<i>c</i> -C ₄ F ₈ Plasmas for the Deposition of Fluorinated Carbon Films. Plasma Processes and Polymers, 2014, 11, 289-299.	1.6	10
50	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
51	Enhancement of visible light-induced surface photo-activity of nanostructured N–TiO2 thin films modified by ion implantation. Chemical Physics Letters, 2013, 582, 95-99.	1.2	12
52	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
53	Attenuation lengths of high energy photoelectrons in compact and mesoporous SiO2 films. Surface Science, 2012, 606, 820-824.	0.8	1
54	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

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55	Investigation of the Growth Mechanisms of a-CH _{<i>x</i>} Coatings Deposited by Pulsed Reactive Magnetron Sputtering. Journal of Physical Chemistry C, 2012, 116, 12017-12026.	1.5	16
56	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
57	Nitrogen plasma functionalization of low density polyethylene. Surface and Coatings Technology, 2011, 205, 3356-3364.	2.2	18
58	Non-destructive depth compositional profiles by XPS peak-shape analysis. Analytical and Bioanalytical Chemistry, 2010, 396, 2757-2768.	1.9	23
59	Tunable In-Plane Optical Anisotropy of Ag Nanoparticles Deposited by DC Sputtering onto SiO2 Nanocolumnar Films. Plasmonics, 2010, 5, 241-250.	1.8	18
60	Improved wear performance of ultra high molecular weight polyethylene coated with hydrogenated diamond like carbon. Wear, 2010, 269, 458-465.	1.5	34
61	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
62	Surface Functionalization, Oxygen Depth Profiles, and Wetting Behavior of PET Treated with Different Nitrogen Plasmas. ACS Applied Materials & Samp; Interfaces, 2010, 2, 980-990.	4.0	34
63	Formation of Nitrogen Functional Groups on Plasma Treated DLC. Plasma Processes and Polymers, 2009, 6, 555-565.	1.6	17
64	Plasmas and atom beam activation of the surface of polymers. Journal Physics D: Applied Physics, 2008, 41, 225209.	1.3	25
65	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
66	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
67	Experimento docente sobre Dinámica I (Leyes de Newton): una propuesta de innovación teÁ³rico-práctica. , 0, , 1985-2001.		0
68	Two Step Glancing Angle Deposition of Supported Vertically Aligned Organometallic Halide Perovskite Nanostructures. , 0, , .		O