Alberto Palmero

List of Publications by Year
in descending order

64 papers	1,825 citations	257357 24 h-index	276775 41 g-index
64 all docs	64 docs citations	64 times ranked	1971 citing authors

#	Article	IF	Citations
1	Perspectives on oblique angle deposition of thin films: From fundamentals to devices. Progress in Materials Science, 2016, 76, 59-153.	16.0	564
2	Nanocolumnar coatings with selective behavior towards osteoblast and Staphylococcus aureus proliferation. Acta Biomaterialia, 2015, 15, 20-28.	4.1	85
3	Growth regimes of porous gold thin films deposited by magnetron sputtering at oblique incidence: from compact to columnar microstructures. Nanotechnology, 2013, 24, 045604.	1.3	71
4	Nanostructured Ti thin films by magnetron sputtering at oblique angles. Journal Physics D: Applied Physics, 2016, 49, 045303.	1.3	54
5	Tilt angle control of nanocolumns grown by glancing angle sputtering at variable argon pressures. Applied Physics Letters, 2010, 97, .	1.5	50
6	Theoretical and experimental characterization of TiO₂ thin films deposited at oblique angles. Journal Physics D: Applied Physics, 2011, 44, 385302.	1.3	45
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	On the formation of the porous structure in nanostructured a-Si coatings deposited by dc magnetron sputtering at oblique angles. Nanotechnology, 2014, 25, 355705.	1.3	39
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	One-dimensional analysis of the rate of plasma-assisted sputter deposition. Journal of Applied Physics, 2007, 101, 083307.	1.1	36
12	On the ion and neutral atom bombardment of the growth surface in magnetron plasma sputter deposition. Applied Physics Letters, 2007, 91, 171501.	1.5	32
13	Morphological evolution of pulsed laser deposited ZrO2 thin films. Journal of Applied Physics, 2010, 107, .	1.1	32
14	Electrochromic response and porous structure of WO3 cathode layers. Electrochimica Acta, 2021, 376, 138049.	2.6	32
15	Study of the gas rarefaction phenomenon in a magnetron sputtering system. Thin Solid Films, 2006, 515, 631-635.	0.8	30
16	On the microstructure of thin films grown by an isotropically directed deposition flux. Journal of Applied Physics, 2010, 108, 064316.	1.1	30
17	Antibacterial Nanostructured Ti Coatings by Magnetron Sputtering: From Laboratory Scales to Industrial Reactors. Nanomaterials, 2019, 9, 1217.	1.9	30
18	Characterization of a low-pressure argon plasma using optical emission spectroscopy and a global model. Journal of Applied Physics, 2007, 101, 053306.	1.1	29

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19	Surface nanostructuring of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>TiO</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:m films by high energy ion irradiation. Physical Review B, 2010, 82, .	1.1	29
20	Influence of plasma-generated negative oxygen ion impingement on magnetron sputtered amorphous SiO2 thin films during growth at low temperatures. Journal of Applied Physics, 2012, 111, 054312.	1.1	29
21	Characterization of the plasma in a radio-frequency magnetron sputtering system. Journal of Applied Physics, 2004, 95, 7611-7618.	1.1	27
22	Gas heating in plasma-assisted sputter deposition. Applied Physics Letters, 2005, 87, 071501.	1.5	27
23	Generalized Keller-Simmons formula for nonisothermal plasma-assisted sputtering depositions. Applied Physics Letters, 2006, 89, 211501.	1.5	26
24	Fabrication of black-gold coatings by glancing angle deposition with sputtering. Beilstein Journal of Nanotechnology, 2017, 8, 434-439.	1.5	26
25	Growth of nanocolumnar porous TiO 2 thin films by magnetron sputtering using particle collimators. Surface and Coatings Technology, 2018, 343, 172-177.	2.2	25
26	On the deposition process of silicon suboxides by a RF magnetron reactive sputtering in Arâ€"O2 mixtures: theoretical and experimental approach. Surface and Coatings Technology, 2004, 177-178, 215-221.	2.2	23
27	Nanocolumnar association and domain formation in porous thin films grown by evaporation at oblique angles. Nanotechnology, 2016, 27, 395702.	1.3	23
28	Electron temperature measurement in a surface-wave-produced argon plasma at intermediate pressures. European Physical Journal D, 2001, 14, 361-366.	0.6	21
29	Surface nanostructuring of TiO2 thin films by ion beam irradiation. Scripta Materialia, 2009, 60, 574-577.	2.6	21
30	Electron temperature measurement in a slot antenna 2.45 GHz microwave plasma source. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2001, 19, 410.	1.6	19
31	Experimental characterization of the deposition of silicon suboxide films in a radiofrequency magnetron reactive sputtering system. Surface and Coatings Technology, 2004, 188-189, 399-403.	2.2	16
32	Growth of SiO₂ and TiO₂ thin films deposited by reactive magnetron sputtering and PECVD by the incorporation of nonâ€directional deposition fluxes. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 796-801.	0.8	15
33	Kinetic energy-induced growth regimes of nanocolumnar Ti thin films deposited by evaporation and magnetron sputtering. Nanotechnology, 2019, 30, 475603.	1.3	13
34	SiOx by magnetron sputtered revisited: Tailoring the photonic properties of multilayers. Applied Surface Science, 2019, 488, 791-800.	3.1	13
35	A 4-view imaging to reveal microstructural differences in obliquely sputter-deposited tungsten films. Materials Letters, 2020, 264, 127381.	1.3	13
36	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

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37	Distinct processes in radio-frequency reactive magnetron plasma sputter deposition of silicon suboxide films. Journal of Applied Physics, 2007, 102, .	1.1	11
38	Growth of nanocolumnar thin films on patterned substrates at oblique angles. Plasma Processes and Polymers, 2019, 16, 1800135.	1.6	11
39	Study of the a-Si/a-SiO2 interface deposited by r.f. magnetron sputtering. Thin Solid Films, 2004, 447-448, 306-310.	0.8	10
40	Argon plasma modelling in a RF magnetron sputtering system. Surface and Coatings Technology, 2004, 188-189, 392-398.	2.2	10
41	Highâ€Rate Deposition of Stoichiometric Compounds by Reactive Magnetron Sputtering at Oblique Angles. Plasma Processes and Polymers, 2016, 13, 960-964.	1.6	10
42	Modulating Low Energy Ion Plasma Fluxes for the Growth of Nanoporous Thin Films. Plasma Processes and Polymers, 2015, 12, 719-724.	1.6	9
43	Patterning and control of the nanostructure in plasma thin films with acoustic waves: mechanical<i>vs.</i>electrical polarization effects. Materials Horizons, 2021, 8, 515-524.	6.4	9
44	Positron annihilation analysis of nanopores and growth mechanism of oblique angle evaporated TiO2 and SiO2 thin films and multilayers. Microporous and Mesoporous Materials, 2020, 295, 109968.	2.2	8
45	Gas heating in low-pressure microwave argon discharges. Physical Review E, 2002, 66, 066401.	0.8	7
46	Characterization of an Ar/O2 magnetron sputtering plasma using a Langmuir probe and an energy resolved mass spectrometer. Thin Solid Films, 2006, 494, 18-22.	0.8	7
47	On the argon and oxygen incorporation into SiOx through ion implantation during reactive plasma magnetron sputter deposition. Applied Surface Science, 2008, 255, 3079-3084.	3.1	7
48	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
49	Gas temperature equation in a high-frequency argon plasma column at low pressures. Physics of Plasmas, 2002, 9, 358-363.	0.7	6
50	Structural control in porous/compact multilayer systems grown by magnetron sputtering. Nanotechnology, 2017, 28, 465605.	1.3	6
51	Environmentally Tight TiO₂â€"SiO₂ Porous 1Dâ€Photonic Structures. Advanced Materials Interfaces, 2019, 6, 1801212.	1.9	6
52	Electrical and reaction performances of packedâ€bed plasma reactors moderated with ferroelectric or dielectric materials. Plasma Processes and Polymers, 2021, 18, 2000193.	1.6	6
53	Wetting and spreading of liquid lithium onto nanocolumnar tungsten coatings tailored through the topography of stainless steel substrates. Nuclear Fusion, 2020, 60, 126033.	1.6	6
54	Atomistic model of ultra-smooth amorphous thin film growth by low-energy ion-assisted physical vapour deposition. Journal Physics D: Applied Physics, 2013, 46, 395303.	1.3	5

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55	Gas Temperature Measurement in a Surface-Wave Argon Plasma Column at Low Pressures. Japanese Journal of Applied Physics, 2002, 41, 5787-5791.	0.8	4
56	On-line characterisation of radiofrequency magnetron sputter deposition of SiOx using elastic recoil detection. Thin Solid Films, 2006, 494, 13-17.	0.8	4
57	Advanced Strategies in Thin Films Engineering by Magnetron Sputtering. Coatings, 2020, 10, 419.	1.2	4
58	Excitation Equilibria in an Argon Surface-Wave-Produced and -Sustained Plasmas. Japanese Journal of Applied Physics, 2002, 41, 5659-5667.	0.8	3
59	Characterization of the ion cathode fall region in relation to the growth rate in plasma sputter deposition. European Physical Journal D, 2007, 41, 303-309.	0.6	3
60	On the kinetic and thermodynamic electron temperatures in non-thermal plasmas. Europhysics Letters, 2014, 105, 15001.	0.7	3
61	2D compositional self-patterning in magnetron sputtered thin films. Applied Surface Science, 2019, 480, 115-121.	3.1	3
62	Micronâ€scale wedge thin films prepared by plasma enhanced chemical vapor deposition. Plasma Processes and Polymers, 2017, 14, 1700043.	1.6	2
63	Editorial for Special Issue: Nanostructured Surfaces and Thin Films Synthesis by Physical Vapor Deposition. Nanomaterials, 2021, 11, 148.	1.9	2
64	Compositional gradients at the nanoscale in substoichiometric thin films deposited by magnetron sputtering at oblique angles: A case study on SiO_{<i>x</i>} thin films. Plasma Processes and Polymers, 2022, 19, 2100116.	1.6	1