Leonardo Soriano

List of Publications by Year
in descending order

85 papers	2,176 citations	236925 25 h-index	243625 44 g-index
86 all docs	86 docs citations	86 times ranked	3311 citing authors

#	Article	IF	Citations
1	An XPS study of the interaction of oxygen with zirconium. Surface Science, 1989, 218, 331-345.	1.9	296
2	Surface effects in the Ni2px-ray photoemission spectra of NiO. Physical Review B, 2007, 75, .	3.2	134
3	Thin films of oxygen-deficient perovskite phases by pulsed-laser ablation of strontium titanate. Physical Review B, 2007, 75, .	3.2	93
4	Changes in the passive layer of corrugated austenitic stainless steel of low nickel content due to exposure to simulated pore solutions. Corrosion Science, 2009, 51, 785-792.	6.6	79
5	Surface contributions to the XPS spectra of nanostructured NiO deposited on HOPG. Surface Science, 2012, 606, 1426-1430.	1.9	76
6	Investigation of surface and non-local screening effects in the Ni 2p core level photoemission spectra of NiO. Chemical Physics Letters, 2011, 501, 437-441.	2.6	74
7	The O 1s x-ray absorption spectra of transition-metal oxides: The TiO2â^'ZrO2â^'HfO2 and V2O5â^'Nb2O5â^'Ta2O5 series. Solid State Communications, 1993, 87, 699-703.	1.9	70
8	Chemical changes induced by sputtering in TiO2 and some selected titanates as observed by X-ray absorption spectroscopy. Surface Science, 1993, 290, 427-435.	1.9	68
9	Interface effects in the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi mathvariant="normal">Ni</mml:mi><mml:mspace width="0.2em" /><mml:mn>2</mml:mn><mml:mi>p</mml:mi></mml:mrow></mml:math>x-ray photoelectron spectra of NiO thin films grown on oxide substrates. Physical Review B, 2008, 77, .	3.2	66
10	The electronic structure of mesoscopic NiO particles. Chemical Physics Letters, 1993, 208, 460-464.	2.6	60
11	Electronic structure of stoichiometric andAr+-bombardedZrO2determined by resonant photoemission. Physical Review B, 1995, 52, 11711-11720.	3.2	60
12	Thermal oxidation of TiN studied by means of soft xâ€ray absorption spectroscopy. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1993, 11, 47-51.	2.1	55
13	Oxidation State and Size Effects in CoO Nanoparticles. Journal of Physical Chemistry B, 1999, 103, 6676-6679.	2.6	46
14	The electronic structure of TiN and VN: X-ray and electron spectra compared to band structure calculations. Solid State Communications, 1997, 102, 291-296.	1.9	38
15	Splitting ofNi3dstates at the surface ofNiOnanostructures. Physical Review B, 2006, 74, .	3.2	38
16	The electronic structure of ZrO2: Band structure calculations compared to electron and x-ray spectra. Solid State Communications, 1995, 93, 659-665.	1.9	37
17	Spectral evidence of spinodal decomposition, phase transformation and molecular nitrogen formation in supersaturated TiAlN films upon annealing. Acta Materialia, 2011, 59, 6287-6296.	7.9	35
18	Chemical analysis of passivated and oxidized layers on FeCr and FeTi alloys by soft x-ray absorption spectroscopy. Surface and Interface Analysis, 1993, 20, 21-26.	1.8	34

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19	Soft x-ray absorption spectroscopy study of oxide layers on titanium alloys. Surface and Interface Analysis, 2002, 33, 570-576.	1.8	34
20	Adsorption and oxidation of K deposited on graphite. Surface Science, 1996, 364, 253-265.	1.9	33
21	The interaction of N with Ti and the oxidation of TiN studied by soft X-ray absorption spectroscopy. Journal of Electron Spectroscopy and Related Phenomena, 1993, 62, 197-206.	1.7	32
22	Crystal-Field Effects at the TiO2â^'SiO2Interface As Observed by X-ray Absorption Spectroscopy. Langmuir, 2000, 16, 7066-7069.	3.5	32
23	Chemical Analysis of Ternary Ti Oxides using Soft X-ray Absorption Spectroscopy. Surface and Interface Analysis, 1997, 25, 804-808.	1.8	28
24	Correlation between Nâ€Š1s core level x-ray photoelectron and x-ray absorption spectra of amorphous carbon nitride films. Applied Physics Letters, 2000, 77, 803-805.	3.3	28
25	Effects of Ni vacancies and crystallite size on the O 1s and Ni 2p x-ray absorption spectra of nanocrystalline NiO. Journal of Physics Condensed Matter, 2013, 25, 495506.	1.8	27
26	Electronic interaction at the TiO2â€"Al2O3 interface as observed by X-ray absorption spectroscopy. Surface Science, 2001, 482-485, 470-475.	1.9	25
27	Study of the growth of NiO on highly oriented pyrolytic graphite by X-ray absorption spectroscopy. Journal of Electron Spectroscopy and Related Phenomena, 2007, 156-158, 111-114.	1.7	25
28	Oxidation post-treatment of hard AlTiN coating for machining of hardened steels. Surface and Coatings Technology, 2009, 204, 256-262.	4.8	24
29	Ultrathin Free-Standing Oxide Membranes for Electron and Photon Spectroscopy Studies of Solidâ€"Gas and Solidâ€"Liquid Interfaces. Nano Letters, 2020, 20, 6364-6371.	9.1	24
30	Resonant photoemission characterization of SnO. Physical Review B, 1999, 60, 11171-11179.	3.2	23
31	The growth of cobalt oxides on HOPG and SiO2 surfaces: A comparative study. Surface Science, 2014, 624, 145-153.	1.9	22
32	An XPS study of Cs2Te photocathode materials. Surface and Interface Analysis, 1990, 16, 193-198.	1.8	21
33	Electronic structure of insulatingZr3N4studied by resonant photoemission. Physical Review B, 1995, 51, 17984-17987.	3.2	21
34	Surface Functionalization of Nanostructured Porous Silicon by APTS: Toward the Fabrication of Electrical Biosensors of Bacterium Escherichia coli. Current Nanoscience, 2011, 7, 178-182.	1.2	20
35	The interaction of nitrogen with titanium studied by soft X-ray absorption spectroscopy: adsorption versus implantation. Surface Science, 1993, 281, 120-126.	1.9	19
36	Electronic structure and chemical characterization of ultrathin insulating films. Thin Solid Films, 1998, 332, 209-214.	1.8	16

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37	Growth and Structure of Self-assembled Monolayers of a TTF Derivative on Au(111). Journal of Physical Chemistry C, 2010, 114, 6503-6510.	3.1	16
38	Pursuit of optimal synthetic conditions for obtaining colloidal zero-valent iron nanoparticles by scanning pulsed laser ablation in liquids. Journal of Industrial and Engineering Chemistry, 2020, 81, 340-351.	5.8	15
39	Thermal annealing of defects in highly defective NiO nanoparticles studied by X-ray and electron spectroscopies. Chemical Physics Letters, 1997, 266, 184-188.	2.6	14
40	Study of the growth of ultrathin films of NiO on Cu(111). Surface and Interface Analysis, 2000, 30, 396-400.	1.8	14
41	Resonant photoemission of TiN films. Physical Review B, 2001, 63, .	3.2	14
42	Atomic force microscope study of the early stages of NiO deposition on graphite and mica. Thin Solid Films, 1998, 317, 59-63.	1.8	13
43	Correlation between bonding structure and mechanical properties of amorphous carbon nitride thin films. Surface and Coatings Technology, 2000, 125, 284-288.	4.8	13
44	X-ray absorption study of the local structure atÂtheÂNiO/oxide interfaces. Journal of Synchrotron Radiation, 2013, 20, 635-640.	2.4	13
45	Resonant Photoemission and X-ray Absorption Study of the Electronic Structure of the TiO2â^'Al2O3 Interface. Langmuir, 2001, 17, 7339-7343.	3.5	12
46	Hexagonally-arranged-nanoporous and continuous NiO films with varying electrical conductivity. Applied Surface Science, 2013, 276, 832-837.	6.1	12
47	A Comparative Study of the ZnO Growth on Graphene and Graphene Oxide: The Role of the Initial Oxidation State of Carbon. Journal of Carbon Research, 2020, 6, 41.	2.7	12
48	On the photoconductivity of copper sulphide polycrystalline thin films. Solar Energy Materials and Solar Cells, 1985, 12, 149-155.	0.4	10
49	Interaction of Cesium-Potassium Antimonide Photocathode Materials with Oxygen: an X-Ray Photoelectron Spectroscopy Study. Japanese Journal of Applied Physics, 1993, 32, 4737-4744.	1.5	10
50	Electronic structure of TiO2 monolayers grown on Al2O3 and MgO studied by resonant photoemission spectroscopy. Surface Science, 2002, 507-510, 672-677.	1.9	10
51	Core-level electronic properties of nanostructured NiO coatings. Applied Surface Science, 2007, 254, 278-280.	6.1	10
52	Interface effects in the electronic structure of TiO2 deposited on MgO, Al2O3 and SiO2 substrates. Surface Science, 2011, 605, 539-544.	1.9	10
53	Composition of oxides and nitrides from line shapes of metal core level x-ray photoelectron spectra. Surface and Interface Analysis, 1992, 19, 205-210.	1.8	9
54	The bremsstrahlung isochromat spectra of d0 transition-metal oxides. Solid State Communications, 1994, 91, 551-554.	1.9	9

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55	Study of the early stages of growth of Co oxides on oxide substrates. Surface and Interface Analysis, 2014, 46, 975-979.	1.8	9
56	Growth and characterization of ZnO thin films at low temperatures: from room temperature to â^’Â120ÂÂ°C. Journal of Alloys and Compounds, 2021, 884, 161056.	5.5	9
57	Nanopatterning on highly oriented pyrolytic graphite surfaces promoted by cobalt oxides. Carbon, 2015, 85, 89-98.	10.3	8
58	An XPS investigation on the influence of the substrate and growth conditions on pyrite thin films surface composition. Applied Surface Science, 2019, 492, 651-660.	6.1	8
59	Controlled ultra-thin oxidation of graphite promoted by cobalt oxides: Influence of the initial 2D CoO wetting layer. Applied Surface Science, 2020, 509, 145118.	6.1	8
60	Hydrothermal control of the lithium-rich Li₂MnO₃ phase in lithium manganese oxide nanocomposites and their application as precursors for lithium adsorbents. Dalton Transactions, 2021, 50, 10765-10778.	3.3	8
61	Multiple-length-scale small-angle X-ray scattering analysis on maghemite nanocomposites. Journal of Applied Crystallography, 2007, 40, s696-s700.	4.5	7
62	Electronic Decoupling of Graphene from Copper Induced by Deposition of ZnO: A Complex Substrate/Graphene/Deposit/Environment Interaction. Advanced Materials Interfaces, 2020, 7, 1902062.	3.7	7
63	Dielectric and structural characteristics of Ta2O5 anodic films formed in phosphoric acid electrolytes. Journal of Materials Science, 1987, 22, 1785-1789.	3.7	6
64	Electronic Structure and Size of TiO 2 Nanoparticles of Controlled Size Prepared by Aerosol Methods. Monatshefte FÃ¼r Chemie, 2002, 133, 849-857.	1.8	6
65	Factor analysis applied to the study of valence band resonant photoemission spectra in transition-metal compounds. Surface and Interface Analysis, 2002, 34, 244-247.	1.8	6
66	Study of the morphology of NiO nanostructures grown on highly ordered pyrolytic graphite, by the Tougaard method and atomic force microscopy: a comparative study. Surface and Interface Analysis, 2010, 42, 869-873.	1.8	6
67	Study of the Interface of the Early Stages of Growth under Quasiâ€Equilibrium Conditions of ZnO on Graphene/Cu and Graphite. Advanced Materials Interfaces, 2019, 6, 1801689.	3.7	6
68	Thermal induced depletion of cationic vacancies in NiO thin films evidenced by x-ray absorption spectroscopy at the O 1s threshold. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2020, 38, .	2.1	6
69	PasivaciÃ³n de aceros inoxidables dÃºplex en disoluciones que simulan el hormigÃ³n contaminado con cloruros. Materiales De Construccion, 2007, 57, .	0.7	6
70	Oxidation of Cs2Te with superficial Te clusters studied by XPS. Surface Science, 1991, 251-252, 1075-1080.	1.9	5
71	X-ray absorption spectroscopy study at the SiK-edge of tungsten carbideâ€“silicon carbide thin films. Scripta Materialia, 2007, 56, 1011-1014.	5.2	5
72	Silver nanopillar coatings grown by glancing angle magnetron sputtering for reducing multipactor effect in spacecrafts. Applied Surface Science, 2020, 526, 146699.	6.1	5

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73	Re-Oxidation of ZnO Clusters Grown on HOPG. Coatings, 2020, 10, 401.	2.6	4
74	Imaging the Kirkendall effect in pyrite (FeS2) thin films: Cross-sectional microstructure and chemical features. Acta Materialia, 2021, 205, 116582.	7.9	4
75	Catalytic oxidation of Mo by caesium oxides. Surface and Interface Analysis, 1992, 19, 553-558.	1.8	3
76	Study of ammonium fluoride passivation time on CdZnTe bulk crystal wafers. Crystal Research and Technology, 2011, 46, 659-663.	1.3	3
77	Effects of grain refinement and disorder on the electronic properties of nanocrystalline NiO. Journal of Materials Science, 2014, 49, 2773-2780.	3.7	3
78	Ultra-thin CoO films grown on different oxide substrates: Size and support effects and chemical stability. Journal of Alloys and Compounds, 2018, 758, 5-13.	5.5	3
79	In-situ study of the carbon gasification reaction of highly oriented pyrolytic graphite promoted by cobalt oxides and the novel nanostructures appeared after reaction. Carbon, 2020, 158, 588-597.	10.3	3
80	3pâ†'3d resonant photoemission spectroscopy of a TiO2 sub-monolayer grown on Al2O3. Surface Science, 2004, 566-568, 515-519.	1.9	2
81	Influence of chemical and electronic inhomogeneities of graphene/copper on the growth of oxide thin films: the ZnO/graphene/copper case. Nanotechnology, 2021, 32, 245301.	2.6	1
82	Optical characterization procedure for large thin films. , 2007, 6617, 312.		0
83	Coercivity and morphology in Fe/NiO films deposited on nanoporous Al2O3 membranes. Boletin De La Sociedad Espanola De Ceramica Y Vidrio, 2015, 54, 241-246.	1.9	0
84	Magnetization reversal mechanisms in Fe/NiO bilayers grown onto nanoporous alumina membranes and Si wafers. AIP Advances, 2020, 10, 015113.	1.3	0
85	Electronic Structure and Size of TiO2 Nanoparticles of Controlled Size Prepared by Aerosol Methods. , 2002, , 113-121.		0