Maria Francisca Lopez Fagundez

List of Publications by Year
in descending order

104 papers	3,762 citations	186209 28 h-index	138417 58 g-index
104 all docs	104 docs citations	104 times ranked	5843 citing authors

#	Article	IF	Citations
1	Controlled-valence properties ofLa1â^'xSrxFeO3andLa1â^'xSrxMnO3studied by soft-x-ray absorption spectroscopy. Physical Review B, 1992, 46, 4511-4519.	1.1	619
2	Production and processing of graphene and related materials. 2D Materials, 2020, 7, 022001.	2.0	333
3	Fullerenes from aromatic precursors by surface-catalysed cyclodehydrogenation. Nature, 2008, 454, 865-868.	13.7	291
4	Doping-induced changes in the electronic structure ofLaxSr1â^'xTiO3: Limitation of the one-electron rigid-band model and the Hubbard model. Physical Review B, 1992, 46, 9841-9844.	1.1	170
5	On-surface synthesis of cyclic organic molecules. Chemical Society Reviews, 2011, 40, 4578.	18.7	154
6	Differences between L3 and L2 xâ€ray absorption spectra of transition metal compounds. Journal of Chemical Physics, 1994, 101, 6570-6576.	1.2	134
7	In vitro corrosion behaviour of titanium alloys without vanadium. Electrochimica Acta, 2002, 47, 1359-1364.	2.6	129
8	Electrochemical growth of Acidithiobacillus ferrooxidans on a graphite electrode for obtaining a biocathode for direct electrocatalytic reduction of oxygen. Biosensors and Bioelectronics, 2010, 26, 877-880.	5.3	113
9	Corrosion study of surface-modified vanadium-free titanium alloys. Electrochimica Acta, 2003, 48, 1395-1401.	2.6	94
10	Structure of RutileTiO2(110)â^'(1Ã—2): Formation ofTi2O3Quasi-1D Metallic Chains. Physical Review Letters, 2006, 96, 055502.	2.9	60
11	Surface characterization of new non-toxic titanium alloys for use as biomaterials. Surface Science, 2001, 482-485, 300-305.	0.8	58
12	Tailored Formation of N-Doped Nanoarchitectures by Diffusion-Controlled on-Surface (Cyclo)Dehydrogenation of Heteroaromatics. ACS Nano, 2013, 7, 3676-3684.	7.3	52
13	AFM and SEM characterization of non-toxic vanadium-free Ti alloys used as biomaterials. Applied Surface Science, 2003, 220, 79-87.	3.1	51
14	X-Ray Photoelectron Spectroscopy Study on the Chemical Composition of Copper Tarnish Products Formed at Low Humidities. Journal of the Electrochemical Society, 2001, 148, E26.	1.3	50
15	Operando Studies of the Catalytic Hydrogenation of Ethylene on Pt(111) Single Crystal Surfaces. ACS Catalysis, 2012, 2, 2259-2268.	5.5	50
16	Highly selective covalent organic functionalization of epitaxial graphene. Nature Communications, 2017, 8, 15306.	5.8	45
17	Resonant Photoemission vs. Coster-Kronig Auger Decay At the L _{III} Thresholds of Ni Metal and CuO. Europhysics Letters, 1992, 20, 357-362.	0.7	42
18	Corrosion behaviour of an Fe3Al-type intermetallic in a chloride containing solution. Intermetallics, 1999, 7, 185-191.	1.8	41

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19	Planar Growth of Pentacene on the Dielectric TiO₂(110) Surface. Journal of Physical Chemistry C, 2011, 115, 4664-4672.	1.5	40
20	On-Surface Hydrogen-Induced Covalent Coupling of Polycyclic Aromatic Hydrocarbons via a Superhydrogenated Intermediate. Journal of the American Chemical Society, 2019, 141, 3550-3557.	6.6	40
21	Chemical analysis of passive films on type AISI 304 stainless steel using soft X-ray absorption spectroscopy. Corrosion Science, 1998, 40, 431-438.	3.0	39
22	Corrosion behaviour of amorphous Feî—¸Crî—¸Niî—¸(Si,P) alloys. Electrochimica Acta, 1997, 42, 659-665.	2.6	38
23	X-ray absorption spectroscopy study of pulsed-laser-evaporated amorphous carbon films. Applied Physics A: Materials Science and Processing, 1995, 61, 111-114.	1.1	34
24	Soft x-ray absorption spectroscopy study of oxide layers on titanium alloys. Surface and Interface Analysis, 2002, 33, 570-576.	0.8	34
25	Understanding atomic-resolved STM images on TiO₂(110)-(1 Ã— 1) surface by DFT calculations. Nanotechnology, 2010, 21, 405702.	1.3	33
26	Corrosion behaviour of FeAl-type intermetallic compounds. Electrochimica Acta, 1998, 43, 671-678.	2.6	32
27	Chemistry below graphene: Decoupling epitaxial graphene from metals by potential-controlled electrochemical oxidation. Carbon, 2018, 129, 837-846.	5.4	30
28	Comparative study of the corrosion behavior of MA-956 and conventional metallic biomaterials. , 1996, 31, 313-317.		29
29	High-quality PVD graphene growth by fullerene decomposition on Cu foils. Carbon, 2017, 119, 535-543.	5.4	29
30	Surface elastic properties of Ti alloys modified for medical implants: A force spectroscopy study. Acta Biomaterialia, 2007, 3, 113-119.	4.1	28
31	Hard X-rays magnetic EXAFS. Physica B: Condensed Matter, 1995, 208-209, 751-754.	1.3	27
32	LEED-IV study of the rutileTiO2(110)â^'1Ã—2surface with a Ti-interstitial added-row reconstruction. Physical Review B, 2007, 75, .	1.1	27
33	Resonant photoemission at the 2p thresholds of Fe, Co, and Ni metal. European Physical Journal B, 1994, 95, 9-12.	0.6	26
34	X-ray absorption and Auger electron spectroscopy studies of the quality of diamond thin films grown by the oxy-acetylene flame method. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1997, 15, 294-297.	0.9	26
35	Weakly Interacting Molecular Layer of Spinning C₆₀ Molecules on TiO₂ (110) Surfaces. Chemistry - A European Journal, 2012, 18, 7382-7387.	1.7	26
36	Influence of Au doping on electrical properties of CVD graphene. Carbon, 2016, 100, 625-631.	5.4	26

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37	Nanomechanical properties of surface-modified titanium alloys for biomedical applications. Acta Biomaterialia, 2008, 4, 1545-1552.	4.1	25
38	Vacancy formation on C60/Pt (111): unraveling the complex atomistic mechanism. Nanotechnology, 2014, 25, 385602.	1.3	25
39	In vitro biocompatibility evaluation of surfaceâ€modified titanium alloys. Journal of Biomedical Materials Research - Part A, 2010, 92A, 1623-1634.	2.1	24
40	Sequential formation of N-doped nanohelicenes, nanographenes and nanodomes by surface-assisted chemical (cyclo)dehydrogenation of heteroaromatics. Chemical Communications, 2014, 50, 1555.	2.2	23
41	Cyclic voltammetry and XPS studies of monolayers deposited on gold and platinum electrodes displaced by mercaptopyridines.. Journal of Electroanalytical Chemistry, 1997, 435, 241-254.	1.9	22
42	Surface characterization of the oxide layer grown on Tïï£¿Nbï£¿Zr and Tïï£¿Nbï£¿Al alloys. Surface and Interface Analysis, 2004, 36, 977-980.	0.8	21
43	Commensurate Growth of Densely Packed PTCDI Islands on the Rutile TiO2(110) Surface. Journal of Physical Chemistry C, 2013, 117, 12639-12647.	1.5	21
44	Soft X-ray absorption spectroscopy study of the effects of Si, Ce, and Mo ion implantation on the passive layer of AISI 304 stainless steel. Corrosion Science, 2003, 45, 2043-2053.	3.0	20
45	Influence of thermal ageing on surface degradation of ethyleneâ€propyleneâ€diene elastomer. Journal of Applied Polymer Science, 2011, 119, 242-251.	1.3	20
46	Valence band electronic structure characterization of the rutile TiO2 (110)-(1Ã—2) reconstructed surface. Surface Science, 2013, 608, 92-96.	0.8	19
47	Sublattice Localized Electronic States in Atomically Resolved Graphene-Pt(111) Edge-Boundaries. ACS Nano, 2014, 8, 3590-3596.	7.3	19
48	Surface analysis of a heat-treated, Al-containing, iron-based superalloy. Journal of Materials Research, 1998, 13, 3411-3416.	1.2	18
49	Role of the Pinning Points in epitaxial Graphene MoirÃ© Superstructures on the Pt(111) Surface. Scientific Reports, 2016, 6, 20354.	1.6	18
50	Resonant photoemission in highly localized versus weakly localized solids. European Physical Journal B, 1994, 94, 1-2.	0.6	17
51	Angle-resolved resonant photoemission at theMIIIabsorption threshold of Co and Fe metal. Physical Review B, 1997, 56, 1111-1113.	1.1	17
52	XPS characterization of surface modified titanium alloys for use as biomaterials. Vacuum, 2011, 85, 1076-1079.	1.6	17
53	Chemistry and temperature-assisted dehydrogenation of C60H30 molecules on TiO2(110) surfaces. Nanoscale, 2013, 5, 11058.	2.8	17
54	Chemisorption of Pentacene on Pt(111) with a Little Molecular Distortion. Journal of Physical Chemistry C, 2017, 121, 22797-22805.	1.5	17

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55	First Experimental Evidence of a C-1 s Core Exciton in Amorphous Carbon Films. Europhysics Letters, 1995, 31, 299-303.	0.7	16
56	Reply to Comment by L. H. Tjeng on â€œResonant Photoemission vs. Coster-Kronig Auger Decay at the L III Thresholds of Ni Metal and CuOâ€• Europhysics Letters, 1993, 23, 538-540.	0.7	14
57	Soft x-ray absorption spectroscopy study of electrochemically formed passive layers on AISI 304 and 316L stainless steels. Journal of Materials Research, 1999, 14, 763-770.	1.2	14
58	Growth of subnanometer-thin Si overlayer on TiO2 (110)-(1Ã—2) surface. Applied Surface Science, 2004, 234, 497-502.	3.1	13
59	Surface microstructure of the oxide protective layers grown on vanadium-free Ti alloys for use in biomedical applications. Surface Science, 2006, 600, 3780-3784.	0.8	13
60	Onâ€Surface Bottomâ€Up Synthesis of Azine Derivatives Displaying Strong Acceptor Behavior. Angewandte Chemie - International Edition, 2018, 57, 8582-8586.	7.2	13
61	Resonant photoemission versus incoherent superposition of Auger and photoemission signals. Journal of Electron Spectroscopy and Related Phenomena, 1995, 71, 73-77.	0.8	12
62	Oxidation behaviour of Al-alloyed ZrSi2 at 700Â°C. Intermetallics, 2000, 8, 1393-1398.	1.8	12
63	Ultra-thin Si overlayers on the TiO2 (110)-(1Ã—2) surface: Growth mode and electronic properties. Surface Science, 2006, 600, 2696-2704.	0.8	12
64	Effects of spin-dependent spectral weight on magnetic circular x-ray dichroism: Applications toR(NixCo1â^'x)5intermetallic compounds. Physical Review B, 1995, 51, 15957-15963.	1.1	11
65	Effects of Ce, Mo and Si ion implantation on the passive layer composition and high-temperature oxidation behaviour of AISI 304 stainless-steel studied by soft x-ray absorption spectroscopy. Surface and Interface Analysis, 2000, 30, 130-134.	0.8	11
66	Formation and stability of the Cu(110)+c(2Ã—2)-Si surface alloy studied by high resolution XPS. Surface Science, 2000, 454-456, 778-782.	0.8	11
67	Surface modification of ion-implanted AISI 304 stainless steel after oxidation process: X-ray absorption spectroscopy analysis. Thin Solid Films, 2002, 415, 258-265.	0.8	11
68	Thermal oxidation of vanadium-free Ti alloys: An X-ray photoelectron spectroscopy study. Materials Science and Engineering C, 2010, 30, 465-471.	3.8	11
69	Densely Packed Perylene Layers on the Rutile TiO₂(110)-(1 Ã— 1) Surface. Journal of Physical Chemistry C, 2015, 119, 7809-7816.	1.5	11
70	XPS study of the displacement of an electrodeposited Cu monolayer on Pt by mercaptopyridines. Surface Science, 1999, 430, 206-212.	0.8	10
71	Oxygen intercalation in PVD graphene grown on copper substrates: A decoupling approach. Applied Surface Science, 2020, 529, 147100.	3.1	10
72	X-ray-absorption spectroscopy study of the partial devitrification of amorphousNi80B20and the formation of amorphous nickel. Physical Review B, 1997, 56, 5039-5041.	1.1	9

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73	Small Pt nanoparticles on the TiO2 (110)â€“(1Ã—2) surface. Surface Science, 2013, 607, 159-163.	0.8	9
74	Versatile Graphene-Based Platform for Robust Nanobiohybrid Interfaces. ACS Omega, 2019, 4, 3287-3297.	1.6	9
75	Synchrotron radiation photoemission study of the passive layers of heat treated Fe3Al-type alloy. Solid State Communications, 1997, 101, 575-580.	0.9	8
76	Structure of MgO/V/MgO(001) thin films studied by the combination of X-ray photoemission and ion beam analysis techniques. Surface Science, 2006, 600, 497-506.	0.8	8
77	Adsorption and coupling of 4-aminophenol on Pt(111) surfaces. Surface Science, 2016, 646, 5-12.	0.8	8
78	Structural characterization of as-grown and quasi-free standing graphene layers on SiC. Applied Surface Science, 2019, 466, 51-58.	3.1	8
79	Coherence versus incoherence of photoemission and Auger signals at resonance. Surface Science, 1994, 307-309, 907-911.	0.8	7
80	Effect of Mineral Compounds in Phosphoric Acid Polluted by Sulfide Ions on Corrosion of Nickel. Corrosion, 1999, 55, 576-581.	0.5	7
81	Onâ€Surface Bottomâ€Up Synthesis of Azine Derivatives Displaying Strong Acceptor Behavior. Angewandte Chemie, 2018, 130, 8718-8722.	1.6	7
82	Comparative study of the oxide scale thermally grown on titanium alloys by ion beam analysis techniques and scanning electron microscopy. Journal of Materials Research, 2008, 23, 2245-2253.	1.2	6
83	Resonant 3p and 3s core-level photoemission at the 2p thresholds of Ni and Co metal. Solid State Communications, 1995, 94, 673-676.	0.9	5
84	Effects of Mercaptopyridines on the Underpotential and Overpotential Deposition of Copper on Pt(111). Langmuir, 1999, 15, 7014-7021.	1.6	5
85	X-ray photoelectron spectroscopy study of thiols adsorbed on Pt(111) with and without the presence of a copper monolayer. Surface and Interface Analysis, 2000, 30, 359-363.	0.8	5
86	Physicochemical Characterization of Acidiphilium sp. Biofilms. ChemPhysChem, 2013, 14, 1237-1244.	1.0	5
87	Antiphase Boundaries Accumulation Forming a New C₆₀ Decoupled Crystallographic Phase on the Rutile TiO₂(110)-(1 Ã— 1) Surface. Journal of Physical Chemistry C, 2014, 118, 27318-27324.	1.5	5
88	Onâ€Surface Driven Formal Michael Addition Produces m â€Polyaniline Oligomers on Pt(111). Angewandte Chemie - International Edition, 2020, 59, 23220-23227.	7.2	5
89	Applications of soft X-ray absorption spectroscopy to the study of passive and oxide layers on stainless steels: influence of ion implantation. Journal of Electron Spectroscopy and Related Phenomena, 2001, 114-116, 825-829.	0.8	4
90	On-surface self-organization of a robust metalâ€“organic cluster based on copper(<scp>i</scp>) with chloride and organosulphur ligands. Chemical Communications, 2015, 51, 3243-3246.	2.2	4

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91	Tailored graphenic structures directly grown on titanium oxide boost the interfacial charge transfer. Applied Surface Science, 2020, 504, 144439.	3.1	4
92	Spectroscopic characterization of the on-surface induced (cyclo)dehydrogenation of a N-heteroaromatic compound on noble metal surfaces. Physical Chemistry Chemical Physics, 2017, 19, 22454-22461.	1.3	3
93	Spectator states in resonant photoemission of Eu and Gd metal. Journal of Physics Condensed Matter, 1997, 9, 6113-6118.	0.7	2
94	A photoelectron diffraction method to evaluate in-plane atomic distances at surfaces: the two atoms approximation. Surface Science, 1999, 429, 298-308.	0.8	2
95	Thermal behaviour of the O2/TiO2 (110)â€“(1ÂÃ—Â2) surface. Vacuum, 2011, 85, 1056-1058.	1.6	2
96	Role of the Metal Surface on the Room Temperature Activation of the Alcohol and Amino Groups of p-Aminophenol. Journal of Physical Chemistry C, 2020, 124, 19655-19665.	1.5	2
97	X-ray absorption spectroscopy study of pulsed-laser-evaporated amorphous carbon films. Applied Physics A: Materials Science and Processing, 1995, 61, 111-114.	1.1	2
98	Corrosion study of the passive film of amorphous Fe-Cr-Ni-(Si, P, B) alloys. Revista De Metalurgia, 1996, 32, 375-380.	0.1	2
99	On-Surface Thermal Stability of a Graphenic Structure Incorporating a Tropone Moiety. Nanomaterials, 2022, 12, 488.	1.9	2
100	Onâ€Surface Driven Formal Michael Addition Produces m â€Polyaniline Oligomers on Pt(111). Angewandte Chemie, 2020, 132, 23420-23427.	1.6	1
101	CaracterizaciÃ³n de la superaleaciÃ³n ODS MA 956 para aplicaciones biomÃ©dicas. Revista De Metalurgia, 1998, 34, 83-85.	0.1	1
102	RESONANT PHOTOEMISSION AT THE LIII THRESHOLD IN CuO. International Journal of Modern Physics B, 1993, 07, 349-352.	1.0	0
103	An Evolutionary Algorithm for the Surface Structure Problem. Lecture Notes in Computer Science, 2009, , 280-283.	1.0	0
104	Effects of Spin-Dependent Spectral Weight on Magnetic Circular X-Ray Dichroism: Application to R(Ni_xCo_{1-x})₅Intermetallic Compounds. European Physical Journal Special Topics, 1997, 7, C2-447-C2-448.	0.2	0