Juan de la Figuera

List of Publications by Year
in descending order

120	3,123	31	49
papers	citations	h-index	g-index
		147801	197818

122	122	122	2803
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	RBS/Channeling characterization of Ru(0001) and thin epitaxial Ru/Al<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e354" altimg="si44.svg"><mml:msub><mml:mrow /><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:math>O<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e362" altimg="si45.svg"><mml:msub><mml:mrow /><mml:mrow><mml:mn>3</mml:mn></mml:mrow></mml:ms	6.1	2
2	Growth and characterization of ultrathin cobalt ferrite films on Pt(111). Applied Surface Science, 2022, 586, 152672.	6.1	4
3	Dynamics of Li deposition on epitaxial graphene/Ru(0001) islands. Applied Surface Science, 2022, 593, 153274.	6.1	1
4	Magnetic domain wall pinning in cobalt ferrite microstructures. Applied Surface Science, 2022, , 154045.	6.1	6
5	Uncorrelated magnetic domains in decoupled SrFe₁₂O₁₉/Co hard/soft bilayers. Journal Physics D: Applied Physics, 2021, 54, 054003.	2.8	3
6	Different spin axis orientation and large antiferromagnetic domains in Fe-doped NiO/Ru(0001) epitaxial films. Nanoscale, 2020, 12, 21225-21233.	5.6	7
7	Influence of the growth conditions on the magnetism of SrFe₁₂O₁₉ thin films and the behavior of Co/SrFe₁₂O₁₉ bilayers. Journal Physics D: Applied Physics, 2020, 53, 344002.	2.8	6
8	A real-time XAS PEEM study of the growth of cobalt iron oxide on Ru(0001). Journal of Chemical Physics, 2020, 152, 074704.	3.0	4
9	Combining high temperature sample preparation and in-situ magnetic fields in XPEEM. Ultramicroscopy, 2020, 214, 113010.	1.9	4
10	Strontium hexaferrite platelets: a comprehensive soft X-ray absorption and MÃ¶ssbauer spectroscopy study. Scientific Reports, 2019, 9, 11777.	3.3	35
11	Tuning the NÃ©el temperature in an antiferromagnet: the case of NixCo1â^'xO microstructures. Scientific Reports, 2019, 9, 13584.	3.3	15
12	Highly oriented (111) CoO and Co3O4 thin films grown by ion beam sputtering. Journal of Alloys and Compounds, 2019, 810, 151912.	5.5	28
13	Metastable misfit dislocations during thin-film growth: The case of Cu on Ru(0001). Surface Science, 2019, 682, 43-50.	1.9	4
14	Self-assembly of iron oxide precursor micelles driven by magnetic stirring time in solâ€"gel coatings. RSC Advances, 2019, 9, 17571-17580.	3.6	22
15	Magnetite and the Verwey transition, from Î³-rays to low-energy electrons. Hyperfine Interactions, 2019, 240, 1.	0.5	3
16	Influence of the manganese substitution on the cation distribution and magnetic structure of the spinel-related LiFe1-xMn1â€‰+â€‰xO4 (xâ€‰=â€‰0.00, 0.25, 0.50, 0.75) system. Hyperfine Interactions, 2019, 240, 1.	0.5	3
17	Evidence of anomalous switching of the in-plane magnetic easy axis with temperature in Fe₃O₄ film on SrTiO₃:Nb by v-MOKE and ferromagnetic resonance. Nanoscale, 2019, 11, 19870-19876.	5.6	3
18	Bulk and surface characterisation of micrometer-thick cobalt ferrite films grown by IR PLD. Applied Surface Science, 2019, 470, 917-922.	6.1	14

#	Article	IF	Citations
19	Epitaxial integration of CoFe2O4 thin films on Si (001) surfaces using TiN buffer layers. Applied Surface Science, 2018, 436, 1067-1074.	6.1	15
20	Memory effect and magnetocrystalline anisotropy impact on the surface magnetic domains of magnetite(001). Scientific Reports, 2018, 8, 5991.	3.3	7
21	Geometrically defined spin structures in ultrathin Fe₃O₄with bulk like magnetic properties. Nanoscale, 2018, 10, 5566-5573.	5.6	21
22	Structure and magnetism of ultrathin nickel-iron oxides grown on Ru(0001) by high-temperature oxygen-assisted molecular beam epitaxy. Scientific Reports, 2018, 8, 17980.	3.3	27
23	Exchange-spring behavior below the exchange length in hard-soft bilayers in multidomain configurations. Physical Review B, 2018, 98, .	3.2	13
24	Observation of a topologically protected state in a magnetic domain wall stabilized by a ferromagnetic chemical barrier. Scientific Reports, 2018, 8, 16695.	3.3	35
25	Effect of wavelength, deposition temperature and substrate type on cobalt ferrite thin films grown by pulsed laser deposition. Applied Surface Science, 2018, 452, 19-31.	6.1	29
26	Spectral green cathodoluminescence emission from surfaces of insulators with metal-hydroxyl bonds. Journal of Luminescence, 2017, 190, 128-135.	3.1	34
27	Unaltered reversible magnetic transition in Fe nanostructures upon ambient exposure. Ultramicroscopy, 2017, 181, 70-73.	1.9	1
28	Reprint of Unaltered reversible magnetic transition in Fe nanostructures upon ambient exposure. Ultramicroscopy, 2017, 183, 15-18.	1.9	0
29	The Verwey transition observed by spin-resolved photoemission electron microscopy. Applied Surface Science, 2017, 391, 66-69.	6.1	4
30	Origin of the magnetic transition at 100â€‰K in<i>Îµ</i>-Fe₂O₃nanoparticles studied by x-ray absorption fine structure spectroscopy. Journal of Physics Condensed Matter, 2017, 29, 485701.	1.8	13
31	Magnetism of epitaxial Tb films on W(110) studied by spin-polarized low-energy electron microscopy. Physical Review B, 2016, 94, .	3.2	4
32	Co on Fe3O4(001): Towards precise control of surface properties. Journal of Chemical Physics, 2016, 144, 094704.	3.0	28
33	Initial Stages of the Growth of Mixed Iron-cobalt Oxides on Ru(0001). Physics Procedia, 2016, 85, 12-19.	1.2	7
34	Growth, structure and magnetism of Îµ-Fe₂O₃in nanoparticle form. RSC Advances, 2016, 6, 46380-46387.	3.6	47
35	Fourfold in-plane magnetic anisotropy of magnetite thin films grown on TiN buffered Si(001) by ion-assisted sputtering. Journal of Materials Chemistry C, 2016, 4, 7632-7639.	5.5	7
36	Spin reorientation transition of magnetite (001). Physical Review B, 2016, 93, .	3.2	12

#	Article	IF	Citations
37	Structure and stability of ultrathin Fe films on W(110). Physical Review B, 2016, 93, .	3.2	6
38	Unconventional properties of nanometric FeO(111) films on Ru(0001): stoichiometry and surface structure. Journal of Materials Chemistry C, 2016, 4, 1850-1859.	5.5	24
39	Atomically Flat Ultrathin Cobalt Ferrite Islands. Advanced Materials, 2015, 27, 5955-5960.	21.0	26
40	MÃ¶ssbauer and Magnetic Properties of Coherently Mixed Magnetite-Cobalt Ferrite Grown by Infrared Pulsed-Laser Deposition. Croatica Chemica Acta, 2015, 88, 453-460.	0.4	12
41	Role of the substrate on the magnetic anisotropy of magnetite thin films grown by ion-assisted deposition. Applied Surface Science, 2015, 359, 742-748.	6.1	11
42	Spin and orbital magnetic moment of reconstructed<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msqrt><mml:mn>2</mml:mn></mml:msqrt><mml:mo>Ã—</ Physical Review B, 2015, 91, .	3.2	16
43	Reversible temperature-driven domain transition in bistable Fe magnetic nanostrips grown on Ru(0001). Physical Review B, 2015, 92, .	3.2	4
44	Nanocrystalline magnetite thin films grown by dual ion-beam sputtering. Journal of Alloys and Compounds, 2015, 636, 150-155.	5.5	6
45	Self-organized single crystal mixed magnetite/cobalt ferrite films grown by infrared pulsed-laser deposition. Applied Surface Science, 2015, 359, 480-485.	6.1	11
46	Oxidation of Magnetite(100) to Hematite Observed by in Situ Spectroscopy and Microscopy. Journal of Physical Chemistry C, 2014, 118, 19768-19777.	3.1	39
47	Stoichiometric magnetite grown by infrared nanosecond pulsed laser deposition. Applied Surface Science, 2013, 282, 642-651.	6.1	17
48	Determination of the surface structure of CeO2(111) by low-energy electron diffraction. Journal of Chemical Physics, 2013, 139, 114703.	3.0	12
49	Real-space imaging of the Verwey transition at the (100) surface of magnetite. Physical Review B, 2013, 88, .	3.2	21
50	Synthesis and characterisation of the n=2 Ruddlesdenâ€“Popper phases Ln2Sr(Ba)Fe2O7 (Ln=La, Nd, Eu). Materials Research Bulletin, 2013, 48, 3537-3544.	5.2	20
51	Micromagnetism in (001) magnetite by spin-polarized low-energy electron microscopy. Ultramicroscopy, 2013, 130, 77-81.	1.9	20
52	Effects of low energy ion bombardment on the formation of cubic iron mononitride thin films. Thin Solid Films, 2013, 539, 35-40.	1.8	9
53	Insight into Magnetiteâ€™s Redox Catalysis from Observing Surface Morphology during Oxidation. Journal of the American Chemical Society, 2013, 135, 10091-10098.	13.7	53
54	Initial stages of FeO growth on Ru(0001). Journal of Physics Condensed Matter, 2013, 25, 484001.	1.8	17

#	Article	IF	Citations
55	Room temperature in-plane âŸ¨100âŸ© magnetic easy axis for Fe3O4/SrTiO3(001):Nb grown by infrared pulsed laser deposition. Journal of Applied Physics, 2013, 114, .	2.5	37
56	Order-disorder phase transition on the (100) surface of magnetite. Physical Review B, 2013, 88, .	3.2	22
57	Hydrogen-induced reversible spin-reorientation transition and magnetic stripe domain phase in bilayer Co on Ru(0001). Physical Review B, 2012, 85, .	3.2	14
58	CO-Assisted Subsurface Hydrogen Trapping in Pd(111) Films. Journal of Physical Chemistry Letters, 2012, 3, 87-91.	4.6	16
59	Oxidation Pathways in Bicomponent Ultrathin Iron Oxide Films. Journal of Physical Chemistry C, 2012, 116, 11539-11547.	3.1	44
60	Magnetism in nanometer-thick magnetite. Physical Review B, 2012, 85, .	3.2	71
61	MÃ¶ssbauer spectroscopic study of ironâ€"nickel nitrides thin films prepared by ion beam assisted deposition. Hyperfine Interactions, 2011, 202, 47-55.	0.5	0
62	Real-space study of the growth of magnesium on ruthenium. Surface Science, 2011, 605, 903-911.	1.9	8
63	Valence band circular dichroism in non-magnetic Ag/Ru(0001) at normal emission. Journal of Physics Condensed Matter, 2011, 23, 305006.	1.8	4
64	Structure of ultrathin Pd films determined by low-energy electron microscopy and diffraction. New Journal of Physics, 2010, 12, 023023.	2.9	15
65	Real Space Observations of Magnesium Hydride Formation and Decomposition. Chemistry of Materials, 2010, 22, 1291-1293.	6.7	5
66	Measuring the magnetization of three monolayer thick Co islands and films by x-ray dichroism. Physical Review B, 2009, 80, .	3.2	4
67	Structure and magnetism in ultrathin iron oxides characterized by low energy electron microscopy. Journal of Physics Condensed Matter, 2009, 21, 314011.	1.8	29
68	How metal films de-wet substratesâ€"identifying the kinetic pathways and energetic driving forces. New Journal of Physics, 2009, 11, 043001.	2.9	29
69	Structure and magnetism of ultra-thin chromium layers on W(110). New Journal of Physics, 2008, 10, 013005.	2.9	24
70	Noble metal capping effects on the spin-reorientation transitions of Co/Ru(0001). New Journal of Physics, 2008, 10, 073024.	2.9	34
71	Nanoscale Periodicity in Stripe-Forming Systems at High Temperature:<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Au</mml:mi><mml:mo>/</mml:mo><mml:mi mathvariant="normal">W</mml:mi><mml:mo stretchy="false">(</mml:mo><mml:mn>110</mml:mn><mml:mo) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 82 Td (stretchy="false"	7.8	18
72	An ultrahigh vacuum fast-scanning and variable temperature scanning tunneling microscope for large scale imaging. Review of Scientific Instruments, 2007, 78, 103701.	1.3	13

#	Article	IF	Citations
73	Labyrinthine Island Growth duringPd/Ru(0001)Heteroepitaxy. Physical Review Letters, 2007, 99, 106101.	7.8	22
74	Structure and morphology of ultrathinCo/Ru(0001) films. New Journal of Physics, 2007, 9, 80-80.	2.9	40
75	Imaging Spin-Reorientation Transitions in Consecutive Atomic Co Layers on Ru(0001). Physical Review Letters, 2006, 96, 147202.	7.8	68
76	Herringbone and triangular patterns of dislocations in Ag, Au, and AgAu alloy films on Ru(0001). Surface Science, 2006, 600, 1735-1757.	1.9	60
77	Determining the structure of Ru(0001) from low-energy electron diffraction of a single terrace. Surface Science, 2006, 600, L105-L109.	1.9	50
78	Electron reflectivity measurements of Ag adatom concentrations on W(110). Surface Science, 2006, 600, 4062-4066.	1.9	27
79	The Importance of Threading Dislocations on the Motion of Domain Boundaries in Thin Films. Science, 2005, 308, 1303-1305.	12.6	20
80	Enhanced Self-Diffusion on Cu(111) by Trace Amounts of S: Chemical-Reaction-Limited Kinetics. Physical Review Letters, 2004, 93, 166101.	7.8	54
81	Strain Relief through Heterophase Interface Reconstruction:Ag(111)/Ru(0001). Physical Review Letters, 2004, 92, 116102.	7.8	19
82	Properties of dislocation half loops inAu(100): Structure, formation energy, and diffusion barrier. Physical Review B, 2004, 70, .	3.2	2
83	Tailoring surface electronic states via strain to control adsorption: O/Cu/Ru(0001). Surface Science, 2004, 550, 65-72.	1.9	37
84	Interplay between gas adsorption and dislocation structure on a metal surface. Surface Science, 2003, 531, 29-38.	1.9	14
85	Glide and Climb of Dislocations in Ultra-Thin Metal Films. Materials Science Forum, 2003, 426-432, 3421-3426.	0.3	3
86	Dislocation Emission around Nanoindentations on a (001) fcc Metal Surface Studied by Scanning Tunneling Microscopy and Atomistic Simulations. Physical Review Letters, 2002, 88, 036101.	7.8	158
87	In-situ STM studies of strain-stabilized thin-film dislocation networks under applied stress. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 319-321, 914-918.	5.6	29
88	Determination of buried dislocation structures by scanning tunneling microscopy. Physical Review B, 2001, 63, .	3.2	24
89	Direct Observation of Misfit Dislocation Glide on Surfaces. Physical Review Letters, 2001, 86, 3819-3822.	7.8	36
90	Surface energetics in a heteroepitaxial model system: Co/Cu(111). Physical Review B, 2000, 62, 2126-2133.	3.2	48

#	Article	IF	Citations
91	Novel Microscopic Mechanism of Intermixing during Growth on Soft Metallic Substrates. Physical Review Letters, 2000, 84, 4397-4400.	7.8	32
92	Structural characterisation and homoepitaxial growth on Cu(111). Surface Science, 2000, 459, 191-205.	1.9	26
93	Identifying the forces responsible for self-organization of nanostructures at crystal surfaces. Nature, 1999, 397, 238-241.	27.8	169
94	Surface defects and reconstruction instabilities in Au(001). Surface Science, 1999, 429, L486-L491.	1.9	12
95	Multiplication of threading dislocations in strained metal films under sulfur exposure. Surface Science, 1999, 433-435, 93-98.	1.9	9
96	Thermal vibrations of a two-dimensional vacancy island crystal in a strained metal film. Surface Science, 1999, 433-435, 506-511.	1.9	10
97	A Prelude to Surface Chemical Reaction:â€‰ Imaging the Induction Period of Sulfur Interaction with a Strained Cu Layer. Journal of Physical Chemistry B, 1999, 103, 10557-10561.	2.6	29
98	Linking dislocation dynamics and chemical reactivity on strained metal films. Surface Science, 1998, 415, L993-L999.	1.9	15
99	STM characterization of extended dislocation configurations in Au(001). Physical Review B, 1998, 58, 1169-1172.	3.2	49
100	The structure of Co films on Cu(111) up to 15 ML. Surface Science, 1996, 352-354, 46-49.	1.9	31
101	Crystallography and morphology of the early stages of the growth of by LEED and STM. Surface Science, 1996, 349, L139-L145.	1.9	27
102	Crystallography and morphology of the early stages of the growth of by LEED and STM. Surface Science, 1996, 349, L139-L145.	1.9	43
103	Atomic Scale Engineering of Superlattices and Magnetic Wires. Materials Research Society Symposia Proceedings, 1995, 384, 49.	0.1	5
104	Fabrication of magnetic quantum wires by stepâ€flow growth of cobalt on copper surfaces. Applied Physics Letters, 1995, 66, 1006-1008.	3.3	87
105	Creation and motion of vacancy islands on solid surfaces: A direct view. Solid State Communications, 1994, 89, 815-818.	1.9	40
106	Surface etching and enhanced diffusion during the early stages of the growth of Co on Cu(111). Surface Science, 1994, 307-309, 538-543.	1.9	72
107	The Growth of Cobalt/Copper Epitaxial Layers and its Relationship to the Oscillatory Magnetic Coupling. , 1994, , 141-149.		0
108	Structural phase transition during heteroepitaxial growth of iron silicides on Si(111). Applied Surface Science, 1993, 70-71, 578-582.	6.1	8

#	Article	IF	Citations
109	Surface structure of ?-FeSi2(101) epitaxially grown on Si(111). Applied Physics A: Solids and Surfaces, 1993, 57, 477-482.	1.4	15
110	A structural characterization of the buffer layer for growth of magnetically coupled Co/Cu superlattices. Journal of Magnetism and Magnetic Materials, 1993, 121, 20-23.	2.3	1
111	Initial stages of the growth of Fe on Si(111)7Ã—7. Physical Review B, 1993, 47, 16048-16051.	3.2	84
112	Geometric and electronic structure of epitaxial iron silicides. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1993, 11, 929-933.	2.1	28
113	Scanning-tunneling-microscopy study of the growth of cobalt on Cu(111). Physical Review B, 1993, 47, 13043-13046.	3.2	237
114	On the Structural Quality of Co/Cu Trilayers and Superlattices: The Influence of the Template Layer. NATO ASI Series Series B: Physics, 1993, , 439-451.	0.2	0
115	Real-Space Imaging of the First Stages of FeSi ₂ Epitaxially Grown on Si(111): Nucleation and Atomic Structure. Europhysics Letters, 1992, 18, 595-600.	2.0	74
116	Surface morphology of semiconducting iron silicides grown on Si(111). Surface Science, 1992, 264, 45-54.	1.9	14
117	Growth of epitaxial iron disilicide on Si(100). Surface Science, 1992, 269-270, 1016-1021.	1.9	13
118	A new metastable epitaxial silicide: FeSi2/Si(111). Ultramicroscopy, 1992, 42-44, 845-850.	1.9	29
119	Surface characterization of epitaxial, semiconducting, FeSi2grown on Si(100). Applied Physics Letters, 1991, 59, 99-101.	3.3	45
120	Topical Review: Progress and Prospects of Hard Hexaferrites for Permanent Magnet Applications. Journal Physics D: Applied Physics, 0, , .	2.8	27