

Asuncion Fernandez

List of Publications by Year in descending order

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250
papers

10,779
citations

34076

52
h-index

43868

91
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264
all docs

264
docs citations

264
times ranked

11924
citing authors

#	ARTICLE	IF	CITATIONS
1	Permanent Magnetism, Magnetic Anisotropy, and Hysteresis of Thiol-Capped Gold Nanoparticles. <i>Physical Review Letters</i> , 2004, 93, 087204.	2.9	513
2	Preparation and characterization of TiO ₂ photocatalysts supported on various rigid supports (glass, Tj ETQq0 0 0 rgBT /Overlock 10 Tf 10). <i>Applied Catalysis B: Environmental</i> , 1995, 7, 49-63.	10.8	475
3	Characterization and photocatalytic activity in aqueous medium of TiO ₂ and Ag-TiO ₂ coatings on quartz. <i>Applied Catalysis B: Environmental</i> , 1997, 13, 219-228.	10.8	415
4	Gold Glyconanoparticles as Water-Soluble Polyvalent Models To Study Carbohydrate Interactions. <i>Angewandte Chemie - International Edition</i> , 2001, 40, 2257-2261.	7.2	354
5	The state of the oxygen at the surface of polycrystalline cobalt oxide. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 1995, 71, 61-71.	0.8	319
6	Gold Glyconanoparticles: Synthetic Polyvalent Ligands Mimicking Glycocalyx-Like Surfaces as Tools for Glycobiological Studies. <i>Chemistry - A European Journal</i> , 2003, 9, 1909-1921.	1.7	241
7	MgH with NbO as additive, for hydrogen storage: Chemical, structural and kinetic behavior with heating. <i>Acta Materialia</i> , 2006, 54, 105-110.	3.8	240
8	Spectroscopic characterization of quantum-sized TiO ₂ supported on silica: influence of size and TiO ₂ -SiO ₂ interface composition. <i>The Journal of Physical Chemistry</i> , 1995, 99, 1484-1490.	2.9	209
9	Formation of ⁵⁷ Fe ₂ O ₃ Isolated Nanoparticles in a Silica Matrix. <i>Langmuir</i> , 1997, 13, 3627-3634.	1.6	189
10	Improvement in H-sorption kinetics of MgH powders by using Fe nanoparticles generated by reactive FeF addition. <i>Scripta Materialia</i> , 2005, 52, 719-724.	2.6	174
11	Ferromagnetism in fcc Twinned 2.4Ånm Size Pd Nanoparticles. <i>Physical Review Letters</i> , 2003, 91, 237203.	2.9	172
12	Nanoecotoxicity effects of engineered silver and gold nanoparticles in aquatic organisms. <i>TrAC - Trends in Analytical Chemistry</i> , 2012, 32, 40-59.	5.8	167
13	Influence of the microstructure on the mechanical and tribological behavior of TiC/a-C nanocomposite coatings. <i>Thin Solid Films</i> , 2009, 517, 1662-1671.	0.8	152
14	Bonding structure in amorphous carbon nitride: A spectroscopic and nuclear magnetic resonance study. <i>Journal of Applied Physics</i> , 2001, 90, 675-681.	1.1	131
15	Hydrogen sorption improvement of nanocrystalline MgH ₂ by Nb ₂ O ₅ nanoparticles. <i>Scripta Materialia</i> , 2006, 54, 1293-1297.	2.6	129
16	Chemical and microstructural study of the oxygen passivation behaviour of nanocrystalline Mg and MgH ₂ . <i>Applied Surface Science</i> , 2006, 252, 2334-2345.	3.1	128
17	Nb ₂ O ₅ Pathway Effect on Hydrogen Sorption in Mg. <i>Journal of Physical Chemistry B</i> , 2006, 110, 7845-7850.	1.2	111
18	Spectroscopic characterization of TiO ₂ /SiO ₂ catalysts. <i>Journal of Catalysis</i> , 1988, 112, 489-494.	3.1	109

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19	Encapsulation of Nickel Nanoparticles in Carbon Obtained by the Sonochemical Decomposition of Ni(C ₈ H ₁₂) ₂ . Chemistry of Materials, 1999, 11, 1331-1335.	3.2	109
20	Surface plasmon resonance of capped Au nanoparticles. Physical Review B, 2005, 72, .	1.1	106
21	Tribological behaviour of titanium carbide/amorphous carbon nanocomposite coatings: From macro to the micro-scale. Surface and Coatings Technology, 2008, 202, 4011-4018.	2.2	99
22	An XPS study of dispersion and chemical state of MoO ₃ on Al ₂ O ₃ -TiO ₂ binary oxide support. Applied Catalysis A: General, 2001, 213, 279-288.	2.2	97
23	Characterization of V ₂ O ₅ /TiO ₂ ~ZrO ₂ Catalysts by XPS and Other Techniques. Journal of Physical Chemistry B, 1998, 102, 10176-10182.	1.2	96
24	Magnetron sputtering of Cr(Al)N coatings: Mechanical and tribological study. Surface and Coatings Technology, 2005, 200, 192-197.	2.2	90
25	Evidence of spin disorder at the surface~core interface of oxygen passivated Fe nanoparticles. Journal of Applied Physics, 1998, 84, 2189-2192.	1.1	86
26	XPS study of the surface carbonation/hydroxylation state of metal oxides. Applied Surface Science, 1990, 45, 103-108.	3.1	83
27	Supported Co catalysts prepared as thin films by magnetron sputtering for sodium borohydride and ammonia borane hydrolysis. Applied Catalysis B: Environmental, 2014, 158-159, 400-409.	10.8	82
28	Structure and tribological properties of MoCN-Ag coatings in the temperature range of 25~700 Å°C. Applied Surface Science, 2013, 273, 408-414.	3.1	80
29	Behaviour of Au-citrate nanoparticles in seawater and accumulation in bivalves at environmentally relevant concentrations. Environmental Pollution, 2013, 174, 134-141.	3.7	79
30	Boron Compounds as Stabilizers of a Complex Microstructure in a Co~C-based Catalyst for NaBH ₄ Hydrolysis. ChemCatChem, 2011, 3, 1305-1313.	1.8	78
31	Metal carbide/amorphous C-based nanocomposite coatings for tribological applications. Surface and Coatings Technology, 2009, 204, 947-954.	2.2	74
32	Interpretation of the Binding Energy and Auger Parameter Shifts Found by XPS for TiO ₂ Supported on Different Surfaces. The Journal of Physical Chemistry, 1996, 100, 16255-16262.	2.9	72
33	Giant magnetic anisotropy at the nanoscale: Overcoming the superparamagnetic limit. Physical Review B, 2006, 74, .	1.1	71
34	Comparative investigation of TiAlC(N), TiCrAlC(N), and CrAlC(N) coatings deposited by sputtering of BCC-phase Ti ₂ ~Cr AlC targets. Surface and Coatings Technology, 2009, 203, 3595-3609.	2.2	71
35	Microstructural study of the LiBH ₄ ~MgH ₂ reactive hydride composite with and without Ti-isopropoxide additive. Acta Materialia, 2010, 58, 5683-5694.	3.8	71
36	Endurance of TiAlSiN coatings: Effect of Si and bias on wear and adhesion. Wear, 2011, 270, 541-549.	1.5	71

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37	Oxidation and diffusion processes in nickel-titanium oxide systems. <i>Surface Science</i> , 1993, 295, 402-410.	0.8	70
38	Chemical changes induced by sputtering in TiO ₂ and some selected titanates as observed by X-ray absorption spectroscopy. <i>Surface Science</i> , 1993, 290, 427-435.	0.8	68
39	Gold Nanoparticles with Different Capping Systems: An Electronic and Structural XAS Analysis. <i>Journal of Physical Chemistry B</i> , 2005, 109, 8761-8766.	1.2	68
40	Oxidation State and Local Structure of Ti-Based Additives in the Reactive Hydride Composite 2LiBH ₄ + MgH ₂ . <i>Journal of Physical Chemistry C</i> , 2010, 114, 3309-3317.	1.5	66
41	Surface Characterization of Ga ₂ O ₃ /TiO ₂ and V ₂ O ₅ /Ga ₂ O ₃ /TiO ₂ Catalysts. <i>Journal of Physical Chemistry B</i> , 2001, 105, 6227-6235.	1.2	65
42	Investigation of a Pt containing washcoat on SiC foam for hydrogen combustion applications. <i>Applied Catalysis B: Environmental</i> , 2016, 180, 336-343.	10.8	64
43	Mechanical behavior and oxidation resistance of Cr(Al)N coatings. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2005, 23, 681-686.	0.9	63
44	Structural Characterization and Oxidative Dehydrogenation Activity of V ₂ O ₅ /Ce _x Zr _{1-x} O ₂ /SiO ₂ Catalysts. <i>Journal of Physical Chemistry B</i> , 2006, 110, 9140-9147.	1.2	63
45	Magnetic and microstructural analysis of palladium nanoparticles with different capping systems. <i>Physical Review B</i> , 2006, 73, .	1.1	63
46	Surface-modified Pd and Au nanoparticles for anti-wear applications. <i>Tribology International</i> , 2011, 44, 720-726.	3.0	61
47	The electronic structure of mesoscopic NiO particles. <i>Chemical Physics Letters</i> , 1993, 208, 460-464.	1.2	60
48	Electronic structure of stoichiometric and Ar ⁺ -bombarded ZrO ₂ determined by resonant photoemission. <i>Physical Review B</i> , 1995, 52, 11711-11720.	1.1	60
49	In Situ EXAFS Study of the Photocatalytic Reduction and Deposition of Gold on Colloidal Titania. <i>The Journal of Physical Chemistry</i> , 1995, 99, 3303-3309.	2.9	59
50	Morphological effects on the photocatalytic properties of SnO ₂ nanostructures. <i>Journal of Alloys and Compounds</i> , 2019, 810, 151718.	2.8	57
51	Ion beam induced chemical vapor deposition procedure for the preparation of oxide thin films. II. Preparation and characterization of Al _x Ti _y O _z thin films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1996, 14, 2842-2848.	0.9	56
52	Surface plasmon resonance and magnetism of thiol-capped gold nanoparticles. <i>Nanotechnology</i> , 2008, 19, 175701.	1.3	55
53	Surface Stabilized Nanosized Ce _x Zr _{1-x} O ₂ Solid Solutions over SiO ₂ : Characterization by XRD, Raman, and HREM Techniques. <i>Journal of Physical Chemistry B</i> , 2005, 109, 13545-13552.	1.2	53
54	Electronic Semiconductor-Support Interaction: A Novel Effect in Semiconductor Photocatalysis. <i>Angewandte Chemie - International Edition</i> , 2001, 40, 3825-3827.	7.2	51

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55	Surface-modified Pd nanoparticles as a superior additive for lubrication. Journal of Nanoparticle Research, 2007, 9, 639-645.	0.8	51
56	Dependence of exchange anisotropy and coercivity on the Fe ²⁺ oxide structure in oxygen-passivated Fe nanoparticles. Journal of Applied Physics, 1999, 85, 6118-6120.	1.1	50
57	Doping and Alloying Effects on DLC Coatings. , 2008, , 311-338.		50
58	Interface effects for metal oxide thin films deposited on another metal oxide I. SnO deposited on SiO ₂ . Surface Science, 1996, 350, 123-135.	0.8	49
59	Characterisation of Co@Fe ₃ O ₄ core@shell nanoparticles using advanced electron microscopy. Nanoscale, 2013, 5, 5765.	2.8	49
60	Towards Extending Solar Cell Lifetimes: Addition of a Fluorous Cation to Triple Cation-Based Perovskite Films. ChemSusChem, 2017, 10, 3846-3853.	3.6	49
61	Gold Glyconanoparticles as Building Blocks for Nanomaterials Design. Advanced Materials, 2002, 14, 585.	11.1	48
62	Gold and Gold-Iron Oxide Magnetic Glyconanoparticles: Synthesis, Characterization and Magnetic Properties.. Journal of Physical Chemistry B, 2006, 110, 13021-13028.	1.2	47
63	An XPS study of the mixing effects induced by ion bombardment in composite oxides. Applied Surface Science, 1993, 68, 453-459.	3.1	46
64	Oxidation State and Size Effects in CoO Nanoparticles. Journal of Physical Chemistry B, 1999, 103, 6676-6679.	1.2	46
65	Structural and microtribological studies of Ti-C-N based nanocomposite coatings prepared by reactive sputtering. Thin Solid Films, 2005, 472, 64-70.	0.8	45
66	Bifunctional, Monodisperse BiPO ₄ -Based Nanostars: Photocatalytic Activity and Luminescent Applications. Crystal Growth and Design, 2014, 14, 3319-3326.	1.4	45
67	Hydrogen production through sodium borohydride ethanolysis. International Journal of Hydrogen Energy, 2015, 40, 5326-5332.	3.8	45
68	Spectroscopic characterisation and photochemical behaviour of a titanium hydroxyperoxo compound. Journal of the Chemical Society Faraday Transactions I, 1989, 85, 1279.	1.0	44
69	Titania-supported bimetallic catalyst synthesis by photocatalytic codeposition at ambient temperature: Preparation and characterization of Pt ₂ /Rh, Ag ₂ /Rh, and Pt ₂ /Pd couples. Journal of Catalysis, 1991, 132, 490-497.	3.1	44
70	Passivation of nanocrystalline Al prepared by the gas phase condensation method: An x-ray photoelectron spectroscopy study. Journal of Materials Research, 1998, 13, 703-710.	1.2	43
71	Size and support effects in the photoelectron spectra of small TiO ₂ particles. Surface and Interface Analysis, 1992, 18, 392-396.	0.8	42
72	XPS and ISS study of NiTiO ₃ and PbTiO ₃ subjected to low-energy ion bombardment. I. Influence of the type of ion (Ar ⁺ and O ²⁺). Surface and Interface Analysis, 1993, 20, 941-948.	0.8	42

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73	SnO ₂ thin films prepared by ion beam induced CVD: preparation and characterization by X-ray absorption spectroscopy. <i>Thin Solid Films</i> , 1999, 353, 113-123.	0.8	42
74	Ion beam induced chemical vapor deposition for the preparation of thin film oxides. <i>Thin Solid Films</i> , 1994, 241, 198-201.	0.8	41
75	Characterization of carbon nitride thin films prepared by dual ion beam sputtering. <i>Applied Physics Letters</i> , 1996, 69, 764-766.	1.5	41
76	Characterization of MoO ₃ /TiO ₂ ~ZrO ₂ catalysts by XPS and other techniques. <i>Journal of Molecular Catalysis A</i> , 2000, 162, 431-441.	4.8	41
77	The melting behavior of passivated nanocrystalline aluminum. <i>Scripta Materialia</i> , 1996, 7, 813-822.	0.5	40
78	TEM, EELS and EFTEM characterization of nickel nanoparticles encapsulated in carbon. <i>Journal of Materials Chemistry</i> , 2000, 10, 715-721.	6.7	40
79	New insights into the synergistic effect in bimetallic-boron catalysts for hydrogen generation: The Co~Ru~B system as a case study. <i>Applied Catalysis B: Environmental</i> , 2012, 128, 39-47.	10.8	40
80	Study of the thermal stability of carbon nitride thin films prepared by reactive magnetron sputtering. <i>Diamond and Related Materials</i> , 2000, 9, 212-218.	1.8	39
81	Comparative investigation of Al- and Cr-doped TiSiCN coatings. <i>Surface and Coatings Technology</i> , 2011, 205, 4640-4648.	2.2	39
82	On the formation of the porous structure in nanostructured a-Si coatings deposited by dc magnetron sputtering at oblique angles. <i>Nanotechnology</i> , 2014, 25, 355705.	1.3	39
83	Structural characterization of partially amorphous SnO ₂ nanoparticles by factor analysis of XAS and FT-IR spectra. <i>Solid State Ionics</i> , 1999, 116, 117-127.	1.3	38
84	Electronic structure, magnetic properties, and microstructural analysis of thiol-functionalized Au nanoparticles: role of chemical and structural parameters in the ferromagnetic behaviour. <i>Journal of Nanoparticle Research</i> , 2008, 10, 179-192.	0.8	38
85	Deactivation, reactivation and memory effect on Co~B catalyst for sodium borohydride hydrolysis operating in high conversion conditions. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 14373-14381.	3.8	38
86	Structural Characterization of CeO ₂ ~ZrO ₂ /TiO ₂ and V ₂ O ₅ /CeO ₂ ~ZrO ₂ /TiO ₂ Mixed Oxide Catalysts by XRD, Raman Spectroscopy, HREM, and Other Techniques. <i>Journal of Physical Chemistry B</i> , 2005, 109, 1781-1787.	1.2	37
87	Self-lubricating Ti~C~N nanocomposite coatings prepared by double magnetron sputtering. <i>Solid State Sciences</i> , 2009, 11, 660-670.	1.5	37
88	The role of cobalt hydroxide in deactivation of thin film Co-based catalysts for sodium borohydride hydrolysis. <i>Applied Catalysis B: Environmental</i> , 2017, 210, 342-351.	10.8	37
89	In Situ Energy-Dispersive XAS and XRD Study of the Superior Hydrogen Storage System MgH ₂ /Nb ₂ O ₅ . <i>Journal of Physical Chemistry C</i> , 2007, 111, 10700-10706.	1.5	35
90	Ion beam induced chemical vapor deposition procedure for the preparation of oxide thin films. I. Preparation and characterization of TiO ₂ thin films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1994, 12, 2728-2732.	0.9	34

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91	Synthesis of SnO and SnO ₂ nanocrystalline powders by the gas phase condensation method. <i>Sensors and Actuators B: Chemical</i> , 1996, 31, 29-32.	4.0	34
92	Adsorption and oxidation of K deposited on graphite. <i>Surface Science</i> , 1996, 364, 253-265.	0.8	33
93	Tailored synthesis of TiC/a-C nanocomposite tribological coatings. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2005, 23, 1732-1736.	0.9	33
94	X-ray Photoelectron Spectroscopy Study of V ₂ O ₅ Dispersion on a Nanosized Al ₂ O ₃ -TiO ₂ Mixed Oxide. <i>Langmuir</i> , 2001, 17, 1132-1137.	1.6	32
95	Catalytic growth of carbon nanotubes on stainless steel: Characterization and frictional properties. <i>Diamond and Related Materials</i> , 2008, 17, 1853-1857.	1.8	31
96	Mechanism of hydrogen gas-sensing at low temperatures using Rh/TiO ₂ systems. <i>Sensors and Actuators</i> , 1989, 18, 337-348.	1.8	30
97	Preparation, microstructural characterisation and tribological behaviour of CN coatings. <i>Surface and Coatings Technology</i> , 2003, 163-164, 527-534.	2.2	30
98	Synchrotron Photoemission Characterization of TiO ₂ Supported on SiO ₂ . <i>Langmuir</i> , 1998, 14, 4908-4914.	1.6	29
99	The preparation of metal-polymer composite materials using ultrasound radiation: Part II. Differences in physical properties of cobalt-polymer and iron-polymer composites. <i>Journal of Materials Research</i> , 1999, 14, 3913-3920.	1.2	29
100	STEM-EELS analysis reveals stable high-density He in nanopores of amorphous silicon coatings deposited by magnetron sputtering. <i>Nanotechnology</i> , 2015, 26, 075703.	1.3	29
101	Structural aspects of the interaction of methyl thiol and dimethyl disulphide with Ni(111). <i>Journal of Physics Condensed Matter</i> , 1995, 7, 7781-7796.	0.7	28
102	Chemical Analysis of Ternary Ti Oxides using Soft X-ray Absorption Spectroscopy. <i>Surface and Interface Analysis</i> , 1997, 25, 804-808.	0.8	28
103	Synthesis of nanocrystalline MgH ₂ powder by gas-phase condensation and in situ hydridation: TEM, XPS and XRD study. <i>Journal of Alloys and Compounds</i> , 2007, 434-435, 721-724.	2.8	28
104	A comparative study of the role of additive in the MgH ₂ vs. the LiBH ₄ -MgH ₂ hydrogen storage system. <i>International Journal of Hydrogen Energy</i> , 2011, 36, 3932-3940.	3.8	28
105	A new bottom-up methodology to produce silicon layers with a closed porosity nanostructure and reduced refractive index. <i>Nanotechnology</i> , 2013, 24, 275604.	1.3	28
106	Pt-impregnated catalysts on powdery SiC and other commercial supports for the combustion of hydrogen under oxidant conditions. <i>Applied Catalysis B: Environmental</i> , 2017, 201, 391-399.	10.8	28
107	Nanoporous Pt-based catalysts prepared by chemical dealloying of magnetron-sputtered Pt-Cu thin films for the catalytic combustion of hydrogen. <i>Applied Catalysis B: Environmental</i> , 2018, 235, 168-176.	10.8	28
108	Ion-Beam-Induced CVD: An Alternative Method of Thin Film Preparation. <i>Chemical Vapor Deposition</i> , 1997, 3, 219-226.	1.4	27

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109	Characterisation of passivated aluminium nanopowders: An XPS and TEM/EELS study. <i>Journal of the European Ceramic Society</i> , 1998, 18, 1195-1200.	2.8	27
110	Tribochemical effects on CN _x films. <i>Surface and Coatings Technology</i> , 2000, 133-134, 430-436.	2.2	27
111	Bonding and morphology study of carbon nitride films obtained by dual ion beam sputtering. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2000, 18, 515-523.	0.9	26
112	Characterisation and magnetic behaviour of nickel nanoparticles encapsulated in carbon. <i>Acta Materialia</i> , 2004, 52, 2165-2171.	3.8	26
113	Characterization of nanostructured TiN coatings produced by direct current magnetron sputtering. <i>Thin Solid Films</i> , 2007, 515, 3590-3596.	0.8	26
114	Photophysikalische und photochemische Eigenschaften von Metalldithiolenen. <i>Chemische Berichte</i> , 1984, 117, 3102-3111.	0.2	25
115	Mixing effects in CeO ₂ /TiO ₂ and CeO ₂ /SiO ₂ systems submitted to Ar ⁺ sputtering. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1993, 11, 58-65.	0.9	25
116	Thermal and photochemical methods for the preparation of thin films of cermet materials. <i>Journal of Materials Science</i> , 1996, 31, 2325-2332.	1.7	25
117	The role of CN chemical bonding on the tribological behaviour of CN _x coatings. <i>Surface and Coatings Technology</i> , 1999, 120-121, 594-600.	2.2	25
118	The use of X-ray photoelectron spectroscopy to characterize fine AlN powders submitted to mechanical attrition. <i>Scripta Materialia</i> , 1999, 11, 249-257.	0.5	25
119	Tribological behaviour and chemical characterisation of Si-free and Si-containing carbon nitride coatings. <i>Diamond and Related Materials</i> , 2002, 11, 169-175.	1.8	25
120	Combined x-ray photoelectron spectroscopy and scanning electron microscopy studies of the LiBH ₄ -MgH ₂ reactive hydride composite with and without a Ti-based additive. <i>Journal of Applied Physics</i> , 2011, 109, .	1.1	25
121	Characterization of oxygen passivated iron nanoparticles and thermal evolution to γ -Fe ₂ O ₃ . <i>Journal of Materials Science</i> , 2004, 39, 4877-4885.	1.7	24
122	Optimized hydrogen generation in a semicontinuous sodium borohydride hydrolysis reactor for a 60W-scale fuel cell stack. <i>Journal of Power Sources</i> , 2011, 196, 4388-4395.	4.0	24
123	STEM-in-SEM high resolution imaging of gold nanoparticles and bivalve tissues in bioaccumulation experiments. <i>Analyst, The</i> , 2015, 140, 3082-3089.	1.7	24
124	Tailor-made preparation of Co-C, Co-B, and Co catalytic thin films using magnetron sputtering: insights into structure-composition and activation effects for catalyzed NaBH ₄ hydrolysis. <i>RSC Advances</i> , 2016, 6, 108611-108620.	1.7	24
125	The growth of thin Ti and TiO _x films on Pt(111): Morphology and oxidation states. <i>Surface Science</i> , 1992, 273, 31-39.	0.8	23
126	The gas-phase condensation method for the preparation of quantum-sized ZnS nanoparticles. <i>Thin Solid Films</i> , 1998, 317, 497-499.	0.8	23

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127	Resonant photoemission characterization of SnO. <i>Physical Review B</i> , 1999, 60, 11171-11179.	1.1	23
128	Evolution of the microstructure, chemical composition and magnetic behaviour during the synthesis of alkanethiol-capped gold nanoparticles. <i>Acta Materialia</i> , 2007, 55, 1723-1730.	3.8	23
129	Comparative performance of nanocomposite coatings of TiC or TiN dispersed in a-C matrixes. <i>Surface and Coatings Technology</i> , 2008, 203, 756-760.	2.2	23
130	SiOxNy thin films with variable refraction index: Microstructural, chemical and mechanical properties. <i>Applied Surface Science</i> , 2010, 256, 4548-4553.	3.1	23
131	A resonant photoemission study of the ZrO ₂ valence band. <i>Surface Science</i> , 1994, 307-309, 848-853.	0.8	22
132	Contribution of the x-ray absorption spectroscopy to study TiO ₂ thin films prepared by ion beam induced chemical vapor deposition. <i>Journal of Applied Physics</i> , 1995, 77, 591-597.	1.1	22
133	Substrate Effects and Chemical State Plots for the XPS Analysis of Supported TiO ₂ Catalysts. <i>Surface and Interface Analysis</i> , 1997, 25, 292-294.	0.8	22
134	Preparation, characterization and thermal evolution of oxygen passivated nanocrystalline cobalt. <i>Journal of Materials Chemistry</i> , 1999, 9, 1011-1017.	6.7	22
135	Room temperature permanent magnetism in thiol-capped Pd-rich nanoparticles. <i>Nanotechnology</i> , 2006, 17, 1449-1453.	1.3	22
136	Characterization of Ti _{1-x} Al _x N coatings with selective IR reflectivity. <i>Solar Energy</i> , 2010, 84, 1397-1401.	2.9	22
137	Depth profiling of catalyst samples: An XPS-based model for the sputtering behavior of powder materials. <i>Journal of Catalysis</i> , 1991, 130, 627-641.	3.1	21
138	Charging and mixing effects during the XPS analysis of mixtures of oxides. <i>Surface and Interface Analysis</i> , 1994, 22, 111-114.	0.8	21
139	Electronic structure of insulating Zr ₃ N ₄ studied by resonant photoemission. <i>Physical Review B</i> , 1995, 51, 17984-17987.	1.1	21
140	Permanent magnetism in phosphine- and chlorine-capped gold: from clusters to nanoparticles. <i>Journal of Nanoparticle Research</i> , 2010, 12, 1307-1318.	0.8	21
141	Role of hydrogen in the mobility of phases in Ni ₃ S ₂ /TiO _x systems. <i>Journal of Catalysis</i> , 1991, 131, 51-59.	3.1	20
142	Photoelectron spectroscopy of metal oxide particles: size and support effects. <i>Vacuum</i> , 1994, 45, 1085-1086.	1.6	20
143	Oxygen gas sensing behavior of nanocrystalline tin oxide prepared by the gas phase condensation method. <i>Scripta Materialia</i> , 1997, 8, 675-686.	0.5	20
144	Transmission Electron Microscopy and Energy-Dispersive X-ray Spectroscopy Study of V ₂ O ₅ /TiO ₂ -ZrO ₂ Catalyst. <i>Langmuir</i> , 2000, 16, 4217-4221.	1.6	20

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145	Depth profiling of industrial surface treatments by rf and dc glow discharge spectrometry. Applied Surface Science, 2004, 235, 97-102.	3.1	20
146	Study of Cobalt-Filled Carbon Nanoflasks. Journal of Physical Chemistry B, 2001, 105, 7606-7611.	1.2	19
147	Successive ion implantation of high doses of carbon and nitrogen on steels. Surface and Coatings Technology, 2002, 158-159, 630-635.	2.2	19
148	Tribological carbon-based coatings: An AFM and LFM study. Surface Science, 2009, 603, 973-979.	0.8	19
149	Exploring the benefits of depositing hard TiN thin films by non-reactive magnetron sputtering. Applied Surface Science, 2013, 275, 121-126.	3.1	19
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