

Asuncion Fernandez

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249
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h-index

85
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264
ext. papers

10,029
ext. citations

4.8
avg, IF

5.66
L-index

#	Paper	IF	Citations
249	Permanent magnetism, magnetic anisotropy, and hysteresis of thiol-capped gold nanoparticles. <i>Physical Review Letters</i> , 2004 , 93, 087204	7.4	472
248	Preparation and characterization of TiO ₂ photocatalysts supported on various rigid supports (glass, quartz and stainless steel). Comparative studies of photocatalytic activity in water purification. <i>Applied Catalysis B: Environmental</i> , 1995 , 7, 49-63	21.8	430
247	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	21.8	379
246	Gold Glyconanoparticles as Water-Soluble Polyvalent Models To Study Carbohydrate Interactions. <i>Angewandte Chemie - International Edition</i> , 2001 , 40, 2257-2261	16.4	336
245	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	1.7	284
244	Gold glyconanoparticles: synthetic polyvalent ligands mimicking glycocalyx-like surfaces as tools for glycobiological studies. <i>Chemistry - A European Journal</i> , 2003 , 9, 1909-21	4.8	225
243	MgH ₂ with Nb ₂ O ₅ as additive, for hydrogen storage: Chemical, structural and kinetic behavior with heating. <i>Acta Materialia</i> , 2006 , 54, 105-110	8.4	220
242	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		192
241	Formation of γ -Fe ₂ O ₃ Isolated Nanoparticles in a Silica Matrix. <i>Langmuir</i> , 1997 , 13, 3627-3634	4	161
240	Ferromagnetism in fcc twinned 2.4 nm size Pd nanoparticles. <i>Physical Review Letters</i> , 2003 , 91, 237203	7.4	157
239	Nanoecotoxicity effects of engineered silver and gold nanoparticles in aquatic organisms. <i>TrAC - Trends in Analytical Chemistry</i> , 2012 , 32, 40-59	14.6	149
238	Improvement in H-sorption kinetics of MgH ₂ powders by using Fe nanoparticles generated by reactive FeF ₃ addition. <i>Scripta Materialia</i> , 2005 , 52, 719-724	5.6	146
237	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	2.2	140
236	Bonding structure in amorphous carbon nitride: A spectroscopic and nuclear magnetic resonance study. <i>Journal of Applied Physics</i> , 2001 , 90, 675-681	2.5	121
235	Hydrogen sorption improvement of nanocrystalline MgH ₂ by Nb ₂ O ₅ nanoparticles. <i>Scripta Materialia</i> , 2006 , 54, 1293-1297	5.6	109
234	Chemical and microstructural study of the oxygen passivation behaviour of nanocrystalline Mg and MgH ₂ . <i>Applied Surface Science</i> , 2006 , 252, 2334-2345	6.7	104
233	Encapsulation of Nickel Nanoparticles in Carbon Obtained by the Sonochemical Decomposition of Ni(C ₈ H ₁₂) ₂ . <i>Chemistry of Materials</i> , 1999 , 11, 1331-1335	9.6	100

232	Surface plasmon resonance of capped Au nanoparticles. <i>Physical Review B</i> , 2005 , 72,	3.3	95
231	Nb2O5 "pathway effect" on hydrogen sorption in Mg. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 7845-50,	3.4	93
230	Spectroscopic characterization of TiO2/SiO2 catalysts. <i>Journal of Catalysis</i> , 1988 , 112, 489-494	7.3	92
229	Tribological behaviour of titanium carbide/amorphous carbon nanocomposite coatings: From macro to the micro-scale. <i>Surface and Coatings Technology</i> , 2008 , 202, 4011-4018	4.4	91
228	Characterization of V2O5/TiO2–rO2 Catalysts by XPS and Other Techniques. <i>Journal of Physical Chemistry B</i> , 1998 , 102, 10176-10182	3.4	89
227	An XPS study of dispersion and chemical state of MoO3 on Al2O3-TiO2 binary oxide support. <i>Applied Catalysis A: General</i> , 2001 , 213, 279-288	5.1	83
226	Magnetron sputtering of Cr(Al)N coatings: Mechanical and tribological study. <i>Surface and Coatings Technology</i> , 2005 , 200, 192-197	4.4	82
225	Evidence of spin disorder at the surface/core interface of oxygen passivated Fe nanoparticles. <i>Journal of Applied Physics</i> , 1998 , 84, 2189-2192	2.5	77
224	Behaviour of Au-citrate nanoparticles in seawater and accumulation in bivalves at environmentally relevant concentrations. <i>Environmental Pollution</i> , 2013 , 174, 134-41	9.3	76
223	XPS study of the surface carbonation/hydroxylation state of metal oxides. <i>Applied Surface Science</i> , 1990 , 45, 103-108	6.7	73
222	Metal carbide/amorphous C-based nanocomposite coatings for tribological applications. <i>Surface and Coatings Technology</i> , 2009 , 204, 947-954	4.4	69
221	Interpretation of the Binding Energy and Auger Parameter Shifts Found by XPS for TiO2 Supported on Different Surfaces. <i>The Journal of Physical Chemistry</i> , 1996 , 100, 16255-16262		67
220	Supported Co catalysts prepared as thin films by magnetron sputtering for sodium borohydride and ammonia borane hydrolysis. <i>Applied Catalysis B: Environmental</i> , 2014 , 158-159, 400-409	21.8	65
219	Microstructural study of the LiBH4/MgH2 reactive hydride composite with and without Ti-isopropoxide additive. <i>Acta Materialia</i> , 2010 , 58, 5683-5694	8.4	65
218	Giant magnetic anisotropy at the nanoscale: Overcoming the superparamagnetic limit. <i>Physical Review B</i> , 2006 , 74,	3.3	65
217	Oxidation State and Local Structure of Ti-Based Additives in the Reactive Hydride Composite 2LiBH4 + MgH2. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 3309-3317	3.8	63
216	Chemical changes induced by sputtering in TiO2 and some selected titanates as observed by X-ray absorption spectroscopy. <i>Surface Science</i> , 1993 , 290, 427-435	1.8	63
215	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	2.9	62

214	Structure and tribological properties of MoCN-Ag coatings in the temperature range of 25-100°C. <i>Applied Surface Science</i> , 2013 , 273, 408-414	6.7	61
213	Boron Compounds as Stabilizers of a Complex Microstructure in a Co-B-based Catalyst for NaBH ₄ Hydrolysis. <i>ChemCatChem</i> , 2011 , 3, 1305-1313	5.2	60
212	Gold nanoparticles with different capping systems: an electronic and structural XAS analysis. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 8761-6	3.4	60
211	Oxidation and diffusion processes in nickel-titanium oxide systems. <i>Surface Science</i> , 1993 , 295, 402-410	1.8	60
210	Magnetic and microstructural analysis of palladium nanoparticles with different capping systems. <i>Physical Review B</i> , 2006 , 73,	3.3	59
209	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	3.4	59
208	Comparative investigation of TiAlC(N), TiCrAlC(N), and CrAlC(N) coatings deposited by sputtering of phase Ti ₂ CrAlC targets. <i>Surface and Coatings Technology</i> , 2009 , 203, 3595-3609	4.4	58
207	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, 9140-7	3.4	58
206	Electronic structure of stoichiometric and Ar ⁺ -bombarded ZrO ₂ determined by resonant photoemission. <i>Physical Review B</i> , 1995 , 52, 11711-11720	3.3	54
205	Endurance of TiAlSiN coatings: Effect of Si and bias on wear and adhesion. <i>Wear</i> , 2011 , 270, 541-549	3.5	52
204	Surface-modified Pd and Au nanoparticles for anti-wear applications. <i>Tribology International</i> , 2011 , 44, 720-726	4.9	52
203	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		52
202	Electronic Semiconductor-Support Interaction-A Novel Effect in Semiconductor Photocatalysis. <i>Angewandte Chemie - International Edition</i> , 2001 , 40, 3825-3827	16.4	48
201	The electronic structure of mesoscopic NiO particles. <i>Chemical Physics Letters</i> , 1993 , 208, 460-464	2.5	48
200	Surface plasmon resonance and magnetism of thiol-capped gold nanoparticles. <i>Nanotechnology</i> , 2008 , 19, 175701	3.4	46
199	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, 13545-52	3.4	46
198	Gold and gold-iron oxide magnetic glyconanoparticles: synthesis, characterization and magnetic properties. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 13021-8	3.4	45
197	Gold Glyconanoparticles as Building Blocks for Nanomaterials Design. <i>Advanced Materials</i> , 2002 , 14, 585-24		45

196	Interface effects for metal oxide thin films deposited on another metal oxide I. SnO deposited on SiO ₂ . <i>Surface Science</i> , 1996 , 350, 123-135	1.8	45
195	Structural and microtribological studies of TiO ₂ /Ni based nanocomposite coatings prepared by reactive sputtering. <i>Thin Solid Films</i> , 2005 , 472, 64-70	2.2	44
194	Dependence of exchange anisotropy and coercivity on the Fe ₃ O ₄ structure in oxygen-passivated Fe nanoparticles. <i>Journal of Applied Physics</i> , 1999 , 85, 6118-6120	2.5	44
193	An XPS study of the mixing effects induced by ion bombardment in composite oxides. <i>Applied Surface Science</i> , 1993 , 68, 453-459	6.7	44
192	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	2.9	43
191	Surface-modified Pd nanoparticles as a superior additive for lubrication. <i>Journal of Nanoparticle Research</i> , 2007 , 9, 639-645	2.3	42
190	Investigation of a Pt containing washcoat on SiC foam for hydrogen combustion applications. <i>Applied Catalysis B: Environmental</i> , 2016 , 180, 336-343	21.8	41
189	Bifunctional, Monodisperse BiPO ₄ -Based Nanostars: Photocatalytic Activity and Luminescent Applications. <i>Crystal Growth and Design</i> , 2014 , 14, 3319-3326	3.5	41
188	Size and support effects in the photoelectron spectra of small TiO ₂ particles. <i>Surface and Interface Analysis</i> , 1992 , 18, 392-396	1.5	41
187	Characterisation of Co@Fe ₃ O ₄ core@shell nanoparticles using advanced electron microscopy. <i>Nanoscale</i> , 2013 , 5, 5765-72	7.7	40
186	Oxidation State and Size Effects in CoO Nanoparticles. <i>Journal of Physical Chemistry B</i> , 1999 , 103, 6676-6679	6.7	40
185	Passivation of nanocrystalline Al prepared by the gas phase condensation method: An x-ray photoelectron spectroscopy study. <i>Journal of Materials Research</i> , 1998 , 13, 703-710	2.5	39
184	Doping and Alloying Effects on DLC Coatings 2008 , 311-338		39
183	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	2.2	39
182	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		38
181	The melting behavior of passivated nanocrystalline aluminum. <i>Scripta Materialia</i> , 1996 , 7, 813-822		38
180	Titania-supported bimetallic catalyst synthesis by photocatalytic codeposition at ambient temperature: Preparation and characterization of Pt/Rh, Ag/Rh, and Pt/Pd couples. <i>Journal of Catalysis</i> , 1991 , 132, 490-497	7.3	38
179	Towards Extending Solar Cell Lifetimes: Addition of a Fluorous Cation to Triple Cation-Based Perovskite Films. <i>ChemSusChem</i> , 2017 , 10, 3846-3853	8.3	37

178	Self-lubricating TiCN nanocomposite coatings prepared by double magnetron sputtering. <i>Solid State Sciences</i> , 2009 , 11, 660-670	3-4	37
177	Comparative investigation of Al- and Cr-doped TiSiCN coatings. <i>Surface and Coatings Technology</i> , 2011 , 205, 4640-4648	4-4	37
176	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	3-5	36
175	Deactivation, reactivation and memory effect on CoB catalyst for sodium borohydride hydrolysis operating in high conversion conditions. <i>International Journal of Hydrogen Energy</i> , 2012 , 37, 14373-14381	6-7	35
174	TEM, EELS and EFTEM characterization of nickel nanoparticles encapsulated in carbon. <i>Journal of Materials Chemistry</i> , 2000 , 10, 715-721		35
173	New insights into the synergistic effect in bimetallic-boron catalysts for hydrogen generation: The CoRuB system as a case study. <i>Applied Catalysis B: Environmental</i> , 2012 , 128, 39-47	21-8	34
172	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	2-3	34
171	Characterization of carbon nitride thin films prepared by dual ion beam sputtering. <i>Applied Physics Letters</i> , 1996 , 69, 764-766	3-4	34
170	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). <i>Surface and Interface Analysis</i> , 1993 , 20, 941-948	1-5	34
169	Spectroscopic characterisation and photochemical behaviour of a titanium hydroxyperoxo compound. <i>Journal of the Chemical Society Faraday Transactions I</i> , 1989 , 85, 1279		34
168	Hydrogen production through sodium borohydride ethanolysis. <i>International Journal of Hydrogen Energy</i> , 2015 , 40, 5326-5332	6-7	33
167	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	3-3	33
166	Ion beam induced chemical vapor deposition for the preparation of thin film oxides. <i>Thin Solid Films</i> , 1994 , 241, 198-201	2-2	33
165	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	3-4	32
164	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, 1781-7	3-4	32
163	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	2-9	32
162	Morphological effects on the photocatalytic properties of SnO ₂ nanostructures. <i>Journal of Alloys and Compounds</i> , 2019 , 810, 151718	5-7	30
161	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	3-8	30

160	Tailored synthesis of TiC _B -C nanocomposite tribological coatings. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2005 , 23, 1732-1736	2.9	30
159	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	4	30
158	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	8.5	30
157	Preparation, microstructural characterisation and tribological behaviour of CN coatings. <i>Surface and Coatings Technology</i> , 2003 , 163-164, 527-534	4.4	29
156	Synchrotron Photoemission Characterization of TiO ₂ Supported on SiO ₂ . <i>Langmuir</i> , 1998 , 14, 4908-4914	4	28
155	Adsorption and oxidation of K deposited on graphite. <i>Surface Science</i> , 1996 , 364, 253-265	1.8	28
154	Mechanism of hydrogen gas-sensing at low temperatures using Rh/TiO ₂ systems. <i>Sensors and Actuators</i> , 1989 , 18, 337-348		28
153	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	6.7	27
152	Structural aspects of the interaction of methyl thiol and dimethyldisulphide with Ni(111). <i>Journal of Physics Condensed Matter</i> , 1995 , 7, 7781-7796	1.8	27
151	A new bottom-up methodology to produce silicon layers with a closed porosity nanostructure and reduced refractive index. <i>Nanotechnology</i> , 2013 , 24, 275604	3.4	26
150	Ion-Beam-Induced CVD: An Alternative Method of Thin Film Preparation. <i>Chemical Vapor Deposition</i> , 1997 , 3, 219-226		26
149	Chemical Analysis of Ternary Ti Oxides using Soft X-ray Absorption Spectroscopy. <i>Surface and Interface Analysis</i> , 1997 , 25, 804-808	1.5	25
148	Catalytic growth of carbon nanotubes on stainless steel: Characterization and frictional properties. <i>Diamond and Related Materials</i> , 2008 , 17, 1853-1857	3.5	25
147	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	5.7	25
146	Tribochemical effects on CN _x films. <i>Surface and Coatings Technology</i> , 2000 , 133-134, 430-436	4.4	25
145	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	2.9	25
144	The use of X-ray photoelectron spectroscopy to characterize fine AlN powders submitted to mechanical attrition. <i>Scripta Materialia</i> , 1999 , 11, 249-257		25
143	Characterisation of passivated aluminium nanopowders: An XPS and TEM/EELS study. <i>Journal of the European Ceramic Society</i> , 1998 , 18, 1195-1200	6	24

142	Characterisation and magnetic behaviour of nickel nanoparticles encapsulated in carbon. <i>Acta Materialia</i> , 2004 , 52, 2165-2171	8.4	24
141	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	2.5	24
140	Characterization of nanostructured TiB ₂ (N) coatings produced by direct current magnetron sputtering. <i>Thin Solid Films</i> , 2007 , 515, 3590-3596	2.2	23
139	Comparative performance of nanocomposite coatings of TiC or TiN dispersed in a-C matrixes. <i>Surface and Coatings Technology</i> , 2008 , 203, 756-760	4.4	23
138	Tribological behaviour and chemical characterisation of Si-free and Si-containing carbon nitride coatings. <i>Diamond and Related Materials</i> , 2002 , 11, 169-175	3.5	23
137	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	4.4	23
136	The growth of thin Ti and TiO _x films on Pt(111): Morphology and oxidation states. <i>Surface Science</i> , 1992 , 273, 31-39	1.8	23
135	Photophysikalische und photochemische Eigenschaften von Metaldithiolenen. <i>Chemische Berichte</i> , 1984 , 117, 3102-3111		23
134	STEM-EELS analysis reveals stable high-density He in nanopores of amorphous silicon coatings deposited by magnetron sputtering. <i>Nanotechnology</i> , 2015 , 26, 075703	3.4	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	1.5	22
132	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	4.3	22
131	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	2.5	22
130	Thermal and photochemical methods for the preparation of thin films of cermet materials. <i>Journal of Materials Science</i> , 1996 , 31, 2325-2332	4.3	22
129	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	2.9	22
128	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, 014913	2.5	21
127	Characterization of Ti _{1-x} Al _x N coatings with selective IR reflectivity. <i>Solar Energy</i> , 2010 , 84, 1397-1401	6.8	21
126	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	8.4	21
125	Resonant photoemission characterization of SnO. <i>Physical Review B</i> , 1999 , 60, 11171-11179	3.3	21

124	Preparation, characterization and thermal evolution of oxygen passivated nanocrystalline cobalt. <i>Journal of Materials Chemistry</i> , 1999 , 9, 1011-1017		21
123	A resonant photoemission study of the ZrO ₂ valence band. <i>Surface Science</i> , 1994 , 307-309, 848-853	1.8	21
122	Tailor-made preparation of Co _A , 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	3.7	20
121	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	21.8	20
120	SiO _x N _y thin films with variable refraction index: Microstructural, chemical and mechanical properties. <i>Applied Surface Science</i> , 2010 , 256, 4548-4553	6.7	20
119	The gas-phase condensation method for the preparation of quantum-sized ZnS nanoparticles. <i>Thin Solid Films</i> , 1998 , 317, 497-499	2.2	20
118	Room temperature permanent magnetism in thiol-capped Pd-rich nanoparticles. <i>Nanotechnology</i> , 2006 , 17, 1449-1453	3.4	20
117	Depth profiling of industrial surface treatments by rf and dc glow discharge spectrometry. <i>Applied Surface Science</i> , 2004 , 235, 97-102	6.7	20
116	Electronic structure of insulating Zr ₃ N ₄ studied by resonant photoemission. <i>Physical Review B</i> , 1995 , 51, 17984-17987	3.3	20
115	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	21.8	19
114	Permanent magnetism in phosphine- and chlorine-capped gold: from clusters to nanoparticles. <i>Journal of Nanoparticle Research</i> , 2010 , 12, 1307-1318	2.3	19
113	Successive ion implantation of high doses of carbon and nitrogen on steels. <i>Surface and Coatings Technology</i> , 2002 , 158-159, 630-635	4.4	19
112	Charging and mixing effects during the XPS analysis of mixtures of oxides. <i>Surface and Interface Analysis</i> , 1994 , 22, 111-114	1.5	19
111	STEM-in-SEM high resolution imaging of gold nanoparticles and bivalve tissues in bioaccumulation experiments. <i>Analyst, The</i> , 2015 , 140, 3082-9	5	18
110	Tribological carbon-based coatings: An AFM and LFM study. <i>Surface Science</i> , 2009 , 603, 973-979	1.8	18
109	Oxygen gas sensing behavior of nanocrystalline tin oxide prepared by the gas phase condensation method. <i>Scripta Materialia</i> , 1997 , 8, 675-686		18
108	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	4	18
107	Photoinduzierte Elektronen-Übertragung mit Metaldithiolenen. <i>Chemische Berichte</i> , 1985 , 118, 1936-1948		18

106	Optimized hydrogen generation in a semicontinuous sodium borohydride hydrolysis reactor for a 60 W-scale fuel cell stack. <i>Journal of Power Sources</i> , 2011 , 196, 4388-4395	8.9	17
105	Preparation of Al ₂ O ₃ thin films by ion-beam-induced CVD: structural effects of the bombardment with accelerated ions. <i>Surface and Coatings Technology</i> , 1996 , 80, 23-26	4.4	17
104	Role of hydrogen in the mobility of phases in Ni/TiO _x systems. <i>Journal of Catalysis</i> , 1991 , 131, 51-59	7.3	17
103	Influence of particle size on electrochemical and gas-phase hydrogen storage in nanocrystalline Mg. <i>Journal of Alloys and Compounds</i> , 2008 , 463, 539-545	5.7	16
102	Structural characterization of PbTiO ₃ thin films prepared by ion beam induced CVD and evaporation of lead. <i>Thin Solid Films</i> , 1996 , 272, 99-106	2.2	16
101	Photoelectron spectroscopy of metal oxide particles: size and support effects. <i>Vacuum</i> , 1994 , 45, 1085-1086	10.86	16
100	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	7.3	16
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