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List of Publications by Year in descending order

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103 papers	1,888 citations	257450 24 h-index	345221 36 g-index
103 all docs	103 docs citations	103 times ranked	1826 citing authors

#	Article	IF	Citations
1	Effects of Oxygen Mobility in Laâ€“Fe-Based Perovskites on the Catalytic Activity and Selectivity of Methane Oxidation. ACS Catalysis, 2020, 10, 3707-3719.	11.2	132
2	Minute synthesis of extremely stable gold nanoparticles. Nanotechnology, 2009, 20, 505606.	2.6	95
3	Ru@Pt coreâ€“shell nanoparticles for methanol fuel cell catalyst: Control and effects of shell composition. International Journal of Hydrogen Energy, 2013, 38, 16631-16641.	7.1	64
4	SEM, EDS and XPS Analysis of the Coatings Obtained on Titanium after Plasma Electrolytic Oxidation in Electrolytes Containing Copper Nitrate. Materials, 2016, 9, 318.	2.9	60
5	Anomalous saturation of mixed valence in cerium-based systems as studied by x-ray absorption. Physical Review B, 1983, 28, 3556-3558.	3.2	58
6	Importance of Oxygen-Free Edge and Defect Sites for the Immobilization of Colloidal Pt Oxide Particles with Implications for the Preparation of CNF-Supported Catalysts. Journal of Physical Chemistry C, 2010, 114, 1752-1762.	3.1	53
7	Ce valence variation in intermetallic alloys:LIIIabsorption spectroscopy results. Physical Review B, 1984, 30, 4164-4169.	3.2	51
8	Absence of two-electron resonances in valence-band photoemission from Cr, Mn, Fe, and Co. Physical Review B, 1987, 36, 887-890.	3.2	50
9	Towards a highly-efficient fuel-cell catalyst: optimization of Pt particle size, supports and surface-oxygen group concentration. Physical Chemistry Chemical Physics, 2013, 15, 3803.	2.8	46
10	Development of plasma electrolytic oxidation for improved Ti6Al4V biomaterial surface properties. International Journal of Advanced Manufacturing Technology, 2016, 85, 2425-2437.	3.0	43
11	Effects of thin cerium overlayers on the oxidation of tantalum and aluminium. Surface Science, 1989, 222, 499-516.	1.9	42
12	CO and O2 adsorption on the Re/Pt(111) surface studied by photoemission and thermal desorption.. Surface Science, 1999, 440, 290-300.	1.9	38
13	Investigation of porous coatings obtained on Ti-Nb-Zr-Sn alloy biomaterial by plasma electrolytic oxidation: characterisation and modelling. International Journal of Advanced Manufacturing Technology, 2016, 87, 3497-3512.	3.0	35
14	XPS and GDOES Characterization of Porous Coating Enriched with Copper and Calcium Obtained on Tantalum via Plasma Electrolytic Oxidation. Journal of Spectroscopy, 2016, 2016, 1-7.	1.3	32
15	Characterization of Passive Film Formed on AISI 316L Stainless Steel after Magnetoelectropolishing in a Broad Range of Polarization Parameters. Steel Research International, 2012, 83, 910-918.	1.8	30
16	GDOES, XPS, and SEM with EDS analysis of porous coatings obtained on titanium after plasma electrolytic oxidation. Surface and Interface Analysis, 2017, 49, 303-315.	1.8	30
17	Electrochemical modification of the Ti-15Mo alloy surface in solutions containing ZnO and Zn3(PO4)2 particles. Materials Science and Engineering C, 2020, 115, 111098.	7.3	29
18	Formation of and CO adsorption on an inert La-Pt(111) surface alloy. Physical Review B, 1999, 59, 15935-15941.	3.2	28

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19	Development of Cerium-Doped Hydroxyapatite Coatings with Antimicrobial Properties for Biomedical Applications. Coatings, 2020, 10, 516.	2.6	28
20	Photoemission study of formation and oxidation of a cerium-copper interface. Physical Review B, 1989, 40, 7969-7972.	3.2	27
21	Development of copper-enriched porous coatings on ternary Ti-Nb-Zr alloy by plasma electrolytic oxidation. International Journal of Advanced Manufacturing Technology, 2017, 89, 2953-2965.	3.0	27
22	Growth and alloy formation studied by photoelectron spectroscopy and STM. Surface Science, 1999, 425, 57-67.	1.9	26
23	Core-level and valence-band photoemission study of granular platinum films. Physical Review B, 1986, 33, 4345-4348.	3.2	25
24	Electronic structure of the Laâ€“Pt(111) surface alloy. Surface Science, 2000, 448, 179-186.	1.9	24
25	Monte-Carlo simulations of thermal desorption of adsorbed molecules from metal surfaces. Energy, 2005, 30, 821-830.	8.8	24
26	Hydrogen adsorption on carbon nanocone material studied by thermal desorption and photoemission. Applied Surface Science, 2008, 255, 1906-1910.	6.1	24
27	Preparation of stable cubic LaFeO3 nanoparticles using carbon nanotubes as templates. Journal of Materials Chemistry A, 2013, 1, 7006.	10.3	24
28	Evolution of the Pt conduction band in a solid Xe layer. Physical Review B, 1985, 32, 4289-4291.	3.2	23
29	Novel Porous Phosphorusâ€“Calciumâ€“Magnesium Coatings on Titanium with Copper or Zinc Obtained by DC Plasma Electrolytic Oxidation: Fabrication and Characterization. Materials, 2018, 11, 1680.	2.9	22
30	Deposition of Au colloids on plasmachemically modified carbon nanofibers. Carbon, 2008, 46, 759-765.	10.3	21
31	Mixed valence in CeNi5; effects of dilution and chemical pressure. Solid State Communications, 1983, 48, 199-202.	1.9	20
32	LIIIx-ray absorption in the light rare earths: Ground-state versus final-state effects. Physical Review B, 1983, 27, 5139-5141.	3.2	20
33	LIIIabsorption studies of the mixed valence systems Ce(Rh1â^'xRux)2and Ce(Rh1â^'yPty)2. Journal of Applied Physics, 1984, 55, 1966-1968.	2.5	20
34	Correlation effects in 3d transition metals: Presence of a two-hole core-satellite in cobalt. Solid State Communications, 1986, 60, 991-993.	1.9	20
35	Photoemission study of Sm on Ta(110): Valence states in the initial growth phase. Physical Review B, 1997, 55, 1391-1394.	3.2	19
36	The influence of potassium doping on hydrogen adsorption on carbon nanocone material studied by thermal desorption and photoemission. Applied Surface Science, 2013, 270, 364-369.	6.1	19

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37	Investigation of Spin Coating Cerium-Doped Hydroxyapatite Thin Films with Antifungal Properties. Coatings, 2021, 11, 464.	2.6	19
38	Solid state reaction at room temperature of cerium and gold in evaporated films. Solid State Communications, 1990, 73, 389-392.	1.9	17
39	An X-ray photoemission study of Ce-Rh, Ce-Pd and Ce-Ag interfaces. Journal of Physics Condensed Matter, 1992, 4, 8021-8028.	1.8	17
40	Photoelectron spectroscopy and scanning tunneling microscopy studies of the initial growth of the Sm-on-Pt(100) interface. Physical Review B, 1996, 53, 16587-16594.	3.2	17
41	Valence variations of Sm on polycrystalline Ag. Surface Science, 2006, 600, 1155-1159.	1.9	17
42	Characterisation of Calcium- and Phosphorus-Enriched Porous Coatings on CP Titanium Grade 2 Fabricated by Plasma Electrolytic Oxidation. Metals, 2017, 7, 354.	2.3	17
43	Characterization of Porous Phosphate Coatings Enriched with Magnesium or Zinc on CP Titanium Grade 2 under DC Plasma Electrolytic Oxidation. Metals, 2018, 8, 112.	2.3	17
44	Antimicrobial Properties of Samarium Doped Hydroxyapatite Suspensions and Coatings. Coatings, 2020, 10, 1124.	2.6	17
45	Characterization of Porous Phosphate Coatings Enriched with Calcium, Magnesium, Zinc and Copper Created on CP Titanium Grade 2 by Plasma Electrolytic Oxidation. Metals, 2018, 8, 411.	2.3	16
46	K promoted oxidation of Al and Ta. Surface Science, 1991, 250, 51-58.	1.9	15
47	Work function variations and oxygen conduction in a Pt|ZrO2(Y2O3)|Pt solid electrolyte cell. Applied Surface Science, 1996, 93, 199-203.	6.1	15
48	The surface core-level shift of the Rh (100) single-crystal surface. Journal of Physics Condensed Matter, 1994, 6, L7-L10.	1.8	14
49	Valence variations in the monolayer regime of Sm on the Nb(110) surface. Surface Science, 1998, 410, 344-350.	1.9	14
50	Hydrophobic monolayer preparation by Langmuirâ€“Blodgett and chemical adsorption techniques. Journal of Colloid and Interface Science, 2008, 325, 228-235.	9.4	14
51	Initial oxidation of pure and K doped NiTi shape memory alloys. Journal of Applied Physics, 2009, 105, .	2.5	13
52	High temperature hydrogenation of Tiâ€“V alloys: The effect of cycling and carbon monoxide on the bulk and surface properties. International Journal of Hydrogen Energy, 2016, 41, 1699-1710.	7.1	12
53	Development of Porous Coatings Enriched with Magnesium and Zinc Obtained by DC Plasma Electrolytic Oxidation. Micromachines, 2018, 9, 332.	2.9	12
54	Physicochemical and Biological Evaluation of Chitosan-Coated Magnesium-Doped Hydroxyapatite Composite Layers Obtained by Vacuum Deposition. Coatings, 2022, 12, 702.	2.6	12

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55	Surface versus shake-down effects in the deep-core photoemission of Sm- and Eu-based intermetallics. Physical Review B, 1983, 27, 6469-6471.	3.2	11
56	Observation of a first-order phase transition in Xe/Ta(110) by photoelectron spectroscopy. Physical Review B, 1985, 31, 623-626.	3.2	11
57	Referencing core levels in photoelectron spectroscopy. Physical Review B, 1990, 42, 9151-9154.	3.2	11
58	Investigation of the Laâ€“Rh(100) surface alloy. Surface Science, 2001, 490, 1-12.	1.9	11
59	Molecular vibrations in core-ionised CO adsorbed on Co(0001) and Rh(100). Surface Science, 2001, 492, 152-160.	1.9	11
60	Porous Coatings Containing Copper and Phosphorus Obtained by Plasma Electrolytic Oxidation of Titanium. Materials, 2020, 13, 828.	2.9	11
61	Oxidation of transition metal-rare earth interfaces: an XPS study. Physica Scripta, 1988, 37, 778-781.	2.5	10
62	Plasma electrolytic oxidation as an effective tool for production of copper incorporated bacteriostatic coatings on Ti-15Mo alloy. Applied Surface Science, 2021, 563, 150284.	6.1	10
63	Praseodymium-overlayer-induced enhancement in oxide growth on aluminum and tantalum. Physical Review B, 1990, 41, 12270-12273.	3.2	9
64	Enhanced oxidation of aluminum; effects of thin cerium overlayers. Physica Scripta, 1990, 41, 1001-1004.	2.5	9
65	Oxygen K near-edge-structure for thin Ce oxide films. Solid State Communications, 1991, 77, 731-734.	1.9	9
66	Photoemission study of the Ce/Rh(100) overlayer system: Hybridization offanddstates. Physical Review B, 1994, 50, 1976-1979.	3.2	9
67	Oxidation of 4Hâ€“SiC covered with a SmSix surface alloy. Surface Science, 2006, 600, 1300-1307.	1.9	8
68	Oxidation of thin Ce layers on Rh(110). Thin Solid Films, 2008, 517, 805-810.	1.8	8
69	Enhanced visible light photoelectrochemical water splitting using nanotubular FeOx-TiO2 annealed at different temperatures. Journal of Power Sources, 2021, 507, 230274.	7.8	8
70	Correspondence between the work function and overlayer core-level shifts in oxidized cesium on carbon. Physical Review B, 1991, 44, 3373-3376.	3.2	7
71	Spontaneous formation of an ordered interstratification upon Ni-exchange of Na-fluorohectorite. Applied Clay Science, 2020, 198, 105831.	5.2	7
72	Phosphate Coatings Enriched with Copper on Titanium Substrate Fabricated Via DC-PEO Process. Materials, 2020, 13, 1295.	2.9	7

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73	Hybridization between4fand conduction electrons and saturation of mixed valence in cerium-based systems. Physical Review B, 1985, 32, 4241-4244.	3.2	6
74	Observation of bulk tantalum oxide formation below 35 K. Physical Review B, 1987, 35, 3740-3744.	3.2	6
75	Valence states of Eu/Pd and Eu/Ta interfaces. Journal of Physics Condensed Matter, 1990, 2, 7679-7686.	1.8	6
76	Photoemission study of solid state reaction and initial oxidation of the Ce/A1(111) system. Surface Science, 1994, 303, 114-124.	1.9	6
77	Oxidation of metal surfaces at 15 K: The quantum nature of oxidation. Physical Review B, 1995, 52, 11339-11342.	3.2	6
78	Study of CO adsorption on Laâ€“Rh(100) surface alloys. Surface Science, 2002, 497, 254-268.	1.9	6
79	Surface alloy formation after deposition of Ce on Rh(110). Surface Science, 2007, 601, 2917-2923.	1.9	6
80	Surface alloying and mixed valence in thin layers of Ce and Pd on Ru(0001). Surface Science, 2009, 603, 197-202.	1.9	6
81	Influence of Elemental Carbon (EC) Coating Covering nc-(Ti,Mo)C Particles on the Microstructure and Properties of Titanium Matrix Composites Prepared by Reactive Spark Plasma Sintering. Materials, 2021, 14, 231.	2.9	6
82	The Influence of Nanometals, Dispersed in the Electrophoretic Nanohydroxyapatite Coatings on the Ti13Zr13Nb Alloy, on Their Morphology and Mechanical Properties. Materials, 2021, 14, 1638.	2.9	6
83	4p-4d fano-like resonance in rhodium. Journal of Electron Spectroscopy and Related Phenomena, 1990, 50, 195-200.	1.7	5
84	Resonant photoemission from tantalum in the vicinity of the 5p excitation threshold. Physica B: Condensed Matter, 1990, 162, 172-175.	2.7	5
85	Properties of TmPt(111) surface alloys. Surface Science, 2005, 581, 133-141.	1.9	5
86	Metal Ions Supported Porous Coatings by Using AC Plasma Electrolytic Oxidation Processing. Materials, 2020, 13, 3838.	2.9	5
87	Final-state mixing and charge neutralization by tunneling: A photoemission study of metalâ€“rare-gas systems. Physical Review B, 1986, 33, 4360-4363.	3.2	4
88	Photoemission studies of Eu-Rh and Eu-Pd interfaces. Journal of Physics Condensed Matter, 1992, 4, 4213-4220.	1.8	3
89	Initial oxidation of the Sc-on-Al(111) system, as studied by photoelectron spectroscopy. Journal of Electron Spectroscopy and Related Phenomena, 1996, 77, 25-31.	1.7	3
90	The surface core-level shift of the Nb(110) surface. Philosophical Magazine Letters, 1998, 78, 271-276.	1.2	3

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91	Size effect on thermal desorption of CO from Pt nanostructures on graphite. Journal of Applied Physics, 2011, 109, 123503.	2.5	3
92	Adsorption of Carbon Dioxide on Mono-Layer Thick Oxidized Samarium Films on Ni(100). Nanomaterials, 2021, 11, 2064.	4.1	3
93	The Effect of Substrate Treatment on the Properties of TiAlSiYN/CrN Nanocomposite Coatings. Surfaces and Interfaces, 2022, 30, 101902.	3.0	3
94	Growth of gold monolayers on polycrystalline tantalum. Solid State Communications, 1988, 65, 1605-1608.	1.9	2
95	Carbon Cones - a Structure with Unique Properties. Materials Research Society Symposia Proceedings, 2007, 1057, 1.	0.1	2
96	Formation of dendritic Pt nanostructures on graphite. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2014, 32, 031803.	1.2	2
97	Interaction between adsorbed hydrogen and potassium on a carbon nanocone containing material as studied by photoemission. Journal of Applied Physics, 2015, 118, .	2.5	2
98	Temperature programmed desorption of CO from CO pre-covered Mo(1 1 0). Applied Surface Science, 2015, 349, 17-20.	6.1	2
99	Characterisation of porous coatings formed on titanium under AC plasma electrolytic oxidation. MATEC Web of Conferences, 2018, 178, 03008.	0.2	2
100	A photoemission investigation of deposition rate dependent growth of europium on silver films. Physica B: Condensed Matter, 1993, 183, 415-418.	2.7	1
101	Possible influence of electrostatics in molecular bonding at supported metal nanoparticles. Philosophical Magazine Letters, 2010, 90, 193-199.	1.2	1
102	Characterisation of porous coatings formed on titanium under DC plasma electrolytic oxidation. MATEC Web of Conferences, 2018, 178, 03009.	0.2	1
103	Correlation effects in the photoemission/B.I.S. from narrow band metals. Physica Scripta, 1989, 40, 315-320.	2.5	0