VÃ¡clav Nehasil

List of Publications by Year
in descending order

70 papers	894 citations	516215 16 h-index	525886 27 g-index
70 all docs	70 docs citations	70 times ranked	1068 citing authors

#	Article	IF	Citations
1	Calcium-doped titanium thin films prepared with the assistance of an oxygen ion beam: The effect of Ca content on microstructure, mechanical properties and adhesion. Applied Surface Science, 2022, 573, 151569.	3.1	5
2	XPS study of Rh/In2O3 system. Surfaces and Interfaces, 2021, 22, 100794.	1.5	5
3	Beta-Titanium Alloy Covered by Ferroelectric Coatingâ€"Physicochemical Properties and Human Osteoblast-Like Cell Response. Coatings, 2021, 11, 210.	1.2	7
4	Ozone Sensing by In2O3 Films Modified with Rh: Dimension Effect. Sensors, 2021, 21, 1886.	2.1	5
5	Oxygen Exchange between Catalyst and Active Support during CO Oxidation on Rh/CeO2(111) and Rh/CeO2(110): Isotope Labeled 18O Study. Journal of Physical Chemistry C, 2021, 125, 15959-15966.	1.5	6
6	Ablation of single-crystalline cesium iodide by extreme ultraviolet capillary-discharge laser. Nukleonika, 2020, 65, 205-210.	0.3	0
7	Anion-mediated electronic effects in reducible oxides: Tuning the valence band of ceria via fluorine doping. Journal of Chemical Physics, 2019, 151, 044701.	1.2	4
8	The role of Rh dispersion in gas sensing effects observed in SnO2 thin films. Materials Chemistry and Physics, 2019, 232, 160-168.	2.0	8
9	XPS study of the SnO₂ films modified with Rh. Surface and Interface Analysis, 2018, 50, 795-801.	0.8	9
10	The analysis of thermal and anodic oxide layers on selected biocompatible titanium alloys. Surface and Interface Analysis, 2018, 50, 1007-1011.	0.8	8
11	Morphology and CO Oxidation Reactions on Anion Doped CeOXFY/Rh(111) and CeOX/Rh(111) Inverse Catalysts. Journal of Physical Chemistry C, 2016, 120, 26782-26792.	1.5	2
12	Photocatalytic and electrochemical properties of single- and multi-layer sub-stoichiometric titanium oxide coatings prepared by atmospheric plasma spraying. Journal of Advanced Ceramics, 2016, 5, 126-136.	8.9	13
13	Experimental and Theoretical Study on the Electronic Interaction between Rh Adatoms and CeOx Substrate in Dependence on a Degree of Cerium Oxide Reduction. Journal of Physical Chemistry C, 2016, 120, 5468-5476.	1.5	21
14	Impact of Rhâ€"CeO interaction on CO oxidation mechanisms. Applied Surface Science, 2015, 332, 747-755.	3.1	25
15	Altering properties of cerium oxide thin films by Rh doping. Materials Research Bulletin, 2015, 67, 5-13.	2.7	20
16	Study of the character of gold nanoparticles deposited onto sputtered cerium oxide layers by deposition-precipitation method: Influence of the preparation parameters. Vacuum, 2015, 114, 86-92.	1.6	10
17	Influence of the Ceâ€"F interaction on cerium photoelectron spectra in CeO F layers. Chemical Physics Letters, 2015, 639, 126-130.	1.2	13
18	The effect of the substrate on thermal stability of CeO<i>_x</i> and Rhâ€"Ceâ€"O thin films. Surface and Interface Analysis, 2014, 46, 980-983.	0.8	1

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19	Improving dielectric properties of plasma sprayed calcium titanate (CaTiO3) coatings by thermal annealing. Ceramics International, 2014, 40, 13049-13055.	2.3	9
20	Atomic and Electronic Structure of Vâ€“Rh(110) Near-Surface Alloy. Journal of Physical Chemistry C, 2013, 117, 12679-12688.	1.5	18
21	Photoemission and LEED study of the Sn/Rh(111) surfaceâ€"early oxidation steps and thermal stability. Journal of Physics Condensed Matter, 2012, 24, 015002.	0.7	2
22	Structural, electronic and adsorption properties of Vâ€“Rh(111) subsurface alloy. Journal of Alloys and Compounds, 2012, 543, 189-196.	2.8	13
23	Bimetallic Nickelâ€“Cobalt Nanosized Layers Supported on Polar ZnO Surfaces: Metalâ€“Support Interaction and Alloy Effects Studied by Synchrotron Radiation X-ray Photoelectron Spectroscopy. Journal of Physical Chemistry C, 2012, 116, 10048-10056.	1.5	20
24	Titanium Dioxide Coatings Sprayed by a Water-Stabilized Plasma Gun (WSP) with Argon and Nitrogen as the Powder Feeding Gas: Differences in Structural, Mechanical and Photocatalytic Behavior. Journal of Thermal Spray Technology, 2012, 21, 425-434.	1.6	16
25	Plasma sprayed TiO2: The influence of power of an electric supply on relations among stoichiometry, surface state and photocatalytic decomposition of acetone. Ceramics International, 2012, 38, 3453-3458.	2.3	13
26	XPS and TPD investigation of CO adsorption on mixed Rhâ€“V layers supported by gamma-alumina. Applied Surface Science, 2011, 258, 908-913.	3.1	7
27	Structure and properties of plasma sprayed BaTiO3 coatings: Spray parameters versus structure and photocatalytic activity. Ceramics International, 2011, 37, 2561-2567.	2.3	23
28	Non-Destructive Depth Profiling of the Activated Ti-Zr-V Getter by Means of Excitation Energy Resolved Photoelectron Spectroscopy. Analytical Sciences, 2010, 26, 209-215.	0.8	5
29	Photoemission study of Rh/CeO2/Cu(111) systemâ€"Oxidation state, stability and interaction with adsorbed gases. Journal of Electron Spectroscopy and Related Phenomena, 2010, 181, 229-233.	0.8	3
30	Photoemission and thermoâ€programmed reaction study of the catalytic properties of Rh/CeO₂ system. Surface and Interface Analysis, 2010, 42, 931-934.	0.8	2
31	Surface alloying in the Sn/Ni(111) system studied by synchrotron radiation photoelectron valence band spectroscopy and ab-initio density of states calculations. Thin Solid Films, 2008, 516, 2962-2965.	0.8	0
32	A photoemission study of carbon monoxide interaction with the Gaâ€“Pd(110) system. Thin Solid Films, 2008, 517, 773-778.	0.8	5
33	Photoemission Spectroscopy Study of Cu/CeO₂ Systems:â€‰ Cu/CeO₂ Nanosized Catalyst and CeO₂(111)/Cu(111) Inverse Model Catalyst. Journal of Physical Chemistry C, 2008, 112, 3751-3758.	1.5	40
34	Study of CO adsorption on Sn/Rh(111). Surface Science, 2007, 601, 3717-3721.	0.8	6
35	Valence band and band gap photoemission study of (111) In2O3 epitaxial films under interactions with oxygen, water and carbon monoxide. Surface Science, 2007, 601, 5585-5594.	0.8	26
36	Growth of ultra-thin cerium oxide layers on Cu(1 1 1). Applied Surface Science, 2007, 254, 153-155.	3.1	64

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37	XPS and TPD study of Rh/SnO2 system â€“ Reversible process of substrate oxidation and reduction. Surface Science, 2006, 600, 4233-4238.	0.8	46
38	The transition from the adsorbed state to a surface alloy in the Sn/Ni(111) system. Surface Science, 2006, 600, 4067-4071.	0.8	11
39	Experimental and model study of the Rh/Al system by means of EPES. Surface and Interface Analysis, 2005, 37, 998-1005.	0.8	3
40	EELS and AES investigation of Rh thin film growth on polycrystalline Al substrate. Vacuum, 2004, 74, 141-145.	1.6	3
41	Reactivity of mixed rhodium/aluminium thin films deposited on gamma-alumina. Vacuum, 2004, 74, 317-323.	1.6	0
42	Investigation of behaviour of Rh deposited onto polycrystalline SnO2 by means of TPD, AES and EELS. Surface Science, 2003, 532-535, 415-419.	0.8	13
43	Influence of the alumina surface orientation to the Rh particle growth and reconstruction. Surface Science, 2002, 507-510, 655-661.	0.8	12
44	Rh/Al bimetallic system with different thickness of Rh layerâ€“â€“AES characterisation and CO oxidation. Surface Science, 2002, 507-510, 859-864.	0.8	3
45	Using EPES as an easy method in model catalysts research. Applied Surface Science, 2002, 189, 138-147.	3.1	2
46	EELS study of Rh particle growth on ZrO2 substrate with different deposition conditions. Surface Science, 2001, 482-485, 789-796.	0.8	2
47	Reactivity of non-continuous Rh model catalysts deposited on differently oriented Al2O3 substrates. Surface Science, 2001, 482-485, 260-265.	0.8	4
48	The AES and EELS study of small rhodium clusters deposited onto alumina substrates. Surface Science, 2001, 487, 231-242.	0.8	7
49	AES and TDS study of CO interaction with Rh layers on Al substrate. Vacuum, 2001, 63, 7-14.	1.6	5
50	Characterisation of Rh films deposited onto Al2O3 substrate by means of electron spectroscopy. Vacuum, 2001, 63, 83-89.	1.6	2
51	Electron spectroscopy study of metal particle-gas molecule interaction. Vacuum, 2001, 63, 283-289.	1.6	4
52	Angular distribution of electrons elastically reflected from polycrystalline metals (Pd, In). Surface and Interface Analysis, 2000, 30, 341-345.	0.8	4
53	Cogelation: an effective sol-gel method to produce sinter-proof finely dispersed metal catalysts supported on highly porous oxides. Studies in Surface Science and Catalysis, 2000, 143, 25-33.	1.5	11
54	Study of CO adsorption on Rh/alumina model catalysts in dependence on substrate orientation. Surface Science, 2000, 454-456, 289-294.	0.8	12

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55	Abilities of elastic peak electron spectroscopy in the field of thin films growth investigation: Au on Al and Al2O3. Applied Surface Science, 1999, 142, 465-469.	3.1	9
56	X-ray photoelectron spectroscopy study of rhodium particle growth on different alumina surfaces. Surface Science, 1999, 433-435, 612-616.	0.8	15
57	The interaction of carbon monoxide with Rh/Al2O3 model catalysts: influence of the support structure. Surface Science, 1999, 433-435, 215-220.	0.8	10
58	Electron elastic scattering study of thin film growth mode: Rh on Al2O3. Vacuum, 1998, 50, 147-149.	1.6	3
59	XPS study of Pd particle growth on different alumina surfaces. Vacuum, 1998, 50, 143-145.	1.6	11
60	SSIMS and XPS Studies of Reconstruction of Alumina-Supported Rh Particles. Surface Review and Letters, 1998, 05, 375-379.	0.5	3
61	Molecular beam study of CO and O2 sticking coefficients on Rh model catalysts. Surface Science, 1997, 377-379, 813-818.	0.8	16
62	Miniature electron bombardment evaporation source: evaporation rate measurement. European Physical Journal D, 1997, 47, 261-268.	0.4	34
63	Size effect study of carbon monoxide oxidation by Rh surfaces. Surface Science, 1996, 352-354, 305-309.	0.8	37
64	Influence of substrate structure on activity of alumina supported Pd particles: CO adsorption and oxidation. Surface Science, 1996, 365, 69-77.	0.8	40
65	Vacuum evaporation of thin alumina layers. Thin Solid Films, 1996, 289, 295-299.	0.8	6
66	Study of CO desorption and dissociation on Rh surfaces. Surface Science, 1995, 331-333, 105-109.	0.8	45
67	The influence of particle size on CO oxidation on Pd/alumina model catalyst. Surface Science, 1995, 331-333, 173-177.	0.8	65
68	Study of the nickel-alumina interface by XPS and XAES. Surface Science, 1994, 318, 151-157.	0.8	17
69	Study of desorption activation energy on Rh-CO systems. European Physical Journal D, 1993, 43, 957-961.	0.4	5
70	Some aspects of measurements with a 127Â° cylindrical analyzer. European Physical Journal D, 1985, 35, 621-629.	0.4	0