Karel Masek

List of Publications by Year
in descending order

87 papers	964 citations	430874 18 h-index	610901 24 g-index
88 all docs	88 docs citations	88 times ranked	1053 citing authors

#	Article	IF	Citations
1	Adsorption of CO on Small Supported Rhodium Particles: SSIMS and TPD Study. Journal of Catalysis, 1993, 143, 492-498.	6.2	36
2	Mechanism of non-evaporable getter activation XPS and static SIMS study of Zr44V56 alloy. Vacuum, 2003, 71, 317-322.	3.5	35
3	Miniature electron bombardment evaporation source: evaporation rate measurement. European Physical Journal D, 1997, 47, 261-268.	0.4	34
4	Snâ€"CeO2 thin films prepared by rf magnetron sputtering: XPS and SIMS study. Applied Surface Science, 2009, 255, 6656-6660.	6.1	33
5	CO dissociation and oxidation on small supported rhodium particles: SSIMS and TPR study. Catalysis Letters, 1993, 21, 175-182.	2.6	29
6	Structure of tungsten oxide nanoclusters. Surface Science, 2004, 566-568, 383-389.	1.9	27
7	X-ray photoelectron spectroscopy and static secondary ion mass spectroscopy study of activation mechanism of Zrâ€"V low activation temperature nonevaporable getter films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2003, 21, 797-805.	2.1	26
8	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.	1.9	26
9	Chemical Etching of CdTe in Aqueous Solutions of H2O2-HI-Citric Acid. Journal of Electronic Materials, 2007, 36, 1021-1024.	2.2	26
10	XPS and SIMS study of the ageing mechanism of Zrâ€"V non-evaporable getter films. Applied Surface Science, 2004, 235, 202-206.	6.1	24
11	Residual surface oxide on ZrV getterâ€"XPS, LEIS and SIMS study. Vacuum, 2004, 74, 305-309.	3.5	23
12	RHEED study of the growth of cerium oxide on Cu(1 1 1). Applied Surface Science, 2012, 259, 34-38.	6.1	23
13	SRPES investigation of tungsten oxide in different oxidation states. Surface Science, 2006, 600, 1624-1627.	1.9	22
14	Interface termination and band alignment of epitaxially grown alumina films on Cuâ€"Al alloy. Journal of Applied Physics, 2008, 103, 033707.	2.5	22
15	Influence of surface structure on the growth of Au on Î±Al2O3 (1Ì,,012). Thin Solid Films, 2000, 374, 134-141.	1.8	21
16	Altering properties of cerium oxide thin films by Rh doping. Materials Research Bulletin, 2015, 67, 5-13.	5.2	20
17	Study of the growth of rhodium particles on different substrates. Thin Solid Films, 1995, 260, 252-258.	1.8	19
18	Photoemission study of the tin doped cerium oxide thin films prepared by RF magnetron sputtering. Thin Solid Films, 2010, 518, 2206-2209.	1.8	19

#	Article	IF	Citations
19	Contactless resistivity and photoconductivity correlation to surface preparation of CdZnTe. Applied Surface Science, 2014, 315, 144-148.	6.1	19
20	Chemical Polishing of CdTe and CdZnTe in Iodineâ€"Methanol Etching Solutions. Journal of Electronic Materials, 2011, 40, 1802-1808.	2.2	18
21	Polarity driven morphology of CeO2(100) islands on Cu(111). Applied Surface Science, 2013, 285, 766-771.	6.1	18
22	An epitaxial hexagonal tungsten bronze as precursor for WO3 nanorods on mica. Journal of Crystal Growth, 2008, 310, 3318-3324.	1.5	16
23	The interface structure and band alignment at alumina/Cu(Al) alloy interfacesâ€"Influence of the crystallinity of alumina films. Applied Surface Science, 2010, 256, 3051-3057.	6.1	16
24	Activation of binary Zrâ€"V non-evaporable getters: synchrotron radiation photoemission study. Applied Surface Science, 2005, 243, 106-112.	6.1	15
25	Rh particle growth on insulator substrates: RHEED study. Thin Solid Films, 1996, 286, 330-335.	1.8	14
26	Influence of Pdâ€"Co bimetallic interaction on CO adsorption properties of PdxCo1â ̂'x alloys: XPS, TPD and static SIMS studies. Vacuum, 2003, 71, 41-45.	3.5	14
27	RHEED study of Pd thin film growth on Î±-Al2O3 substrate. Vacuum, 1998, 50, 151-155.	3.5	13
28	Oxidation of tungsten nanoclusters. Thin Solid Films, 2003, 444, 9-16.	1.8	13
29	Activation of binary Zrâ€"V non-evaporable getters: a soft X-ray photoemission study of carbide formation. Surface Science, 2004, 566-568, 1246-1249.	1.9	13
30	Ultra-thin oxide layer formation on Cuâ€"9%Al(111) surface and Pd growth studied using reflection high energy electron diffraction and Auger electron spectroscopy. Surface Science, 2006, 600, 4357-4360.	1.9	13
31	RHEED and XPS study of cerium interaction with SnO2 (110) surface. Ceramics International, 2014, 40, 323-329.	4.8	13
32	Influence of the alumina surface orientation to the Rh particle growth and reconstruction. Surface Science, 2002, 507-510, 655-661.	1.9	12
33	Chemical Interaction of CdTe and CdZnTe with Aqueous Solutions of H2O2-HI-Tartaric Acid. Journal of Electronic Materials, 2009, 38, 1645-1651.	2.2	12
34	Structural and electronic studies of supported Pt and Au epitaxial clusters on tungsten oxide surface. Vacuum, 2012, 86, 586-589.	3.5	12
35	Optical and electrical study of CdZnTe surfaces passivated by KOH and NH4F solutions. Applied Surface Science, 2016, 389, 1214-1219.	6.1	12
36	RHEED investigation of lattice deformations of Î±-Al2O3 supported Pd particles. European Physical Journal D, 1999, 9, 557-560.	1.3	11

#	Article	IF	Citations
37	RHEED and XPS study of Pdâ€“Sn bimetallic system growth. Surface Science, 2007, 601, 4475-4478.	1.9	11
38	Surface characterization of activated Tiâ€“Zrâ€“V NEG coatings. Vacuum, 2009, 83, 824-827.	3.5	11
39	Ptâ€doped tungsten oxide surface: photoemission and RHEED study. Surface and Interface Analysis, 2010, 42, 540-544.	1.8	11
40	Effects of oxygen addition in reactive cluster beam deposition of tungsten by magnetron sputtering with gas aggregation. Thin Solid Films, 2015, 591, 194-199.	1.8	11
41	The comparative study of electrical, optical and catalytic properties of Co3O4 thin nanocrystalline films prepared by reactive high-power impulse and radio frequency magnetron sputtering. Thin Solid Films, 2019, 686, 137427.	1.8	11
42	RHEED and XPS study of palladium interaction with cerium oxide surface. Vacuum, 2019, 167, 438-444.	3.5	11
43	RHEED study of Nb thin film growth on Î±-Al2O3 (0001) substrate. Thin Solid Films, 1998, 317, 183-188.	1.8	10
44	RHEED study of Nb thin film growth on Cu(111) and (100) single-crystals. Vacuum, 2001, 61, 217-221.	3.5	9
45	Cyclodextrin-Polypyrrole Coatings of Scaffolds for Tissue Engineering. Polymers, 2019, 11, 459.	4.5	9
46	Methanol oxidation on pure and platinum-doped tungsten oxide supported by activated carbon. Materials Chemistry and Physics, 2019, 228, 147-159.	4.0	8
47	RHEED Study of Pd Particle Growth on Î±-Alumina and NaCl Substrates. Surface Review and Letters, 1998, 05, 403-408.	1.1	7
48	Sims study of Tiâ€“Zrâ€“V NEG thermal activation process. Vacuum, 2005, 80, 47-52.	3.5	7
49	Faceting Transition at the Oxideâ€“Metal Interface: (13 13 1) Facets on Cu(110) Induced by Carpet-Like Ceria Overlayer. Journal of Physical Chemistry C, 2015, 119, 1851-1858.	3.1	7
50	Methanol to hydrogen conversion on cobaltâ€“ceria catalysts prepared by magnetron sputtering. International Journal of Hydrogen Energy, 2021, 46, 17197-17208.	7.1	7
51	Influence of Alumina Surface Structure on Growth and Adsorption Properties of Pd Particles. Surface Review and Letters, 1998, 05, 397-401.	1.1	6
52	Structure of Pd/tungsten oxide epitaxial system. Vacuum, 2007, 82, 274-277.	3.5	6
53	Photoemission and RHEED study of the supported Pt and Au epitaxial alloy clusters. Applied Surface Science, 2013, 282, 746-756.	6.1	6
54	RHEED structural study of the novel tin-cerium oxide catalyst. Ceramics International, 2015, 41, 4946-4952.	4.8	6

#	Article	IF	Citations
55	Thermal stability of bulk p-CdTe. Journal of Alloys and Compounds, 2016, 680, 8-13.	5.5	6
56	Reflection high-energy electron loss spectroscopy (RHEELS): a new approach in the investigation of epitaxial thin film growth by reflection high-energy electron diffraction (RHEED). Vacuum, 2003, 71, 59-64.	3.5	5
57	Photoelectron Spectroscopy Characterization of Diamond-like Carbon Films. Applied Spectroscopy, 2006, 60, 936-940.	2.2	5
58	Photoelectron spectroscopy and secondary ion mass spectrometry characterization of diamond-like carbon films. Thin Solid Films, 2007, 515, 5386-5390.	1.8	5
59	Photoemission spectroscopy and electron diffraction study of Pd/tungsten oxide/W(110) epitaxial system. Journal of Physics: Conference Series, 2008, 100, 012008.	0.4	5
60	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.	1.6	5
61	Slow-Polishing Iodine-Based Etchant for CdTe and CdZnTe Single Crystals. Journal of Electronic Materials, 2012, 41, 2838-2845.	2.2	5
62	Photoemission Study of Methanol Adsorption and Decomposition on Pd/CeO2(111)/Cu(111) Thin Film Model Catalyst. Catalysis Letters, 2015, 145, 1474-1482.	2.6	5
63	RHEED INVESTIGATION OF Pd/Al BIMETALLIC SYSTEM ON KCl(001) SUBSTRATE. Surface Review and Letters, 1999, 06, 825-828.	1.1	4
64	RHEED study of the growth of Pdâ€“Al/MgO bimetallic system. Vacuum, 2005, 80, 102-107.	3.5	4
65	Catalytic activity of small supported Pd/Al2O3 particles: CO oxidation. Zeitschrift FÃ¼r Physik D-Atoms Molecules and Clusters, 1988, 10, 499-501.	1.0	3
66	Preparation of single-crystalline Nbâ€“Al2O3â€“Nb structures by molecular-beam deposition. Surface Science, 1998, 417, 139-144.	1.9	3
67	RHEED and EELS study of Pd/Al bimetallic thin film growth on different Î±-Al2O3 substrates. Surface Science, 2002, 507-510, 300-304.	1.9	3
68	Photoelectron-spectroscopic and reactivity investigation of thin Pdâ€“Sn films prepared by magnetron sputtering. Applied Surface Science, 2007, 253, 5400-5403.	6.1	3
69	The growth of Au/Pd/alumina/Cuâ€“Al system studied by SRPES. Applied Surface Science, 2008, 254, 4340-4345.	6.1	3
70	A Slightly Oxidizing Etchant for Polishing of CdTe and CdZnTe Surfaces. Journal of Electronic Materials, 2013, 42, 3059-3065.	2.2	3
71	Two-dimensional, high valence-doped ceria: Ce 6 WO 12 (100)/W(110). Applied Surface Science, 2016, 372, 152-157.	6.1	3
72	Structural and photoelectron studies of <scp>Snâ€SnO_x</scp> and <scp>SnO₂</scp> nanoparticles on <scp>TiO₂</scp> (110) surface. Surface and Interface Analysis, 2018, 50, 1116-1121.	1.8	3

#	Article	IF	Citations
73	Thermal stability of cobalt oxide thin films and its enhancement by cerium oxide. Applied Surface Science, 2022, 593, 153430.	6.1	3
74	Study of the growth of supported Pdâ€“Sn bimetallic nanoclusters. Thin Solid Films, 2006, 515, 563-566.	1.8	2
75	XPS and LEED study of Pd and Au growth on alumina/Cuâ€“Al surface. Applied Surface Science, 2007, 254, 490-493.	6.1	2
76	Photoemission and LEED study of the Sn/Rh(111) surfaceâ€"early oxidation steps and thermal stability. Journal of Physics Condensed Matter, 2012, 24, 015002.	1.8	2
77	RHEED study of Pd/Al bimetallic thin film growth on NaCl (001) substrate. Journal of Electron Spectroscopy and Related Phenomena, 2004, 137-140, 113-117.	1.7	1
78	Structural study of epitaxial tungsten oxide nanoclusters. Vacuum, 2005, 80, 58-63.	3.5	1
79	Evolution of the oxidation states at the WO3 thin film surface during annealing in gases. Vacuum, 2007, 82, 261-265.	3.5	1
80	The growth of Au/Pd on alumina/Cu-Al system. Journal of Physics: Conference Series, 2008, 100, 012040.	0.4	1
81	Bridging the Component-Based and Service-Oriented Worlds. , 2009, , .		1
82	Evidence for two growth modes during tungsten oxide vapor deposition on mica substrates. Journal of Crystal Growth, 2014, 394, 67-73.	1.5	1
83	Tungsten oxide nanowire on copper surfaces: a DFT model. RSC Advances, 2016, 6, 88463-88468.	3.6	1
84	1D tungsten oxide nanostructures on a Cu(1â€‰1â€‰0) surface. Journal of Physics Condensed Matter, 2018, 30, 465001.	1.8	1
85	RHEED investigation of lattice deformations of Î±-Al2O3 supported Pd particles. , 1999, , 557-560.		1
86	Catalytic activity of small supported Pd/Al2O3 particles: CO oxidation. Zeitschrift FÃ¼r Physik D-Atoms Molecules and Clusters, 1989, 13, 77-77.	1.0	0
87	Oxidation and erosion of single crystal CdTe surface in distilled water and NaCl solution. Thin Solid Films, 2019, 686, 137426.	1.8	0