

# Karel Masek

## List of Publications by Year in descending order

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docs citations

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times ranked

1053  
citing authors

#	ARTICLE	IF	CITATIONS
1	Thermal stability of cobalt oxide thin films and its enhancement by cerium oxide. Applied Surface Science, 2022, 593, 153430.	6.1	3
2	Methanol to hydrogen conversion on cobalt-ceria catalysts prepared by magnetron sputtering. International Journal of Hydrogen Energy, 2021, 46, 17197-17208.	7.1	7
3	The comparative study of electrical, optical and catalytic properties of Co <sub>3</sub> O <sub>4</sub> thin nanocrystalline films prepared by reactive high-power impulse and radio frequency magnetron sputtering. Thin Solid Films, 2019, 686, 137427.	1.8	11
4	Oxidation and erosion of single crystal CdTe surface in distilled water and NaCl solution. Thin Solid Films, 2019, 686, 137426.	1.8	0
5	RHEED and XPS study of palladium interaction with cerium oxide surface. Vacuum, 2019, 167, 438-444.	3.5	11
6	Cyclodextrin-Polypyrrole Coatings of Scaffolds for Tissue Engineering. Polymers, 2019, 11, 459.	4.5	9
7	Methanol oxidation on pure and platinum-doped tungsten oxide supported by activated carbon. Materials Chemistry and Physics, 2019, 228, 147-159.	4.0	8
8	Structural and photoelectron studies of SnO <sub>x</sub> and SnO <sub>2</sub> nanoparticles on TiO <sub>2</sub> (110) surface. Surface and Interface Analysis, 2018, 50, 1116-1121.	1.8	3
9	1D tungsten oxide nanostructures on a Cu(100) surface. Journal of Physics Condensed Matter, 2018, 30, 465001.	1.8	1
10	Thermal stability of bulk p-CdTe. Journal of Alloys and Compounds, 2016, 680, 8-13.	5.5	6
11	Optical and electrical study of CdZnTe surfaces passivated by KOH and NH <sub>4</sub> F solutions. Applied Surface Science, 2016, 389, 1214-1219.	6.1	12
12	Tungsten oxide nanowire on copper surfaces: a DFT model. RSC Advances, 2016, 6, 88463-88468.	3.6	1
13	Two-dimensional, high valence-doped ceria: Ce <sub>6</sub> WO <sub>12</sub> (100)/W(110). Applied Surface Science, 2016, 372, 152-157.	6.1	3
14	Faceting Transition at the Oxide-Metal Interface: (111) Facets on Cu(110) Induced by Carpet-Like Ceria Overlay. Journal of Physical Chemistry C, 2015, 119, 1851-1858.	3.1	7
15	Altering properties of cerium oxide thin films by Rh doping. Materials Research Bulletin, 2015, 67, 5-13.	5.2	20
16	Photoemission Study of Methanol Adsorption and Decomposition on Pd/CeO <sub>2</sub> (111)/Cu(111) Thin Film Model Catalyst. Catalysis Letters, 2015, 145, 1474-1482.	2.6	5
17	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
18	RHEED structural study of the novel tin-cerium oxide catalyst. Ceramics International, 2015, 41, 4946-4952.	4.8	6

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19	Contactless resistivity and photoconductivity correlation to surface preparation of CdZnTe. Applied Surface Science, 2014, 315, 144-148.	6.1	19
20	RHEED and XPS study of cerium interaction with SnO <sub>2</sub> (110) surface. Ceramics International, 2014, 40, 323-329.	4.8	13
21	Evidence for two growth modes during tungsten oxide vapor deposition on mica substrates. Journal of Crystal Growth, 2014, 394, 67-73.	1.5	1
22	A Slightly Oxidizing Etchant for Polishing of CdTe and CdZnTe Surfaces. Journal of Electronic Materials, 2013, 42, 3059-3065.	2.2	3
23	Photoemission and RHEED study of the supported Pt and Au epitaxial alloy clusters. Applied Surface Science, 2013, 282, 746-756.	6.1	6
24	Polarity driven morphology of CeO <sub>2</sub> (100) islands on Cu(111). Applied Surface Science, 2013, 285, 766-771.	6.1	18
25	Photoemission and LEED study of the Sn/Rh(111) surface—early oxidation steps and thermal stability. Journal of Physics Condensed Matter, 2012, 24, 015002.	1.8	2
26	Slow-Polishing Iodine-Based Etchant for CdTe and CdZnTe Single Crystals. Journal of Electronic Materials, 2012, 41, 2838-2845.	2.2	5
27	RHEED study of the growth of cerium oxide on Cu(1 1 1). Applied Surface Science, 2012, 259, 34-38.	6.1	23
28	Structural and electronic studies of supported Pt and Au epitaxial clusters on tungsten oxide surface. Vacuum, 2012, 86, 586-589.	3.5	12
29	Chemical Polishing of CdTe and CdZnTe in Iodine—Methanol Etching Solutions. Journal of Electronic Materials, 2011, 40, 1802-1808.	2.2	18
30	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
31	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
32	The interface structure and band alignment at alumina/Cu(Al) alloy interfaces—Influence of the crystallinity of alumina films. Applied Surface Science, 2010, 256, 3051-3057.	6.1	16
33	Pt-doped tungsten oxide surface: photoemission and RHEED study. Surface and Interface Analysis, 2010, 42, 540-544.	1.8	11
34	Chemical Interaction of CdTe and CdZnTe with Aqueous Solutions of H <sub>2</sub> O <sub>2</sub> -HI-Tartaric Acid. Journal of Electronic Materials, 2009, 38, 1645-1651.	2.2	12
35	Surface characterization of activated Ti—Zr—V NEG coatings. Vacuum, 2009, 83, 824-827.	3.5	11
36	Sn—CeO <sub>2</sub> thin films prepared by rf magnetron sputtering: XPS and SIMS study. Applied Surface Science, 2009, 255, 6656-6660.	6.1	33

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37	Bridging the Component-Based and Service-Oriented Worlds. , 2009, , .		1
38	The growth of Au/Pd/alumina/Cu-Al system studied by SRPES. Applied Surface Science, 2008, 254, 4340-4345.	6.1	3
39	An epitaxial hexagonal tungsten bronze as precursor for WO <sub>3</sub> nanorods on mica. Journal of Crystal Growth, 2008, 310, 3318-3324.	1.5	16
40	Interface termination and band alignment of epitaxially grown alumina films on Cu-Al alloy. Journal of Applied Physics, 2008, 103, 033707.	2.5	22
41	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
42	The growth of Au/Pd on alumina/Cu-Al system. Journal of Physics: Conference Series, 2008, 100, 012040.	0.4	1
43	RHEED and XPS study of Pd-Sn bimetallic system growth. Surface Science, 2007, 601, 4475-4478.	1.9	11
44	Valence band and band gap photoemission study of (111) In <sub>2</sub> O <sub>3</sub> epitaxial films under interactions with oxygen, water and carbon monoxide. Surface Science, 2007, 601, 5585-5594.	1.9	26
45	Evolution of the oxidation states at the WO <sub>3</sub> thin film surface during annealing in gases. Vacuum, 2007, 82, 261-265.	3.5	1
46	Structure of Pd/tungsten oxide epitaxial system. Vacuum, 2007, 82, 274-277.	3.5	6
47	Photoelectron spectroscopy and secondary ion mass spectrometry characterization of diamond-like carbon films. Thin Solid Films, 2007, 515, 5386-5390.	1.8	5
48	XPS and LEED study of Pd and Au growth on alumina/Cu-Al surface. Applied Surface Science, 2007, 254, 490-493.	6.1	2
49	Chemical Etching of CdTe in Aqueous Solutions of H <sub>2</sub> O <sub>2</sub> -HI-Citric Acid. Journal of Electronic Materials, 2007, 36, 1021-1024.	2.2	26
50	Photoelectron-spectroscopic and reactivity investigation of thin Pd-Sn films prepared by magnetron sputtering. Applied Surface Science, 2007, 253, 5400-5403.	6.1	3
51	Photoelectron Spectroscopy Characterization of Diamond-like Carbon Films. Applied Spectroscopy, 2006, 60, 936-940.	2.2	5
52	SRPES investigation of tungsten oxide in different oxidation states. Surface Science, 2006, 600, 1624-1627.	1.9	22
53	Ultra-thin oxide layer formation on Cu-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
54	Study of the growth of supported Pd-Sn bimetallic nanoclusters. Thin Solid Films, 2006, 515, 563-566.	1.8	2

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55	Activation of binary Zr-V non-evaporable getters: synchrotron radiation photoemission study. Applied Surface Science, 2005, 243, 106-112.	6.1	15
56	Structural study of epitaxial tungsten oxide nanoclusters. Vacuum, 2005, 80, 58-63.	3.5	1
57	Sims study of Ti-Zr-V NEG thermal activation process. Vacuum, 2005, 80, 47-52.	3.5	7
58	RHEED study of the growth of Pd-Al/MgO bimetallic system. Vacuum, 2005, 80, 102-107.	3.5	4
59	Structure of tungsten oxide nanoclusters. Surface Science, 2004, 566-568, 383-389.	1.9	27
60	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
61	Residual surface oxide on ZrV getter-XPS, LEIS and SIMS study. Vacuum, 2004, 74, 305-309.	3.5	23
62	Activation of binary Zr-V non-evaporable getters: a soft X-ray photoemission study of carbide formation. Surface Science, 2004, 566-568, 1246-1249.	1.9	13
63	XPS and SIMS study of the ageing mechanism of Zr-V non-evaporable getter films. Applied Surface Science, 2004, 235, 202-206.	6.1	24
64	Influence of Pd-Co bimetallic interaction on CO adsorption properties of Pd <sub>x</sub> Co <sub>1-x</sub> alloys: XPS, TPD and static SIMS studies. Vacuum, 2003, 71, 41-45.	3.5	14
65	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
66	Mechanism of non-evaporable getter activation XPS and static SIMS study of Zr <sub>44</sub> V <sub>56</sub> alloy. Vacuum, 2003, 71, 317-322.	3.5	35
67	Oxidation of tungsten nanoclusters. Thin Solid Films, 2003, 444, 9-16.	1.8	13
68	X-ray photoelectron spectroscopy and static secondary ion mass spectroscopy study of activation mechanism of Zr-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
69	Influence of the alumina surface orientation to the Rh particle growth and reconstruction. Surface Science, 2002, 507-510, 655-661.	1.9	12
70	RHEED and EELS study of Pd/Al bimetallic thin film growth on different $\gamma$ -Al <sub>2</sub> O <sub>3</sub> substrates. Surface Science, 2002, 507-510, 300-304.	1.9	3
71	RHEED study of Nb thin film growth on Cu(111) and (100) single-crystals. Vacuum, 2001, 61, 217-221.	3.5	9
72	Influence of surface structure on the growth of Au on $\gamma$ -Al <sub>2</sub> O <sub>3</sub> (111,012). Thin Solid Films, 2000, 374, 134-141.	1.8	21

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73	RHEED INVESTIGATION OF Pd/Al BIMETALLIC SYSTEM ON KCl(001) SUBSTRATE. Surface Review and Letters, 1999, 06, 825-828.	1.1	4
74	RHEED investigation of lattice deformations of $\gamma$ -Al <sub>2</sub> O <sub>3</sub> supported Pd particles. European Physical Journal D, 1999, 9, 557-560.	1.3	11
75	RHEED investigation of lattice deformations of $\gamma$ -Al <sub>2</sub> O <sub>3</sub> supported Pd particles. , 1999, , 557-560.		1
76	RHEED study of Pd thin film growth on $\gamma$ -Al <sub>2</sub> O <sub>3</sub> substrate. Vacuum, 1998, 50, 151-155.	3.5	13
77	RHEED study of Nb thin film growth on $\gamma$ -Al <sub>2</sub> O <sub>3</sub> (0001) substrate. Thin Solid Films, 1998, 317, 183-188.	1.8	10
78	Preparation of single-crystalline Nb $\alpha$ -Al <sub>2</sub> O <sub>3</sub> $\alpha$ -Nb structures by molecular-beam deposition. Surface Science, 1998, 417, 139-144.	1.9	3
79	Influence of Alumina Surface Structure on Growth and Adsorption Properties of Pd Particles. Surface Review and Letters, 1998, 05, 397-401.	1.1	6
80	RHEED Study of Pd Particle Growth on $\gamma$ -Alumina and NaCl Substrates. Surface Review and Letters, 1998, 05, 403-408.	1.1	7
81	Miniature electron bombardment evaporation source: evaporation rate measurement. European Physical Journal D, 1997, 47, 261-268.	0.4	34
82	Rh particle growth on insulator substrates: RHEED study. Thin Solid Films, 1996, 286, 330-335.	1.8	14
83	Study of the growth of rhodium particles on different substrates. Thin Solid Films, 1995, 260, 252-258.	1.8	19
84	Adsorption of CO on Small Supported Rhodium Particles: SSIMS and TPD Study. Journal of Catalysis, 1993, 143, 492-498.	6.2	36
85	CO dissociation and oxidation on small supported rhodium particles: SSIMS and TPR study. Catalysis Letters, 1993, 21, 175-182.	2.6	29
86	Catalytic activity of small supported Pd/Al <sub>2</sub> O <sub>3</sub> particles: CO oxidation. Zeitschrift für Physik D-Atoms Molecules and Clusters, 1989, 13, 77-77.	1.0	0
87	Catalytic activity of small supported Pd/Al <sub>2</sub> O <sub>3</sub> particles: CO oxidation. Zeitschrift für Physik D-Atoms Molecules and Clusters, 1988, 10, 499-501.	1.0	3