Ludvik Martinu

List of Publications by Year
in descending order

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62 papers	2,589 citations	236925 25 h-index	189892 50 g-index
62 all docs	62 docs citations	62 times ranked	3451 citing authors

#	Article	IF	Citations
1	Protective TixSiy coatings for enhanced oxidation resistance of the É£-TiAl alloy at 900ÂÂ°C. Surface and Coatings Technology, 2022, 430, 127963.	4.8	11
2	High-temperature oxidation protection of Î³-based TiAl by sputtered AlOF films. Surface and Coatings Technology, 2022, 439, 128283.	4.8	4
3	Ion beam assisted chemical vapor deposition of hybrid coatingsâ€"Process diagnostics and mechanisms. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2021, 39, 063003.	2.1	3
4	Synthesis of thin films and coatings by high power impulse magnetron sputtering. , 2020, , 333-374.		6
5	Durability of superhydrophobic duplex coating systems for aerospace applications. Surface and Coatings Technology, 2020, 401, 126249.	4.8	38
6	In situ ice growth kinetics on water-repellent coatings under atmospheric icing conditions. Surface and Coatings Technology, 2020, 399, 126136.	4.8	6
7	Impact dynamics of supercooled microdroplets on water-repellent coatings. Thin Solid Films, 2019, 688, 137309.	1.8	8
8	In situ tribometry with real-time imaging for assessing durability and wear mechanisms of easy-to-clean coatings on glass for touchscreen substrates. Displays, 2019, 57, 47-54.	3.7	1
9	Degradation mechanism of protected ultrathin silver films and the effect of the seed layer. Applied Surface Science, 2019, 484, 335-340.	6.1	9
10	Characteristics of Ultrathin Ni Films. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1800728.	1.8	2
11	Study of corrosion and tribocorrosion of Fe3Al-based duplex PVD/HVOF coatings against alumina in NaCl solution. Surface and Coatings Technology, 2019, 357, 774-783.	4.8	22
12	Fluorinated Hybrid Coatings Deposited by IBACVD. , 2019, , .		0
13	Review Article: Stress in thin films and coatings: Current status, challenges, and prospects. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2018, 36, .	2.1	482
14	Protective coatings for durability enhancement of optical surfaces. , 2018, , 539-564.		1
15	Interacting polariton fluids in a monolayer of tungsten disulfide. Nature Nanotechnology, 2018, 13, 906-909.	31.5	96
16	Investigation of Fe3Al-based PVD/HVOF duplex coatings to protect stainless steel from sliding wear against alumina. Surface and Coatings Technology, 2018, 350, 699-711.	4.8	25
17	Influence of internal stress in optical thin films on their failure modes assessed by in situ real-time scratch analysis. Tribology International, 2017, 109, 355-366.	5.9	11
18	Galvanostatic Rejuvenation of Electrochromic WO₃ Thin Films: Ion Trapping and Detrapping Observed by Optical Measurements and by Time-of-Flight Secondary Ion Mass Spectrometry. ACS Applied Materials & Interfaces, 2017, 9, 16995-17001.	8.0	46

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19	Cavitation erosion behavior of HVOF CaviTec coatings. Wear, 2017, 386-387, 90-98.	3.1	57
20	Hybrid organic/inorganic nanolaminate structures with enhanced tribo-mechanical properties for optical applications. Surface and Coatings Technology, 2017, 315, 399-407.	4.8	9
21	Wear behavior of Fe 3 Al-TiN-TiB 2 HVOF coatings: A comparative study between in situ and ex situ powder processing routes. Ceramics International, 2017, 43, 8040-8050.	4.8	10
22	Hard AlN films prepared by low duty cycle magnetron sputtering and by other deposition techniques. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2017, 35, 061505.	2.1	5
23	Stability and performance of organic-inorganic thin films on polymer substrates. Surface and Coatings Technology, 2017, 314, 131-138.	4.8	9
24	Continuous ultrathin silver films deposited on SiO2 and SiNx using a self-assembled monolayer. Applied Physics Letters, 2016, 109, 121603.	3.3	5
25	Effect of high-energy ball-milling on the characteristics of Fe3Al-based HVOF coatings containing boride and nitride phases. Wear, 2016, 358-359, 97-108.	3.1	8
26	Cavitation erosion mechanisms in stainless steels and in composite metalâ€“ceramic HVOF coatings. Wear, 2016, 364-365, 201-210.	3.1	66
27	Wear properties of Fe3Al-based HVOF coatings strengthened with in-situ precipitated nitride and boride particles. Surface and Coatings Technology, 2016, 307, 109-117.	4.8	12
28	Alkali Metal Halide Salts as Interface Additives to Fabricate Hysteresis-Free Hybrid Perovskite-Based Photovoltaic Devices. ACS Applied Materials & Interfaces, 2016, 8, 23086-23094.	8.0	28
29	Stable reactive deposition of amorphous Al 2 O 3 films with low residual stress and enhanced toughness using pulsed dc magnetron sputtering with very low duty cycle. Vacuum, 2016, 124, 96-100.	3.5	24
30	In situ real time nanowear testing method of optical functional thin films. Tribology International, 2016, 95, 147-155.	5.9	5
31	Galvanostatic Ion Detrapping Rejuvenates Oxide Thin Films. ACS Applied Materials & Interfaces, 2015, 7, 26387-26390.	8.0	77
32	In situ spectroscopic ellipsometry of electrochromic amorphous tungsten oxide films. Solar Energy Materials and Solar Cells, 2015, 140, 77-85.	6.2	25
33	Reactive HiPIMS deposition of SiO2/Ta2O5 optical interference filters. Journal of Applied Physics, 2014, 116, .	2.5	41
34	Distribution of ion current density on a rotating spherical cap substrate during ion-assisted deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2014, 32, 061513.	2.1	3
35	Design and fabrication of stress-compensated optical coatings: Fabryâ€“Perot filters for astronomical applications. Applied Optics, 2014, 53, 2616.	1.8	22
36	Solid particle erosion mechanisms of hard protective coatings. Surface and Coatings Technology, 2013, 235, 383-393.	4.8	35

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37	Effect of Si and C concentration on the microstructure, and the mechanical, tribological and electrochemical properties of nanocomposite TiC/a-SiC:H/a-C:H coatings prepared by plasma enhanced chemical vapor deposition. Journal of Applied Physics, 2012, 111, 043512.	2.5	7
38	Optical and tribomechanical stability of optically variable interference security devices prepared by dual ion beam sputtering. Applied Optics, 2011, 50, 3351.	2.1	10
39	Mechanical and thermoelastic characteristics of optical thin films deposited by dual ion beam sputtering. Applied Optics, 2009, 48, 4536.	2.1	61
40	Anisotropic nonlinear optical absorption of gold nanorods in a silica matrix. Optics Communications, 2008, 281, 331-340.	2.1	50
41	Investigation of refractive index modifications in CW CO2 laser written planar optical waveguides. Optics Communications, 2008, 281, 3686-3690.	2.1	6
42	Fabrication of buried waveguides in planar silica films using a direct CW laser writing technique. Journal of Non-Crystalline Solids, 2008, 354, 4833-4839.	3.1	9
43	OpenFilters: open-source software for the design, optimization, and synthesis of optical filters. Applied Optics, 2008, 47, C219.	2.1	178
44	Local field calculations of the anisotropic nonlinear absorption coefficient of aligned gold nanorods embedded in silica. Journal of the Optical Society of America B: Optical Physics, 2008, 25, 961.	2.1	7
45	High-Quality Flat-Top Micromachining of Silica by a CW CO$_{2}$ Laser. IEEE Photonics Technology Letters, 2007, 19, 459-461.	2.5	9
46	Onset of shadowing-dominated growth in glancing angle deposition. Applied Physics Letters, 2007, 91, .	3.3	33
47	Tribo-Mechanical Properties of DLC Coatings Deposited on Nitrided Biomedical Stainless Steel. Plasma Processes and Polymers, 2007, 4, S640-S646.	3.0	26
48	Engineering of waveguides and other micro-structures in dielectrics. , 2006, , .		5
49	Growth of vacuum evaporated ultraporous silicon studied with spectroscopic ellipsometry and scanning electron microscopy. Journal of Applied Physics, 2005, 97, 013511.	2.5	55
50	Mechanical characteristics of optical coatings prepared by various techniques: a comparative study. Applied Optics, 2004, 43, 2670.	2.1	43
51	Optical Coatings on Plastics. Springer Series in Optical Sciences, 2003, , 359-391.	0.7	5
52	Ellipsometric Characterization of the Optical Constants of Metals: Thin Film versus Nanoparticle. , 2002, , 11-22.		1
53	Optical properties of discontinuous gold films: finite-size effects. Journal of the Optical Society of America B: Optical Physics, 2001, 18, 85.	2.1	60
54	Substrate and morphology effects on photoemission from core-levels in gold clusters. Surface Science, 2001, 472, 33-40.	1.9	54

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55	Spectroellipsometric characterization of plasma-deposited Au/SiO2 nanocomposite films. Journal of Applied Physics, 2000, 87, 228-235.	2.5	95
56	Temperature dependence of the surface plasmon resonance of Au/SiO2 nanocomposite films. Applied Physics Letters, 2000, 77, 4283-4285.	3.3	46
57	Plasma deposition of optical films and coatings: A review. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2000, 18, 2619-2645.	2.1	480
58	Ion energy distributions in pulsed large area microwave plasma. Journal of Applied Physics, 1999, 85, 6366-6372.	2.5	24
59	Spectroellipsometric characterization of plasma-deposited Au/fluoropolymer nanocomposite films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1999, 17, 877-883.	2.1	26
60	Xâ€ray photoelectron spectroscopy study of xâ€ray irradiated metal/fluoropolymer interfaces. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1994, 12, 44-50.	2.1	30
61	Xâ€ray induced modification of metal/fluoropolymer interfaces. Journal of Applied Physics, 1993, 74, 1744-1746.	2.5	23
62	Optical response of composite plasma polymer/metal films in the effective medium approach. Solar Energy Materials and Solar Cells, 1987, 15, 21-35.	0.4	34