

Ludvik Martinu

List of Publications by Year in descending order

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papers

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citations

236912

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189881

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62
docs citations

62
times ranked

3451
citing authors

#	ARTICLE	IF	CITATIONS
1	Protective Ti _x Si _y coatings for enhanced oxidation resistance of the ϵ -TiAl alloy at 900°C. Surface and Coatings Technology, 2022, 430, 127963.	4.8	11
2	High-temperature oxidation protection of β -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 coatings—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 Fe ₃ Al-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 Fe ₃ Al-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 WO ₃ 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. <i>Wear</i> , 2017, 386-387, 90-98.	3.1	57
20	Hybrid organic/inorganic nanolaminate structures with enhanced tribo-mechanical properties for optical applications. <i>Surface and Coatings Technology</i> , 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. <i>Ceramics International</i> , 2017, 43, 8040-8050.	4.8	10
22	Hard AlN films prepared by low duty cycle magnetron sputtering and by other deposition techniques. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2017, 35, 061505.	2.1	5
23	Stability and performance of organic-inorganic thin films on polymer substrates. <i>Surface and Coatings Technology</i> , 2017, 314, 131-138.	4.8	9
24	Continuous ultrathin silver films deposited on SiO ₂ and SiN _x using a self-assembled monolayer. <i>Applied Physics Letters</i> , 2016, 109, 121603.	3.3	5
25	Effect of high-energy ball-milling on the characteristics of Fe ₃ Al-based HVOF coatings containing boride and nitride phases. <i>Wear</i> , 2016, 358-359, 97-108.	3.1	8
26	Cavitation erosion mechanisms in stainless steels and in composite metal-ceramic HVOF coatings. <i>Wear</i> , 2016, 364-365, 201-210.	3.1	66
27	Wear properties of Fe ₃ Al-based HVOF coatings strengthened with in-situ precipitated nitride and boride particles. <i>Surface and Coatings Technology</i> , 2016, 307, 109-117.	4.8	12
28	Alkali Metal Halide Salts as Interface Additives to Fabricate Hysteresis-Free Hybrid Perovskite-Based Photovoltaic Devices. <i>ACS Applied Materials & Interfaces</i> , 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. <i>Vacuum</i> , 2016, 124, 96-100.	3.5	24
30	In situ real time nanowear testing method of optical functional thin films. <i>Tribology International</i> , 2016, 95, 147-155.	5.9	5
31	Galvanostatic Ion Detrapping Rejuvenates Oxide Thin Films. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 26387-26390.	8.0	77
32	In situ spectroscopic ellipsometry of electrochromic amorphous tungsten oxide films. <i>Solar Energy Materials and Solar Cells</i> , 2015, 140, 77-85.	6.2	25
33	Reactive HiPIMS deposition of SiO ₂ /Ta ₂ O ₅ optical interference filters. <i>Journal of Applied Physics</i> , 2014, 116, .	2.5	41
34	Distribution of ion current density on a rotating spherical cap substrate during ion-assisted deposition. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2014, 32, 061513.	2.1	3
35	Design and fabrication of stress-compensated optical coatings: Fabry-Perot filters for astronomical applications. <i>Applied Optics</i> , 2014, 53, 2616.	1.8	22
36	Solid particle erosion mechanisms of hard protective coatings. <i>Surface and Coatings Technology</i> , 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. <i>Journal of Applied Physics</i> , 2012, 111, 043512.	2.5	7
38	Optical and tribomechanical stability of optically variable interference security devices prepared by dual ion beam sputtering. <i>Applied Optics</i> , 2011, 50, 3351.	2.1	10
39	Mechanical and thermoelastic characteristics of optical thin films deposited by dual ion beam sputtering. <i>Applied Optics</i> , 2009, 48, 4536.	2.1	61
40	Anisotropic nonlinear optical absorption of gold nanorods in a silica matrix. <i>Optics Communications</i> , 2008, 281, 331-340.	2.1	50
41	Investigation of refractive index modifications in CW CO ₂ laser written planar optical waveguides. <i>Optics Communications</i> , 2008, 281, 3686-3690.	2.1	6
42	Fabrication of buried waveguides in planar silica films using a direct CW laser writing technique. <i>Journal of Non-Crystalline Solids</i> , 2008, 354, 4833-4839.	3.1	9
43	OpenFilters: open-source software for the design, optimization, and synthesis of optical filters. <i>Applied Optics</i> , 2008, 47, C219.	2.1	178
44	Local field calculations of the anisotropic nonlinear absorption coefficient of aligned gold nanorods embedded in silica. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2008, 25, 961.	2.1	7
45	High-Quality Flat-Top Micromachining of Silica by a CW CO ₂ Laser. <i>IEEE Photonics Technology Letters</i> , 2007, 19, 459-461.	2.5	9
46	Onset of shadowing-dominated growth in glancing angle deposition. <i>Applied Physics Letters</i> , 2007, 91, .	3.3	33
47	Tribo-Mechanical Properties of DLC Coatings Deposited on Nitrided Biomedical Stainless Steel. <i>Plasma Processes and Polymers</i> , 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. <i>Journal of Applied Physics</i> , 2005, 97, 013511.	2.5	55
50	Mechanical characteristics of optical coatings prepared by various techniques: a comparative study. <i>Applied Optics</i> , 2004, 43, 2670.	2.1	43
51	Optical Coatings on Plastics. <i>Springer Series in Optical Sciences</i> , 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. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2001, 18, 85.	2.1	60
54	Substrate and morphology effects on photoemission from core-levels in gold clusters. <i>Surface Science</i> , 2001, 472, 33-40.	1.9	54

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55	Spectroellipsometric characterization of plasma-deposited Au/SiO ₂ nanocomposite films. Journal of Applied Physics, 2000, 87, 228-235.	2.5	95
56	Temperature dependence of the surface plasmon resonance of Au/SiO ₂ 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	X-ray photoelectron spectroscopy study of x-ray irradiated metal/fluoropolymer interfaces. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1994, 12, 44-50.	2.1	30
61	X-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