

Erik Lewin

List of Publications by Year in descending order

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Version: 2024-02-01

68
papers

2,467
citations

201575

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48
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69
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docs citations

69
times ranked

2306
citing authors

#	ARTICLE	IF	CITATIONS
1	Tetragonal distortion in magnetron sputtered bcc-W films with supersaturated carbon. <i>Materials and Design</i> , 2022, 214, 110422.	3.3	1
2	Synthesis and Characterisation of Nanocomposite Mo-Fe-B Thin Films Deposited by Magnetron Sputtering. <i>Materials</i> , 2021, 14, 1739.	1.3	4
3	Influence of the nitrogen content on the corrosion resistances of multicomponent AlCrNbYZrN coatings. <i>Corrosion Science</i> , 2021, 188, 109557.	3.0	9
4	Magnetron sputtering of carbon supersaturated tungsten films – A chemical approach to increase strength. <i>Materials and Design</i> , 2021, 208, 109874.	3.3	4
5	Optical and electrical properties of hard (Hf,Nb,Ti,V,Zr) _{Nx} thin films. <i>Vacuum</i> , 2021, 193, 110517.	1.6	4
6	Selective photocatalytic oxidation of 3-pyridinemethanol on platinumized acid/base modified TiO ₂ . <i>Catalysis Science and Technology</i> , 2021, 11, 4549-4559.	2.1	1
7	Experimental and theoretical evidence of charge transfer in multi-component alloys – how chemical interactions reduce atomic size mismatch. <i>Materials Chemistry Frontiers</i> , 2021, 5, 5746-5759.	3.2	14
8	Multi-component (Al,Cr,Nb,Y,Zr) _N thin films by reactive magnetron sputter deposition for increased hardness and corrosion resistance. <i>Thin Solid Films</i> , 2020, 693, 137685.	0.8	41
9	Enhanced photoelectrochemical performance of atomic layer deposited Hf-doped ZnO. <i>Surface and Coatings Technology</i> , 2020, 385, 125352.	2.2	20
10	Recoverable and Reusable Polymer Microbead-Supported Metal Nanocatalysts for Redox Chemical Transformations. <i>ACS Applied Nano Materials</i> , 2020, 3, 1722-1730.	2.4	3
11	Influence of carbon on microstructure and mechanical properties of magnetron sputtered TaW coatings. <i>Materials and Design</i> , 2020, 196, 109070.	3.3	11
12	Multi-component and high-entropy nitride coatings – A promising field in need of a novel approach. <i>Journal of Applied Physics</i> , 2020, 127, .	1.1	77
13	Influence of N content on structure and mechanical properties of multi-component Al-Cr-Nb-Y-Zr based thin films by reactive magnetron sputtering. <i>Surface and Coatings Technology</i> , 2020, 389, 125614.	2.2	31
14	Microstructure and mechanical, electrical, and electrochemical properties of sputter-deposited multicomponent (TiNbZrTa) _{Nx} coatings. <i>Surface and Coatings Technology</i> , 2020, 389, 125651.	2.2	37
15	Unveiling the role of bisulfide in the photocatalytic splitting of H ₂ S in aqueous solutions. <i>Applied Catalysis B: Environmental</i> , 2020, 270, 118886.	10.8	17
16	In Situ Formation of Ge Nanoparticles by Annealing of Al-Ge-N Thin Films Followed by HAXPES and XRD. <i>Inorganic Chemistry</i> , 2019, 58, 11100-11109.	1.9	2
17	Carbon-containing multi-component thin films. <i>Thin Solid Films</i> , 2019, 688, 137411.	0.8	31
18	On the structural and magnetic properties of the double perovskite $\text{Nd}_{2}\text{NiMnO}_{6}$. <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 16571-16578.	1.1	3

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19	Influence of Deposition Temperature on the Phase Evolution of HfNbTiVZr High-Entropy Thin Films. <i>Materials</i> , 2019, 12, 587.	1.3	31
20	Surface analysis of nickel nanomaterials electrodeposited on graphite surface. <i>Micro and Nano Letters</i> , 2019, 14, 1233-1237.	0.6	1
21	Spectral artefacts post sputter-etching and how to cope with them – A case study of XPS on nitride-based coatings using monoatomic and cluster ion beams. <i>Applied Surface Science</i> , 2018, 442, 487-500.	3.1	24
22	Influence of oxygen content on structure and material properties of reactively sputtered Al-Ge-O-N thin films. <i>Journal of Alloys and Compounds</i> , 2018, 738, 515-527.	2.8	10
23	Synthesis and characterization of multicomponent (CrNbTaTiW)C films for increased hardness and corrosion resistance. <i>Materials and Design</i> , 2018, 149, 51-62.	3.3	99
24	Tuning structure and mechanical properties of Ta-C coatings by N-alloying and vacancy population. <i>Scientific Reports</i> , 2018, 8, 17669.	1.6	27
25	Hard and crack resistant carbon supersaturated refractory nanostructured multicomponent coatings. <i>Scientific Reports</i> , 2018, 8, 14508.	1.6	25
26	Temperature-dependent structural and magnetic properties of R ₂ MMnO ₆ double perovskites (R = Dy, Gd). <i>J. Appl. Phys.</i> , 2019, 125, 084101.	1.1	19
27	Multicomponent Hf-Nb-Ti-V-Zr nitride coatings by reactive magnetron sputter deposition. <i>Surface and Coatings Technology</i> , 2018, 349, 529-539.	2.2	58
28	Effect of in situ electric-field-assisted growth on antiphase boundaries in epitaxial Fe ₃ O ₄ thin films on MgO. <i>Physical Review Materials</i> , 2018, 2, .	0.9	6
29	Synthesis and characterisation of Mo-B-C thin films deposited by non-reactive DC magnetron sputtering. <i>Surface and Coatings Technology</i> , 2017, 309, 506-515.	2.2	20
30	N-TiO ₂ /Cu-TiO ₂ double-layer films: Impact of stacking order on photocatalytic properties. <i>Journal of Catalysis</i> , 2017, 353, 116-122.	3.1	25
31	Continuous-Flow Hydrogenation of D-Xylose with Bimetallic Ruthenium Catalysts on Micrometric Alumina. <i>Synthesis and Catalysis Open Access</i> , 2017, 02, .	0.4	5
32	Synthesis and characterization of MoB _{2-x} thin films grown by nonreactive DC magnetron sputtering. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2016, 34, .	0.9	32
33	Structure and properties of sputter-deposited Al-Sn-N thin films. <i>Journal of Alloys and Compounds</i> , 2016, 682, 42-51.	2.8	21
34	Flow hydrogenation of p-nitrophenol with nano-Ag/Al ₂ O ₃ . <i>RSC Advances</i> , 2016, 6, 87564-87568.	1.7	19
35	Structure and properties of Cr ⁶⁺ /C/Ag films deposited by magnetron sputtering. <i>Surface and Coatings Technology</i> , 2015, 281, 184-192.	2.2	20
36	Sonogashira coupling reaction over supported gold nanoparticles: Influence of support and catalyst synthesis route. <i>Applied Catalysis A: General</i> , 2015, 503, 69-76.	2.2	18

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37	Hard wear-resistant coatings with anisotropic thermal conductivity for high thermal load applications. <i>Journal of Applied Physics</i> , 2014, 116, .	1.1	18
38	An investigation of c-HiPIMS discharges during titanium deposition. <i>Surface and Coatings Technology</i> , 2014, 258, 631-638.	2.2	21
39	Modified high power impulse magnetron sputtering process for increased deposition rate of titanium. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2013, 31, .	0.9	26
40	Comparison of Al ₂ O ₃ -Si ₃ N ₄ nanocomposite coatings deposited by HIPIMS and DC magnetron sputtering. <i>Surface and Coatings Technology</i> , 2013, 232, 680-689.	2.2	67
41	Thermal conductivity of hard oxynitride coatings. <i>Thin Solid Films</i> , 2013, 549, 232-238.	0.8	19
42	Sputter deposition of transition-metal carbide films – A critical review from a chemical perspective. <i>Thin Solid Films</i> , 2013, 536, 1-24.	0.8	209
43	Growth of Ti-C nanocomposite films by reactive high power impulse magnetron sputtering under industrial conditions. <i>Surface and Coatings Technology</i> , 2012, 206, 2396-2402.	2.2	58
44	Nanocomposite Al ₂ O ₃ -Ge ₂ N thin films and their mechanical and optical properties. <i>Journal of Materials Chemistry</i> , 2012, 22, 16761.	6.7	15
45	Uptake of Fluoride from Aqueous Solution on Nano-Sized Hydroxyapatite: Examination of a Fluoridated Surface Layer. <i>Environmental Science & Technology</i> , 2012, 46, 802-809.	4.6	105
46	Magnetron sputtering of Zr ₂ Si ₂ C thin films. <i>Thin Solid Films</i> , 2012, 520, 6375-6381.	0.8	37
47	Ni and Ti diffusion barrier layers between Ti ₂ Si ₂ C and Ti ₂ Si ₂ C _{0.5} Ag nanocomposite coatings and Cu-based substrates. <i>Surface and Coatings Technology</i> , 2012, 206, 2558-2565.	2.2	7
48	Contact Resistance of Ti-Si-C-Ag and Ti-Si-C-Ag-Pd Nanocomposite Coatings. <i>Journal of Electronic Materials</i> , 2012, 41, 560-567.	1.0	2
49	Design of carbide-based nanocomposite thin films by selective alloying. <i>Surface and Coatings Technology</i> , 2011, 206, 583-590.	2.2	45
50	Structural, mechanical and electrical-contact properties of nanocrystalline-NbC/amorphous-C coatings deposited by magnetron sputtering. <i>Surface and Coatings Technology</i> , 2011, 206, 354-359.	2.2	107
51	Friction and contact resistance of nanocomposite Ti ₂ Ni ₂ C coatings. <i>Wear</i> , 2011, 270, 555-566.	1.5	17
52	Carbon release by selective alloying of transition metal carbides. <i>Journal of Physics Condensed Matter</i> , 2011, 23, 355401.	0.7	15
53	Conductive nanocomposite ceramics as tribological and electrical contact materials. <i>EPJ Applied Physics</i> , 2010, 49, 22902.	0.3	15
54	High-rate deposition of amorphous and nanocomposite Ti ₂ Si ₂ C multifunctional coatings. <i>Surface and Coatings Technology</i> , 2010, 205, 299-305.	2.2	42

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55	Growth and structural properties of Mg:C thin films prepared by magnetron sputtering. Thin Solid Films, 2010, 518, 4225-4230.	0.8	18
56	Carbide and nanocomposite thin films in the Tiâ€“Ptâ€“C system. Thin Solid Films, 2010, 518, 5104-5109.	0.8	18
57	Microstructure evolution of Tiâ€“Siâ€“Câ€“Ag nanocomposite coatings deposited by DC magnetron sputtering. Acta Materialia, 2010, 58, 6592-6599.	3.8	30
58	Design of the lattice parameter of embedded nanoparticles. Chemical Physics Letters, 2010, 496, 95-99.	1.2	33
59	Wear-resistant magnetic thin film material based on aTi1âˆ“xFexC1âˆ“ynanocomposite alloy. Physical Review B, 2010, 81, .	1.1	8
60	Synthesis, structure and properties of Ni-alloyed TiCx-based thin films. Journal of Materials Chemistry, 2010, 20, 5950.	6.7	27
61	Deposition of Ti-Si-C-Ag Nanocomposite Coatings as Electrical Contact Material. , 2010, , .		1
62	Electronic structure and chemical bonding of nanocrystalline-TiC/amorphous-C nanocomposites. Physical Review B, 2009, 80, .	1.1	62
63	Industrialisation Study of Nanocomposite ncâ€“TiC/aâ€“C Coatings for Electrical Contact Applications. Plasma Processes and Polymers, 2009, 6, S928.	1.6	28
64	Influence of sputter damage on the XPS analysis of metastable nanocomposite coatings. Surface and Coatings Technology, 2009, 204, 455-462.	2.2	84
65	On the origin of a third spectral component of C1s XPS-spectra for nc-TiC/a-C nanocomposite thin films. Surface and Coatings Technology, 2008, 202, 3563-3570.	2.2	160
66	Design of Nanocomposite Low-Friction Coatings. Advanced Functional Materials, 2007, 17, 1611-1616.	7.8	84
67	Deposition and characterization of ternary thin films within the Tiâ€“Alâ€“C system by DC magnetron sputtering. Journal of Crystal Growth, 2006, 291, 290-300.	0.7	212
68	Nanocomposite nc-TiCâˆ“a-C thin films for electrical contact applications. Journal of Applied Physics, 2006, 100, 054303.	1.1	102