Milan Dopita

List of Publications by Year
in descending order

85	1,266	430874 18	454955 30
papers	citations	h-index	g-index

85	85	85	1368
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Influence of annealing on the microstructure of commercial Mg alloy AZ31 after mechanical forming. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 432, 20-25.	5.6	111
2	Some consequences of the partial crystallographic coherence between nanocrystalline domains in Tiâ€“Alâ€“N and Tiâ€“Alâ€“Siâ€“N coatings. Thin Solid Films, 2006, 514, 240-249.	1.8	63
3	Impact of rare-earth elements on the corrosion performance of binary magnesium alloys. Journal of Alloys and Compounds, 2020, 829, 154569.	5.5	62
4	Effect of Internal Interfaces on Hardness and Thermal Stability of Nanocrystalline Ti0.5Al0.5N Coatings. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2011, 42, 559-569.	2.2	53
5	Microstructure development in Crâ€“Alâ€“Siâ€“N nanocomposites deposited by cathodic arc evaporation. Surface and Coatings Technology, 2006, 201, 2835-2843.	4.8	39
6	Refining bimodal microstructure of materials with MSTRUCT. Powder Diffraction, 2014, 29, S35-S41.	0.2	39
7	Microstructure of Equal-Channel Angular Pressed Cu and Cu-Zr Samples Studied by Different Methods. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2010, 41, 1174-1190.	2.2	35
8	Internal structure of clusters of partially coherent nanocrystallites in Crâ€“Alâ€“N and Crâ€“Alâ€“Siâ€“N coatings. Surface and Coatings Technology, 2007, 201, 9476-9484.	4.8	34
9	Decomposition kinetics in Ti1-xAlxN coatings as studied by in-situ X-ray diffraction during annealing. Surface and Coatings Technology, 2011, 206, 1727-1734.	4.8	33
10	Simulations of Xâ€Ray Scattering on Twoâ€Dimensional, Graphitic and Turbostratic Carbon Structures. Advanced Engineering Materials, 2013, 15, 1280-1291.	3.5	33
11	In situ probing of magnetron sputtered Pt-Ni alloy fuel cell catalysts during accelerated durability test using EC-AFM. Electrochimica Acta, 2017, 245, 760-769.	5.2	32
12	Development of magnetic order in the pseudo-ternary series ErNi1â^'xCuxAl. Journal of Magnetism and Magnetic Materials, 2004, 283, 34-45.	2.3	30
13	Formation of defect structures in hard nanocomposites. Surface and Coatings Technology, 2008, 203, 572-578.	4.8	25
14	Experimental investigation and thermodynamic modelling in the ZrO2â€“La2O3â€“Y2O3 system. Journal of Alloys and Compounds, 2010, 493, 263-271.	5.5	23
15	Evolution of the PtNi Bimetallic Alloy Fuel Cell Catalyst under Simulated Operational Conditions. ACS Applied Materials & Interfaces, 2020, 12, 17602-17610.	8.0	22
16	Antiferroelectric negative capacitance from a structural phase transition in zirconia. Nature Communications, 2022, 13, 1228.	12.8	22
17	Antiferroelectricity in lanthanum doped zirconia without metallic capping layers and post-deposition/-metallization anneals. Applied Physics Letters, 2018, 112, .	3.3	21
18	Structure and magnetism in RNi1â^'xCuxAl (R=Er, Dy) compounds. Journal of Alloys and Compounds, 2006, 408-412, 155-157.	5.5	20

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19	Microstructure evolution of CuZr polycrystals processed by high-pressure torsion. Journal of Materials Science, 2010, 45, 4631-4644.	3.7	19
20	Application of Oxide Coatings for Improved Steel Filtration with the Aid of a Metal Casting Simulator. Advanced Engineering Materials, 2013, 15, 1177-1187.	3.5	19
21	Thermophysical properties of pyrochlore and fluorite phases in the Ln2Zr2O7â€“Y2O3 systems (Ln=La,) Tj ETQq1 1 0.784314 rgBT /Ove Compounds, 2014, 586, 118-128.	5.5	19
22	Crystallography of phase transitions in metastable titanium aluminium nitride nanocomposites. Surface and Coatings Technology, 2014, 257, 26-37.	4.8	19
23	Microstructure development of ultra fine grained Mg-22 wt%Gd alloy prepared by high pressure torsion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 704, 181-191.	5.6	16
24	Cerium Oxalate Morphotypes: Synthesis and Conversion into Nanocrystalline Oxide. Inorganic Chemistry, 2019, 58, 10111-10118.	4.0	16
25	Unraveling the Surface Chemistry and Structure in Highly Active Sputtered Pt₃Y Catalyst Films for the Oxygen Reduction Reaction. ACS Applied Materials & Interfaces, 2020, 12, 4454-4462.	8.0	16
26	Effect of micropores on CO2 capture in ordered mesoporous CMK-3 carbon at atmospheric pressure. Adsorption, 2021, 27, 1221-1236.	3.0	16
27	Interplay of microstructural features in Cr1â^'xAlxN and Cr1â^'xâ^'yAlxSiyN nanocomposite coatings deposited by cathodic arc evaporation. Surface and Coatings Technology, 2008, 202, 3199-3207.	4.8	15
28	Temperature evolution of microstructure of turbostratic high melting coal-tar synthetic pitch studied using wide-angle X-ray scattering method. Carbon, 2015, 81, 272-283.	10.3	15
29	Crystal Structure and Magnetic Properties of Uranium Hydride UH₂ Stabilized as a Thin Film. Inorganic Chemistry, 2018, 57, 14727-14732.	4.0	15
30	In-flight modification of Ni nanoparticles by tubular magnetron sputtering. Journal Physics D: Applied Physics, 2019, 52, 205302.	2.8	14
31	57Fe-enriched perovskites M(Fe0.5Nb0.5)O3 (M â€“ Pb, Ba) studied by MÃ¶ssbauer spectroscopy, NMR and XRD in the wide temperature range 4.2â€“533â€¯K. Journal of Magnetism and Magnetic Materials, 2019, 475, 334-344.	2.3	14
32	Sputtered Irâ€“Ru based catalysts for oxygen evolution reaction: Study of iridium effect on stability. International Journal of Hydrogen Energy, 2022, 47, 21033-21043.	7.1	14
33	EBSD investigation of the grain boundary distributions in ultrafine-grained Cu and Cuâ€“Zr polycrystals prepared by equal-channel angular pressing. International Journal of Materials Research, 2009, 100, 785-789.	0.3	13
34	Morphological and structural studies on Al reinforced by Al2O3 via mechanical alloying. Advanced Powder Technology, 2015, 26, 487-493.	4.1	13
35	Electrical resistivity of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mn>5</mml:mn><mml:mi>f</mml:mi></mml:math> -electron systems affected by static and dynamic spin disorder. Physical Review B, 2017, 95, .	3.2	13
36	Lattice defects in severely deformed biomedical Ti-6Al-7Nb alloy and thermal stability of its ultra-fine grained microstructure. Journal of Alloys and Compounds, 2019, 788, 881-890.	5.5	13

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37	Mechanical Properties and Microstructure Development of Ultrafine-Grained Cu Processed by ECAP. Materials Science Forum, 0, 584-586, 440-445.	0.3	12
38	Capability of X-ray diffraction for the study of microstructure of metastable thin films. IUCrJ, 2014, 1, 446-456.	2.2	12
39	Compositionally tuned magnetron co-sputtered PtxNi100-x alloy as a cathode catalyst for proton exchange membrane fuel cells. Applied Surface Science, 2020, 511, 145486.	6.1	12
40	Residual- and linker-free metal/polymer nanofluids prepared by direct deposition of magnetron-sputtered Cu nanoparticles into liquid PEG. Journal of Molecular Liquids, 2021, 336, 116319.	4.9	12
41	Phase composition and surface properties of nylon-6 nanofibers prepared by nanospider technology at various electrode distances. Journal of Polymer Research, 2015, 22, 1.	2.4	11
42	Nanoscale Morphological and Structural Transformations of PtCu Alloy Electrocatalysts during Potentiodynamic Cycling. Journal of Physical Chemistry C, 2018, 122, 21974-21982.	3.1	11
43	Rapid floating zone growth of Ni2MnGa single crystals exhibiting magnetic shape memory functionality. Journal of Alloys and Compounds, 2019, 775, 533-541.	5.5	11
44	Co-sputtering of gold and copper onto liquids: a route towards the production of porous gold nanoparticles. Nanotechnology, 2020, 31, 455303.	2.6	11
45	Structural studies of submicrocrystalline copper and copper composites by different methods. Zeitschrift FÃ¼r Kristallographie, Supplement, 2008, 2008, 73-80.	0.5	11
46	Thermally-driven morphogenesis of niobium nanoparticles as witnessed by in-situ x-ray scattering. Materials Chemistry and Physics, 2022, 277, 125466.	4.0	11
47	Analysis of local composition gradients in the hard-phase grains of cermets using a combination of X-ray diffraction and electron microscopy. International Journal of Refractory Metals and Hard Materials, 2008, 26, 263-275.	3.8	10
48	Thermophysical properties of pyrochlore and fluorite phases in the Ln2Zr2O7â€“Y2O3 systems (Ln = La,) Tj ETQq0 0 0 rgBT /Overlock 1 Sm2Zr2O7â€“Y2O3. Journal of Alloys and Compounds, 2015, 625, 200-207.	5.5	10
49	Effect of the substrate temperature during gold-copper alloys thin film deposition by magnetron co-sputtering on the dealloying process. Surface and Coatings Technology, 2020, 383, 125220.	4.8	10
50	Microstructure and Properties of Spark Plasma Sintered Al-Zn-Mg-Cu Alloy. Acta Physica Polonica A, 2015, 128, 602-605.	0.5	10
51	Strong 5f Ferromagnetism in UH3-Based Materials. MRS Advances, 2016, 1, 2987-2992.	0.9	9
52	Thermally induced formation of metastable nanocomposites in amorphous Cr-Zr-O thin films deposited using reactive ion beam sputtering. Thin Solid Films, 2016, 612, 430-436.	1.8	9
53	Thermophysical Properties of Pressed and Casted Carbonâ€Bonded Alumina (Al₂O₃â€) up to 800â€‰Â°C. Advanced Engineering Materials, 2013, 15, 1270-1279.	3.5	8
54	XPS, UPS, and BIS study of pure and alloyed Î²-UH3 films: Electronic structure, bonding, and magnetism. Journal of Electron Spectroscopy and Related Phenomena, 2020, 239, 146904.	1.7	8

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55	A Janovecâ€Kayâ€Dunnâ€Like Behavior at Thickness Scaling in Ultraâ€Thin Antiferroelectric ZrO₂ Films. Advanced Electronic Materials, 2021, 7, 2100485.	5.1	8
56	Interference phenomena in nanocrystalline materials and their application in the microstructure analysis. Zeitschrift FÃ¼r Kristallographie, Supplement, 2008, 2008, 15-26.	0.5	8
57	MÃ¶ssbauer Spectroscopy of Triphylite (LiFePO4) at Low Temperatures. Condensed Matter, 2019, 4, 86.	1.8	7
58	Capability of thermodynamic calculation in the development of alloys for deposition of corrosionâ€protection coatings via thermal spraying. Materials and Corrosion - Werkstoffe Und Korrosion, 2007, 58, 673-680.	1.5	6
59	Reaction mechanism between the carbon bonded magnesia coatings deposited on carbon bonded alumina and a steel melt. Journal of the European Ceramic Society, 2015, 35, 795-802.	5.7	6
60	Plasmaâ€based synthesis of iron carbide nanoparticles. Plasma Processes and Polymers, 2020, 17, 2000105.	3.0	6
61	XRD profile analysis of ECAP Cu and Cu + Zr samples. International Journal of Materials Research, 2009, 100, 880-883.	0.3	6
62	Formation of different alumina phases and magnesium aluminate spinel during contact of molten AlSi7Mg0.6 alloy with mullite and amorphous silica. Corrosion Science, 2017, 114, 79-87.	6.6	5
63	Self-organization of vapor-deposited polyolefins at the solid/vacuum interface. Progress in Organic Coatings, 2020, 143, 105630.	3.9	5
64	Microstructural evolution of equal-channel angular pressed interstitial-free steel. International Journal of Materials Research, 2009, 100, 834-837.	0.3	5
65	Layer-Growth of Tantalum Nitrides by Nitridation of Ta Metal: the Basis of the Preparation of a Well-Characterised Nitrogen Standard Material. Defect and Diffusion Forum, 2001, 194-199, 1613-1618.	0.4	4
66	Insights into the growth of nanoparticles in liquid polyol by thermal annealing. Nanoscale Advances, 2021, 3, 4780-4789.	4.6	4
67	M-type ferrites as template layers for the growth of oriented Y-type ferrites through chemical solution deposition method. Journal of the European Ceramic Society, 2016, 36, 3173-3183.	5.7	3
68	Laves phase UTi2 stabilized by hydrogen and its magnetic properties. Physica B: Condensed Matter, 2018, 536, 539-542.	2.7	3
69	Spin fluctuations in hydrogen-stabilized Laves phase UTi₂H₅. Philosophical Magazine, 2019, 99, 1881-1898.	1.6	3
70	Synthesis and microstructure investigation of heterogeneous metalâ€plasma polymer Ag/HMDSO nanoparticles. Surface and Interface Analysis, 2020, 52, 1023-1028.	1.8	3
71	Temperature versus composition phase diagram and temperature evolution of structure and modulation of Ni2MnGa1-xInx single crystals. Journal of Alloys and Compounds, 2021, 855, 157327.	5.5	3
72	Role of disorder in magnetic and conducting properties of Uâ€“Mo and Uâ€“Moâ€“H thin films. Materials Chemistry and Physics, 2021, 260, 124069.	4.0	3

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73	A Facile Way for Acquisition of a Nanoporous Ptâ€“C Catalyst for Oxygen Reduction Reaction. Advanced Materials Interfaces, 2021, 8, 2100122.	3.7	3
74	Microstructural characterisation of Cr-Al-N nanocomposites deposited by cathodic arc evaporation. Zeitschrift FÃ¼r Kristallographie, Supplement, 2008, 2008, 159-166.	0.5	3
75	Core@shell nanoparticles by inflight controlled coating. Journal Physics D: Applied Physics, 2022, 55, 215201.	2.8	3
76	SrAl12O19 thin films by chemical solution deposition and their use as buffer layers for oriented growth of hexagonal ferrites. Thin Solid Films, 2016, 616, 228-237.	1.8	1
77	Mechanical Properties and Microstructure Development in Ultrafineâ€grained Materials Processed by Equalâ€channel Angular Pressing. , 0, , .		1
78	Origin of negative resistivity slope in U-based ferromagnets. Physica B: Condensed Matter, 2018, 536, 527-531.	2.7	1
79	Crystal structures and magnetism of the hydrides of Tb2T2Ga and Tb3Co3Ga (T = Co, Ni). Journal of Solid State Chemistry, 2021, 296, 121978.	2.9	1
80	Residual stress and elastic anisotropy in the Ti-Al-(Si-)N and Cr-Al-(Si-)N nanocomposites deposited by cathodic arc evaporation. Zeitschrift FÃ¼r Kristallographie, Supplement, 2008, 2008, 245-252.	0.5	1
81	Structural studies of M-type ferrites used as template layers for the growth of oriented Y-type ferrites through chemical solution deposition method. Acta Crystallographica Section A: Foundations and Advances, 2016, 72, s68-s68.	0.1	0
82	Investigation of Nanostructures with X-ray Scattering Techniques. Crystals, 2019, 9, 500.	2.2	0
83	Formation and high-temperature stability of metastable (Cr,Zr)2O3/(Zr,Cr)O2 nanocomposites. Acta Crystallographica Section A: Foundations and Advances, 2016, 72, s423-s423.	0.1	0
84	Temperature evolution of microstructure of deformed submicrocrystalline Cuâ€“Zr samples. Acta Crystallographica Section A: Foundations and Advances, 2017, 73, C553-C553.	0.1	0
85	The Effect of Annealing Temperature on Antiferroelectric Zirconia. , 2022, , .		0