Justinas Palisaitis

List of Publications by Year
in descending order

103 papers	4,001 citations	156536 32 h-index	145109 60 g-index
115 all docs	115 docs citations	115 times ranked	4257 citing authors

#	Article	IF	Citations
1	Effect of low-energy ion assistance on the properties of sputtered ZrB2 films. Vacuum, 2022, 195, 110688.	1.6	3
2	Epitaxial Growth of CaMnO_{3â€“<i>y</i>} Films on LaAlO₃(112Â¯0) by Pulsed Direct Current Reactive Magnetron Sputtering. Physica Status Solidi - Rapid Research Letters, 2022, 16, .	1.2	3
3	Oxidation resistance and mechanical properties of sputter-deposited Ti0.9Al0.1B2-y thin films. Surface and Coatings Technology, 2022, 442, 128187.	2.2	7
4	Synthesis and characterization of TiBx (1.2Ââ‰ÂxÂâ‰Â2.8) thin films grown by DC magnetron co-sputtering from TiB2 and Ti targets. Surface and Coatings Technology, 2022, 433, 128110.	2.2	8
5	High-Entropy Laminate Metal Carbide (MAX Phase) and Its Two-Dimensional Derivative MXene. Chemistry of Materials, 2022, 34, 2098-2106.	3.2	60
6	Synthesis, characterization, and magnetic properties of rare earth containing Mo_{4/3}RE_{2/3}AlB₂ <i>i</i>-MAB phases. Materials Research Letters, 2022, 10, 295-300.	4.1	3
7	On the nature of planar defects in transition metal diboride line compounds. Materialia, 2022, 24, 101478.	1.3	4
8	Solidâ€State Janus Nanoprecipitation Enables Amorphousâ€Like Heat Conduction in Crystalline Mg₃Sb₂â€Based Thermoelectric Materials. Advanced Science, 2022, 9, .	5.6	12
9	Oxidation kinetics of overstoichiometric TiB2 thin films grown by DC magnetron sputtering. Corrosion Science, 2022, 206, 110493.	3.0	17
10	Age hardening in superhard ZrB2-rich Zr1-xTaxBy thin films. Scripta Materialia, 2021, 191, 120-125.	2.6	28
11	Where is the unpaired transition metal in substoichiometric diboride line compounds?. Acta Materialia, 2021, 204, 116510.	3.8	21
12	Tailored synthesis approach of (Mo_{2/3}Y_{1/3})₂AlC <i>i</i>-MAX and its two-dimensional derivative Mo_{1.33}CT_z MXene: enhancing the yield, quality, and performance in supercapacitor applications. Nanoscale, 2021, 13, 311-319.	2.8	22
13	Rhombohedral boron nitride epitaxy on ZrB2. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2021, 39, .	0.9	7
14	Exploring MXenes and their MAX phase precursors by electron microscopy. Materials Today Advances, 2021, 9, 100123.	2.5	26
15	In-situ growth of cerium nanoparticles for chrome-free, corrosion resistant anodic coatings. Surface and Coatings Technology, 2021, 410, 126958.	2.2	8
16	Hexacoordinated Gallium(III) Triazenide Precursor for Epitaxial Gallium Nitride by Atomic Layer Deposition. Chemistry of Materials, 2021, 33, 3266-3275.	3.2	15
17	Synthesis and Characterisation of Nanocomposite Mo-Fe-B Thin Films Deposited by Magnetron Sputtering. Materials, 2021, 14, 1739.	1.3	4
18	Use of cleaved wedge geometry for planâ€view transmission electron microscopy sample preparation. Microscopy Research and Technique, 2021, 84, 3182-3190.	1.2	7

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19	Synthesis and characterization of CrB2 thin films grown by DC magnetron sputtering. Scripta Materialia, 2021, 200, 113915.	2.6	12
20	Boridene: Two-dimensional Mo _{4/3} B _{2-x} with ordered metal vacancies obtained by chemical exfoliation. Science, 2021, 373, 801-805.	6.0	126
21	Improved oxidation properties from a reduced B content in sputter-deposited TiBx thin films. Surface and Coatings Technology, 2021, 420, 127353.	2.2	24
22	Outâ€Ofâ€Plane Ordered Laminate Borides and Their 2D Tiâ€Based Derivative from Chemical Exfoliation. Advanced Materials, 2021, 33, e2008361.	11.1	14
23	Synthesis, characterization, properties, first principles calculations, and X-ray photoelectron spectroscopy of bulk Mn5SiB2 and Fe5SiB2 ternary borides. Journal of Alloys and Compounds, 2021, 888, 161377.	2.8	8
24	In_{0.5}Ga_{0.5}N layers by atomic layer deposition. Journal of Materials Chemistry C, 2021, 9, 13077-13080.	2.7	8
25	Surface functionalization of epitaxial graphene using ion implantation for sensing and optical applications. Carbon, 2020, 157, 169-184.	5.4	15
26	Theoretical Prediction and Synthesis of a Family of Atomic Laminate Metal Borides with In-Plane Chemical Ordering. Journal of the American Chemical Society, 2020, 142, 18583-18591.	6.6	55
27	Improving the high-temperature oxidation resistance of TiB2 thin films by alloying with Al. Acta Materialia, 2020, 196, 677-689.	3.8	65
28	Epitaxial GaN using Ga(NMe₂)₃ and NH₃ plasma by atomic layer deposition. Journal of Materials Chemistry C, 2020, 8, 8457-8465.	2.7	15
29	Self-organized columnar Zr0.7Ta0.3B1.5 core/shell-nanostructure thin films. Surface and Coatings Technology, 2020, 401, 126237.	2.2	15
30	High-Selectivity Growth of GaN Nanorod Arrays by Liquid-Target Magnetron Sputter Epitaxy. Coatings, 2020, 10, 719.	1.2	1
31	Direct epitaxial nanometer-thin InN of high structural quality on 4Hâ€"SiC by atomic layer deposition. Applied Physics Letters, 2020, 117, .	1.5	11
32	Microstructure and materials properties of understoichiometric TiBx thin films grown by HiPIMS. Surface and Coatings Technology, 2020, 404, 126537.	2.2	33
33	Plasma CVD of Bâ€"Câ€"N thin films using triethylboron in argonâ€"nitrogen plasma. Journal of Materials Chemistry C, 2020, 8, 4112-4123.	2.7	12
34	How Much Oxygen Can a MXene Surface Take Before It Breaks?. Advanced Functional Materials, 2020, 30, 1909005.	7.8	111
35	The influence of pressure and magnetic field on the deposition of epitaxial TiBx thin films from DC magnetron sputtering. Vacuum, 2020, 177, 109355.	1.6	14
36	The effects of microstructure, Nb content and secondary Ruddlesdenâ€"Popper phase on thermoelectric properties in perovskite CaMn_{1â^'x}Nb_xO₃ (<i>x</i>) Tj ETQq0 0 0 rgBT /Overlock	1.7	7

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37	Controlling the Organization of PEDOT:PSS on Cellulose Structures. ACS Applied Polymer Materials, 2019, 1, 2342-2351.	2.0	40
38	Ti_{n+1}C_n MXenes with fully saturated and thermally stable Cl terminations. Nanoscale Advances, 2019, 1, 3680-3685.	2.2	81
39	Synthesis of (V_{2/3}Sc_{1/3})₂AlC i-MAX phase and V_{2âˆ’x}C MXene scrolls. Nanoscale, 2019, 11, 14720-14726.	2.8	52
40	Theoretical Analysis, Synthesis, and Characterization of 2D W_{1.33}C (MXene) with Ordered Vacancies. ACS Applied Nano Materials, 2019, 2, 6209-6219.	2.4	37
41	Influence of the Al concentration in Ti-Al-B coatings on microstructure and mechanical properties using combinatorial sputtering from a segmented TiB2/AlB2 target. Surface and Coatings Technology, 2019, 364, 89-98.	2.2	24
42	Graphene-based plasmonic nanocomposites for highly enhanced solar-driven photocatalytic activities. RSC Advances, 2019, 9, 30585-30598.	1.7	17
43	2D Transition Metal Carbides (MXenes) for Carbon Capture. Advanced Materials, 2019, 31, e1805472.	11.1	184
44	Synthesis and characterization of (Ti1-Al)B2+ thin films from combinatorial magnetron sputtering. Thin Solid Films, 2019, 669, 181-187.	0.8	24
45	Tailoring Structure, Composition, and Energy Storage Properties of MXenes from Selective Etching of Inâ€Plane, Chemically Ordered MAX Phases. Small, 2018, 14, e1703676.	5.2	174
46	Wâ€Based Atomic Laminates and Their 2D Derivative W_{1.33}C MXene with Vacancy Ordering. Advanced Materials, 2018, 30, e1706409.	11.1	240
47	Large uniaxial magnetostriction with sign inversion at the first order phase transition in the nanolaminated Mn2GaC MAX phase. Scientific Reports, 2018, 8, 2637.	1.6	42
48	Site-controlled growth of GaN nanorod arrays by magnetron sputter epitaxy. Thin Solid Films, 2018, 660, 950-955.	0.8	7
49	Self-Healing in Carbon Nitride Evidenced As Material Inflation and Superlubric Behavior. ACS Applied Materials & Interfaces, 2018, 10, 16238-16243.	4.0	51
50	Single Cr atom catalytic growth of graphene. Nano Research, 2018, 11, 2405-2411.	5.8	41
51	On the organization and thermal behavior of functional groups on Ti ₃ C ₂ MXene surfaces in vacuum. 2D Materials, 2018, 5, 015002.	2.0	219
52	Self-structuring in Zr1âˆ’xAlxN films as a function of composition and growth temperature. Scientific Reports, 2018, 8, 16327.	1.6	9
53	On the Structural Stability of MXene and the Role of Transition Metal Adatoms. Nanoscale, 2018, 10, 10850-10855.	2.8	71
54	Sequential magnetic switching in Fe/MgO(001) superlattices. Physical Review B, 2018, 97, .	1.1	5

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55	Synthesis of Two-Dimensional Nb_{1.33}C (MXene) with Randomly Distributed Vacancies by Etching of the Quaternary Solid Solution (Nb_{2/3}Sc_{1/3})₂AlC MAX Phase. ACS Applied Nano Materials, 2018, 1, 2455-2460.	2.4	154
56	Effects of N2 Partial Pressure on Growth, Structure, and Optical Properties of GaN Nanorods Deposited by Liquid-Target Reactive Magnetron Sputter Epitaxy. Nanomaterials, 2018, 8, 223.	1.9	8
57	Resolving the debated atomic structure of the metastable cubic <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Si</mml:mi><mml:msub><mml:mi mathvariant="normal">N</mml:mi><mml:mi>x</mml:mi></mml:msub></mml:mrow></mml:math> tissue phase in nanocomposites with TiN. Physical Review Materials, 2018, 2, .	0.9	0
58	Coreâ€"shell formation in self-induced InAlN nanorods. Nanotechnology, 2017, 28, 115602.	1.3	4
59	Synthesis of Ti3AuC2, Ti3Au2C2 and Ti3IrC2 by noble metal substitution reaction in Ti3SiC2 for high-temperature-stable Ohmic contacts to SiC. Nature Materials, 2017, 16, 814-818.	13.3	142
60	Two-dimensional Mo1.33C MXene with divacancy ordering prepared from parent 3D laminate with in-plane chemical ordering. Nature Communications, 2017, 8, 14949.	5.8	525
61	Direct observation of spinodal decomposition phenomena in InAlN alloys during in-situ STEM heating. Scientific Reports, 2017, 7, 44390.	1.6	20
62	Synthesis and characterisation of Mo-B-C thin films deposited by non-reactive DC magnetron sputtering. Surface and Coatings Technology, 2017, 309, 506-515.	2.2	20
63	Selective-area growth of single-crystal wurtzite GaN nanorods on SiOx/Si(001) substrates by reactive magnetron sputter epitaxy exhibiting single-mode lasing. Scientific Reports, 2017, 7, 12701.	1.6	14
64	Phase formation of nanolaminated Mo₂AuC and Mo₂(Au_{1â^'x}Ga_x)₂C by a substitutional reaction within Au-capped Mo₂GaC and Mo₂Ga₂C thin films. Nanoscale, 2017, 9, 17681-17687.	2.8	43
65	Age hardening in (Ti 1â^'x Al x)B 2+Î" thin films. Scripta Materialia, 2017, 127, 122-126.	2.6	38
66	Magnetron Sputter Epitaxy of High-Quality GaN Nanorods on Functional and Cost-Effective Templates/Substrates. Energies, 2017, 10, 1322.	1.6	18
67	Influence of pulse frequency and bias on microstructure and mechanical properties of TiB2 coatings deposited by high power impulse magnetron sputtering. Surface and Coatings Technology, 2016, 304, 203-210.	2.2	61
68	Synthesis and characterization of MoB2â^'x thin films grown by nonreactive DC magnetron sputtering. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2016, 34, .	0.9	32
69	Influence of Microstructure and Surface Activation of Dualâ€Phase Membrane Ce_{0.8}Gd_{0.2}O_{2â^'Î´}â€"FeCo₂O₄ on Oxygen Permeation. Journal of the American Ceramic Society, 2016, 99, 349-355.	1.9	44
70	Hydrogen separation through tailored dual phase membranes with nominal composition BaCe0.8Eu0.2O3-Î´:Ce0.8Y0.2O2-Î´ at intermediate temperatures. Scientific Reports, 2016, 6, 34773.	1.6	46
71	Strongly polarized quantum-dot-like light emitters embedded in GaAs/GaNAs core/shell nanowires. Nanoscale, 2016, 8, 15939-15947.	2.8	22
72	Discrete Layer-by-Layer Magnetic Switching in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>Fe</mml:mi><mml:mo>/</mml:mo><mml:mi>MgO</mml:mi><mml:mo stretchy="false">(</mml:mo><mml:mn>001</mml:mn><mml:mo) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 47 Td (stretchy="false">)</mml	1.5	21

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73	Nucleation and core-shell formation mechanism of self-induced InxAl1âˆ’xN core-shell nanorods grown on sapphire substrates by magnetron sputter epitaxy. Vacuum, 2016, 131, 39-43.	1.6	9
74	Ab initio calculations and experimental study of piezoelectric Y In1âˆ’N thin films deposited using reactive magnetron sputter epitaxy. Acta Materialia, 2016, 105, 199-206.	3.8	20
75	Room-temperature mobility above 2200â€‰cm2/VÂ·s of two-dimensional electron gas in a sharp-interface AlGaN/GaN heterostructure. Applied Physics Letters, 2015, 106, .	1.5	43
76	Structure and properties of Crâ€“C/Ag films deposited by magnetron sputtering. Surface and Coatings Technology, 2015, 281, 184-192.	2.2	20
77	Functional properties of La0.99X0.01Nb0.99Al0.01O4âˆ’Î´ and La0.99X0.01Nb0.99Ti0.01O4âˆ’Î´ proton conductors where X is an alkaline earth cation. Journal of the European Ceramic Society, 2015, 35, 1239-1253.	2.8	16
78	Phase homogeneity analysis of La 0.99 Sr 0.01 Nb 0.99 Al 0.01 O 4âˆ’Î´ and La 0.99 Ca 0.01 Nb 0.99 Ti 0.01 O 4âˆ’Î´ proton conductors by high-resolution STEM and EELS. Journal of the European Ceramic Society, 2015, 35, 1517-1525.	2.8	6
79	Liquid-target reactive magnetron sputter epitaxy of High quality GaN(0001Ì„) nanorods on Si(111). Materials Science in Semiconductor Processing, 2015, 39, 702-710.	1.9	22
80	Stabilization of wurtzite Sc0.4Al0.6N in pseudomorphic epitaxial Sc Al1âˆ’N/In Al1âˆ’N superlattices. Acta Materialia, 2015, 94, 101-110.	3.8	19
81	Curved-Lattice Epitaxial Growth of In_{<i>x</i>}Al_{1â€“<i>x</i>}N Nanospirals with Tailored Chirality. Nano Letters, 2015, 15, 294-300.	4.5	19
82	Stress evolution during growth of GaN (0001)/Al₂O₃(0001) by reactive dc magnetron sputter epitaxy. Journal Physics D: Applied Physics, 2014, 47, 145301.	1.3	11
83	Excitons and biexcitons in InGaN quantum dot like localization centers. Nanotechnology, 2014, 25, 495702.	1.3	6
84	Characterization of InGaN/GaN quantum well growth using monochromated valence electron energy loss spectroscopy. Journal of Applied Physics, 2014, 115, 034302.	1.1	3
85	<i>In situ</i> transmission electron microscopy studies of the kinetics of Pt-Mo alloy diffusion in ZrB2 thin films. Applied Physics Letters, 2013, 103, .	1.5	9
86	Thermal stability of Al1âˆ’xInxN (0001) throughout the compositional range as investigated during in situ thermal annealing in a scanning transmission electron microscope. Acta Materialia, 2013, 61, 4683-4688.	3.8	12
87	Nucleation of single GaN nanorods with diameters smaller than 35â€‰nm by molecular beam epitaxy. Applied Physics Letters, 2013, 103, .	1.5	6
88	Kinetics of Ga droplet decay on thin carbon films. Applied Physics Letters, 2013, 102, .	1.5	9
89	Microstructure and dielectric properties of piezoelectric magnetron sputtered w-ScxAl1âˆ’xN thin films. Journal of Applied Physics, 2012, 111, .	1.1	93
90	Room-temperature heteroepitaxy of single-phase Al1âˆ’xInxN films with full composition range on isostructural wurtzite templates. Thin Solid Films, 2012, 524, 113-120.	0.8	24

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91	InGaN quantum dot formation mechanism on hexagonal GaN/InGaN/GaN pyramids. Nanotechnology, 2012, 23, 305708.	1.3	26
92	Y_xAl_{1âˆ’x}N thin films. Journal Physics D: Applied Physics, 2012, 45, 422001.	1.3	42
93	Two-domain formation during the epitaxial growth of GaN (0001) on <i>c</i>-plane Al2O3 (0001) by high power impulse magnetron sputtering. Journal of Applied Physics, 2011, 110, .	1.1	18
94	Standardâ€free composition measurements of Al<i>_x</i> In_{1â€“<i>x</i>}N by lowâ€loss electron energy loss spectroscopy. Physica Status Solidi - Rapid Research Letters, 2011, 5, 50-52.	1.2	15
95	Face-centered cubic (Al1âˆ’xCrx)2O3. Thin Solid Films, 2011, 519, 2426-2429.	0.8	60
96	Effect of strain on low-loss electron energy loss spectra of group-III nitrides. Physical Review B, 2011, 84, .	1.1	26
97	Spontaneous Formation of AlInN Coreâ€“Shell Nanorod Arrays by Ultrahigh-Vacuum Magnetron Sputter Epitaxy. Applied Physics Express, 2011, 4, 115002.	1.1	15
98	Electronic-grade GaN(0001)/Al2O3(0001) grown by reactive DC-magnetron sputter epitaxy using a liquid Ga target. Applied Physics Letters, 2011, 98, .	1.5	52
99	Growth and Properties of SiC On-Axis Homoepitaxial Layers. Materials Science Forum, 2010, 645-648, 83-88.	0.3	10
100	AlGaN Multiple Quantum Wells and AlN Grown in a Hot-wall MOCVD for Deep UV Applications. ECS Transactions, 2009, 25, 837-844.	0.3	1
101	Two Dimensional X-Ray Diffraction Mapping of Basal Plane Orientation on SiC Substrates. Materials Science Forum, 2009, 615-617, 275-278.	0.3	2
102	Trimming of aqueous chemically grown ZnO nanorods into ZnO nanotubes and their comparative optical properties. Applied Physics Letters, 2009, 95, 073114.	1.5	52
103	Macrodefects in Cubic Silicon Carbide Crystals. Materials Science Forum, 0, 645-648, 375-378.	0.3	2