Mikko HeikkilÃ¤

List of Publications by Year
in descending order

81 papers	2,021 citations	218592 26 h-index	276775 41 g-index
83 all docs	83 docs citations	83 times ranked	3269 citing authors

#	Article	IF	Citations
1	Atomic layer deposition of TiO2â"xNx thin films for photocatalytic applications. Journal of Photochemistry and Photobiology A: Chemistry, 2006, 177, 68-75.	2.0	117
2	Atomic Layer Deposition of Highâ€‹k Oxides of the Group 4 Metals for Memory Applications. Advanced Engineering Materials, 2009, 11, 223-234.	1.6	116
3	Thermal study on electrospun polyvinylpyrrolidone/ammonium metatungstate nanofibers: optimising the annealing conditions for obtaining WO3 nanofibers. Journal of Thermal Analysis and Calorimetry, 2011, 105, 73-81.	2.0	95
4	Lithium Phosphate Thin Films Grown by Atomic Layer Deposition. Journal of the Electrochemical Society, 2012, 159, A259-A263.	1.3	83
5	Atomic layer deposition and characterization of vanadium oxide thin films. RSC Advances, 2013, 3, 1179-1185.	1.7	77
6	Studies on atomic layer deposition of MOF-5 thin films. Microporous and Mesoporous Materials, 2013, 182, 147-154.	2.2	76
7	Atomic layer deposition of Ge2Sb2Te5 thin films. Microelectronic Engineering, 2009, 86, 1946-1949.	1.1	64
8	Noble metal-modified TiO2 thin film photocatalyst on porous steel fiber support. Applied Catalysis B: Environmental, 2010, 95, 358-364.	10.8	63
9	Photocatalytic Properties of WO₃/TiO₂ Core/Shell Nanofibers prepared by Electrospinning and Atomic Layer Deposition. Chemical Vapor Deposition, 2013, 19, 149-155.	1.4	62
10	Effect of thickness of ALD grown TiO2 films on photoelectrocatalysis. Journal of Photochemistry and Photobiology A: Chemistry, 2009, 204, 200-208.	2.0	61
11	Amphiphilic and Phaseâ€Separable Ionic Liquids for Biomass Processing. ChemSusChem, 2014, 7, 1422-1434.	3.6	60
12	Evaluation and Comparison of Novel Precursors for Atomic Layer Deposition of Nb2O5Thin Films. Chemistry of Materials, 2012, 24, 975-980.	3.2	47
13	Atomic layer deposition of crystalline molybdenum oxide thin films and phase control by post-deposition annealing. Materials Today Chemistry, 2018, 9, 17-27.	1.7	44
14	Microwave-assisted base-free oxidation of glucose on gold nanoparticle catalysts. Catalysis Communications, 2016, 74, 115-118.	1.6	40
15	Atomic Layer Deposition of Photoconductive Cu₂O Thin Films. ACS Omega, 2019, 4, 11205-11214.	1.6	40
16	Suppression of Forward Electron Injection from Ru(dcbpy)₂(NCS)₂ to Nanocrystalline TiO₂ Film As a Result of an Interfacial Al₂O₃ Barrier Layer Prepared with Atomic Layer Deposition. Journal of Physical Chemistry Letters, 2010, 1, 536-539.	2.1	39
17	Advanced low-temperature ceramic nanocomposite fuel cells using ultra high ionic conductivity electrolytes synthesized through freeze-dried method and solid-route. Materials Today Energy, 2017, 5, 338-346.	2.5	38
18	Atomic Layer Deposition of Ta₂O₅/Polyimide Nanolaminates. Chemical Vapor Deposition, 2009, 15, 221-226.	1.4	34

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19	Cellulose fatty acid esters as sustainable film materials â€“ effect of side chain structure on barrier and mechanical properties. RSC Advances, 2015, 5, 80702-80708.	1.7	34
20	Atomic Layer Deposition of AlF₃ Thin Films Using Halide Precursors. Chemistry of Materials, 2015, 27, 604-611.	3.2	33
21	Atomic Layer Deposition of Aluminum and Titanium Phosphates. Journal of Physical Chemistry C, 2012, 116, 5920-5925.	1.5	31
22	Mechanical properties of aluminum, zirconium, hafnium and tantalum oxides and their nanolaminates grown by atomic layer deposition. Surface and Coatings Technology, 2015, 282, 36-42.	2.2	31
23	Role of ALD Al₂O₃ Surface Passivation on the Performance of p-Type Cu₂O Thin Film Transistors. ACS Applied Materials & Interfaces, 2021, 13, 4156-4164.	4.0	31
24	The structure and the photocatalytic activity of titania based nanotube and nanofiber coatings. Applied Surface Science, 2016, 368, 165-172.	3.1	30
25	Diamine Adduct of Cobalt(II) Chloride as a Precursor for Atomic Layer Deposition of Stoichiometric Cobalt(II) Oxide and Reduction Thereof to Cobalt Metal Thin Films. Chemistry of Materials, 2018, 30, 3499-3507.	3.2	27
26	Chemical vapour deposition of In2O3 thin films from a tris-guanidinate indium precursor. Dalton Transactions, 2011, 40, 9425.	1.6	26
27	Binary TiO2/SiO2 nanoparticle coating for controlling the wetting properties of paperboard. Materials Chemistry and Physics, 2015, 149-150, 230-237.	2.0	26
28	Atomic Layer Deposition of Iridium Thin Films Using Sequential Oxygen and Hydrogen Pulses. Journal of Physical Chemistry C, 2016, 120, 15235-15243.	1.5	26
29	Atomic layer deposition and properties of mixed Ta2O5 and ZrO2 films. AIP Advances, 2017, 7, .	0.6	26
30	Studies on atomic layer deposition of IRMOF-8 thin films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2015, 33, .	0.9	23
31	Thermal ageing and short-range ordering of Alloy 690 between 350 and 550ÂÂ°C. Journal of Nuclear Materials, 2017, 485, 56-66.	1.3	21
32	Mechanical strength and water resistance of paperboard coated with long chain cellulose esters. Packaging Technology and Science, 2011, 24, 249-258.	1.3	20
33	Impedance spectroscopy study of the unipolar and bipolar resistive switching states of atomic layer deposited polycrystalline ZrO₂ thin films. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 751-766.	0.8	20
34	Bioinspired Synthesis of Superhydrophobic Coatings. Langmuir, 2008, 24, 10625-10628.	1.6	19
35	Bismuth iron oxide thin films using atomic layer deposition of alternating bismuth oxide and iron oxide layers. Thin Solid Films, 2016, 611, 78-87.	0.8	19
36	Atomic Layer Deposition of Materials for Phase-Change Memories. ECS Transactions, 2009, 25, 399-407.	0.3	18

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37	Isosorbide synthesis from cellulose with an efficient and recyclable ruthenium catalyst. Green Chemistry, 2017, 19, 4563-4570.	4.6	18
38	Van der Waals epitaxy of continuous thin films of 2D materials using atomic layer deposition in low temperature and low vacuum conditions. 2D Materials, 2020, 7, 011003.	2.0	18
39	Facile open air oxidation of benzylic alcohols in distilled water by in situ made copper(II) complexes. Applied Catalysis A: General, 2012, 449, 153-162.	2.2	17
40	In Situ Reaction Mechanism Studies on Atomic Layer Deposition of Al_xSi_yO_z from Trimethylaluminium, Hexakis(ethylamino)disilane, and Water. Chemistry of Materials, 2012, 24, 3859-3867.	3.2	17
41	Zeolitic imidazole Framework-8 (ZIF-8) fibers by gas-phase conversion of electroblown zinc oxide and aluminum doped zinc oxide fibers. Microporous and Mesoporous Materials, 2018, 267, 212-220.	2.2	16
42	Sulphideâ€induced stress corrosion cracking and hydrogen absorption of copper in deoxygenated water at 90Â°C. Materials and Corrosion - Werkstoffe Und Korrosion, 2021, 72, 317-332.	0.8	16
43	Preparation and bioactive properties of nanocrystalline hydroxyapatite thin films obtained by conversion of atomic layer deposited calcium carbonate. Biointerphases, 2014, 9, 031008.	0.6	15
44	Study of atomic layer deposited Zr<scp>O</scp>₂ and Zr<scp>O</scp>₂/<scp>T</scp>i<scp>O</scp>₂ films for resistive switching application. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 301-309.	0.8	15
45	Atomic layer deposition and characterization of zirconium oxideâ€“erbium oxide nanolaminates. Thin Solid Films, 2010, 519, 666-673.	0.8	14
46	Optical and Dielectric Characterization of Atomic Layer Deposited Nb2O5 Thin Films. ECS Solid State Letters, 2012, 1, N1-N3.	1.4	14
47	Electrospinning of calcium carbonate fibers and their conversion to nanocrystalline hydroxyapatite. Materials Science and Engineering C, 2014, 45, 469-476.	3.8	13
48	Experimental constraints on the ordinary chondrite shock darkening caused by asteroid collisions. Astronomy and Astrophysics, 2020, 639, A146.	2.1	13
49	High-performance imidoâ€“amido precursor for the atomic layer deposition of Ta₂O₅. Semiconductor Science and Technology, 2012, 27, 074003.	1.0	12
50	Preparation of Lithium Containing Oxides by the Solid State Reaction of Atomic Layer Deposited Thin Films. Chemistry of Materials, 2017, 29, 998-1005.	3.2	12
51	Novel electroblowing synthesis of submicron zirconium dioxide fibers: effect of fiber structure on antimony(<scp>v</scp>) adsorption. Nanoscale Advances, 2019, 1, 4373-4383.	2.2	12
52	Studies on aluminium corrosion during and after HF vapour treatment. Microelectronic Engineering, 2010, 87, 501-504.	1.1	11
53	Intercalation of Lithium Ions from Gaseous Precursors into Î²-MnO2 Thin Films Deposited by Atomic Layer Deposition. Journal of Physical Chemistry C, 2019, 123, 15802-15814.	1.5	11
54	Synthesis, characterisation and application of novel self-assembled comb-like liquid crystalline biphenyl-cellulose as UV absorber for paper. Journal of Materials Chemistry, 2009, 19, 639-644.	6.7	10

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55	Holmium and titanium oxide nanolaminates by atomic layer deposition. Thin Solid Films, 2014, 565, 165-171.	0.8	10
56	Red Y2O3:Eu-Based Electroluminescent Device Prepared by Atomic Layer Deposition for Transparent Display Applications. Materials, 2021, 14, 1505.	1.3	10
57	As2S3 thin films deposited by atomic layer deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2017, 35, 01B114.	0.9	9
58	Effect of substrate deformation on functional properties of atomic-layer-deposited TiO2 coatings on stainless steel. Thin Solid Films, 2009, 517, 3797-3805.	0.8	8
59	Atomic Layer Deposition and Performance of ZrO₂-Al₂O₃Thin Films. ECS Journal of Solid State Science and Technology, 2018, 7, P287-P294.	0.9	8
60	Nickel Germanide Thin Films by Atomic Layer Deposition. Chemistry of Materials, 2019, 31, 5314-5319.	3.2	7
61	Magnetic properties and resistive switching in mixture films and nanolaminates consisting of iron and silicon oxides grown by atomic layer deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2020, 38, .	0.9	7
62	Hierarchical paramecium-like hollow and solid Au/Pt bimetallic nanostructures constructed using goethite as template. Nanotechnology, 2010, 21, 395604.	1.3	6
63	Voltage Controlled Hot Carrier Injection Enables Ohmic Contacts Using Au Island Metal Films on Ge. ACS Applied Materials & Interfaces, 2017, 9, 27357-27364.	4.0	6
64	Atomic Layer Deposition of Nickel Nitride Thin Films using NiCl₂(TMPDA) and Tertâ€Butylhydrazine as Precursors. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1900058.	0.8	6
65	Effect of self-assembly via Ï€-stacking to morphology and crystallinity on tritylated cellulose. Materials Letters, 2009, 63, 473-476.	1.3	5
66	Studies on Li3AlF6 thin film deposition utilizing conversion reactions of thin films. Thin Solid Films, 2017, 636, 26-33.	0.8	5
67	Early stage oxidation behavior of Alâ€•and Siâ€alloyed stainless steels as well as Niâ€based alloys in air at elevated temperatures. Materials and Corrosion - Werkstoffe Und Korrosion, 2018, 69, 690-702.	0.8	5
68	Solid-State Conversion of Scandium Phosphate into Scandium Oxide with Sodium Compounds. Industrial & Engineering Chemistry Research, 2019, 58, 14609-14620.	1.8	5
69	Studies on solid state reactions of atomic layer deposited thin films of lithium carbonate with hafnia and zirconia. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2019, 37, .	0.9	5
70	Toward epitaxial ternary oxide multilayer device stacks by atomic layer deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2019, 37, .	0.9	5
71	Silicon oxide-niobium oxide mixture films and nanolaminates grown by atomic layer deposition from niobium pentaethoxide and hexakis(ethylamino) disilane. Nanotechnology, 2020, 31, 195713.	1.3	5
72	Novel electroblowing synthesis of tin dioxide and composite tin dioxide/silicon dioxide submicron fibers for cobalt(<scp>ii</scp>) uptake. RSC Advances, 2021, 11, 15245-15257.	1.7	5

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73	Atomic layer deposition of TbF3 thin films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2021, 39, .	0.9	5
74	Phosphopeptide enrichment with stable spatial coordination on a titanium dioxide coated glass slide. Rapid Communications in Mass Spectrometry, 2009, 23, 3661-3667.	0.7	4
75	TlBr purification and single crystal growth for the detector applications. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 633, S72-S74.	0.7	4
76	Effect of Electrochemical Potential on Stress Corrosion Cracking Susceptibility of EN 1.4301 (AISI 304) Austenitic Stainless Steels in Simulated Hot Black Liquor. Corrosion, 2015, 71, 887-894.	0.5	4
77	Al₂O₃ Thin Films Prepared by a Combined Thermalâ€Plasma Atomic Layer Deposition Process at Low Temperature for Encapsulation Applications. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900237.	0.8	4
78	Bulk synthesis of stoichiometric/meteoritic troilite (FeS) by highâ€temperature pyrite decomposition and pyrrhotite melting. Meteoritics and Planetary Science, 2022, 57, 588-602.	0.7	4
79	Atomic Layer Deposition of Zinc Glutarate Thin Films. Advanced Materials Interfaces, 2017, 4, 1700512.	1.9	3
80	Atomic Layer Deposition of Insulating AlF3/Polyimide Nanolaminate Films. Coatings, 2021, 11, 355.	1.2	3
81	High-temperature X-ray scattering studies of atomic layer deposited IrO₂. Journal of Applied Crystallography, 2020, 53, 369-380.	1.9	2