

# Mikko Heikkil

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

81

papers

1,641

citations

22

h-index

37

g-index

83

ext. papers

1,831

ext. citations

4.4

avg, IF

4.48

L-index

| #  | Paper   | IF  | Citations |
|----|---|-----|-----------|
| 81 | Atomic layer deposition of TbF <sub>3</sub> thin films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2021</b> , 39, 022404  | 2.9 | 2         |
| 80 | Atomic Layer Deposition of Insulating AlF <sub>3</sub> /Polyimide Nanolaminate Films. <i>Coatings</i> , <b>2021</b> , 11, 355   | 2.9 | 1         |
| 79 | Red YO:Eu-Based Electroluminescent Device Prepared by Atomic Layer Deposition for Transparent Display Applications. <i>Materials</i> , <b>2021</b> , 14,  | 3.5 | 4         |
| 78 | Sulphide-induced stress corrosion cracking and hydrogen absorption of copper in deoxygenated water at 90°C. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , <b>2021</b> , 72, 317-332   | 1.6 | 4         |
| 77 | Role of ALD AlO Surface Passivation on the Performance of p-Type CuO Thin Film Transistors. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 4156-4164   | 9.5 | 15        |
| 76 | Novel electroblowing synthesis of tin dioxide and composite tin dioxide/silicon dioxide submicron fibers for cobalt(ii) uptake.. <i>RSC Advances</i> , <b>2021</b> , 11, 15245-15257  | 3.7 | 0         |
| 75 | Magnetic properties and resistive switching in mixture films and nanolaminates consisting of iron and silicon oxides grown by atomic layer deposition. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2020</b> , 38, 042405     | 2.9 | 2         |
| 74 | Silicon oxide-niobium oxide mixture films and nanolaminates grown by atomic layer deposition from niobium pentaethoxide and hexakis(ethylamino) disilane. <i>Nanotechnology</i> , <b>2020</b> , 31, 195713  | 3.4 | 3         |
| 73 | High-temperature X-ray scattering studies of atomic layer deposited IrO <sub>2</sub> . <i>Journal of Applied Crystallography</i> , <b>2020</b> , 53, 369-380  | 3.8 | 1         |
| 72 | Experimental constraints on the ordinary chondrite shock darkening caused by asteroid collisions. <i>Astronomy and Astrophysics</i> , <b>2020</b> , 639, A146   | 5.1 | 6         |
| 71 | Van der Waals epitaxy of continuous thin films of 2D materials using atomic layer deposition in low temperature and low vacuum conditions. <i>2D Materials</i> , <b>2020</b> , 7, 011003  | 5.9 | 13        |
| 70 | Al <sub>2</sub> O <sub>3</sub> Thin Films Prepared by a Combined Thermal-Plasma Atomic Layer Deposition Process at Low Temperature for Encapsulation Applications. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2020</b> , 217, 1900237 | 1.6 | 2         |
| 69 | Intercalation of Lithium Ions from Gaseous Precursors into EMnO <sub>2</sub> Thin Films Deposited by Atomic Layer Deposition. <i>Journal of Physical Chemistry C</i> , <b>2019</b> , 123, 15802-15814   | 3.8 | 9         |
| 68 | Studies on solid state reactions of atomic layer deposited thin films of lithium carbonate with hafnia and zirconia. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2019</b> , 37, 020929                                       | 2.9 | 5         |
| 67 | Atomic Layer Deposition of Nickel Nitride Thin Films using NiCl <sub>2</sub> (TMPDA) and Tert-Butylhydrazine as Precursors. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2019</b> , 216, 1900058  | 1.6 | 4         |
| 66 | Solid-State Conversion of Scandium Phosphate into Scandium Oxide with Sodium Compounds. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2019</b> , 58, 14609-14620  | 3.9 | 5         |
| 65 | Atomic Layer Deposition of Photoconductive CuO Thin Films. <i>ACS Omega</i> , <b>2019</b> , 4, 11205-11214  | 3.9 | 19        |

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|----|---|-----|----|
| 64 | Nickel Germanide Thin Films by Atomic Layer Deposition. <i>Chemistry of Materials</i> , <b>2019</b> , 31, 5314-5319   | 9.6 | 5  |
| 63 | Toward epitaxial ternary oxide multilayer device stacks by atomic layer deposition. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2019</b> , 37, 020602  | 2.9 | 3  |
| 62 | Novel electroblowing synthesis of submicron zirconium dioxide fibers: effect of fiber structure on antimony(V) adsorption. <i>Nanoscale Advances</i> , <b>2019</b> , 1, 4373-4383   | 5.1 | 9  |
| 61 | Zeolitic imidazole Framework-8 (ZIF-8) fibers by gas-phase conversion of electroblown zinc oxide and aluminum doped zinc oxide fibers. <i>Microporous and Mesoporous Materials</i> , <b>2018</b> , 267, 212-220                                 | 5.3 | 12 |
| 60 | Early stage oxidation behavior of Al- and Si-alloyed stainless steels as well as Ni-based alloys in air at elevated temperatures. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , <b>2018</b> , 69, 690-702                         | 1.6 | 2  |
| 59 | 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. <i>Chemistry of Materials</i> , <b>2018</b> , 30, 3499-3507 <sup>21</sup> | 9.6 | 21 |
| 58 | Atomic Layer Deposition and Performance of ZrO <sub>2</sub> -Al <sub>2</sub> O <sub>3</sub> Thin Films. <i>ECS Journal of Solid State Science and Technology</i> , <b>2018</b> , 7, P287-P294   | 2   | 8  |
| 57 | Atomic layer deposition of crystalline molybdenum oxide thin films and phase control by post-deposition annealing. <i>Materials Today Chemistry</i> , <b>2018</b> , 9, 17-27  | 6.2 | 22 |
| 56 | Preparation of Lithium Containing Oxides by the Solid State Reaction of Atomic Layer Deposited Thin Films. <i>Chemistry of Materials</i> , <b>2017</b> , 29, 998-1005   | 9.6 | 11 |
| 55 | Atomic layer deposition and properties of mixed Ta <sub>2</sub> O <sub>5</sub> and ZrO <sub>2</sub> films. <i>AIP Advances</i> , <b>2017</b> , 7, 025001  | 1.5 | 21 |
| 54 | Studies on Li <sub>3</sub> AlF <sub>6</sub> thin film deposition utilizing conversion reactions of thin films. <i>Thin Solid Films</i> , <b>2017</b> , 636, 26-33   | 2.2 | 5  |
| 53 | As <sub>2</sub> S <sub>3</sub> thin films deposited by atomic layer deposition. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2017</b> , 35, 01B114  | 2.9 | 8  |
| 52 | Thermal ageing and short-range ordering of Alloy 690 between 350 and 550 °C. <i>Journal of Nuclear Materials</i> , <b>2017</b> , 485, 56-66   | 3.3 | 14 |
| 51 | Atomic Layer Deposition of Zinc Glutarate Thin Films. <i>Advanced Materials Interfaces</i> , <b>2017</b> , 4, 1700512   | 4.6 | 2  |
| 50 | Advanced low-temperature ceramic nanocomposite fuel cells using ultra high ionic conductivity electrolytes synthesized through freeze-dried method and solid-route. <i>Materials Today Energy</i> , <b>2017</b> , 5, 338-346                    | 7   | 30 |
| 49 | Voltage Controlled Hot Carrier Injection Enables Ohmic Contacts Using Au Island Metal Films on Ge. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 27357-27364   | 9.5 | 4  |
| 48 | Isosorbide synthesis from cellulose with an efficient and recyclable ruthenium catalyst. <i>Green Chemistry</i> , <b>2017</b> , 19, 4563-4570   | 10  | 14 |
| 47 | Bismuth iron oxide thin films using atomic layer deposition of alternating bismuth oxide and iron oxide layers. <i>Thin Solid Films</i> , <b>2016</b> , 611, 78-87  | 2.2 | 16 |

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|----|---|-----|----|
| 46 | The structure and the photocatalytic activity of titania based nanotube and nanofiber coatings. <i>Applied Surface Science</i> , <b>2016</b> , 368, 165-172   | 6.7 | 22 |
| 45 | Microwave-assisted base-free oxidation of glucose on gold nanoparticle catalysts. <i>Catalysis Communications</i> , <b>2016</b> , 74, 115-118   | 3.2 | 29 |
| 44 | Atomic Layer Deposition of Iridium Thin Films Using Sequential Oxygen and Hydrogen Pulses. <i>Journal of Physical Chemistry C</i> , <b>2016</b> , 120, 15235-15243  | 3.8 | 23 |
| 43 | Effect of Electrochemical Potential on Stress Corrosion Cracking Susceptibility of EN 1.4301 (AISI 304) Austenitic Stainless Steels in Simulated Hot Black Liquor. <i>Corrosion</i> , <b>2015</b> , 71, 887-894   | 1.8 | 4  |
| 42 | Cellulose fatty acid esters as sustainable film materials Effect of side chain structure on barrier and mechanical properties. <i>RSC Advances</i> , <b>2015</b> , 5, 80702-80708   | 3.7 | 20 |
| 41 | Mechanical properties of aluminum, zirconium, hafnium and tantalum oxides and their nanolaminates grown by atomic layer deposition. <i>Surface and Coatings Technology</i> , <b>2015</b> , 282, 36-42   | 4.4 | 24 |
| 40 | Binary TiO <sub>2</sub> /SiO <sub>2</sub> nanoparticle coating for controlling the wetting properties of paperboard. <i>Materials Chemistry and Physics</i> , <b>2015</b> , 149-150, 230-237  | 4.4 | 25 |
| 39 | Studies on atomic layer deposition of IRMOF-8 thin films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2015</b> , 33, 01A121  | 2.9 | 17 |
| 38 | Impedance spectroscopy study of the unipolar and bipolar resistive switching states of atomic layer deposited polycrystalline ZrO <sub>2</sub> thin films. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2015</b> , 212, 751-766 | 1.6 | 18 |
| 37 | Atomic Layer Deposition of AlF <sub>3</sub> Thin Films Using Halide Precursors. <i>Chemistry of Materials</i> , <b>2015</b> , 27, 604-611   | 9.6 | 27 |
| 36 | Amphiphilic and phase-separable ionic liquids for biomass processing. <i>ChemSusChem</i> , <b>2014</b> , 7, 1422-34   | 8.3 | 48 |
| 35 | Electrospinning of calcium carbonate fibers and their conversion to nanocrystalline hydroxyapatite. <i>Materials Science and Engineering C</i> , <b>2014</b> , 45, 469-76   | 8.3 | 11 |
| 34 | Holmium and titanium oxide nanolaminates by atomic layer deposition. <i>Thin Solid Films</i> , <b>2014</b> , 565, 165-171   | 1.7 | 9  |
| 33 | Preparation and bioactive properties of nanocrystalline hydroxyapatite thin films obtained by conversion of atomic layer deposited calcium carbonate. <i>Biointerphases</i> , <b>2014</b> , 9, 031008   | 1.8 | 11 |
| 32 | Study of atomic layer deposited ZrO <sub>2</sub> and ZrO <sub>2</sub> /TiO <sub>2</sub> films for resistive switching application. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2014</b> , 211, 301-309                         | 1.6 | 13 |
| 31 | Studies on atomic layer deposition of MOF-5 thin films. <i>Microporous and Mesoporous Materials</i> , <b>2013</b> , 182, 147-154  | 5.3 | 58 |
| 30 | Atomic layer deposition and characterization of vanadium oxide thin films. <i>RSC Advances</i> , <b>2013</b> , 3, 1179-1185   | 3.7 | 65 |
| 29 | Photocatalytic Properties of WO <sub>3</sub> /TiO <sub>2</sub> Core/Shell Nanofibers prepared by Electrospinning and Atomic Layer Deposition. <i>Chemical Vapor Deposition</i> , <b>2013</b> , 19, 149-155  |     | 58 |

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|----|---|------|----|
| 28 | Facile open air oxidation of benzylic alcohols in distilled water by in situ made copper(II) complexes. <i>Applied Catalysis A: General</i> , <b>2012</b> , 449, 153-162  | 5.1  | 16 |
| 27 | Optical and Dielectric Characterization of Atomic Layer Deposited Nb <sub>2</sub> O <sub>5</sub> Thin Films. <i>ECS Solid State Letters</i> , <b>2012</b> , 1, N1-N3  |      | 12 |
| 26 | Evaluation and Comparison of Novel Precursors for Atomic Layer Deposition of Nb <sub>2</sub> O <sub>5</sub> Thin Films. <i>Chemistry of Materials</i> , <b>2012</b> , 24, 975-980   | 9.6  | 41 |
| 25 | In Situ Reaction Mechanism Studies on Atomic Layer Deposition of Al <sub>x</sub> Si <sub>y</sub> O <sub>z</sub> from Trimethylaluminium, Hexakis(ethylamino)disilane, and Water. <i>Chemistry of Materials</i> , <b>2012</b> , 24, 3859-3867  | 9.6  | 16 |
| 24 | Atomic Layer Deposition of Aluminum and Titanium Phosphates. <i>Journal of Physical Chemistry C</i> , <b>2012</b> , 116, 5920-5925  | 3.8  | 31 |
| 23 | Lithium Phosphate Thin Films Grown by Atomic Layer Deposition. <i>Journal of the Electrochemical Society</i> , <b>2012</b> , 159, A259-A263   | 3.9  | 77 |
| 22 | High-performance imido-imido precursor for the atomic layer deposition of Ta <sub>2</sub> O <sub>5</sub> . <i>Semiconductor Science and Technology</i> , <b>2012</b> , 27, 074003   | 1.8  | 12 |
| 21 | Thermal study on electrospun polyvinylpyrrolidone/ammonium metatungstate nanofibers: optimising the annealing conditions for obtaining WO <sub>3</sub> nanofibers. <i>Journal of Thermal Analysis and Calorimetry</i> , <b>2011</b> , 105, 73-81  | 4.1  | 79 |
| 20 | Mechanical strength and water resistance of paperboard coated with long chain cellulose esters. <i>Packaging Technology and Science</i> , <b>2011</b> , 24, 249-258   | 2.3  | 13 |
| 19 | Chemical vapour deposition of In <sub>2</sub> O <sub>3</sub> thin films from a tris-guanidinate indium precursor. <i>Dalton Transactions</i> , <b>2011</b> , 40, 9425-30  | 4.3  | 21 |
| 18 | TlBr purification and single crystal growth for the detector applications. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2011</b> , 633, S72-S74  | 1.2  | 3  |
| 17 | Hierarchical paramecium-like hollow and solid Au/Pt bimetallic nanostructures constructed using goethite as template. <i>Nanotechnology</i> , <b>2010</b> , 21, 395604  | 3.4  | 6  |
| 16 | Suppression of Forward Electron Injection from Ru(dcbpy) <sub>2</sub> (NCS) <sub>2</sub> to Nanocrystalline TiO <sub>2</sub> Film As a Result of an Interfacial Al <sub>2</sub> O <sub>3</sub> Barrier Layer Prepared with Atomic Layer Deposition. <i>Journal of Physical Chemistry Letters</i> , <b>2010</b> , 1, 536-539 | 6.4  | 38 |
| 15 | Studies on aluminium corrosion during and after HF vapour treatment. <i>Microelectronic Engineering</i> , <b>2010</b> , 87, 501-504   | 2.5  | 10 |
| 14 | Atomic layer deposition and characterization of zirconium oxide/erbium oxide nanolaminates. <i>Thin Solid Films</i> , <b>2010</b> , 519, 666-673  | 2.2  | 12 |
| 13 | Noble metal-modified TiO <sub>2</sub> thin film photocatalyst on porous steel fiber support. <i>Applied Catalysis B: Environmental</i> , <b>2010</b> , 95, 358-364  | 21.8 | 53 |
| 12 | Atomic Layer Deposition of Materials for Phase-Change Memories. <i>ECS Transactions</i> , <b>2009</b> , 25, 399-407   | 1    | 17 |
| 11 | Effect of self-assembly via stacking to morphology and crystallinity on tritylated cellulose. <i>Materials Letters</i> , <b>2009</b> , 63, 473-476  | 3.3  | 5  |

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|----|---|-----|---------|
| 10 | Atomic Layer Deposition of High-k Oxides of the Group 4 Metals for Memory Applications. <i>Advanced Engineering Materials</i> , <b>2009</b> , 11, 223-234   | 3.5 | 105     |
| 9  | Atomic Layer Deposition of Ta <sub>2</sub> O <sub>5</sub> /Polyimide Nanolaminates. <i>Chemical Vapor Deposition</i> , <b>2009</b> , 15, 221-226  |     | 30      |
| 8  | Effect of substrate deformation on functional properties of atomic-layer-deposited TiO <sub>2</sub> coatings on stainless steel. <i>Thin Solid Films</i> , <b>2009</b> , 517, 3797-3805                         | 2.2 | 8       |
| 7  | Phosphopeptide enrichment with stable spatial coordination on a titanium dioxide coated glass slide. <i>Rapid Communications in Mass Spectrometry</i> , <b>2009</b> , 23, 3661-7                                | 2.2 | 3       |
| 6  | Atomic layer deposition of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> thin films. <i>Microelectronic Engineering</i> , <b>2009</b> , 86, 1946-1949   | 2.5 | 58      |
| 5  | Effect of thickness of ALD grown TiO <sub>2</sub> films on photoelectrocatalysis. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , <b>2009</b> , 204, 200-208                                   | 4.7 | 58      |
| 4  | Synthesis, characterisation and application of novel self-assembled comb-like liquid crystalline biphenyl-cellulose as UV absorber for paper. <i>Journal of Materials Chemistry</i> , <b>2009</b> , 19, 639-644 |     | 10      |
| 3  | Bioinspired synthesis of superhydrophobic coatings. <i>Langmuir</i> , <b>2008</b> , 24, 10625-8   | 4   | 18      |
| 2  | Atomic layer deposition of TiO <sub>2</sub> /N <sub>x</sub> thin films for photocatalytic applications. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , <b>2006</b> , 177, 68-75               | 4.7 | 105     |
| 1  | Poster: Advances in Technology and Characterization   |     | 665-692 |