Lauri Aarik

List of Publications by Year
in descending order

31 papers	564 citations	687363 13 h-index	642732 23 g-index
31 all docs	31 docs citations	31 times ranked	723 citing authors

#	Article	IF	Citations
1	Development of a thin ceramic-graphene nanolaminate coating for corrosion protection of stainless steel. Corrosion Science, 2016, 105, 161-169.	6.6	100
2	Atomic layer deposition of TiO2 from TiCl4 and O3. Thin Solid Films, 2013, 542, 100-107.	1.8	64
3	Influence of phase composition on optical properties of TiO2: Dependence of refractive index and band gap on formation of TiO2-II phase in thin films. Optical Materials, 2019, 96, 109335.	3.6	52
4	Effect of substrate-enhanced and inhibited growth on atomic layer deposition and properties of aluminumâ€“titanium oxide films. Thin Solid Films, 2016, 600, 119-125.	1.8	44
5	Effective corrosion protection of aluminum alloy AA2024-T3 with novel thin nanostructured oxide coating. Surface and Coatings Technology, 2021, 411, 126993.	4.8	32
6	Atomic layer deposition of high-quality Al2O3 and Al-doped TiO2 thin films from hydrogen-free precursors. Thin Solid Films, 2014, 565, 19-24.	1.8	31
7	Temperature induced inversion of oxygen response in CVD graphene on SiO2. Sensors and Actuators B: Chemical, 2014, 190, 1006-1013.	7.8	28
8	Chemical resistance of thin film materials based on metal oxides grown by atomic layer deposition. Thin Solid Films, 2013, 542, 219-224.	1.8	24
9	Atomic layer deposition of aluminum oxide films on graphene. IOP Conference Series: Materials Science and Engineering, 2013, 49, 012014.	0.6	18
10	Atomic layer deposition of rutile-phase TiO2 on RuO2 from TiCl4 and O3: Growth of high-permittivity dielectrics with low leakage current. Journal of Crystal Growth, 2013, 382, 61-66.	1.5	17
11	Influence of process parameters on atomic layer deposition of ZrO2 thin films from CpZr(NMe2)3 and H2O. Thin Solid Films, 2014, 565, 37-44.	1.8	17
12	Influence of growth temperature on the structure and electrical properties of highâ€permittivity Ti<scp>O</scp>₂ films in Ti<scp>C</scp>l₄â€<scp>H</scp>₂<scp>O</scp> and Ti<scp>C</scp>l₄â€<scp>O</scp>₃ atomicâ€layerâ€deposition processes. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 425-432.	1.8	14
13	Growth of Ti Al1â”'O films by atomic layer deposition using successive supply of metal precursors. Thin Solid Films, 2015, 591, 276-284.	1.8	13
14	TiO₂-Based Metal-Insulator-Metal Structures for Future DRAM Storage Capacitors. ECS Transactions, 2013, 50, 79-87.	0.5	12
15	Chemical resistance of TiO2 and Al2O3 single-layer and multilayer coatings atomic layer deposited from hydrogen-free precursors on silicon and stainless steel. Materials Chemistry and Physics, 2019, 228, 285-292.	4.0	11
16	Influence of oxygen precursors on atomic layer deposition of HfO2 and hafnium-titanium oxide films: Comparison of O3- and H2O-based processes. Applied Surface Science, 2020, 530, 147229.	6.1	11
17	Atomic layer deposition of rutile and TiO2-II from TiCl4 and O3 on sapphire: Influence of substrate orientation on thin film structure. Journal of Crystal Growth, 2015, 428, 86-92.	1.5	9
18	Mechanical properties of crystalline and amorphous aluminum oxide thin films grown by atomic layer deposition. Surface and Coatings Technology, 2022, 438, 128409.	4.8	9

#	Article	IF	Citations
19	Atomic layer deposition of Zr<scp>O</scp>₂ for grapheneâ€based multilayer structures: In situ and ex situ characterization of growth process. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 397-402.	1.8	8
20	Low-Temperature Atomic Layer Deposition of Î±-Al₂O₃ Thin Films. Crystal Growth and Design, 2021, 21, 4220-4229.	3.0	8
21	Tribological properties of PVD coatings with lubricating films. Estonian Journal of Engineering, 2012, 18, 193.	0.4	6
22	Functionalization of Titanium Alloy Surface by Graphene Nanoplatelets and Metal Oxides: Corrosion Inhibition. Journal of Nanoscience and Nanotechnology, 2015, 15, 6533-6540.	0.9	6
23	Dysprosium oxide and dysprosium-oxide-doped titanium oxide thin films grown by atomic layer deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2015, 33, .	2.1	6
24	Atomic layer deposition of high-k dielectrics on carbon nanoparticles. Thin Solid Films, 2013, 538, 16-20.	1.8	5
25	Atomic Layer Deposition and Characterization of Dysprosiumâ€Doped Zirconium Oxide Thin Films. Chemical Vapor Deposition, 2015, 21, 181-187.	1.3	5
26	Atomic-layer design and properties of Pr-doped HfO2 thin films. Journal of Alloys and Compounds, 2021, 868, 159100.	5.5	4
27	Nanostructured Coating for Aluminum Alloys Used in Aerospace Applications. Journal of the Electrochemical Society, 2022, 169, 071503.	2.9	4
28	Al alloy protection via ultra-thin ceramic coatings and different surface pretreatments. Surface and Coatings Technology, 2022, 435, 128240.	4.8	3
29	Structure and Electrical Behavior of Hafnium-Praseodymium Oxide Thin Films Grown by Atomic Layer Deposition. Materials, 2022, 15, 877.	2.9	2
30	Influence of Î±-Al2O3 Template and Process Parameters on Atomic Layer Deposition and Properties of Thin Films Containing High-Density TiO2 Phases. Coatings, 2021, 11, 1280.	2.6	1
31	Atomic Layer Deposition of Zirconium Oxide on Carbon Nanoparticles. IOP Conference Series: Materials Science and Engineering, 2013, 49, 012019.	0.6	0