Ola Nilsen

List of Publications by Citations

141 papers	3,124 citations	34 h-index	48 g-index
149 ext. papers	3,375 ext. citations	4.1 avg, IF	5.47 L-index

#	Paper	IF	Citations
141	Growth of thin films of molybdenum oxide by atomic layer deposition. *Journal of Materials Chemistry*, **2011**, 21, 705-710		102
140	Structural and morphological properties of ZnO:Ga thin films. *Thin Solid Films*, **2006**, 515, 472-476	2.2	101
139	All-gas-phase synthesis of UiO-66 through modulated atomic layer deposition. *Nature Communications*, **2016**, 7, 13578	17.4	96
138	Deposition of thin films of organic-inorganic hybrid materials based on aromatic carboxylic acids by atomic layer deposition. *Dalton Transactions*, **2010**, 39, 11628-35	4.3	92
137	Growth of manganese oxide thin films by atomic layer deposition. *Thin Solid Films*, **2003**, 444, 44-51	2.2	87
136	Atomic Layer Deposition of Li2O□Al2O3 Thin Films. *Chemistry of Materials*, **2011**, 23, 4669-4675	9.6	82
135	Growth of thin films of Co3O4 by atomic layer deposition. *Thin Solid Films*, **2007**, 515, 7772-7781	2.2	79
134	Lanthanum titanate and lithium lanthanum titanate thin films grown by atomic layer deposition. *Journal of Materials Chemistry*, **2010**, 20, 2877		77
133	Atomic layer deposition of lithium containing thin films. *Journal of Materials Chemistry*, **2009**, 19, 8767		75
132	Growth of Nano-Needles of Manganese(IV) Oxide by Atomic Layer Deposition. *Journal of Nanoscience and Nanotechnology*, **2008**, 8, 1003-1011	1.3	75
131	Deposition of Organic- Inorganic Hybrid Materials by Atomic Layer Deposition. *ECS Transactions*, **2009**, 16, 3-14	1	74
130	Atomic layer deposition of organic-inorganic hybrid materials based on saturated linear carboxylic acids. *Dalton Transactions*, **2011**, 40, 4636-46	4.3	59
129	Atomic Layer Deposition of Spinel Lithium Manganese Oxide by Film-Body-Controlled Lithium Incorporation for Thin-Film Lithium-Ion Batteries. *Journal of Physical Chemistry C*, **2014**, 118, 1258-1268	3.8	58
128	Atomic layer deposition of ferroelectric LiNbO3. *Journal of Materials Chemistry C*, **2013**, 1, 4283-4290	7.1	51
127	Growth of calcium carbonate by the atomic layer chemical vapour deposition technique. *Thin Solid Films*, **2004**, 450, 240-247	2.2	50
126	High-performing iron phosphate for enhanced lithium ion solid state batteries as grown by atomic layer deposition. *Journal of Materials Chemistry A*, **2013**, 1, 9054-9059	13	47
125	Growth of La1□CaxMnO3 thin films by atomic layer deposition. *Journal of Materials Chemistry*, **2007**, 17, 1466-1475		47

124	High power nano-structured V2O5 thin film cathodes by atomic layer deposition. *Journal of Materials Chemistry A*, **2014**, 2, 15044-15051	13	46
123	Atomic layer deposition of LixTiyOz thin films. *RSC Advances*, **2013**, 3, 7537-7542	3.7	46
122	Epitaxial growth of cobalt oxide by atomic layer deposition. *Journal of Crystal Growth*, **2007**, 307, 457-465	1.6	46
121	Effect of magnetic field on the growth of □Fe2O3 thin films by atomic layer deposition. *Applied Surface Science*, **2004**, 227, 40-47	6.7	45
120	Thin films of In2O3 by atomic layer deposition using In(acac)3. *Thin Solid Films*, **2009**, 517, 6320-6322	2.2	44
119	Atomic layer deposition of functional films for Li-ion microbatteries. *Physica Status Solidi (A) Applications and Materials Science*, **2014**, 211, 357-367	1.6	43
118	Thin Films of Cobalt Oxide Deposited on High Aspect Ratio Supports by Atomic Layer Deposition. *Chemical Vapor Deposition*, **2011**, 17, 135-140		41
117	Novel materials by atomic layer deposition and molecular layer deposition. *MRS Bulletin*, **2011**, 36, 877-884	3.1	41
116	Analytical model for island growth in atomic layer deposition using geometrical principles. *Journal of Applied Physics*, **2007**, 102, 024906	2.5	41
115	Effect of substrate on the characteristics of manganese(IV) oxide thin films prepared by atomic layer deposition. *Thin Solid Films*, **2004**, 468, 65-74	2.2	41
114	Functional Perovskites by Atomic Layer Deposition □An Overview. *Advanced Materials Interfaces*, **2017**, 4, 1600903	4.6	39
113	Atomic layer deposition of lithium nitride and carbonate using lithium silylamide. *RSC Advances*, **2012**, 2, 6315	3.7	37
112	Effect of heat treatment on ITO film properties and ITO/p-Si interface. *Materials Chemistry and Physics*, **2009**, 114, 425-429	4.4	37
111	Electrical properties of Al2O3□4H-SiC structures grown by atomic layer chemical vapor deposition. *Journal of Applied Physics*, **2007**, 102, 054513	2.5	37
110	All-gas-phase synthesis of amino-functionalized UiO-66 thin films. *Dalton Transactions*, **2017**, 46, 16983-16992	4.3	36
109	Thin film deposition of lanthanum manganite perovskite by the ALE process. *Journal of Materials Chemistry*, **1999**, 9, 1781-1784		36
108	Combination of characterization techniques for atomic layer deposition MoO3 coatings: From the amorphous to the orthorhombic □MoO3 crystalline phase. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2012**, 30, 01A107	2.9	35
107	Sensors for optical thermometry based on luminescence from layered YVO: Ln (Ln = Nd, Sm, Eu, Dy, Ho, Er, Tm, Yb) thin films made by atomic layer deposition. *Scientific Reports*, **2019**, 9, 10247	4.9	34

106	The 1.54-μm photoluminescence from an (Er, Ge) co-doped SiO2 film deposited on Si by rf magnetron sputtering. *Applied Physics Letters*, **2004**, 85, 4475	3.4	33
105	Simulation of growth dynamics in atomic layer deposition. Part I. Amorphous films. *Thin Solid Films*, **2007**, 515, 4527-4537	2.2	31
104	Electrical characterization of amorphous LiAlO2 thin films deposited by atomic layer deposition. *RSC Advances*, **2016**, 6, 60479-60486	3.7	30
103	Structural and optical properties of lanthanide oxides grown by atomic layer deposition (Ln = Pr, Nd, Sm, Eu, Tb, Dy, Ho, Er, Tm, Yb). *Dalton Transactions*, **2013**, 42, 10778-85	4.3	29
102	Atomic Layer Deposition of Organic–Inorganic Hybrid Materials Based on Unsaturated Linear Carboxylic Acids. *European Journal of Inorganic Chemistry*, **2011**, 2011, 5305-5312	2.3	28
101	Simulation of growth dynamics in atomic layer deposition. Part II. Polycrystalline films from cubic crystallites. *Thin Solid Films*, **2007**, 515, 4538-4549	2.2	28
100	Reconstruction of platinum–rhodium catalysts during oxidation of ammonia. *Applied Catalysis A: General*, **2005**, 284, 163-176	5.1	28
99	Enhanced osteoblast differentiation on scaffolds coated with TiO2 compared to SiO2 and CaP coatings. *Biointerphases*, **2012**, 7, 36	1.8	26
98	Surface Forces Apparatus Measurements of Interactions between Rough and Reactive Calcite Surfaces. *Langmuir*, **2018**, 34, 7248-7263	4	26
97	Optical Properties of Vanadium Pentoxide Deposited by ALD. *Journal of Physical Chemistry C*, **2012**, 116, 19444-19450	3.8	25
96	Atomic Layer Deposition of Copper Oxide using Copper(II) Acetylacetonate and Ozone. *Chemical Vapor Deposition*, **2012**, 18, 173-178		25
95	Comparison of near-interface traps in Al2O3/4H-SiC and Al2O3/SiO2/4H-SiC structures. *Applied Physics Letters*, **2006**, 89, 222103	3.4	25
94	MOF thin films with bi-aromatic linkers grown by molecular layer deposition. *Journal of Materials Chemistry A*, **2020**, 8, 2539-2548	13	25
93	Structural, electrical and optical characterization of Ti-doped ZnO films grown by atomic layer deposition. *Journal of Alloys and Compounds*, **2014**, 616, 618-624	5.7	24
92	Growth of La1-xSrxFeO3 thin films by atomic layer deposition. *Dalton Transactions*, **2009**, 481-9	4.3	24
91	Atomic layer deposition of (K,Na)(Nb,Ta)O3 thin films. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2016**, 34, 041508	2.9	23
90	The work function of n-ZnO deduced from heterojunctions with Si prepared by ALD. *Journal Physics D: Applied Physics*, **2012**, 45, 315101	3	22
89	Growth of iron cobalt oxides by atomic layer deposition. *Dalton Transactions*, **2008**, 253-9	4.3	22

88	Black silicon with order-disordered structures for enhanced light trapping and photothermic conversion. *Nano Energy*, **2019**, 65, 103992	17.1	21
87	Simulation of growth dynamics in atomic layer deposition. Part III. Polycrystalline films from tetragonal crystallites. *Thin Solid Films*, **2007**, 515, 4550-4558	2.2	20
86	Reconstruction and loss of platinum catalyst during oxidation of ammonia. *Applied Catalysis A: General*, **2001**, 207, 43-54	5.1	19
85	An iron(II) diketonate□diamine complex as precursor for thin film fabrication by atomic layer deposition. *Applied Surface Science*, **2015**, 347, 861-867	6.7	18
84	Neutron diffraction and Raman analysis of LiMn1.5Ni0.5O4 spinel type oxides for use as lithium ion battery cathode and their capacity enhancements. *Solid State Ionics*, **2016**, 284, 28-36	3.3	18
83	Atomic layer deposited lithium aluminum oxide: (In)dependency of film properties from pulsing sequence. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2015**, 33, 01A101	2.9	17
82	Chemical vapor transport of platinum and rhodium with oxygen as transport agent. *Journal of Crystal Growth*, **2005**, 279, 206-212	1.6	17
81	Effect of ZrO2 addition on the mechanical properties of porous TiO2 bone scaffolds. *Materials Science and Engineering C*, **2012**, 32, 1386-93	8.3	16
80	The effect of fluoride surface modification of ceramic TiO2 on the surface properties and biological response of osteoblastic cells in vitro. *Biomedical Materials (Bristol)*, **2011**, 6, 045006	3.5	16
79	Inexpensive set-up for determination of decomposition temperature for volatile compounds. *Thermochimica Acta*, **2003**, 404, 187-192	2.9	16
78	A foundation for complex oxide electronics -low temperature perovskite epitaxy. *Nature Communications*, **2020**, 11, 2872	17.4	15
77	In situ synchrotron study of ordered and disordered LiMn1.5Ni0.5O4 as lithium ion battery positive electrode. *Acta Materialia*, **2016**, 116, 290-297	8.4	15
76	Atomic Layer Deposition of LaPO4 and Ca:LaPO4**. *Chemical Vapor Deposition*, **2014**, 20, 269-273		14
75	Influence of precursors chemistry on ALD growth of cobalt-molybdenum oxide films. *Dalton Transactions*, **2012**, 41, 2439-44	4.3	14
74	(Invited) Reaction Mechanisms in ALD of Ternary Oxides. *ECS Transactions*, **2011**, 41, 175-183	1	14
73	Ultra-high power capabilities in amorphous FePO4 thin films. *Journal of Power Sources*, **2016**, 306, 454-458	7.9	13
72	Intense NIR emission in YVO4:Yb3+ thin films by atomic layer deposition. *Journal of Materials Chemistry C*, **2017**, 5, 8572-8578	7.1	13
71	Oxide Coating of Alumina Nanoporous Structure Using ALD to Produce Highly Porous Spinel. *Chemical Vapor Deposition*, **2012**, 18, 315-325		13

70	Thickness dependent structural, optical and electrical properties of Ti-doped ZnO films prepared by atomic layer deposition. *Applied Surface Science*, **2015**, 332, 494-499	6.7	12
69	Luminescent Properties of Multilayered Eu2O3 and TiO2 Grown by Atomic Layer Deposition**. *Chemical Vapor Deposition*, **2014**, 20, 274-281		12
68	Rearrangement of the oxide-semiconductor interface in annealed Al2O3/4H-SiC structures. *Applied Physics Letters*, **2007**, 91, 052907	3.4	12
67	Enhanced process and composition control for atomic layer deposition with lithium trimethylsilanolate. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2017**, 35, 01B133	2.9	11
66	Luminescent properties of europium titanium phosphate thin films deposited by atomic layer deposition. *RSC Advances*, **2017**, 7, 8051-8059	3.7	11
65	Luminescence properties of europium titanate thin films grown by atomic layer deposition. *RSC Advances*, **2014**, 4, 11876-11883	3.7	11
64	Simulation of growth dynamics for nearly epitaxial films. *Journal of Crystal Growth*, **2007**, 308, 366-375	1.6	11
63	Surface reconstruction on noble-metal catalysts during oxidation of ammonia. *Applied Catalysis A: General*, **2005**, 284, 185-192	5.1	11
62	Luminescent YbVO by atomic layer deposition. *Dalton Transactions*, **2017**, 46, 3008-3013	4.3	10
61	Atomic Layer Deposition of oriented nickel titanate (NiTiO3). *Applied Surface Science*, **2014**, 311, 478-483	6.7	10
60	ALD Applied to Conformal Coating of Nanoporous Alumina: Spinel Formation and Luminescence Induced by Europium Doping. *Journal of the Electrochemical Society*, **2012**, 159, P45-P49	3.9	10
59	Molecular Hybrid Structures by Atomic Layer Deposition Deposition of Alq3, Znq2 and Tiq4 (q = 8-hydroxyquinoline). *Chemical Vapor Deposition*, **2013**, 19, 174-179		10
58	Atomic layer deposited TiO2 protects porous ceramic foams from grain boundary corrosion. *Corrosion Science*, **2016**, 106, 35-42	6.8	9
57	Thin film fabrication and characterization of proton conducting lanthanum tungstate. *Journal of Materials Chemistry A*, **2014**, 2, 18463-18471	13	9
56	(Invited) ALD of Thin Films for Lithium-Ion Batteries. *ECS Transactions*, **2011**, 41, 331-339	1	9
55	Effect of Fe2O3 surface coating on reconstruction of platinum–rhodium catalysts during oxidation of ammonia. *Applied Catalysis A: General*, **2005**, 284, 177-184	5.1	9
54	Rubidium containing thin films by atomic layer deposition. *Dalton Transactions*, **2017**, 46, 16139-16144	4.3	8
53	Phase Control in Thin Films of Layered Cuprates. *Chemistry of Materials*, **2018**, 30, 1095-1101	9.6	8

52	Chemical Uniformity in Ferroelectric K Na NbO Thin Films. *Global Challenges*, **2019**, 3, 1800114	4.3	8
51	Interfacial studies of Al2O3 deposited on 4H-SiC(0001). *Surface and Interface Analysis*, **2008**, 40, 822-825	1.5	8
50	Luminescence properties of lanthanide and ytterbium lanthanide titanate thin films grown by atomic layer deposition. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2016**, 34, 01A130	2.9	8
49	Molecular layer deposition builds biocompatible substrates for epithelial cells. *Journal of Biomedical Materials Research - Part A*, **2018**, 106, 3090-3098	5.4	8
48	Crystallization, Phase Stability, and Electrochemical Performance of MoO3 Thin Films. *Crystal Growth and Design*, **2020**, 20, 3861-3866	3.5	7
47	Deposition and x-ray characterization of epitaxial thin films of LaAlO3. *Thin Solid Films*, **2014**, 550, 90-94	2.2	7
46	Measuring the heat evolved from individual reaction steps in atomic layer deposition. *Journal of Thermal Analysis and Calorimetry*, **2011**, 105, 33-37	4.1	7
45	High Temperature Annealing Study of Al2O3 Deposited by ALCVD on n-Type 4H-SiC. *Materials Science Forum*, **2006**, 527-529, 1067-1070	0.4	7
44	Etching of platinumhodium alloys in oxygen-containing atmospheres. *Journal of Alloys and Compounds*, **2005**, 402, 53-57	5.7	7
43	Electrical Properties of Aluminium Oxide Films Grown by Atomic Layer Deposition on n-Type 4H-SiC. *Materials Science Forum*, **2005**, 483-485, 705-708	0.4	7
42	tert-butoxides as precursors for atomic layer deposition of alkali metal containing thin films. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2020**, 38, 060804	2.9	7
41	Control of growth orientation in as-deposited epitaxial iron-rich nickel ferrite spinel. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2019**, 37, 021502	2.9	7
40	ALD Applied to Conformal Coating of Nanoporous Alumina: Spinel Formation and Luminescence Induced by Europium Doping. *ECS Transactions*, **2011**, 41, 123-130	1	6
39	Electronic Properties of ZnO/Si Heterojunction Prepared by ALD.. *Solid State Phenomena*, **2011**, 178-179, 130-135	0.4	6
38	Theandplasma modes in plasma-enhanced atomic layer deposition with O2N2capacitive discharges. *Journal Physics D: Applied Physics*, **2017**, 50, 095201	3	5
37	Biocompatible organic-inorganic hybrid materials based on nucleobases and titanium developed by molecular layer deposition. *Beilstein Journal of Nanotechnology*, **2019**, 10, 399-411	3	5
36	Controlling luminescence and quenching mechanisms in subnanometer multilayer structure of europium titanium oxide thin films. *Journal of Luminescence*, **2019**, 215, 116618	3.8	5
35	On the application of a single-crystal diffractometer and a CCD area detector for studies of thin films. *Journal of Synchrotron Radiation*, **2013**, 20, 644-7	2.4	5

34	High-Temperature Oxidation of Ni Coated with La2O3 by Atomic-Layer Chemical-Vapor Deposition (ALCVD). *Oxidation of Metals*, **2003**, 59, 215-232	1.6	5
33	Solar-driven plasmonic heterostructure Ti/TiO with gradient doping for sustainable plasmon-enhanced catalysis. *Physical Chemistry Chemical Physics*, **2020**, 22, 7769-7777	3.6	4
32	Area-selective atomic layer deposition of molybdenum oxide. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2020**, 38, 042406	2.9	4
31	X-Ray and AFM Analysis of Al2O3 Deposited by ALCVD on n-Type 4H-SiC. *Materials Science Forum*, **2007**, 556-557, 683-686	0.4	4
30	Annealing study of H2O and O3grown Al2O3deposited by atomic layer chemical vapour deposition on n-type 4H-SiC. *Physica Scripta*, **2006**, T126, 6-9	2.6	4
29	Structure determination of MnO2 films grown on single crystal Al2O3 substrates. *Philosophical Magazine*, **2005**, 85, 2689-2705	1.6	4
28	LiF by atomic layer deposition Made easy. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2020**, 38, 050401	2.9	4
27	Understanding KOBu in atomic layer deposition - mechanistic studies of the KNbO growth process. *Dalton Transactions*, **2020**, 49, 13233-13242	4.3	4
26	Tuning electronic properties in LaNiO3 thin films by B-site Cu-substitution. *Journal of Materials Chemistry C*, **2020**, 8, 12662-12668	7.1	4
25	High power iron phosphate cathodes by atomic layer deposition. *Solid State Ionics*, **2020**, 353, 115377	3.3	3
24	First complex oxide superconductor by atomic layer deposition. *Chemical Communications*, **2018**, 54, 8253-8256	5.8	3
23	Phase and Orientation Control of NiTiO Thin Films. *Materials*, **2019**, 13,	3.5	3
22	Ionic conductivity in LixTaOy thin films grown by atomic layer deposition. *Electrochimica Acta*, **2020**, 361, 137019	6.7	3
21	Single-step approach to sensitized luminescence through bulk-embedded organics in crystalline fluorides. *Communications Chemistry*, **2020**, 3,	6.3	3
20	Molecular layer deposition of photoactive metal-naphthalene hybrid thin films. *Dalton Transactions*, **2021**, 50, 12896-12905	4.3	3
19	Controllable template approach for ZnO nanowire growth. *Physica Status Solidi (A) Applications and Materials Science*, **2017**, 214, 1600480	1.6	2
18	Atomic Layer Deposition for Thin-Film Lithium-Ion Batteries **2017**, 183-207		2
17	Synthesis and Properties of Ethyl, Propyl, and Butyl Hexa-alkyldisilanes and Tetrakis(tri-alkylsilyl)silanes. *Zeitschrift Fur Anorganische Und Allgemeine Chemie*, **2014**, 640, 2956-2961	1.3	2

List of Publications

16	Atomic Layer Deposited Hybrid Organic-Inorganic Aluminates as Potential Low-k Dielectric Materials. *Materials Research Society Symposia Proceedings*, **2015**, 1791, 15-20		2
15	(E)-1-(2-Iodo-phen-yl)-2-phenyl-diazene. *Acta Crystallographica Section E: Structure Reports Online*, **2011**, 67, o2326		2
14	The Al2O3/4H-SiC Interface Investigated by Thermal Dielectric Relaxation Current Technique. *Materials Science Forum*, **2007**, 556-557, 537-540	0.4	2
13	Growth of Oxides with Complex Stoichiometry by the ALD Technique, Exemplified by Growth of La1−xCaxMnO3	7-100	
12	Phosphites as precursors in atomic layer deposition thin film synthesis. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2021**, 39, 032404	2.9	2
11	Utilizing Zirconium MOF-functionalized Fiber Substrates Prepared by Molecular Layer Deposition for Toxic Gas Capture and Chemical Warfare Agent Degradation.. *Global Challenges*, **2021**, 5, 2100001	4.3	2
10	Comparison of different coating techniques on the properties of FucoPol films. *International Journal of Biological Macromolecules*, **2017**, 103, 268-274	7.9	1
9	Electrical Properties and Gas Sensing Characteristics of the Al2O3/4H SiC Interface Studied by Impedance Spectroscopy. *Materials Science Forum*, **2010**, 645-648, 531-534	0.4	1
8	Influence of Annealing on the Al2O3/4H-SiC Interface. *Materials Science Forum*, **2008**, 600-603, 767-770	0.4	1
7	Al incorporation during metal organic chemical vapour deposition of aluminium zinc oxide. *Thin Solid Films*, **2020**, 709, 138245	2.2	1
6	Quinizarin: a large aromatic molecule well suited for atomic layer deposition. *Dalton Transactions*, **2021**, 50, 8307-8313	4.3	1
5	Selective etching of nanostructured a-Si:Al and its effect on porosity, Al gradient and surface oxidation. *Thin Solid Films*, **2020**, 702, 137982	2.2	0
4	Effect of Subcycle Arrangement on Direct Epitaxy in ALD of LaNiO3. *ACS Applied Electronic Materials*, **2021**, 3, 292-298	4	0
3	Design of experiments approach to luminescent CaMoO4 by atomic layer deposition. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2020**, 38, 052408	2.9	
2	Growth of nano-needles of manganese(IV) oxide by atomic layer deposition. *Journal of Nanoscience and Nanotechnology*, **2008**, 8, 1003-11	1.3	
1	Photoactive Zr-aromatic hybrid thin films made by molecular layer deposition. *RSC Advances*, **2022**, 12, 15718-15727	3.7	