

Adriaan J M Mackus

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/930753/adriaan-j-m-mackus-publications-by-year.pdf>
Version: 2024-04-26

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.
The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

55 papers	2,526 citations	26 h-index	50 g-index
59 ext. papers	2,848 ext. citations	6.3 avg, IF	5.41 L-index

#	Paper	IF	Citations
55	Surface Chemistry during Atomic Layer Deposition of Pt Studied with Vibrational Sum-Frequency Generation.. <i>Journal of Physical Chemistry C</i> , 2022 , 126, 2463-2474	3.8	3
54	Relation between Reactive Surface Sites and Precursor Choice for Area-Selective Atomic Layer Deposition Using Small Molecule Inhibitors.. <i>Journal of Physical Chemistry C</i> , 2022 , 126, 4845-4853	3.8	5
53	Atomic layer deposition and selective etching of ruthenium for area-selective deposition: Temperature dependence and supercycle design. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2021 , 39, 032412	2.9	2
52	Identification of highly active surface iron sites on Ni(OOH) for the oxygen evolution reaction by atomic layer deposition. <i>Journal of Catalysis</i> , 2021 , 394, 476-485	7.3	1
51	Insight into the removal and reapplication of small inhibitor molecules during area-selective atomic layer deposition of SiO ₂ . <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2021 , 39, 012402	2.9	8
50	Dependence of inherent selective atomic layer deposition of FeOx on Pt nanoparticles on the coreactant and temperature. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2021 , 39, 012404	2.9	2
49	Reaction Mechanisms during Atomic Layer Deposition of AlF Using Al(CH ₃) and SF Plasma. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 3913-3923	3.8	3
48	Mechanism of Precursor Blocking by Acetylacetone Inhibitor Molecules during Area-Selective Atomic Layer Deposition of SiO ₂ . <i>Chemistry of Materials</i> , 2020 , 32, 3335-3345	9.6	24
47	Synthesis of a Hybrid Nanostructure of ZnO-Decorated MoS ₂ by Atomic Layer Deposition. <i>ACS Nano</i> , 2020 , 14, 1757-1769	16.7	16
46	Area-Selective Atomic Layer Deposition of Two-Dimensional WS ₂ Nanolayers 2020 , 2, 511-518		24
45	Precise ion energy control with tailored waveform biasing for atomic scale processing. <i>Journal of Applied Physics</i> , 2020 , 128, 213301	2.5	5
44	Atomic layer deposition of ruthenium using an ABC-type process: Role of oxygen exposure during nucleation. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2020 , 38, 062402	2.9	6
43	Nanoscale Encapsulation of Perovskite Nanocrystal Luminescent Films via Plasma-Enhanced SiO ₂ Atomic Layer Deposition. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 53519-53527	9.5	12
42	Area-Selective Atomic Layer Deposition of TiN Using Aromatic Inhibitor Molecules for Metal/Dielectric Selectivity. <i>Chemistry of Materials</i> , 2020 , 32, 7788-7795	9.6	21
41	Isotropic plasma atomic layer etching of Al ₂ O ₃ using a fluorine containing plasma and Al(CH ₃) ₃ . <i>Applied Physics Letters</i> , 2020 , 117, 162107	3.4	5
40	Area-Selective Atomic Layer Deposition of ZnO by Area Activation Using Electron Beam-Induced Deposition. <i>Chemistry of Materials</i> , 2019 , 31, 1250-1257	9.6	43
39	Area-Selective Deposition of Ruthenium by Combining Atomic Layer Deposition and Selective Etching. <i>Chemistry of Materials</i> , 2019 , 31, 3878-3882	9.6	46

38	The Role of Aluminum in Promoting NiFe ₂ DOH Electrocatalysts for the Oxygen Evolution Reaction. <i>ACS Applied Energy Materials</i> , 2019 , 2, 3488-3499	6.1	15
37	From the Bottom-Up: Toward Area-Selective Atomic Layer Deposition with High Selectivity. <i>Chemistry of Materials</i> , 2019 , 31, 2-12	9.6	149
36	Synthesis of Doped, Ternary, and Quaternary Materials by Atomic Layer Deposition: A Review. <i>Chemistry of Materials</i> , 2019 , 31, 1142-1183	9.6	117
35	Approaches and opportunities for area-selective atomic layer deposition 2018 ,		2
34	Area-Selective Atomic Layer Deposition of Metal Oxides on Noble Metals through Catalytic Oxygen Activation. <i>Chemistry of Materials</i> , 2018 , 30, 663-670	9.6	72
33	Isotropic Atomic Layer Etching of ZnO Using Acetylacetone and O Plasma. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 38588-38595	9.5	21
32	Atomic Layer Deposition of Cobalt Using H-, N-, and NH-Based Plasmas: On the Role of the Co-reactant. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 22519-22529	3.8	23
31	Area-Selective Atomic Layer Deposition of InO:H Using a Plasma Printer for Local Area Activation. <i>Chemistry of Materials</i> , 2017 , 29, 921-925	9.6	48
30	Resist-free fabricated carbon nanotube field-effect transistors with high-quality atomic-layer-deposited platinum contacts. <i>Applied Physics Letters</i> , 2017 , 110, 013101	3.4	9
29	Graphene devices with bottom-up contacts by area-selective atomic layer deposition. <i>2D Materials</i> , 2017 , 4, 025046	5.9	14
28	Incomplete elimination of precursor ligands during atomic layer deposition of zinc-oxide, tin-oxide, and zinc-tin-oxide. <i>Journal of Chemical Physics</i> , 2017 , 146, 052802	3.9	49
27	(Invited) Area-Selective Atomic Layer Deposition: Role of Surface Chemistry. <i>ECS Transactions</i> , 2017 , 80, 39-48	1	9
26	Area-Selective Atomic Layer Deposition of SiO Using Acetylacetone as a Chemoselective Inhibitor in an ABC-Type Cycle. <i>ACS Nano</i> , 2017 , 11, 9303-9311	16.7	95
25	Atomic layer deposition of aluminum fluoride using Al(CH ₃) ₃ and SF ₆ plasma. <i>Applied Physics Letters</i> , 2017 , 111, 113105	3.4	12
24	Tandem Core-Shell Si-TaN Photoanodes for Photoelectrochemical Water Splitting. <i>Nano Letters</i> , 2016 , 16, 7565-7572	11.5	86
23	A Process for Topographically Selective Deposition on 3D Nanostructures by Ion Implantation. <i>ACS Nano</i> , 2016 , 10, 4451-8	16.7	67
22	Atomic layer deposition of Pd and Pt nanoparticles for catalysis: on the mechanisms of nanoparticle formation. <i>Nanotechnology</i> , 2016 , 27, 034001	3.4	70
21	Growth, intermixing, and surface phase formation for zinc tin oxide nanolaminates produced by atomic layer deposition. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2016 , 34, 021516	2.9	17

20	In situ spectroscopic ellipsometry during atomic layer deposition of Pt, Ru and Pd. <i>Journal Physics D: Applied Physics</i> , 2016 , 49, 115504	3	24
19	Atomic Layer Deposition of Highly Transparent Platinum Counter Electrodes for Metal/Polymer Flexible Dye-Sensitized Solar Cells. <i>Advanced Energy Materials</i> , 2014 , 4, 1300831	21.8	26
18	The use of atomic layer deposition in advanced nanopatterning. <i>Nanoscale</i> , 2014 , 6, 10941-60	7.7	254
17	Atomic Layer Deposition of High-Purity Palladium Films from Pd(hfac) ₂ and H ₂ and O ₂ Plasmas. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 8702-8711	3.8	52
16	Catalytic Combustion Reactions During Atomic Layer Deposition of Ru Studied Using ¹⁸ O ₂ Isotope Labeling. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 21320-21330	3.8	10
15	Influence of Oxygen Exposure on the Nucleation of Platinum Atomic Layer Deposition: Consequences for Film Growth, Nanopatterning, and Nanoparticle Synthesis. <i>Chemistry of Materials</i> , 2013 , 25, 1905-1911	9.6	112
14	Direct-Write Atomic Layer Deposition of High-Quality Pt Nanostructures: Selective Growth Conditions and Seed Layer Requirements. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 10788-10798	3.8	53
13	Room-Temperature Atomic Layer Deposition of Platinum. <i>Chemistry of Materials</i> , 2013 , 25, 1769-1774	9.6	64
12	(Invited) Catalytic Surface Reactions during Nucleation and Growth of Atomic Layer Deposition of Noble Metals: A Case Study for Platinum. <i>ECS Transactions</i> , 2013 , 58, 183-193	1	4
11	Nanopatterning by direct-write atomic layer deposition. <i>Nanoscale</i> , 2012 , 4, 4477-80	7.7	58
10	Catalytic Combustion and Dehydrogenation Reactions during Atomic Layer Deposition of Platinum. <i>Chemistry of Materials</i> , 2012 , 24, 1752-1761	9.6	99
9	Supported Core/Shell Bimetallic Nanoparticles Synthesis by Atomic Layer Deposition. <i>Chemistry of Materials</i> , 2012 , 24, 2973-2977	9.6	132
8	Dehydrogenation Reactions during Atomic Layer Deposition of Ru Using O ₂ . <i>Chemistry of Materials</i> , 2012 , 24, 3696-3700	9.6	23
7	Mass Spectrometry Study of the Temperature Dependence of Pt Film Growth by Atomic Layer Deposition. <i>ECS Journal of Solid State Science and Technology</i> , 2012 , 1, P255-P262	2	25
6	Nucleation and growth of Pt atomic layer deposition on Al ₂ O ₃ substrates using (methylcyclopentadienyl)-trimethyl platinum and O ₂ plasma. <i>Journal of Applied Physics</i> , 2011 , 109, 084333 ⁵	33	87
5	Optical emission spectroscopy as a tool for studying, optimizing, and monitoring plasma-assisted atomic layer deposition processes. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2010 , 28, 77-87	2.9	51
4	Remote Plasma ALD of Platinum and Platinum Oxide Films. <i>Electrochemical and Solid-State Letters</i> , 2009 , 12, G34		100
3	Remote Plasma and Thermal ALD of Platinum and Platinum Oxide Films. <i>ECS Transactions</i> , 2009 , 16, 209-218	12	

2	Surface reactions during atomic layer deposition of Pt derived from gas phase infrared spectroscopy. <i>Applied Physics Letters</i> , 2009 , 95, 013114	3.4	102
1	Synthesis and in situ characterization of low-resistivity TaNx films by remote plasma atomic layer deposition. <i>Journal of Applied Physics</i> , 2007 , 102, 083517	2.5	70