

# Fred Roozeboom

## List of Publications by Year in descending order

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188  
papers

6,722  
citations

57758

44  
h-index

71685

76  
g-index

196  
all docs

196  
docs citations

196  
times ranked

5928  
citing authors

#	ARTICLE	IF	CITATIONS
1	Vanadium oxide monolayer catalysts. 3. A Raman spectroscopic and temperature-programmed reduction study of monolayer and crystal-type vanadia on various supports. The Journal of Physical Chemistry, 1980, 84, 2783-2791.	2.9	356
2	High Energy Density All-Solid-State Batteries: A Challenging Concept Towards 3D Integration. Advanced Functional Materials, 2008, 18, 1057-1066.	14.9	325
3	Energetics of Self-Interstitial Clusters in Si. Physical Review Letters, 1999, 82, 4460-4463.	7.8	310
4	Spatial atomic layer deposition: A route towards further industrialization of atomic layer deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2012, 30, .	2.1	296
5	3- $\text{\AA}$ Integrated All-Solid-State Rechargeable Batteries. Advanced Materials, 2007, 19, 4564-4567.	21.0	294
6	High-Speed Spatial Atomic-Layer Deposition of Aluminum Oxide Layers for Solar Cell Passivation. Advanced Materials, 2010, 22, 3564-3567.	21.0	287
7	Plasma and Thermal ALD of Al <sub>2</sub> O <sub>3</sub> in a Commercial 200-mm ALD Reactor. Journal of the Electrochemical Society, 2007, 154, G165.	2.9	237
8	Area-Selective Atomic Layer Deposition of SiO <sub>2</sub> Using Acetylacetone as a Chemoselective Inhibitor in an ABC-Type Cycle. ACS Nano, 2017, 11, 9303-9311.	14.6	136
9	Ultrahigh Capacitance Density for Multiple ALD-Grown MIM Capacitor Stacks in 3-D Silicon. IEEE Electron Device Letters, 2008, 29, 740-742.	3.9	130
10	Vanadium oxide monolayer catalysts. I. Preparation, characterization, and thermal stability. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 1979, 449, 25-40.	1.2	122
11	Atomic Layer Etching: What Can We Learn from Atomic Layer Deposition?. ECS Journal of Solid State Science and Technology, 2015, 4, N5023-N5032.	1.8	115
12	Deposition of TiN and HfO <sub>2</sub> in a commercial 200mm remote plasma atomic layer deposition reactor. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2007, 25, 1357-1366.	2.1	107
13	Vanadium oxide monolayer catalysts The vapor-phase oxidation of methanol. Journal of Catalysis, 1981, 68, 464-472.	6.2	105
14	Thermally assisted reversal of exchange biasing in NiO and FeMn based systems. Applied Physics Letters, 1998, 72, 492-494.	3.3	97
15	Rapid thermal processing systems: A review with emphasis on temperature control. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1990, 8, 1249.	1.6	96
16	Ferromagnetic resonance and eddy currents in high-permeable thin films. Journal of Applied Physics, 1997, 81, 350-354.	2.5	96
17	Spatial Atomic Layer Deposition of Zinc Oxide Thin Films. ACS Applied Materials & Interfaces, 2012, 4, 268-272.	8.0	95
18	Low-Temperature Deposition of TiN by Plasma-Assisted Atomic Layer Deposition. Journal of the Electrochemical Society, 2006, 153, G956.	2.9	93

#	ARTICLE	IF	CITATIONS
19	Very low surface recombination velocities on p- and n-type c-Si by ultrafast spatial atomic layer deposition of aluminum oxide. Applied Physics Letters, 2010, 97, .	3.3	89
20	Deposition of TiN and TaN by Remote Plasma ALD for Cu and Li Diffusion Barrier Applications. Journal of the Electrochemical Society, 2008, 155, G287.	2.9	86
21	Synthesis and in situ characterization of low-resistivity TaNx films by remote plasma atomic layer deposition. Journal of Applied Physics, 2007, 102, 083517.	2.5	75
22	Enhanced Doping Efficiency of Al-Doped ZnO by Atomic Layer Deposition Using Dimethylaluminum Isopropoxide as an Alternative Aluminum Precursor. Chemistry of Materials, 2013, 25, 4619-4622.	6.7	75
23	Low temperature and roll-to-roll spatial atomic layer deposition for flexible electronics. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2012, 30, .	2.1	69
24	Research Update: Atmospheric pressure spatial atomic layer deposition of ZnO thin films: Reactors, doping, and devices. APL Materials, 2015, 3, .	5.1	69
25	Electrical transport and Al doping efficiency in nanoscale ZnO films prepared by atomic layer deposition. Journal of Applied Physics, 2013, 114, .	2.5	67
26	Laser raman study on the crystallization of zeolites A, X and Y. Zeolites, 1983, 3, 321-328.	0.5	66
27	Dielectric Properties of Thermal and Plasma-Assisted Atomic Layer Deposited Al[sub 2]O[sub 3] Thin Films. Journal of the Electrochemical Society, 2011, 158, G21.	2.9	65
28	Review Article: Recommended reading list of early publications on atomic layer deposition—Outcome of the “Virtual Project on the History of ALD”. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2017, 35, .	2.1	65
29	Area-Selective Atomic Layer Deposition of ZnO by Area Activation Using Electron Beam-Induced Deposition. Chemistry of Materials, 2019, 31, 1250-1257.	6.7	62
30	Vanadium Oxide Monolayer Catalysts. Zeitschrift Fur Physikalische Chemie, 1978, 111, 215-224.	2.8	60
31	High-frequency permeability of soft-magnetic Fe—Hf—O films with high resistivity. Journal of Applied Physics, 1998, 83, 1569-1574.	2.5	60
32	Precision in harsh environments. Microsystems and Nanoengineering, 2016, 2, 16048.	7.0	60
33	Area-Selective Atomic Layer Deposition of In<sub>2</sub>O<sub>3</sub>:H Using a ¼-Plasma Printer for Local Area Activation. Chemistry of Materials, 2017, 29, 921-925.	6.7	59
34	Passive and heterogeneous integration towards a Si-based System-in-Package concept. Thin Solid Films, 2006, 504, 391-396.	1.8	55
35	Groups III and V impurity solubilities in silicon due to laser, flash, and solid-phase-epitaxial-regrowth anneals. Applied Physics Letters, 2006, 89, 071915.	3.3	53
36	Ru and RuO2 gate electrodes for advanced CMOS technology. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2004, 109, 117-121.	3.5	52

#	ARTICLE	IF	CITATIONS
37	Atomic layer deposition of Ru from CpRu(CO) <sub>2</sub> Et using O <sub>2</sub> gas and O <sub>2</sub> plasma. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2011, 29, .	2.1	51
38	Plasma-assisted atomic layer deposition of TiN/Al <sub>2</sub> O <sub>3</sub> stacks for metal-oxide-semiconductor capacitor applications. Journal of Applied Physics, 2009, 106, .	2.5	49
39	Role of self- and boron-interstitial clusters in transient enhanced diffusion in silicon. Applied Physics Letters, 2000, 76, 855-857.	3.3	48
40	Spatial Atmospheric Atomic Layer Deposition of In <sub>x</sub> Ga <sub>y</sub> Zn <sub>z</sub> O for Thin Film Transistors. ACS Applied Materials & Interfaces, 2015, 7, 3671-3675.	8.0	48
41	On the origin of the uniaxial anisotropy in nanocrystalline soft-magnetic materials. Journal of Applied Physics, 1997, 81, 806-814.	2.5	47
42	Boron diffusion in amorphous silicon and the role of fluorine. Applied Physics Letters, 2004, 84, 4283-4285.	3.3	47
43	On the kinetics of spatial atomic layer deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2013, 31, 01A108.	2.1	47
44	Spatial Atmospheric Atomic Layer Deposition of Al <sub>x</sub> Zn <sub>1-x</sub> O. ACS Applied Materials & Interfaces, 2013, 5, 13124-13128.	8.0	46
45	Etching of Deep Macropores in 6 in. Si Wafers. Journal of the Electrochemical Society, 2000, 147, 2757.	2.9	43
46	RF Characterization and Analytical Modelling of Through Silicon Vias and Coplanar Waveguides for 3D Integration. IEEE Transactions on Advanced Packaging, 2010, 33, 1072-1079.	1.6	43
47	Magnetic behavior of probe layers of <sup>57</sup> Fe in thin Fe films observed by means of nuclear resonant scattering of synchrotron radiation. Physical Review B, 1998, 58, 8590-8595.	3.2	40
48	Doping fin field-effect transistor sidewalls: Impurity dose retention in silicon due to high angle incident ion implants and the impact on device performance. Journal of Vacuum Science & Technology B, 2008, 26, 402.	1.3	40
49	Tin Nitride Thin Films as Negative Electrode Material for Lithium-Ion Solid-State Batteries. Journal of the Electrochemical Society, 2010, 157, A340.	2.9	40
50	Spatially separated atomic layer deposition of Al <sub>2</sub> O <sub>3</sub> , a new option for high-throughput Si solar cell passivation. Progress in Photovoltaics: Research and Applications, 2011, 19, 733-739.	8.1	40
51	Atmospheric pressure plasma enhanced spatial ALD of silver. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2015, 33, .	2.1	40
52	Encapsulation method for atom probe tomography analysis of nanoparticles. Ultramicroscopy, 2015, 159, 420-426.	1.9	40
53	Continuous deep reactive ion etching of tapered via holes for three-dimensional integration. Journal of Micromechanics and Microengineering, 2008, 18, 125023.	2.6	39
54	High-value MOS capacitor arrays in ultradeep trenches in silicon. Microelectronic Engineering, 2000, 53, 581-584.	2.4	36

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55	Application of Ru-based gate materials for CMOS technology. <i>Materials Science in Semiconductor Processing</i> , 2004, 7, 271-276.	4.0	35
56	Ultrafast Atomic Layer Deposition of Alumina Layers for Solar Cell Passivation. <i>Journal of the Electrochemical Society</i> , 2011, 158, H937.	2.9	35
57	Effect of reactor pressure on the conformal coating inside porous substrates by atomic layer deposition. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2017, 35, .	2.1	34
58	Vanadium oxide monolayer catalysts. 4. The catalytic oxidation of carbon monoxide. <i>Industrial &amp; Engineering Chemistry Product Research and Development</i> , 1981, 20, 304-309.	0.5	33
59	Boride-enhanced diffusion in silicon: Bulk and surface layers. <i>Applied Physics Letters</i> , 1999, 75, 181-183.	3.3	33
60	Influences on relaxation of exchange biasing in NiO/Ni <sub>66</sub> Co <sub>18</sub> Fe <sub>16</sub> bilayers. <i>Journal of Applied Physics</i> , 1998, 83, 7207-7209.	2.5	32
61	Plasma-assisted atomic layer deposition of TiN monitored by in situ spectroscopic ellipsometry. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2005, 23, L5-L8.	2.1	31
62	Atmospheric Spatial Atomic Layer Deposition of In-Doped ZnO. <i>ECS Journal of Solid State Science and Technology</i> , 2014, 3, P111-P114.	1.8	31
63	Isotropic Atomic Layer Etching of ZnO Using Acetylacetone and O <sub>2</sub> Plasma. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 38588-38595.	8.0	30
64	Recent Advances in Atmospheric Vapor-Phase Deposition of Transparent and Conductive Zinc Oxide. <i>Chemical Vapor Deposition</i> , 2014, 20, 234-242.	1.3	29
65	HfSiO <sub>4</sub> Dielectric Layers Deposited by ALD Using HfCl <sub>4</sub> and NH <sub>2</sub> (CH <sub>2</sub> ) <sub>3</sub> Si(OC <sub>2</sub> H <sub>5</sub> ) <sub>3</sub> Precursors. <i>Journal of the Electrochemical Society</i> , 2004, 151, C716.	2.9	28
66	Remote Plasma ALD of SrTiO <sub>3</sub> Using Cyclopentadienyl-Based Ti and Sr Precursors. <i>Journal of the Electrochemical Society</i> , 2011, 158, G34.	2.9	28
67	Dopant Distribution in Atomic Layer Deposited ZnO:Al Films Visualized by Transmission Electron Microscopy and Atom Probe Tomography. <i>Chemistry of Materials</i> , 2018, 30, 1209-1217.	6.7	28
68	Plasma-assisted atomic layer deposition of Ta <sub>2</sub> O <sub>5</sub> from alkylamide precursor and remote O <sub>2</sub> plasma. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2008, 26, 472-480.	2.1	27
69	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.	1.8	27
70	Robust giant magnetoresistance material system for magnetic sensors. <i>Journal of Applied Physics</i> , 1999, 85, 5531-5533.	2.5	25
71	Effect of heating ramp rates on transient enhanced diffusion in ion-implanted silicon. <i>Applied Physics Letters</i> , 2001, 78, 889-891.	3.3	25
72	Anodic silicon etching; the formation of uniform arrays of macropores or nanowires. <i>Physica Status Solidi A</i> , 2003, 197, 57-60.	1.7	25

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73	On the environmental stability of ZnO thin films by spatial atomic layer deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2013, 31, .	2.1	25
74	Atmospheric plasma-enhanced spatial-ALD of InZnO for high mobility thin film transistors. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2018, 36, .	2.1	25
75	Energy relaxation of lower-dimensional hot carriers studied with picosecond photoluminescence. Physical Review B, 1988, 38, 13323-13334.	3.2	24
76	Plasma-Assisted Atomic Layer Deposition of SrTiO <sub>3</sub> : Stoichiometry and Crystallinity Studied by Spectroscopic Ellipsometry. ECS Journal of Solid State Science and Technology, 2013, 2, N15-N22.	1.8	23
77	Rapid thermal annealing of amorphous and nanocrystalline soft-magnetic alloys in a static magnetic field. Journal of Applied Physics, 1995, 77, 5293-5297.	2.5	22
78	Fabrication of High Aspect Ratio Ferroelectric Microtubes by Vacuum Infiltration using Macroporous Silicon Templates. Journal of the American Ceramic Society, 2006, 89, 060526004107001-???.	3.8	22
79	Characterization and Modeling of Atomic Layer Deposited High-Density Trench Capacitors in Silicon. IEEE Transactions on Semiconductor Manufacturing, 2012, 25, 247-254.	1.7	21
80	Atomic Layer Deposition of In <sub>2</sub> O <sub>3</sub> :H from InCp and H <sub>2</sub> O/O <sub>2</sub> : Microstructure and Isotope Labeling Studies. ACS Applied Materials & Interfaces, 2017, 9, 592-601.	8.0	21
81	SIMS analysis of Al <sub>x</sub> Ga <sub>1-x</sub> As/gaAs layered structures grown by metal-organic vapour phase Epitaxy. Surface and Interface Analysis, 1986, 9, 303-308.	1.8	20
82	Rapid Thermal Processing: Status, Problems and Options After the First 25 Years. Materials Research Society Symposia Proceedings, 1993, 303, 149.	0.1	20
83	Atmospheric Pressure Plasma Enhanced Spatial ALD of ZrO <sub>2</sub> for Low-Temperature, Large-Area Applications. ECS Journal of Solid State Science and Technology, 2017, 6, N243-N249.	1.8	20
84	Patterned deposition by plasma enhanced spatial atomic layer deposition. Physica Status Solidi - Rapid Research Letters, 2011, 5, 165-167.	2.4	19
85	MIM in 3D: Dream or reality? (invited). Microelectronic Engineering, 2011, 88, 1507-1513.	2.4	19
86	ALD Options for Si-integrated Ultrahigh-density Decoupling Capacitors in Pore and Trench Designs. ECS Transactions, 2007, 3, 173-181.	0.5	18
87	Low Interface Recombination Velocity in GaAs-(Al, Ga)As Double Heterostructures Grown by Metal Organic Vapour Phase Epitaxy. Japanese Journal of Applied Physics, 1985, 24, L761-L763.	1.5	17
88	Manufacturing Equipment Issues in Rapid Thermal Processing <sup>11</sup> Based in part on an invited presentation at the SPIE Workshop on Rapid Thermal and Integrated Processing, San Jose, California, September 9, 1991.. , 1993, , 349-423.		17
89	The influence of polysilicon gate morphology on dopant activation and deactivation kinetics in deep-submicron CMOS transistors. Materials Science in Semiconductor Processing, 2001, 4, 351-356.	4.0	17
90	Plasma-assisted atomic layer deposition of conformal Pt films in high aspect ratio trenches. Journal of Chemical Physics, 2017, 146, 052818.	3.0	17

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91	Cluster ripening and transient enhanced diffusion in silicon. Materials Science in Semiconductor Processing, 1999, 2, 369-376.	4.0	16
92	Silicon Based System-in-Package : a new technology platform supported by very high quality passives and system level design tools. , 2007, , .		16
93	Cyclic Etch/Passivation-Deposition as an All-Spatial Concept toward High-Rate Room Temperature Atomic Layer Etching. ECS Journal of Solid State Science and Technology, 2015, 4, N5067-N5076.	1.8	16
94	The kinetics of low-temperature spatial atomic layer deposition of aluminum oxide. Thin Solid Films, 2013, 532, 22-25.	1.8	15
95	Impurity redistribution due to recrystallization of preamorphized silicon. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2005, 23, 2021.	1.6	14
96	Plasma-Enhanced Atmospheric-Pressure Spatial ALD of Al <sub>2</sub> O <sub>3</sub> and ZrO <sub>2</sub> . ECS Transactions, 2016, 75, 11-19.	0.5	14
97	Nickel-zinc ferrite films by rapid thermal processing of sol-gel precursors. Applied Surface Science, 2002, 187, 68-74.	6.1	13
98	Enhanced electrical properties of atomic layer deposited La <sub>2</sub> O <sub>3</sub> thin films with embedded ZrO <sub>2</sub> nanocrystals. Applied Physics Letters, 2008, 93, .	3.3	13
99	Ultrahigh-density trench capacitors in silicon and their application to integrated DC-DC conversion. Procedia Chemistry, 2009, 1, 1435-1438.	0.7	13
100	(Invited) Area-Selective Atomic Layer Deposition: Role of Surface Chemistry. ECS Transactions, 2017, 80, 39-48.	0.5	13
101	Atmospheric spatial atomic layer deposition of ZnOS buffer layers for flexible Cu(In,Ga)Se <sub>2</sub> solar cells. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2018, 36, 051511.	2.1	13
102	The (001) Surface of Fe <sub>3</sub> O <sub>4</sub> Grown Epitaxially on MgO and Characterized by Scanning Tunneling Microscopy.. Materials Research Society Symposia Proceedings, 1997, 474, 191.	0.1	11
103	Soft-magnetic fluxguide materials. Philips Journal of Research, 1998, 51, 59-91.	0.9	11
104	High-Density, Low-loss MOS Decoupling Capacitors integrated in a GSM Power Amplifier. Materials Research Society Symposia Proceedings, 2003, 783, 631.	0.1	11
105	Preparation of SrRuO <sub>3</sub> films for advanced CMOS metal gates. Materials Science in Semiconductor Processing, 2004, 7, 265-269.	4.0	11
106	Crystallization Study by Transmission Electron Microscopy of SrTiO <sub>3</sub> Thin Films Prepared by Plasma-Assisted ALD. ECS Journal of Solid State Science and Technology, 2013, 2, N120-N124.	1.8	11
107	Plasma-Assisted Atomic Layer Deposition of PtO <sub>2</sub> from (MeCp)PtMe <sub>3</sub> and O <sub>2</sub> Plasma. Chemical Vapor Deposition, 2014, 20, 258-268.	1.3	11
108	Impact of composition and crystallization behavior of atomic layer deposited strontium titanate films on the resistive switching of Pt/STO/TiN devices. Journal of Applied Physics, 2014, 116, 064503.	2.5	11

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109	Infrared and optical emission spectroscopy study of atmospheric pressure plasma-enhanced spatial ALD of Al <sub>2</sub> O <sub>3</sub> . Applied Physics Letters, 2019, 115, 083101.	3.3	11
110	Influence of stoichiometry on the performance of MIM capacitors from plasma-assisted ALD Sr <sub>x</sub> Ti <sub>y</sub> O <sub>z</sub> films. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 389-396.	1.8	10
111	Characterization of Thermal and Electrical Stability of MOCVD HfO <sub>2</sub> -HfSiO <sub>4</sub> Dielectric Layers with Polysilicon Electrodes for Advanced CMOS Technologies. Journal of the Electrochemical Society, 2004, 151, G870.	2.9	9
112	Transient enhanced diffusion of B at low temperatures under extrinsic conditions. Solid-State Electronics, 2005, 49, 618-627.	1.4	9
113	Boron pocket and channel deactivation in nMOS transistors with SPER junctions. IEEE Transactions on Electron Devices, 2006, 53, 71-77.	3.0	9
114	High-Rate Anisotropic Silicon Etching with the Expanding Thermal Plasma Technique. Electrochemical and Solid-State Letters, 2007, 10, H309.	2.2	9
115	Spontaneous nanoclustering of ZrO <sub>2</sub> in atomic layer deposited La <sub>0.17</sub> Zr <sub>0.83</sub> O <sub>x</sub> thin films. Applied Physics Letters, 2008, 93, 062903.	3.3	9
116	Cubic phase stabilization and improved dielectric properties of atomic-layer-deposited Er <sub>y</sub> Hf <sub>1-y</sub> O <sub>x</sub> thin films. Journal of Materials Research, 2010, 25, 1629-1635.	2.6	9
117	The influence of non-stoichiometry on the switching kinetics of strontium-titanate ReRAM devices. Journal of Applied Physics, 2016, 120, .	2.5	9
118	Anti-stiction coating for mechanically tunable photonic crystal devices. Optics Express, 2018, 26, 3882.	3.4	9
119	EXTREMELY HIGH-DENSITY CAPACITORS WITH ALD HIGH-K DIELECTRIC LAYERS. , 2006, , 17-28.		9
120	Atmospheric-Pressure Plasma-Enhanced Spatial ALD of SiO <sub>2</sub> Studied by Gas-Phase Infrared and Optical Emission Spectroscopy. Journal of Physical Chemistry C, 2021, 125, 24945-24957.	3.1	9
121	Silicon out-diffusion and aluminum in-diffusion in devices with atomic-layer deposited La <sub>2</sub> O <sub>3</sub> thin films. Applied Physics Letters, 2008, 93, .	3.3	8
122	Plasma-Enhanced ALD of TiO <sub>2</sub> Using a Novel Cyclopentadienyl Alkylamido Precursor [Ti(Cp <sup>Me</sup> )(NMe <sub>2</sub> ) <sub>3</sub> ] and O <sub>2</sub> Plasma. ECS Transactions, 2010, 33, 385-393.	0.5	8
123	Method to pattern etch masks in two inclined planes for three-dimensional nano- and microfabrication. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2011, 29, 061604.	1.2	8
124	Metal oxide gate electrodes for advanced CMOS technology. Annalen Der Physik, 2004, 13, 31-34.	2.4	7
125	Novel low-temperature processing of low noise SDDs with on-detector electronics. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2004, 517, 301-312.	1.6	7
126	Enhancing the Wettability of High Aspect-Ratio Through-Silicon Vias Lined With LPCVD Silicon Nitride or PE-ALD Titanium Nitride for Void-Free Bottom-Up Copper Electroplating. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2011, 1, 1728-1738.	2.5	7



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127	A new concept for spatially divided Deep Reactive Ion Etching with ALD-based passivation. IOP Conference Series: Materials Science and Engineering, 2012, 41, 012001.	0.6	7
128	Spatial Atmospheric ALD of Functional Layers for CIGS Solar Cells. ECS Transactions, 2015, 69, 31-37.	0.5	7
129	Rapid Thermal Magnetic Annealing: A Novel Technique in Thin-Film Recording Head Production?. Materials Research Society Symposia Proceedings, 1996, 429, 203.	0.1	6
130	Plasma-Assisted Atomic Layer Deposition of SrTiO <sub>3</sub> : Stoichiometry and Crystallinity Study by Spectroscopic Ellipsometry. ECS Transactions, 2011, 41, 63-72.	0.5	6
131	Dielectric Material Options for Integrated Capacitors. ECS Journal of Solid State Science and Technology, 2014, 3, N120-N125.	1.8	6
132	On the Growth, Percolation and Wetting of Silver Thin Films Grown by Atmospheric-Plasma Enhanced Spatial Atomic Layer Deposition. ECS Transactions, 2016, 75, 129-142.	0.5	6
133	Introduction: History and Perspectives of Rapid Thermal Processing. , 1996, , 1-34.		6
134	A Tuneable Metal Gate Work Function Using Solid State Diffusion of Nitrogen. , 2002, , .		5
135	Influence of preamorphization and recrystallization on indium doping profiles in silicon. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2004, 22, 865.	1.6	5
136	Deposition of TiN and TaN by Remote Plasma ALD for Diffusion Barrier Applications. ECS Transactions, 2007, 11, 45-54.	0.5	5
137	Evidence of hafnia oxygen vacancy defects in MOCVD grown Hf <sub>x</sub> Si <sub>1-x</sub> O <sub>y</sub> ultrathin gate dielectrics gated with Ru electrode. Microelectronic Engineering, 2007, 84, 2366-2369.	2.4	5
138	Plasma-Assisted ALD of TiN/Al <sub>2</sub> O <sub>3</sub> Stacks for MIMIM Trench Capacitor Applications. ECS Transactions, 2009, 25, 389-397.	0.5	5
139	(Invited) Spatial Atomic Layer Deposition of Transparent Conductive Oxides. ECS Transactions, 2013, 58, 105-110.	0.5	5
140	Giant Magnetoresistance and Structural Study of Permalloy/Silver Multilayers During Rapid Thermal Annealing. Materials Research Society Symposia Proceedings, 1994, 342, 77.	0.1	4
141	Exchange-biased spin valves combining a high magnetoresistance ratio with soft-magnetic behavior. Applied Physics Letters, 1998, 72, 611-613.	3.3	4
142	Iron-Silicate Glassy Films by Sol-Gel Conversion Induced by Rapid Thermal Processing. Materials Research Society Symposia Proceedings, 1998, 525, 351.	0.1	4
143	Ultrashallow Junction Formation and Gate Activation in Deep-Submicron CMOS. Materials Research Society Symposia Proceedings, 2000, 610, 311.	0.1	4
144	Dopant diffusion in amorphous silicon. Materials Research Society Symposia Proceedings, 2004, 810, 25.	0.1	4

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145	Plasma-assisted Atomic Layer Deposition of TiN Films at low Deposition Temperature for High-aspect Ratio Applications. Materials Research Society Symposia Proceedings, 2005, 863, B6.4-1.	0.1	4
146	Application of Dielectric, Ferroelectric and Piezoelectric Thin Film Devices in Mobile Communication and Medical Systems. Applications of Ferroelectrics, IEEE International Symposium on, 2006, , .	0.0	4
147	Room Temperature Sensing of O <sub>2</sub> and CO by Atomic Layer Deposition Prepared ZnO Films Coated with Pt Nanoparticles. ECS Transactions, 2013, 58, 203-214.	0.5	4
148	Experimental Study on the Mechanism of Carbon Diffusion in Silicon. Materials Research Society Symposia Proceedings, 2002, 717, 1.	0.1	3
149	Silicon Based System-in-Package : Breakthroughs in Miniaturization and "Nano"-integration Supported by Very High Quality Passives and System Level Design Tools. Materials Research Society Symposia Proceedings, 2006, 969, 1.	0.1	3
150	Remote Plasma and Thermal ALD of Al <sub>2</sub> O <sub>3</sub> for Trench Capacitor Applications. ECS Transactions, 2007, 3, 67-77.	0.5	3
151	Evolution of fluorine and boron profiles during annealing in crystalline Si. Journal of Vacuum Science & Technology B, 2008, 26, 377.	1.3	3
152	A New Concept for Spatially-Divided Reactive Ion Etching with ALD-Based Passivation. ECS Transactions, 2013, 50, 73-82.	0.5	3
153	ALD of SrTiO <sub>3</sub> and Pt for Pt/SrTiO <sub>3</sub> /Pt MIM Structures: Growth and Crystallization Study. ECS Transactions, 2013, 58, 153-162.	0.5	3
154	Rapid Thermal Processing of Magnetic Thin Films for Data Storage Devices. , 1996, , 521-552.		3
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