

soo-hyun Kim

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.

162 papers	3,426 citations	31 h-index	51 g-index
170 ext. papers	3,885 ext. citations	4.9 avg, IF	5.3 L-index

#	Paper	IF	Citations
162	Highly Efficient and Stable Iridium Oxygen Evolution Reaction Electrocatalysts Based on Porous Nickel Nanotube Template Enabling Tandem Devices with Solar-to-Hydrogen Conversion Efficiency Exceeding 10%. <i>Advanced Science</i> , 2022 , e2104938	13.6	2
161	Cobalt-based metal oxide coated with ultrathin ALD-MoS ₂ as an electrode material for supercapacitors. <i>Chemical Engineering Journal</i> , 2022 , 435, 135066	14.7	1
160	Preparation of tungsten-based thin films using a F-free W precursor and tert-butyl hydrazine via 2- and 3-step atomic layer deposition process. <i>Applied Surface Science</i> , 2022 , 578, 152062	6.7	
159	In-Zn-Sn-O thin film based transistor with high-k HfO ₂ dielectric. <i>Thin Solid Films</i> , 2022 , 753, 139290	2.2	1
158	Critical Aspects of Various Techniques for Synthesizing Metal Oxides and Fabricating Their Composite-Based Supercapacitor Electrodes: A Review. <i>Nanomaterials</i> , 2022 , 12, 1873	5.4	2
157	Group IV Transition Metal (M = Zr, Hf) Precursors for High- κ Metal Oxide Thin Films. <i>Inorganic Chemistry</i> , 2021 , 60, 17722-17732	5.1	0
156	Facile Synthesis of Zn-Co-S Nanostrip Cluster Arrays on Ni Foam for High-Performance Hybrid Supercapacitors.. <i>Nanomaterials</i> , 2021 , 11,	5.4	2
155	Atomic layer deposition of tungsten sulfide using a new metal-organic precursor and HS: thin film catalyst for water splitting. <i>Nanotechnology</i> , 2021 , 32, 075405	3.4	3
154	Atomic Layer Modulation of Multicomponent Thin Films through Combination of Experimental and Theoretical Approaches. <i>Chemistry of Materials</i> , 2021 , 33, 4435-4444	9.6	2
153	Interfacial adhesion energies of Ru/Mn direct plateable diffusion barriers prepared by atomic layer deposition for advanced Cu interconnects. <i>Journal of Materials Science: Materials in Electronics</i> , 2021 , 32, 20559-20569	2.1	1
152	Atomic Layer Deposition of Ru for Replacing Cu-Interconnects. <i>Chemistry of Materials</i> , 2021 , 33, 5639-5651	5.6	5
151	Atomic layer deposited Mo ₂ N thin films using Mo(CO) ₆ and NH ₃ plasma as a Cu diffusion barrier. <i>Journal of Alloys and Compounds</i> , 2021 , 858, 158314	5.7	5
150	Density functional theory study on the reducing agents for atomic layer deposition of tungsten using tungsten chloride precursor. <i>Applied Surface Science</i> , 2021 , 538, 148156	6.7	5
149	Influence of post-annealing on structural, optical and electrical properties of tin nitride thin films prepared by atomic layer deposition. <i>Applied Surface Science</i> , 2021 , 538, 147920	6.7	4
148	Atomic layer deposition of tungsten and tungsten-based compounds using WCl ₅ and various reactants selected by density functional theory. <i>Applied Surface Science</i> , 2021 , 563, 150373	6.7	2
147	Low-temperature growth of crystalline Tin(II) monosulfide thin films by atomic layer deposition using a liquid divalent tin precursor. <i>Applied Surface Science</i> , 2021 , 565, 150152	6.7	3
146	Artificially induced normal ferroelectric behaviour in aerosol deposited relaxor 65PMN/35PT thick films by interface engineering. <i>Journal of Materials Chemistry C</i> , 2021 , 9, 3403-3411	7.1	6

145	Ultralow Loading (Single-Atom and Clusters) of the Pt Catalyst by Atomic Layer Deposition Using Dimethyl ((3,4- η -N,N-dimethyl-3-butene-1-amine-N) Platinum (DDAP) on the High-Surface-Area Substrate for Hydrogen Evolution Reaction. <i>Advanced Materials Interfaces</i> , 2021 , 8, 2001508	4.6	5
144	Atomic layer deposition of high-quality Pt thin film as an alternative interconnect replacing Cu. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2020 , 38, 032404	2.9	4
143	Hydrogen Evolution Reaction by Atomic Layer-Deposited MoN on Porous Carbon Substrates: The Effects of Porosity and Annealing on Catalyst Activity and Stability. <i>ChemSusChem</i> , 2020 , 13, 4159-4168	8.3	9
142	Voice Coil Actuated (VCA) Engine Mount for Vibration Reduction in Automobile. <i>International Journal of Automotive Technology</i> , 2020 , 21, 771-777	1.6	0
141	Selective Atomic Layer Deposition of Metals on Graphene for Transparent Conducting Electrode Application. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 14331-14340	9.5	14
140	Comparative study on atomic layer deposition of HfO ₂ via substitution of ligand structure with cyclopentadiene. <i>Journal of Materials Chemistry C</i> , 2020 , 8, 1344-1352	7.1	9
139	Rate performance enhancement of lithium-ion battery using precise thickness-controllable-carbon-coated titanium dioxide nanowire array electrode via atomic layer deposition. <i>Electrochimica Acta</i> , 2020 , 334, 135596	6.7	6
138	A review on atomic layer deposited buffer layers for Cu(In,Ga)Se ₂ (CIGS) thin film solar cells: Past, present, and future. <i>Solar Energy</i> , 2020 , 209, 515-537	6.8	8
137	Some Insights into Atomic Layer Deposition of MoN _x Using Mo(CO) ₆ and NH ₃ and Its Diffusion Barrier Application. <i>Chemistry of Materials</i> , 2019 , 31, 8338-8350	9.6	13
136	Thickness-dependent electrochemical response of plasma enhanced atomic layer deposited WS ₂ anodes in Na-ion battery. <i>Electrochimica Acta</i> , 2019 , 322, 134766	6.7	13
135	Atomic-Layer-Deposited MoN Thin Films on Three-Dimensional Ni Foam as Efficient Catalysts for the Electrochemical Hydrogen Evolution Reaction. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 17321-17332	9.5	32
134	Evaluation of grating realized via pulse current electroplating combined with atomic layer deposition as an x-ray grating interferometer. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2019 , 37, 030903	2.9	6
133	Atomic layer deposition of WN _x thin films using a F-free tungsten metal-organic precursor and NH ₃ plasma as a Cu-diffusion barrier. <i>Thin Solid Films</i> , 2019 , 685, 393-401	2.2	12
132	Revealing the Simultaneous Effects of Conductivity and Amorphous Nature of Atomic-Layer-Deposited Double-Anion-Based Zinc Oxysulfide as Superior Anodes in Na-Ion Batteries. <i>Small</i> , 2019 , 15, e1900595	11	8
131	Enhanced activity of highly conformal and layered tin sulfide (SnS) prepared by atomic layer deposition (ALD) on 3D metal scaffold towards high performance supercapacitor electrode. <i>Scientific Reports</i> , 2019 , 9, 10225	4.9	35
130	Atomic Layer Deposition of Nickel Using a Heteroleptic Ni Precursor with NH and Selective Deposition on Defects of Graphene. <i>ACS Omega</i> , 2019 , 4, 11126-11134	3.9	10
129	Low-Temperature Atomic Layer Deposition of Highly Conformal Tin Nitride Thin Films for Energy Storage Devices. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 43608-43621	9.5	14
128	Atomic layer deposited-ZnO@3D-Ni-foam composite for Na-ion battery anode: A novel route for easy and efficient electrode preparation. <i>Ceramics International</i> , 2019 , 45, 1084-1092	5.1	17

127	Phase-controlled growth of cobalt oxide thin films by atomic layer deposition. <i>Surface and Coatings Technology</i> , 2018 , 337, 404-410	4.4	16
126	Hydrogen plasma-enhanced atomic layer deposition of hydrogenated amorphous carbon thin films. <i>Surface and Coatings Technology</i> , 2018 , 344, 12-20	4.4	9
125	Low-temperature direct synthesis of high quality WS ₂ thin films by plasma-enhanced atomic layer deposition for energy related applications. <i>Applied Surface Science</i> , 2018 , 459, 596-605	6.7	33
124	Atomic layer deposited zinc oxysulfide anodes in Li-ion batteries: an efficient solution for electrochemical instability and low conductivity. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 16515-16528	13	21
123	Detailed Visualization of Phase Evolution during Rapid Formation of Cu(InGa)Se Photovoltaic Absorber from Mo/CuGa/In/Se Precursors. <i>Scientific Reports</i> , 2018 , 8, 3905	4.9	3
122	Cobalt titanium nitride amorphous metal alloys by atomic layer deposition. <i>Journal of Alloys and Compounds</i> , 2018 , 737, 684-692	5.7	4
121	Atomic-layer-deposited buffer layers for thin film solar cells using earth-abundant absorber materials: A review. <i>Solar Energy Materials and Solar Cells</i> , 2018 , 176, 49-68	6.4	44
120	Hole-Selective CoOx/SiOx/Si Heterojunctions for Photoelectrochemical Water Splitting. <i>ACS Catalysis</i> , 2018 , 8, 9755-9764	13.1	39
119	Low temperature atomic layer deposited molybdenum nitride-Ni-foam composite: An electrode for efficient charge storage. <i>Electrochemistry Communications</i> , 2018 , 93, 114-118	5.1	19
118	Atomic layer deposited molybdenum disulfide on Si photocathodes for highly efficient photoelectrochemical water reduction reaction. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 3304-3310	13	55
117	Fabrication of high-performance p-type thin film transistors using atomic-layer-deposited SnO films. <i>Journal of Materials Chemistry C</i> , 2017 , 5, 3139-3145	7.1	53
116	Transmission electron microscopy study of the failure mechanism of the diffusion barriers (TiN and TaN) between Al and Cu. <i>Metals and Materials International</i> , 2017 , 23, 141-147	2.4	
115	Comparative study on growth characteristics and electrical properties of ZrO ₂ films grown using pulsed plasma-enhanced chemical vapor deposition and plasma-enhanced atomic layer deposition for oxide thin film transistors. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2017 , 35, 031510	2.9	3
114	Influence of additives upon Cu thin film growth on atomic-layer-deposited Ru layer and trench-filling by direct electrodeposition. <i>Thin Solid Films</i> , 2017 , 636, 251-256	2.2	6
113	Preparation of single-phase SnSe thin-films and modification of electrical properties via stoichiometry control for photovoltaic application. <i>Journal of Alloys and Compounds</i> , 2017 , 722, 474-481	5.7	36
112	Fabrication of single-phase SnS film by H ₂ annealing of amorphous SnS _x prepared by atomic layer deposition. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2017 , 35, 031506	2.9	12
111	Highly Stable and Effective Doping of Graphene by Selective Atomic Layer Deposition of Ruthenium. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 701-709	9.5	19
110	Highly Uniform Atomic Layer-Deposited MoS ₂ @3D-Ni-Foam: A Novel Approach To Prepare an Electrode for Supercapacitors. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 40252-40264	9.5	87

109	2017,		1
108	Highly conductive and flexible fiber for textile electronics obtained by extremely low-temperature atomic layer deposition of Pt. <i>NPG Asia Materials</i> , 2016 , 8, e331-e331	10.3	41
107	Chemically synthesized Ag-doped SnS films for PV applications. <i>Ceramics International</i> , 2016 , 42, 19027-19035	5.7	33
106	Atomic layer deposited self-forming Ru-Mn diffusion barrier for seedless Cu interconnects. <i>Journal of Alloys and Compounds</i> , 2016 , 686, 1025-1031	5.7	17
105	Formation of Ni silicide from atomic layer deposited Ni. <i>Current Applied Physics</i> , 2016 , 16, 720-725	2.6	4
104	Highly-conformal nanocrystalline molybdenum nitride thin films by atomic layer deposition as a diffusion barrier against Cu. <i>Journal of Alloys and Compounds</i> , 2016 , 663, 651-658	5.7	24
103	Wafer-scale, conformal and direct growth of MoS ₂ thin films by atomic layer deposition. <i>Applied Surface Science</i> , 2016 , 365, 160-165	6.7	96
102	Novel Fabrication of Back Channel Etching Type InGaZnO Thin Film Transistors with MoTa Source/Drain. <i>Nanoscience and Nanotechnology Letters</i> , 2016 , 8, 572-576	0.8	2
101	A Study on a Relationship Between Sputtering Condition and Electrochemical Property of Molybdenum Thin Films in Phosphoric Acid Solution. <i>Science of Advanced Materials</i> , 2016 , 8, 854-860	2.3	3
100	Effects of Ultra-Violet Wet Annealing on Electrical Performance of Back Channel Etching Cu/Mo/IGZO 4 Mask Thin Film Transistor. <i>Science of Advanced Materials</i> , 2016 , 8, 2128-2132	2.3	2
99	Atomic Layer Deposition of Al ₂ O ₃ Thin Films Using Dimethyl Aluminum sec-Butoxide and H ₂ O Molecules. <i>Korean Journal of Materials Research</i> , 2016 , 26, 430-437	0.2	2
98	Application of Pulsed Chemical Vapor Deposited Tungsten Thin Film as a Nucleation Layer for Ultrahigh Aspect Ratio Tungsten-Plug Fill Process. <i>Korean Journal of Materials Research</i> , 2016 , 26, 486-492	0.2	2
97	Effects of annealing on the properties of atomic layer deposited Ru thin films deposited by NH ₃ and H ₂ as reactants. <i>Thin Solid Films</i> , 2016 , 612, 122-127	2.2	5
96	Plasma-free atomic layer deposition of Ru thin films using H ₂ molecules as a nonoxidizing reactant. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2016 , 34, 031509	2.9	10
95	Atomic layer deposited nanocrystalline tungsten carbides thin films as a metal gate and diffusion barrier for Cu metallization. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2016 , 34, 041504	2.9	10
94	Comparison of hydrogen sulfide gas and sulfur powder for synthesis of molybdenum disulfide nanosheets. <i>Current Applied Physics</i> , 2016 , 16, 691-695	2.6	12
93	High efficiency n-Si/p-Cu ₂ O core-shell nanowires photodiode prepared by atomic layer deposition of Cu ₂ O on well-ordered Si nanowires array. <i>Electronic Materials Letters</i> , 2016 , 12, 404-410	2.9	12
92	A controlled growth of WN _x and WC _x thin films prepared by atomic layer deposition. <i>Materials Letters</i> , 2016 , 168, 218-222	3.3	22

91	Wafer-scale growth of MoS ₂ thin films by atomic layer deposition. <i>Nanoscale</i> , 2016 , 8, 10792-8	7.7	111
90	Cu ₂ O quantum dots emitting visible light grown by atomic layer deposition. <i>Physica B: Condensed Matter</i> , 2016 , 500, 4-8	2.8	9
89	Highly Conformal Amorphous WSi ₃ N ₄ Thin Films by Plasma-Enhanced Atomic Layer Deposition as a Diffusion Barrier for Cu Metallization. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 1548-1556	3.8	11
88	Properties of plasma-enhanced atomic layer deposited TiC _x films as a diffusion barrier for Cu metallization. <i>Thin Solid Films</i> , 2015 , 590, 311-317	2.2	3
87	Chemiresistive sensing behavior of SnO ₂ (n)-Cu ₂ O (p) core-shell nanowires. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 15351-8	9.5	61
86	Growth characteristics of graphene synthesized via chemical vapor deposition using carbon tetrabromide precursor. <i>Applied Surface Science</i> , 2015 , 343, 128-132	6.7	8
85	Ruthenium and ruthenium dioxide thin films deposited by atomic layer deposition using a novel zero-valent metalorganic precursor, (ethylbenzene)(1,3-butadiene)Ru(0), and molecular oxygen. <i>Microelectronic Engineering</i> , 2015 , 137, 16-22	2.5	20
84	Nitrogen-doped ZnO/n-Si core-shell nanowire photodiode prepared by atomic layer deposition. <i>Materials Science in Semiconductor Processing</i> , 2015 , 33, 154-160	4.3	16
83	Atomic Layer Deposition of Ru Thin Films Using a New Beta-Diketonate Ru Precursor and NH ₃ Plasma as a Reactant. <i>Journal of Nanoscience and Nanotechnology</i> , 2015 , 15, 8472-7	1.3	6
82	Growth Enhancement and Nitrogen Loss in ZnO _x N _y Low-Temperature Atomic Layer Deposition with NH ₃ . <i>Journal of Physical Chemistry C</i> , 2015 , 119, 23470-23477	3.8	6
81	The formation of a dielectric SiN _x C _y sealing layer using an atomic layer deposition technique. <i>Materials Science in Semiconductor Processing</i> , 2015 , 29, 139-142	4.3	3
80	Layer-modulated synthesis of uniform tungsten disulfide nanosheet using gas-phase precursors. <i>Nanoscale</i> , 2015 , 7, 1308-13	7.7	76
79	Synthesis of carbon nanotube-nickel nanocomposites using atomic layer deposition for high-performance non-enzymatic glucose sensing. <i>Biosensors and Bioelectronics</i> , 2015 , 63, 325-330	11.8	128
78	Controlled formation of MoSe ₂ by MoN _x thin film as a diffusion barrier against Se during selenization annealing for CIGS solar cell. <i>Journal of Alloys and Compounds</i> , 2015 , 644, 317-323	5.7	21
77	Highly-conformal p-type copper(I) oxide (Cu ₂ O) thin films by atomic layer deposition using a fluorine-free amino-alkoxide precursor. <i>Applied Surface Science</i> , 2015 , 349, 673-682	6.7	28
76	The effects of nitrogen incorporation on the properties of atomic layer deposited Ru thin films as a direct-plateable diffusion barrier for Cu interconnect. <i>Thin Solid Films</i> , 2014 , 562, 118-125	2.2	6
75	Dual functional sensing mechanism in SnO ₂ /ZnO core-shell nanowires. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 8281-7	9.5	113
74	TaC _x Thin Films Prepared by Atomic Layer Deposition as Diffusion Barriers for Cu Metallization. <i>Journal of the American Ceramic Society</i> , 2014 , 97, 127-134	3.8	7

73	Ultrasmooth, High Electron Mobility Amorphous In ₂ O ₃ Films Grown by Atomic Layer Deposition. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 408-415	3.8	29
72	Fabrication of transferable Al(2)O(3) nanosheet by atomic layer deposition for graphene FET. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 2764-9	9.5	14
71	High efficiency n-ZnO/p-Si core-shell nanowire photodiode based on well-ordered Si nanowire array with smooth surface. <i>Materials Science in Semiconductor Processing</i> , 2014 , 27, 297-302	4.3	15
70	Cu direct electrodeposition using step current for superfilling on Ru-Al ₂ O ₃ layer. <i>Electrochimica Acta</i> , 2014 , 147, 371-379	6.7	1
69	Significant Enhancement of the Dielectric Constant through the Doping of CeO ₂ into HfO ₂ by Atomic Layer Deposition. <i>Journal of the American Ceramic Society</i> , 2014 , 97, 1164-1169	3.8	16
68	ZnO homojunction core-shell nanorods ultraviolet photo-detecting diodes prepared by atomic layer deposition. <i>Sensors and Actuators A: Physical</i> , 2014 , 210, 197-204	3.9	15
67	Growth of highly conformal ruthenium-oxide thin films with enhanced nucleation by atomic layer deposition. <i>Journal of Alloys and Compounds</i> , 2014 , 610, 529-539	5.7	13
66	Sputtered Deposited Carbon/Indium/Zinc Oxide Channel Layers for Use in Thin-Film Transistors. <i>IEEE Electron Device Letters</i> , 2014 , 35, 1028-1030	4.4	5
65	Back End of the Line 2014 , 209-238		1
64	Atomic layer deposition of Ti-doped ZnO films with enhanced electron mobility. <i>Journal of Materials Chemistry C</i> , 2013 , 1, 4761	7.1	35
63	Layer-controlled, wafer-scale, and conformal synthesis of tungsten disulfide nanosheets using atomic layer deposition. <i>ACS Nano</i> , 2013 , 7, 11333-40	16.7	272
62	Effects of AlO _x incorporation into atomic layer deposited Ru thin films: Applications to Cu direct plating technology. <i>Journal of Alloys and Compounds</i> , 2013 , 580, 72-81	5.7	9
61	Characteristics of MoSe ₂ formation during rapid thermal processing of Mo-coated glass. <i>Thin Solid Films</i> , 2013 , 535, 206-213	2.2	11
60	Atomic layer deposition of ruthenium (Ru) thin films using ethylbenzen-cyclohexadiene Ru(0) as a seed layer for copper metallization. <i>Thin Solid Films</i> , 2013 , 546, 2-8	2.2	31
59	Atomic Layer Deposition of Ru Thin Films Using a Ru(0) Metallorganic Precursor and O ₂ . <i>ECS Journal of Solid State Science and Technology</i> , 2013 , 2, P47-P53	2	32
58	Growth of Highly Conformal TiC _x Films Using Atomic Layer Deposition Technique. <i>Journal of the American Ceramic Society</i> , 2013 , 96, 1060-1062	3.8	9
57	Direct Electrodeposition of Cu on Ru-Al ₂ O ₃ Layer. <i>Journal of the Electrochemical Society</i> , 2013 , 160, D3057-D3062	5.7	9
56	Atomic layer deposition of Ru thin film using N ₂ /H ₂ plasma as a reactant. <i>Thin Solid Films</i> , 2012 , 520, 6100-6105	2.2	17

55	Characterization of a Ru-based ternary-oxide thin film for a diffusion barrier. <i>Journal of the Korean Physical Society</i> , 2012 , 61, 984-987	0.6	2
54	A bilayer diffusion barrier of Ru/WSixNy for advanced Cu interconnects. <i>Thin Solid Films</i> , 2012 , 521, 73-77.	2.2	5
53	Interfacial Adhesion Energy of RuAlO Thin Film Deposited by Atomic Layer Deposition between Cu and SiO ₂ : Effect of the Composition of RuAlO Thin Film. <i>Japanese Journal of Applied Physics</i> , 2012 , 51, 05EB04	1.4	3
52	Interfacial Adhesion Energy of RuAlO Thin Film Deposited by Atomic Layer Deposition between Cu and SiO ₂ : Effect of the Composition of RuAlO Thin Film. <i>Japanese Journal of Applied Physics</i> , 2012 , 51, 05EB04	1.4	6
51	(Invited) Low Temperature Atomic Layer Deposition of Ru Thin Films with Enhanced Nucleation Using Various Ru(0) Metallorganic Precursors and Molecular O ₂ . <i>ECS Transactions</i> , 2011 , 41, 19-23	1	13
50	Thermal Atomic Layer Deposition (ALD) of Ru Films for Cu Direct Plating. <i>Journal of the Electrochemical Society</i> , 2011 , 158, D351	3.9	43
49	Structural and Electrical Properties of Atomic Layer Deposited Al-Doped ZnO Films. <i>Advanced Functional Materials</i> , 2011 , 21, 448-455	15.6	212
48	ALD-Grown Al ₂ O ₃ as a Diffusion Barrier for Stainless Steel Substrates for Flexible Cu(InGa)Se ₂ Solar Cells. <i>Molecular Crystals and Liquid Crystals</i> , 2011 , 551, 147-153	0.5	6
47	Ru/WNx/Bilayers as Diffusion Barriers for Cu Interconnects. <i>Japanese Journal of Applied Physics</i> , 2011 , 50, 05EA08	1.4	1
46	Controlling spatial density and size of nanocrystals by two-step atomic layer deposition. <i>Nanotechnology</i> , 2011 , 22, 095305	3.4	1
45	Formation of Nano-Crystalline Ru-Based Ternary Thin Films by Plasma-Enhanced Atomic Layer Deposition. <i>Electrochemical and Solid-State Letters</i> , 2011 , 14, D10		18
44	Characteristics of Plasma-Enhanced Atomic Layer Deposited RuSiN as a Diffusion Barrier against Cu. <i>Journal of the Electrochemical Society</i> , 2011 , 158, D657	3.9	7
43	Plasma Enhanced Atomic Layer Deposition of Ruthenium Thin Films Using Isopropylmethylbenzene-Cyclohexadiene-Ruthenium and NH ₃ Plasma. <i>Journal of the Electrochemical Society</i> , 2011 , 158, D42	3.9	16
42	Atomic Layer Deposition of Co Using N ₂ H ₂ Plasma as a Reactant. <i>Journal of the Electrochemical Society</i> , 2011 , 158, H1179	3.9	27
41	Effect of Al Distribution on Carrier Generation of Atomic Layer Deposited Al-Doped ZnO Films. <i>Journal of the Electrochemical Society</i> , 2011 , 158, D277	3.9	33
40	Plasma-Enhanced Atomic Layer Deposition of TaCx Films Using Tris(neopentyl) Tantalum Dichloride and H ₂ Plasma. <i>Electrochemical and Solid-State Letters</i> , 2011 , 14, D89		3
39	Atomic Layer Deposition of RuAlO Thin Films as a Diffusion Barrier for Seedless Cu Interconnects. <i>Electrochemical and Solid-State Letters</i> , 2011 , 14, D57		27
38	Ru/WNx/Bilayers as Diffusion Barriers for Cu Interconnects. <i>Japanese Journal of Applied Physics</i> , 2011 , 50, 05EA08	1.4	1

37	Nonvolatile memory characteristics of atomic layer deposited Ru nanocrystals with a SiO ₂ /Al ₂ O ₃ bilayered tunnel barrier. <i>Journal of Applied Physics</i> , 2010 , 107, 013707	2.5	24
36	Vertically and Laterally Self-Aligned Double Layer of Nanocrystals in Nanopatterned Dielectric Layer for Nanocrystal Floating Gate Memory Device. <i>Electrochemical and Solid-State Letters</i> , 2010 , 13, H366		3
35	Effect of incident angle of target molecules on electrical property of Al-doped ZnO thin films prepared by RF magnetron sputtering. <i>Current Applied Physics</i> , 2010 , 10, S286-S289	2.6	8
34	Controlling dislocation positions in silicon germanium (SiGe) buffer layers by local oxidation. <i>Thin Solid Films</i> , 2010 , 518, S217-S221	2.2	
33	Pulsed CVD-W Nucleation Layer Using WF ₆ and B ₂ H ₆ for Low Resistivity W. <i>Journal of the Electrochemical Society</i> , 2009 , 156, H685	3.9	17
32	Improvement of Adhesion Performances of CVD-W Films Deposited on B ₂ H ₆ -Based ALD-W Nucleation Layer. <i>Electrochemical and Solid-State Letters</i> , 2009 , 12, H80		14
31	Improvement of the Diffusion Barrier Performance of Ru by Incorporating a WN _x Thin Film for Direct-Plateable Cu Interconnects. <i>Electrochemical and Solid-State Letters</i> , 2009 , 12, H248		29
30	Low Temperature Atomic Layer Deposition of Ruthenium Thin Films Using Isopropylmethylbenzene-Cyclohexadiene-Ruthenium and O ₂ . <i>Electrochemical and Solid-State Letters</i> , 2009 , 12, D85		57
29	Nucleation kinetics of Ru on silicon oxide and silicon nitride surfaces deposited by atomic layer deposition. <i>Journal of Applied Physics</i> , 2008 , 103, 113509	2.5	64
28	Phase and Microstructure of ALD-W Films Deposited Using B ₂ H ₆ and WF ₆ and Their Effects on CVD-W Growth. <i>Journal of the Electrochemical Society</i> , 2008 , 155, D148	3.9	12
27	Atomic Layer Deposition of Ru Nanocrystals with a Tunable Density and Size for Charge Storage Memory Device Application. <i>Electrochemical and Solid-State Letters</i> , 2008 , 11, K89		22
26	Diffusion Barriers Between Al and Cu for the Cu Interconnect of Memory Devices. <i>Electrochemical and Solid-State Letters</i> , 2008 , 11, H127		7
25	Formation of Ru Nanotubes by Atomic Layer Deposition onto an Anodized Aluminum Oxide Template. <i>Electrochemical and Solid-State Letters</i> , 2008 , 11, K61		37
24	A Bilayer Diffusion Barrier of ALD-Ru/ALD-TaCN for Direct Plating of Cu. <i>Journal of the Electrochemical Society</i> , 2008 , 155, H589	3.9	26
23	Effects of phase of underlying W film on chemical vapor deposited-W film growth and applications to contact-plug and bit line processes for memory devices. <i>Journal of Vacuum Science & Technology B</i> , 2007 , 25, 1574		9
22	Characteristics of ALD Tungsten Nitride Using B ₂ H ₆ , WF ₆ , and NH ₃ and Application to Contact Barrier Layer for DRAM. <i>Journal of the Electrochemical Society</i> , 2007 , 154, D435	3.9	21
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