Woo-Hee Kim

List of Publications by Year
in descending order

74	2,102	201674 27	254184 43
papers	citations	h-index	g-index

74	74	74	2517
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	2D Transition Metal Dichalcogenide Heterostructures for pâ€•and nâ€Type Photovoltaic Selfâ€Powered Gas Sensor. Advanced Functional Materials, 2020, 30, 2003360.	14.9	102
2	Area-Selective Atomic Layer Deposition of Metal Oxides on Noble Metals through Catalytic Oxygen Activation. Chemistry of Materials, 2018, 30, 663-670.	6.7	90
3	Thermal and plasma enhanced atomic layer deposition ruthenium and electrical characterization as a metal electrode. Microelectronic Engineering, 2008, 85, 39-44.	2.4	89
4	Ru nanostructure fabrication using an anodic aluminum oxide nanotemplate and highly conformal Ru atomic layer deposition. Nanotechnology, 2008, 19, 045302.	2.6	79
5	Atomic Layer Deposition of Ni Thin Films and Application to Area-Selective Deposition. Journal of the Electrochemical Society, 2011, 158, D1.	2.9	79
6	A Process for Topographically Selective Deposition on 3D Nanostructures by Ion Implantation. ACS Nano, 2016, 10, 4451-4458.	14.6	78
7	Area-Selective Atomic Layer Deposition Using Si Precursors as Inhibitors. Chemistry of Materials, 2018, 30, 7603-7610.	6.7	78
8	Reaction Mechanism of Area-Selective Atomic Layer Deposition for Al₂O₃ Nanopatterns. ACS Applied Materials & Interfaces, 2017, 9, 41607-41617.	8.0	73
9	High Quality Area-Selective Atomic Layer Deposition Co Using Ammonia Gas as a Reactant. Journal of the Electrochemical Society, 2010, 157, D10.	2.9	65
10	Incomplete elimination of precursor ligands during atomic layer deposition of zinc-oxide, tin-oxide, and zinc-tin-oxide. Journal of Chemical Physics, 2017, 146, 052802.	3.0	64
11	Growth characteristics and electrical properties of La2O3 gate oxides grown by thermal and plasma-enhanced atomic layer deposition. Thin Solid Films, 2010, 519, 362-366.	1.8	57
12	Atomic layer deposition of Y2O3 and yttrium-doped HfO2 using a newly synthesized Y(iPrCp)2(N-iPr-amd) precursor for a high permittivity gate dielectric. Applied Surface Science, 2014, 297, 16-21.	6.1	54
13	Low-temperature Atomic Layer Deposition of TiO2, Al2O3, and ZnO Thin Films. Journal of the Korean Physical Society, 2011, 59, 452-457.	0.7	54
14	Effect oxygen exposure on the quality of atomic layer deposition of ruthenium from bis(cyclopentadienyl)ruthenium and oxygen. Thin Solid Films, 2008, 516, 7345-7349.	1.8	45
15	Low Pressure Chemical Vapor Deposition of Aluminum-Doped Zinc Oxide for Transparent Conducting Electrodes. Journal of the Electrochemical Society, 2011, 158, D495.	2.9	45
16	Electronic Structure of Cerium Oxide Gate Dielectric Grown by Plasma-Enhanced Atomic Layer Deposition. Journal of the Electrochemical Society, 2011, 158, G217.	2.9	41
17	Enhanced Light Stability of InGaZnO Thin-Film Transistors by Atomic-Layer-Deposited Y₂O₃ with Ozone. ACS Applied Materials & Interfaces, 2018, 10, 2143-2150.	8.0	41
18	Atomic Layer Deposition of Ruthenium and Ruthenium-oxide ThinFilms by Using a Ru(EtCp)$_{2}$ Precursor and Oxygen Gas. Journal of the Korean Physical Society, 2009, 55, 32-37.	0.7	41

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19	Comparative study of the growth characteristics and electrical properties of atomic-layer-deposited HfO₂ films obtained from metal halide and amide precursors. Journal of Materials Chemistry C, 2018, 6, 7367-7376.	5.5	40
20	The effects of La substitution on ferroelectric domain structure and multiferroic properties of epitaxially grown BiFeO3 thin films. Applied Physics Letters, 2013, 103, .	3.3	39
21	Plasma-Enhanced Atomic Layer Deposition of Ni. Japanese Journal of Applied Physics, 2010, 49, 05FA11.	1.5	38
22	Out-of-plane piezoresponse of monolayer MoS2 on plastic substrates enabled by highly uniform and layer-controllable CVD. Applied Surface Science, 2019, 487, 1356-1361.	6.1	36
23	Nanoscale resistive switching memory device composed of NiO nanodot and graphene nanoribbon nanogap electrodes. Carbon, 2014, 79, 388-392.	10.3	35
24	Inherently Areaâ€Selective Atomic Layer Deposition of SiO₂ Thin Films to Confer Oxide Versus Nitride Selectivity. Advanced Functional Materials, 2021, 31, 2102556.	14.9	32
25	Growth characteristics and electrical properties of SiO2 thin films prepared using plasma-enhanced atomic layer deposition and chemical vapor deposition with an aminosilane precursor. Journal of Materials Science, 2016, 51, 5082-5091.	3.7	31
26	Growth Characteristics and Film Properties of Cerium Dioxide Prepared by Plasma-Enhanced Atomic Layer Deposition. Journal of the Electrochemical Society, 2011, 158, G169.	2.9	30
27	Synthesis of a Hybrid Nanostructure of ZnO-Decorated MoS₂ by Atomic Layer Deposition. ACS Nano, 2020, 14, 1757-1769.	14.6	29
28	Flat band voltage (VFB) modulation by controlling compositional depth profile in La2O3/HfO2 nanolaminate gate oxide. Journal of Applied Physics, 2010, 107, 074109.	2.5	27
29	Atomic layer deposition of B2O3/SiO2 thin films and their application in an efficient diffusion doping process. Journal of Materials Chemistry C, 2014, 2, 5805.	5.5	26
30	Thermal Atomic Layer Deposition of Device-Quality SiO₂ Thin Films under 100 Â°C Using an Aminodisilane Precursor. Chemistry of Materials, 2019, 31, 5502-5508.	6.7	26
31	?The Degradation of Deposition Blocking Layer during Area Selective Plasma Enhanced Atomic Layer Deposition of Cobalt. Journal of the Korean Physical Society, 2010, 56, 104-107.	0.7	26
32	Effects of a Nb nanopin electrode on the resistive random-access memory switching characteristics of NiO thin films. Nanoscale, 2018, 10, 13443-13448.	5.6	25
33	Synthesis of two-dimensional MoS2/graphene heterostructure by atomic layer deposition using MoF6 precursor. Applied Surface Science, 2019, 494, 591-599.	6.1	25
34	Phase-controlled synthesis of SnOx thin films by atomic layer deposition and post-treatment. Applied Surface Science, 2019, 480, 472-477.	6.1	25
35	Thermal adsorption-enhanced atomic layer etching of Si3N4. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2018, 36, .	2.1	24
36	Wafer-Scale Growth of a MoS₂ Monolayer via One Cycle of Atomic Layer Deposition: An Adsorbate Control Method. Chemistry of Materials, 2021, 33, 4099-4105.	6.7	23

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37	Growth characteristics and electrical properties of Ta2O5 grown by thermal and O3-based atomic layer deposition on TiN substrates for metalâ€“insulatorâ€“metal capacitor applications. Thin Solid Films, 2013, 542, 71-75.	1.8	22
38	Confinement of Ferroelectric Domain-Wall Motion at Artificially Formed Conducting-Nanofilaments in Epitaxial BiFeO₃ Thin Films. ACS Applied Materials & Interfaces, 2014, 6, 6346-6350.	8.0	22
39	In situ surface cleaning on a Ge substrate using TMA and MgCp₂for HfO₂-based gate oxides. Journal of Materials Chemistry C, 2015, 3, 4852-4858.	5.5	20
40	Analysis of Defect Recovery in Reduced Graphene Oxide and Its Application as a Heater for Self-Healing Polymers. ACS Applied Materials & Interfaces, 2019, 11, 16804-16814.	8.0	19
41	Ferroelectric domain wall motion in epitaxial PbTiO3 and BiFeO3 thin films. Materials Letters, 2014, 124, 47-49.	2.6	18
42	Significant Enhancement of the Dielectric Constant through the Doping of <scp><scp>CeO</scp></scp>₂ into <scp><scp>HfO</scp></scp>₂ by Atomic Layer Deposition. Journal of the American Ceramic Society, 2014, 97, 1164-1169.	3.8	18
43	Hydrogen barrier performance of sputtered La2O3 films for InGaZnO thin-film transistor. Journal of Materials Science, 2019, 54, 11145-11156.	3.7	18
44	Imprint Control of Nonvolatile Shape Memory with Asymmetric Ferroelectric Multilayers. Chemistry of Materials, 2014, 26, 6911-6914.	6.7	17
45	Structural and ferroelectric properties of P(VDF-TrFE) thin films depending on the annealing temperature. Materials Letters, 2019, 238, 294-297.	2.6	15
46	Enhanced selectivity of atomic layer deposited Ru thin films through the discrete feeding of aminosilane inhibitor molecules. Applied Surface Science, 2021, 539, 148247.	6.1	15
47	Flatband voltage control in p-metal gate metal-oxide-semiconductor field effect transistor by insertion of TiO2 layer. Applied Physics Letters, 2010, 96, .	3.3	14
48	Effects of Ar Addition to O₂ Plasma on Plasma-Enhanced Atomic Layer Deposition of Oxide Thin Films. ACS Applied Materials & Interfaces, 2018, 10, 40286-40293.	8.0	14
49	Improved interface quality of atomic-layer-deposited ZrO2 metal-insulator-metal capacitors with Ru bottom electrodes. Thin Solid Films, 2020, 701, 137950.	1.8	14
50	Atomic layer deposition of CeO2/HfO2 gate dielectrics on Ge substrate. Applied Surface Science, 2014, 321, 214-218.	6.1	12
51	Interface roughness effect between gate oxide and metal gate on dielectric property. Thin Solid Films, 2009, 517, 3892-3895.	1.8	11
52	Room temperature magnetoresistance of horizontally aligned Mn-doped ZnO nanowires on terrace edges. Materials Letters, 2014, 133, 101-104.	2.6	11
53	Single-Layer MoS₂Field Effect Transistor with Epitaxially Grown SrTiO₃Gate Dielectric on Nb-doped SrTiO₃Substrate. Bulletin of the Korean Chemical Society, 2013, 34, 2563-2564.	1.9	11
54	Advanced Atomic Layer Deposition: Ultrathin and Continuous Metal Thin Film Growth and Work Function Control Using the Discrete Feeding Method. Nano Letters, 2022, 22, 4589-4595.	9.1	11

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55	BiFeO3 nanodots prepared via dip-pen lithography on Nb-doped SrTiO3 and highly ordered pyrolytic graphite substrates. Applied Physics Letters, 2013, 103, 052905.	3.3	9
56	An atomic layer deposition chamber for in situ x-ray diffraction and scattering analysis. Review of Scientific Instruments, 2014, 85, 055116.	1.3	9
57	Triangular ferroelectric domains of highly (111)-oriented NaNbO3 thin film on a glass substrate. Electronic Materials Letters, 2014, 10, 107-110.	2.2	9
58	Resistive switching characteristics of ferroelectric BiFeO3 nanodot prepared by dip-pen nanolithography. Materials Letters, 2014, 121, 122-125.	2.6	9
59	Ultralow-Resistivity Molybdenum-Carbide Thin Films Deposited by Plasma-Enhanced Atomic Layer Deposition Using a Cyclopentadienyl-Based Precursor. Chemistry of Materials, 2022, 34, 2576-2584.	6.7	9
60	Atomic Layer Deposition of Pt on the Surface Deactivated by Fluorocarbon Implantation: Investigation of the Growth Mechanism. Chemistry of Materials, 2020, 32, 9696-9703.	6.7	8
61	Metal-insulator transition and interfacial thermal transport in atomic layer deposited Ru nanofilms characterized by ultrafast terahertz spectroscopy. Applied Surface Science, 2021, 563, 150184.	6.1	8
62	Inhibitor-free area-selective atomic layer deposition of SiO2 through chemoselective adsorption of an aminodisilane precursor on oxide versus nitride substrates. Applied Surface Science, 2022, 589, 152939.	6.1	8
63	A Strategy for Waferâ€Scale Crystalline MoS₂ Thin Films with Controlled Morphology Using Pulsed Metalâ€“Organic Chemical Vapor Deposition at Low Temperature. Advanced Materials Interfaces, 2022, 9, .	3.7	8
64	Rhenium oxide/sulfide binary phase flakes decorated on nanofiber support for enhanced activation of electrochemical conversion reactions. Chemical Engineering Journal, 2022, 446, 136951.	12.7	8
65	Piezoelectric and ferroelectric characteristics of P(VDF-TrFE) thin films on Pt and ITO substrates. Materials Letters, 2019, 238, 237-240.	2.6	6
66	Variation in ferroelectric polarization direction of epitaxial (001) SrBi2Ta2O9 thin film induced by oxygen vacancy. Ceramics International, 2014, 40, 2741-2745.	4.8	4
67	Uniform color coating of multilayered TiO2/Al2O3 films by atomic layer deposition. Journal of Coatings Technology Research, 2017, 14, 177-183.	2.5	4
68	Thickness and Post-annealing Effects of the Sputtered La-Capping Layer Inserted between the TiN Gate and Hf-Based Dielectrics. ACS Applied Materials & Interfaces, 2014, 6, 5199-5205.	8.0	3
69	Cobalt and nickel atomic layer depositions for contact applications. , 2009, , .		2
70	Local ferroelectric responses of epitaxial PbTiO3 thin films to heated atomic force microscopy. Materials Letters, 2016, 168, 134-137.	2.6	2
71	The Benefits of Atomic Layer Deposition in Non-semiconductor Applications; Producing Metallic Nanomaterials and Fabrication of Flexible Display. ECS Transactions, 2009, 25, 101-111.	0.5	1
72	Selfâ€Powered Gas Sensors: 2D Transition Metal Dichalcogenide Heterostructures for pâ€•and nâ€Type Photovoltaic Selfâ€Powered Gas Sensor (Adv. Funct. Mater. 43/2020). Advanced Functional Materials, 2020, 30, 2070284.	14.9	1

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73	Nanomaterial fabrication by Ru atomic layer deposition on anodic aluminum oxide nanotemplate. , 2006, , .		0
74	Nanomaterials fabrication using advanced thin film deposition and nanohybrid process. , 2009, , .		0