Woongkyu Lee

List of Publications by Year
in descending order

45 papers	1,959 citations	361413 20 h-index	243625 44 g-index
46 all docs	46 docs citations	46 times ranked	1964 citing authors

#	Article	IF	Citations
1	Comparison of high-k Y₂O₃/TiO₂ bilayer and Y-doped TiO₂ thin films on Ge substrate. Journal Physics D: Applied Physics, 2021, 54, 185110.	2.8	2
2	Investigating the Reasons for the Difficult Erase Operation of a Chargeâ€Trap Flash Memory Device with Amorphous Oxide Semiconductor Thinâ€Film Channel Layers. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2000549.	2.4	13
3	Trap Reduction through O 3 Postâ€Deposition Treatment of Y 2 O 3 Thin Films Grown by Atomic Layer Deposition on Ge Substrates. Advanced Electronic Materials, 2021, 7, 2000819.	5.1	3
4	CsPbBr₃ Perovskite Quantum Dot Lightâ€Emitting Diodes Using Atomic Layer Deposited Al₂O₃ and ZnO Interlayers. Physica Status Solidi - Rapid Research Letters, 2020, 14, 1900573.	2.4	19
5	Substrate-Dependent Growth Behavior of Atomic-Layer-Deposited Zinc Oxide and Zinc Tin Oxide Thin Films for Thin-Film Transistor Applications. Journal of Physical Chemistry C, 2020, 124, 26780-26792.	3.1	12
6	Enhanced Brightness and Device Lifetime of Quantum Dot Lightâ€Emitting Diodes by Atomic Layer Deposition. Advanced Materials Interfaces, 2020, 7, 2000343.	3.7	12
7	Lightâ€Emitting Diodes: Enhanced Brightness and Device Lifetime of Quantum Dot Lightâ€Emitting Diodes by Atomic Layer Deposition (Adv. Mater. Interfaces 12/2020). Advanced Materials Interfaces, 2020, 7, 2070067.	3.7	1
8	CsPbBr₃ Perovskite Quantum Dot Lightâ€Emitting Diodes Using Atomic Layer Deposited Al₂O₃ and ZnO Interlayers. Physica Status Solidi - Rapid Research Letters, 2020, 14, 2070012.	2.4	3
9	Leakage Current Control of SrTiO₃ Thin Films through Al Doping at the Interface between Dielectric and Electrode Layers via Atomic Layer Deposition. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1900373.	2.4	5
10	Substrate Effects on the Growth Behavior of Atomic-Layer-Deposited Ru Thin Films Using RuO₄ Precursor and N₂/H₂ Mixed Gas. Journal of Physical Chemistry C, 2019, 123, 22539-22549.	3.1	8
11	Effect of the Annealing Temperature of the Seed Layer on the Following Main Layer in Atomicâ€Layerâ€Deposited SrTiO 3 Thin Films. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1800557.	2.4	3
12	Cs₂SnI₆-Encapsulated Multidye-Sensitized All-Solid-State Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 21424-21434.	8.0	35
13	Processing, Structure, and Transistor Performance: Combustion versus Pulsed Laser Growth of Amorphous Oxides. ACS Applied Electronic Materials, 2019, 1, 548-557.	4.3	15
14	Controlling the Electrical Characteristics of ZrO₂/Al₂O₃/ZrO₂ Capacitors by Adopting a Ru Top Electrode Grown via Atomic Layer Deposition. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1800454.	2.4	23
15	Quantitative Analysis of the Incorporation Behaviors of Sr and Ti Atoms During the Atomic Layer Deposition of SrTiO₃ Thin Films. ACS Applied Materials & Interfaces, 2018, 10, 8836-8844.	8.0	15
16	MoO₂ as a thermally stable oxide electrode for dynamic random-access memory capacitors. Journal of Materials Chemistry C, 2018, 6, 13250-13256.	5.5	18
17	Effect of Growth Temperature during the Atomic Layer Deposition of the SrTiO₃ Seed Layer on the Properties of RuO₂/SrTiO₃/Ru Capacitors for Dynamic Random Access Memory Applications. ACS Applied Materials & Interfaces, 2018, 10, 41544-41551.	8.0	13
18	Electrical Properties of ZrO₂/Al₂O₃/ZrO₂â€Based Capacitors with TiN, Ru, and TiN/Ru Top Electrode Materials. Physica Status Solidi - Rapid Research Letters, 2018, 12, 1800356.	2.4	16

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19	Surface and grain boundary energy as the key enabler of ferroelectricity in nanoscale hafnia-zirconia: a comparison of model and experiment. Nanoscale, 2017, 9, 9973-9986.	5.6	249
20	Resistance switching behavior of atomic layer deposited SrTiO3 film through possible formation of Sr2Ti6O13 or Sr1Ti11O20 phases. Scientific Reports, 2016, 6, 20550.	3.3	17
21	Reducing the nano-scale defect formation of atomic-layer-deposited SrTiO3 films by adjusting the cooling rate of the crystallization annealing of the seed layer. Thin Solid Films, 2015, 589, 723-729.	1.8	9
22	Asymmetry in electrical properties of Alâ€doped TiO₂ film with respect to bias voltage. Physica Status Solidi - Rapid Research Letters, 2015, 9, 410-413.	2.4	10
23	Improved Initial Growth Behavior of SrO and SrTiO₃ Films Grown by Atomic Layer Deposition Using {Sr(demamp)(tmhd)}₂ as Sr-Precursor. Chemistry of Materials, 2015, 27, 3881-3891.	6.7	32
24	Structure and Electrical Properties of Al-Doped HfO₂ and ZrO₂ Films Grown via Atomic Layer Deposition on Mo Electrodes. ACS Applied Materials & Interfaces, 2014, 6, 22474-22482.	8.0	63
25	Chemistry of active oxygen in RuO_x and its influence on the atomic layer deposition of TiO₂ films. Journal of Materials Chemistry C, 2014, 2, 9993-10001.	5.5	18
26	Study on the degradation mechanism of the ferroelectric properties of thin Hf_{0.5}Zr_{0.5}O₂ films on TiN and Ir electrodes. Applied Physics Letters, 2014, 105, 072902.	3.3	133
27	Evaluating the Top Electrode Material for Achieving an Equivalent Oxide Thickness Smaller than 0.4 nm from an Al-Doped TiO₂ Film. ACS Applied Materials & Interfaces, 2014, 6, 21632-21637.	8.0	31
28	Controlling the Al-Doping Profile and Accompanying Electrical Properties of Rutile-Phased TiO₂ Thin Films. ACS Applied Materials & Interfaces, 2014, 6, 7910-7917.	8.0	21
29	Nanoscale Characterization of TiO₂ Films Grown by Atomic Layer Deposition on RuO₂ Electrodes. ACS Applied Materials & Interfaces, 2014, 6, 2486-2492.	8.0	21
30	Effect of forming gas annealing on the ferroelectric properties of Hf0.5Zr0.5O2 thin films with and without Pt electrodes. Applied Physics Letters, 2013, 102, .	3.3	141
31	Evolution of phases and ferroelectric properties of thin Hf0.5Zr0.5O2 films according to the thickness and annealing temperature. Applied Physics Letters, 2013, 102, .	3.3	480
32	Influences of metal, non-metal precursors, and substrates on atomic layer deposition processes for the growth of selected functional electronic materials. Coordination Chemistry Reviews, 2013, 257, 3154-3176.	18.8	48
33	Atomic Layer Deposition of SrTiO₃ Films with Cyclopentadienyl-Based Precursors for Metalâ€“Insulatorâ€“Metal Capacitors. Chemistry of Materials, 2013, 25, 953-961.	6.7	69
34	Controlling the initial growth behavior of SrTiO3 films by interposing Al2O3 layers between the film and the Ru substrate. Journal of Materials Chemistry, 2012, 22, 15037.	6.7	19
35	Growth of Conductive SrRuO₃ Films by Combining Atomic Layer Deposited SrO and Chemical Vapor Deposited RuO₂ Layers. Chemistry of Materials, 2012, 24, 4686-4692.	6.7	26
36	Study on Initial Growth Behavior of RuO₂ Film Grown by Pulsed Chemical Vapor Deposition: Effects of Substrate and Reactant Feeding Time. Chemistry of Materials, 2012, 24, 1407-1414.	6.7	23

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37	Impact of Bimetal Electrodes on Dielectric Properties of TiO₂ and Al-Doped TiO₂ Films. ACS Applied Materials & Interfaces, 2012, 4, 4726-4730.	8.0	18
38	Conformal Formation of (GeTe2)(1â€“x)(Sb2Te3)x Layers by Atomic Layer Deposition for Nanoscale Phase Change Memories. Chemistry of Materials, 2012, 24, 2099-2110.	6.7	48
39	Improvement in the leakage current characteristic of metal-insulator-metal capacitor by adopting RuO2 film as bottom electrode. Applied Physics Letters, 2011, 99, .	3.3	58
40	Role of Interfacial Reaction in Atomic Layer Deposition of TiO₂ Thin Films Using Ti(O-<i>i</i>Pr)₂(tmhd)₂ on Ru or RuO₂ Substrates. Chemistry of Materials, 2011, 23, 976-983.	6.7	26
41	Atomic Layer Deposition of SrTiO₃ Thin Films with Highly Enhanced Growth Rate for Ultrahigh Density Capacitors. Chemistry of Materials, 2011, 23, 2227-2236.	6.7	112
42	Atomic layer deposition of TiO₂ and Alâ€doped TiO₂ films on Ir substrates for ultralow leakage currents. Physica Status Solidi - Rapid Research Letters, 2011, 5, 262-264.	2.4	9
43	Electrical properties of TiO2-based MIM capacitors deposited by TiCl4 and TTIP based atomic layer deposition processes. Microelectronic Engineering, 2011, 88, 1514-1516.	2.4	21
44	The mechanism for the suppression of leakage current in high dielectric TiO2 thin films by adopting ultra-thin HfO2 films for memory application. Journal of Applied Physics, 2011, 110, 024105.	2.5	26
45	Growth and Phase Separation Behavior in Ge-Doped Sbâˆ’Te Thin Films Deposited by Combined Plasma-Enhanced Chemical Vapor and Atomic Layer Depositions. Journal of Physical Chemistry C, 2010, 114, 17899-17904.	3.1	15