Bonggeun Shong

List of Publications by Year
in descending order

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75 papers	1,397 citations	331642 21 h-index	414395 32 g-index
75 all docs	75 docs citations	75 times ranked	1637 citing authors

#	Article	IF	Citations
1	Atomic Layer Deposition of an Indium Gallium Oxide Thin Film for Thin-Film Transistor Applications. ACS Applied Materials & Interfaces, 2017, 9, 23934-23940.	8.0	97
2	Area-Selective Atomic Layer Deposition Using Si Precursors as Inhibitors. Chemistry of Materials, 2018, 30, 7603-7610.	6.7	78
3	Finite-Size Effects in O and CO Adsorption for the Late Transition Metals. Topics in Catalysis, 2012, 55, 1276-1282.	2.8	68
4	Highly conductive and flexible fiber for textile electronics obtained by extremely low-temperature atomic layer deposition of Pt. NPG Asia Materials, 2016, 8, e331-e331.	7.9	51
5	Atomic and Molecular Adsorption on the Bi(111) Surface: Insights into Catalytic CO₂ Reduction. Journal of Physical Chemistry C, 2018, 122, 23084-23090.	3.1	48
6	Low temperature atomic layer deposition of SiO2 thin films using di-isopropylaminosilane and ozone. Ceramics International, 2017, 43, 2095-2099.	4.8	47
7	Low-Temperature Atomic Layer Deposition of Highly Conformal Tin Nitride Thin Films for Energy Storage Devices. ACS Applied Materials & Interfaces, 2019, 11, 43608-43621.	8.0	47
8	Low-temperature direct synthesis of high quality WS2 thin films by plasma-enhanced atomic layer deposition for energy related applications. Applied Surface Science, 2018, 459, 596-605.	6.1	42
9	Effects of Al Precursors on Deposition Selectivity of Atomic Layer Deposition of Al₂O₃ Using Ethanethiol Inhibitor. Chemistry of Materials, 2020, 32, 8921-8929.	6.7	40
10	Antiâ€“corrosive FeO decorated CuCo2S4 as an efficient and durable electrocatalyst for hydrogen evolution reaction. Applied Surface Science, 2021, 539, 148229.	6.1	37
11	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
12	Molecular oxidation of surface â€“CH3 during atomic layer deposition of Al2O3 with H2O, H2O2, and O3: A theoretical study. Applied Surface Science, 2018, 457, 376-380.	6.1	29
13	Synthesis of a Hybrid Nanostructure of ZnO-Decorated MoS₂ by Atomic Layer Deposition. ACS Nano, 2020, 14, 1757-1769.	14.6	29
14	Formic acid electrooxidation activity of Pt and Pt/Au catalysts: Effects of surface physical properties and irreversible adsorption of Bi. Electrochimica Acta, 2018, 273, 307-317.	5.2	28
15	In Vacuo Photoemission Studies of Platinum Atomic Layer Deposition Using Synchrotron Radiation. Journal of Physical Chemistry Letters, 2013, 4, 176-179.	4.6	27
16	Atomic Layer Deposition of Ru for Replacing Cu-Interconnects. Chemistry of Materials, 2021, 33, 5639-5651.	6.7	27
17	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
18	Self-assembly of acetate adsorbates drives atomic rearrangement on the Au(110) surface. Nature Communications, 2016, 7, 13139.	12.8	23

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19	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
20	Reaction of Hydroquinone and p-Benzoquinone with the Ge(100)-2 Ã— 1 Surface. Journal of Physical Chemistry C, 2012, 116, 4705-4713.	3.1	22
21	Facile fabrication of p-type Al2O3/carbon nanocomposite films using molecular layer deposition. Applied Surface Science, 2018, 458, 864-871.	6.1	21
22	Coverage-Dependent Adsorption of Bifunctional Molecules: Detailed Insights into Interactions between Adsorbates. Journal of Physical Chemistry C, 2014, 118, 23811-23820.	3.1	20
23	Intermediates for catalytic reduction of CO2 on p-block element surfaces. Journal of Industrial and Engineering Chemistry, 2021, 96, 236-242.	5.8	20
24	Adsorption of gas molecules on graphene, silicene, and germanene: A comparative first-principles study. Surfaces and Interfaces, 2021, 24, 101054.	3.0	20
25	Growth of Al-rich AlGaN thin films by purely thermal atomic layer deposition. Journal of Alloys and Compounds, 2021, 854, 157186.	5.5	19
26	Effects of Al Precursors on the Characteristics of Indiumâ€“Aluminum Oxide Semiconductor Grown by Plasma-Enhanced Atomic Layer Deposition. ACS Applied Materials & Interfaces, 2021, 13, 40134-40144.	8.0	19
27	Some Insights into Atomic Layer Deposition of MoNx Using Mo(CO)6 and NH3 and Its Diffusion Barrier Application. Chemistry of Materials, 2019, 31, 8338-8350.	6.7	18
28	Synthesis of indium tin oxide (ITO) nanoparticles in supercritical methanol. Journal of Supercritical Fluids, 2016, 113, 39-43.	3.2	17
29	Thermal atomic layer deposition of metallic Ru using H2O as a reactant. Applied Surface Science, 2019, 488, 896-902.	6.1	17
30	Mechanistic Investigation on Thermal Atomic Layer Deposition of Group 13 Oxides. Journal of Physical Chemistry C, 2020, 124, 17121-17134.	3.1	17
31	Area-Selective Atomic Layer Deposition of Ruthenium Using a Novel Ru Precursor and H₂O as a Reactant. Chemistry of Materials, 2021, 33, 4353-4361.	6.7	17
32	Low temperature atomic layer deposition of nickel sulfide and nickel oxide thin films using Ni(dmamb)2 as Ni precursor. Ceramics International, 2018, 44, 16342-16351.	4.8	16
33	Molecular Adsorption of NH3 and NO2 on Zr and Hf Dichalcogenides (S, Se, Te) Monolayers: A Density Functional Theory Study. Nanomaterials, 2020, 10, 1215.	4.1	16
34	Molecular layer deposition of indicone and organic-inorganic hybrid thin films as flexible transparent conductor. Applied Surface Science, 2020, 525, 146383.	6.1	16
35	Water-Erasable Memory Device for Security Applications Prepared by the Atomic Layer Deposition of GeO₂. Chemistry of Materials, 2018, 30, 830-840.	6.7	15
36	Surface chemical reactions during atomic layer deposition of ZnO, ZnS, and Zn(O,S). Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2019, 37, .	2.1	14

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37	Residue-free photolithographic patterning of graphene. Chemical Engineering Journal, 2022, 429, 132504.	12.7	14
38	Reaction Mechanism of Pt Atomic Layer Deposition on Various Textile Surfaces. Chemistry of Materials, 2019, 31, 8995-9002.	6.7	13
39	Tin oxysulfide composite thin films based on atomic layer deposition of tin sulfide and tin oxide using Sn(dmamp)2 as Sn precursor. Ceramics International, 2020, 46, 5109-5118.	4.8	13
40	Adsorption of Titanium Halides on Nitride and Oxide Surfaces during Atomic Layer Deposition: A DFT Study. Coatings, 2020, 10, 712.	2.6	13
41	Evaluation of silicon tetrahalide precursors for low-temperature thermal atomic layer deposition of silicon nitride. Applied Surface Science, 2021, 565, 150603.	6.1	13
42	Transition in the Molecular Orientation of Phenol Adsorbates on the Ge(100)-2 Ã— 1 Surface. Journal of Physical Chemistry C, 2012, 116, 7925-7930.	3.1	12
43	Strong Carbon-Surface Dative Bond Formation by tert-Butyl Isocyanide on the Ge(100)-2 Ã— 1 Surface. Journal of the American Chemical Society, 2014, 136, 5848-5851.	13.7	12
44	Unidirectional Adsorption of Bifunctional 1,4-Phenylene Diisocyanide on the Ge(100)-2 Ã— 1 Surface. Journal of Physical Chemistry Letters, 2015, 6, 1037-1041.	4.6	12
45	Neighbour-sensitized near-infrared emission of new Nd(<scp>iii</scp>) and Er(<scp>iii</scp>) complexes with 1-(anthracene-2-yl)-4,4,4-trifluoro-1,3-butanedione. New Journal of Chemistry, 2016, 40, 9702-9710.	2.8	12
46	Moisture barrier properties of low-temperature atomic layer deposited Al2O3 using various oxidants. Ceramics International, 2019, 45, 19105-19112.	4.8	11
47	Thermal Annealing of Molecular Layer-Deposited Indicone Toward Area-Selective Atomic Layer Deposition. ACS Applied Materials & Interfaces, 2020, 12, 43212-43221.	8.0	11
48	Low-temperature growth of crystalline Tin(II) monosulfide thin films by atomic layer deposition using a liquid divalent tin precursor. Applied Surface Science, 2021, 565, 150152.	6.1	11
49	Adsorption of Trimethyl Phosphite at the Ge(100)-2 Ã— 1 Surface by Nucleophilic Reaction. Journal of Physical Chemistry C, 2013, 117, 26628-26635.	3.1	10
50	Surface Energy Change of Atomic-Scale Metal Oxide Thin Films by Phase Transformation. ACS Nano, 2020, 14, 676-687.	14.6	10
51	Atomic layer deposition of 1D and 2D nickel nanostructures on graphite. Nanotechnology, 2017, 28, 115301.	2.6	9
52	Thermally Activated Reactions of Phenol at the Ge(100)-2 Ã— 1 Surface. Journal of Physical Chemistry C, 2020, 124, 23657-23660.	3.1	9
53	Atomic Layer Modulation of Multicomponent Thin Films through Combination of Experimental and Theoretical Approaches. Chemistry of Materials, 2021, 33, 4435-4444.	6.7	9
54	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

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55	One-Dimensional Pattern Formation of Adsorbed Molecules on the Ge(100)-2 Ã— 1 Surface Driven by Nearest-Neighbor Effects. Journal of Physical Chemistry C, 2013, 117, 949-955.	3.1	8
56	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
57	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
58	Atomic Layer Deposition of Iridium Using a Tricarbonyl Cyclopropenyl Precursor and Oxygen. Chemistry of Materials, 2022, 34, 1533-1543.	6.7	7
59	Formation of Germa-ketenimine on the Ge(100) Surface by Adsorption of tert-Butyl Isocyanide. Journal of the American Chemical Society, 2017, 139, 8758-8765.	13.7	6
60	Reaction Mechanisms of Non-hydrolytic Atomic Layer Deposition of Al₂O₃ with a Series of Alcohol Oxidants. Journal of Physical Chemistry C, 2021, 125, 18151-18160.	3.1	6
61	Commensurate Assembly of C₆₀ on Black Phosphorus for Mixedâ€Dimensional van der Waals Transistors. Small, 2022, 18, e2105916.	10.0	6
62	Thermally Activated Reactions of Nitrobenzene at the Ge(100)-2 Ã— 1 Surface. Journal of Physical Chemistry C, 2014, 118, 29224-29233.	3.1	5
63	Growth mechanism and electrical properties of tungsten films deposited by plasma-enhanced atomic layer deposition with chloride and metal organic precursors. Applied Surface Science, 2021, 568, 150939.	6.1	5
64	Growth modulation of atomic layer deposition of HfO₂ by combinations of H₂O and O₃ reactants. Dalton Transactions, 2021, 50, 17935-17944.	3.3	5
65	Tunable adsorption of isocyanides on group 14 (100)-2 Ã— 1 surfaces. Applied Surface Science, 2016, 390, 968-973.	6.1	4
66	Adsorption of carbon monoxide on the Si(111)-7 Ã— 7 surface. Applied Surface Science, 2017, 405, 209-214.	6.1	4
67	Effect of molecular backbone structure on vapor phase coupling reaction between diiso(thio)cyanates with diamines, diols, and dithiols. Progress in Organic Coatings, 2020, 140, 105509.	3.9	4
68	Chemical mechanism of formation of two-dimensional electron gas at the Al2O3/TiO2 interface by atomic layer deposition. Materials Today Advances, 2021, 12, 100195.	5.2	4
69	Selective ethylene oligomerization with inâ€situâ€generated chromium catalysts supported by trifluoromethylâ€containing ligands. Journal of Polymer Science Part A, 2018, 56, 444-450.	2.3	3
70	Plasma-enhanced atomic layer deposition of hafnium silicate thin films using a single source precursor. Ceramics International, 2020, 46, 10121-10129.	4.8	3
71	Adsorption of heterobifunctional 4-nitrophenol on the Ge(100)-2 Ã— 1 surface. Surface Science, 2016, 650, 279-284.	1.9	2
72	Computational study on vapor phase coupling reaction between diiso(thio)cyanates with diamines, diols, and dithiols. International Journal of Quantum Chemistry, 2017, 117, e25341.	2.0	2

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73	Autocatalytic Dissociative Adsorption of Imidazole on the Ge(100)-2 Ã— 1 Surface. Journal of Physical Chemistry C, 2017, 121, 20905-20910.	3.1	1
74	Ab initio Simulation of 1D Pattern Formation of Adsorbates on the Ge(100)-2 Ã— 1 Surface. Materials Research Society Symposia Proceedings, 2013, 1551, 81-86.	0.1	0
75	Atomic Layer Deposition of Al2O3 with Alcohol Oxidants for Impeding Substrate Oxidation. ECS Meeting Abstracts, 2019, , .	0.0	0