Ken Cadien

List of Publications by Year
in descending order

61 papers	1,124 citations	361045 20 h-index	433756 31 g-index
62 all docs	62 docs citations	62 times ranked	1472 citing authors

#	Article	IF	Citations
1	Interaction Mechanisms between Air Bubble and Molybdenite Surface: Impact of Solution Salinity and Polymer Adsorption. Langmuir, 2017, 33, 2353-2361.	1.6	67
2	Adsorption characteristics and mechanisms of O-Carboxymethyl chitosan on chalcopyrite and molybdenite. Journal of Colloid and Interface Science, 2019, 552, 659-670.	5.0	65
3	Comparing XPS on bare and capped ZrN films grown by plasma enhanced ALD: Effect of ambient oxidation. Applied Surface Science, 2018, 435, 367-376.	3.1	57
4	Observation of long-range dipole-dipole interactions in hyperbolic metamaterials. Science Advances, 2018, 4, eaar5278.	4.7	57
5	Freestanding hierarchical porous carbon film derived from hybrid nanocellulose for high-power supercapacitors. Nano Research, 2017, 10, 1847-1860.	5.8	55
6	Selective flotation separation of molybdenite and talc by humic substances. Minerals Engineering, 2018, 117, 34-41.	1.8	46
7	Growth mechanism of atomic layer deposition of zinc oxide: A density functional theory approach. Applied Physics Letters, 2013, 103, .	1.5	40
8	Advances in Characterization of CMP Consumables. MRS Bulletin, 2002, 27, 766-771.	1.7	38
9	A route to low temperature growth of single crystal GaN on sapphire. Journal of Materials Chemistry C, 2015, 3, 7428-7436.	2.7	38
10	Ultra low density of interfacial traps with mixed thermal and plasma enhanced ALD of high-Î¹ gate dielectrics. RSC Advances, 2016, 6, 16301-16307.	1.7	38
11	Achieving ultrahigh corrosion resistance and conductive zirconium oxynitride coating on metal bipolar plates by plasma enhanced atomic layer deposition. Journal of Power Sources, 2018, 397, 32-36.	4.0	37
12	Growth, structure and properties of sputtered niobium oxide thin films. Thin Solid Films, 2011, 519, 3068-3073.	0.8	35
13	Flotation separation of Cu-Mo sulfides by O-Carboxymethyl chitosan. Minerals Engineering, 2019, 134, 202-205.	1.8	35
14	Separation of talc and molybdenite: challenges and opportunities. Minerals Engineering, 2019, 143, 105923.	1.8	34
15	Selective separation of copper-molybdenum sulfides using humic acids. Minerals Engineering, 2019, 133, 43-46.	1.8	33
16	Carbon nanosheets derived from reconstructed lignin for potassium and sodium storage with low voltage hysteresis. Nano Research, 2021, 14, 4664-4673.	5.8	24
17	AxBAxBâ€¦ pulsed atomic layer deposition: Numerical growth model and experiments. Journal of Applied Physics, 2016, 119, .	1.1	23
18	Low Thermal Budget Heteroepitaxial Gallium Oxide Thin Films Enabled by Atomic Layer Deposition. ACS Applied Materials & Interfaces, 2020, 12, 44225-44237.	4.0	23

#	Article	IF	Citations
19	Chemically enhanced synergistic wear: A copper chemical mechanical polishing case study. Wear, 2013, 307, 155-163.	1.5	22
20	Electrical Comparison of ${m HfO}_{2}$ and ${m ZrO}_{2}$ Gate Dielectrics on GaN. IEEE Transactions on Electron Devices, 2013, 60, 4119-4124.	1.6	21
21	Probing initial-stages of ALD growth with dynamic in situ spectroscopic ellipsometry. Applied Surface Science, 2015, 328, 344-348.	3.1	21
22	Surface reaction kinetics in atomic layer deposition: An analytical model and experiments. Journal of Applied Physics, 2018, 124, .	1.1	20
23	Zr₂N₂O Coating-Improved Corrosion Resistance for the Anodic Dissolution Induced by Cathodic Transient Potential. ACS Applied Materials & Interfaces, 2018, 10, 40111-40124.	4.0	19
24	Low temperature plasma enhanced atomic layer deposition of conducting zirconium nitride films using tetrakis (dimethylamido) zirconium and forming gas (5% H2 + 95% N2) plasma. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2015, 33, .	0.9	18
25	Sustained hole inversion layer in a wide-bandgap metal-oxide semiconductor with enhanced tunnel current. Nature Communications, 2016, 7, 10632.	5.8	16
26	The effect of argon pressure, residual oxygen and exposure to air on the electrical and microstructural properties of sputtered chromium thin films. Thin Solid Films, 2012, 520, 1762-1767.	0.8	15
27	Plasma enhanced atomic layer deposition of ZnO with diethyl zinc and oxygen plasma: Effect of precursor decomposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2016, 34, .	0.9	15
28	Growth and Characterization of Metastable Hexagonal Nickel Thin Films via Plasma-Enhanced Atomic Layer Deposition. ACS Applied Materials & Interfaces, 2017, 9, 24722-24730.	4.0	15
29	Schottky barrier source-gated ZnO thin film transistors by low temperature atomic layer deposition. Applied Physics Letters, 2013, 103, .	1.5	14
30	Understanding the Effects of a High Surface Area Nanostructured Indium Tin Oxide Electrode on Organic Solar Cell Performance. ACS Applied Materials & Interfaces, 2017, 9, 38706-38715.	4.0	14
31	Challenges for on-chip optical interconnects. , 2005, 5730, 133.		13
32	Atomic Layer Deposition. , 2018, , 359-377.		13
33	In Situ Spectroscopic Ellipsometry Study of Plasma-Enhanced ALD of Al₂O₃on Chromium Substrates. Journal of the Electrochemical Society, 2011, 159, D59-D64.	1.3	12
34	Capacitance Modeling and Characterization of Planar MOSCAP Devices for Wideband-Gap Semiconductors With High-$kappa$ Dielectrics. IEEE Transactions on Electron Devices, 2012, 59, 2662-2666.	1.6	11
35	Interfacial Contact Effects in Top Gated Zinc Oxide Thin Film Transistors Grown by Atomic Layer Deposition. IEEE Transactions on Electron Devices, 2016, 63, 3540-3546.	1.6	11
36	Hf1â^'xZrxO2 and HfO2/ZrO2 gate dielectrics with extremely low density of interfacial defects using low temperature atomic layer deposition on GaN and InP. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2021, 39, .	0.9	11

#	Article	IF	Citations
37	Influence of atomic layer deposition valve temperature on ZrN plasma enhanced atomic layer deposition growth. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2015, 33, .	0.9	9
38	Evaluation of efficiency factors and internal resistance of thermoelectric materials. International Journal of Energy Research, 2017, 41, 198-206.	2.2	9
39	Transient Potential Induced Anodic Dissolution of 316L Stainless Steel in Sulfuric Acid Solution. Journal of the Electrochemical Society, 2019, 166, C3355-C3363.	1.3	8
40	Xâ€Ray Spectromicroscopy Investigation of Heterogeneous Sodiation in Hard Carbon Nanosheets with Vertically Oriented (002) Planes. Small, 2021, 17, e2102109.	5.2	8
41	TiO2-HfN Radial Nano-Heterojunction: A Hot Carrier Photoanode for Sunlight-Driven Water-Splitting. Catalysts, 2021, 11, 1374.	1.6	8
42	High-mobility solution-processed zinc oxide thin films on silicon nitride. Physica Status Solidi - Rapid Research Letters, 2014, 8, 871-875.	1.2	7
43	Atomic layer deposition of iron oxide on a porous carbon substrate via ethylferrocene and an oxygen plasma. Surface and Coatings Technology, 2021, 421, 127390.	2.2	6
44	Solar wafer emitter measurement by infrared reflectometry for process control: Implementation and results. , 2014, , .		5
45	Electrical Characteristics of TiW/ZnO Schottky contact with ALD and PLD. Materials Research Society Symposia Proceedings, 2014, 1635, 127-132.	0.1	5
46	Defect Characterization of PEALD High-k ZrO₂Films Fabricated on IIIâ€“V Materials. IEEE Transactions on Semiconductor Manufacturing, 2016, 29, 355-362.	1.4	5
47	Tetraallyltin precursor for plasma enhanced atomic layer deposition of tin oxide: Growth study and material characterization. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2019, 37, .	0.9	5
48	Ceria coated silica particles: One step preparation and settling behaviour under the influence of colloidal and hydrodynamic interactions. Materials Chemistry and Physics, 2016, 173, 467-474.	2.0	4
49	In Situ Synchrotron Xâ€Ray Diffraction Analysis of Phase Transformation in Epitaxial Metastable hcp Nickel Thin Films, Prepared via Plasmaâ€Enhanced Atomic Layer Deposition. Advanced Materials Interfaces, 2018, 5, 1800957.	1.9	4
50	ZnO Schottky Nanodiodes Processed From Plasma-Enhanced Atomic Layer Deposition at Near Room Temperature. IEEE Transactions on Electron Devices, 2018, 65, 4513-4519.	1.6	3
51	Chemical Mechanical Polishing. , 2001, , 501-512.		2
52	CMP Method and Practice. , 2012, , 179-219.		2
53	Conformal Carbon Nanotube Coatings for Ceramic Composite Structures. MRS Advances, 2017, 2, 1499-1503.	0.5	2
54	AlN PEALD with TMA and forming gas: study of plasma reaction mechanisms. RSC Advances, 2021, 11, 12235-12248.	1.7	2

#	Article	IF	Citations
55	High ionic conductivity of ultralow yttria concentration yttria-stabilized zirconia thin films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2022, 40, 042405.	0.9	2
56	Chemical mechanical polishing of boron-doped polycrystalline silicon. Proceedings of SPIE, 2014, , .	0.8	1
57	Stoichiometry controlled homogeneous ternary oxide growth in showerhead atomic layer deposition reactor and application for ZrxHf1âˆ’xO2. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2021, 39, 030401.	0.9	1
58	On-Chip Power Generation: Microfluidic-Based Reactor for Catalytic Combustion of Methanol. , 2013, , .		0
59	Optimization of Copper Schottky Contacts on Nanocrystalline ZnO thin films by Atomic Layer Deposition. MRS Advances, 2016, 1, 3421-3427.	0.5	0
60	Resolving self-limiting growth in silicon nitride plasma enhanced atomic layer deposition with tris-dimethylamino silane precursor. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2020, 38, 062406.	0.9	0
61	From Amorphous to Î²-Gallium Oxide: Practical Implementation of Energetics Considerations in Process Design and Optimization. ECS Meeting Abstracts, 2021, MA2021-01, 2104-2104.	0.0	0