Claudia Wiemer

List of Publications by Year
in descending order

96 papers	2,113 citations	201674 27 h-index	276875 41 g-index
97 all docs	97 docs citations	97 times ranked	2365 citing authors

#	Article	IF	Citations
1	Ozone-Based Atomic Layer Deposition of Alumina from TMA:Â Growth, Morphology, and Reaction Mechanism. Chemistry of Materials, 2006, 18, 3764-3773.	6.7	161
2	Atomic-layer deposition of Lu2O3. Applied Physics Letters, 2004, 85, 630-632.	3.3	100
3	Combining grazing incidence X-ray diffraction and X-ray reflectivity for the evaluation of the structural evolution of HfO2 thin films with annealing. Thin Solid Films, 2004, 450, 134-137.	1.8	76
4	Review Article: Recommended reading list of early publications on atomic layer depositionâ€"Outcome of the â€œVirtual Project on the History of ALDâ€• Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2017, 35, .	2.1	65
5	Electrical and structural characteristics of yttrium oxide films deposited by rf-magnetron sputtering on n-Si. Journal of Applied Physics, 2003, 94, 318-325.	2.5	60
6	La2Hf2O7 high-Î¤ gate dielectric grown directly on Si(001) by molecular-beam epitaxy. Applied Physics Letters, 2004, 85, 3205-3207.	3.3	57
7	Resistance switching in amorphous and crystalline binary oxides grown by electron beam evaporation and atomic layer deposition. Microelectronic Engineering, 2008, 85, 2414-2419.	2.4	55
8	Ru and RuO2 gate electrodes for advanced CMOS technology. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2004, 109, 117-121.	3.5	52
9	Effects of the oxygen precursor on the electrical and structural properties of HfO2 films grown by atomic layer deposition on Ge. Applied Physics Letters, 2005, 87, 112904.	3.3	52
10	Chlorine mobility during annealing in N2 in ZrO2 and HfO2 films grown by atomic layer deposition. Journal of Applied Physics, 2002, 92, 7675-7677.	2.5	48
11	High Temperature Thermal Conductivity of Amorphous Al₂<scp>O</scp>₃ Thin Films Grown by Low Temperature ALD. Advanced Engineering Materials, 2013, 15, 1046-1050.	3.5	48
12	High epitaxial quality Y2O3 high-Î¤ dielectric on vicinal Si(001) surfaces. Applied Physics Letters, 2002, 81, 3549-3551.	3.3	47
13	Reproducibility in X-ray reflectometry: results from the first world-wide round-robin experiment. Journal of Applied Crystallography, 2008, 41, 143-152.	4.5	47
14	Thermal and Electrical Characterization of Materials for Phase-Change Memory Cells. Journal of Chemical & Engineering Data, 2009, 54, 1698-1701.	1.9	47
15	Cubic-to-monoclinic phase transition during the epitaxial growth of crystalline Gd2O3 films on Ge(001) substrates. Applied Physics Letters, 2007, 90, 193511.	3.3	41
16	Solid-state dewetting of ultra-thin Au films on SiO₂and HfO₂. Nanotechnology, 2014, 25, 495603.	2.6	41
17	Atomic Layer Deposition of NiO Films on Si(100) Using Cyclopentadienyl-Type Compounds and Ozone as Precursors. Journal of the Electrochemical Society, 2008, 155, H807.	2.9	40
18	Effect of nitrogen doping on the thermal conductivity of GeTe thin films. Physica Status Solidi - Rapid Research Letters, 2013, 7, 1107-1111.	2.4	38

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19	Dielectric properties of Erâˆ'doped HfO2â€ˆ(Erâˆ¼15%) grown by atomic layer deposition for high-Î¹ gate stacks. Applied Physics Letters, 2010, 96, .	3.3	37
20	Structural and electrical characterization of ALCVD ZrO2 thin films on silicon. Journal of Non-Crystalline Solids, 2002, 303, 29-34.	3.1	35
21	Metal Organic Chemical Vapor Deposition of Phase Change Ge₁Sb₂Te₄ Nanowires. Nano Letters, 2012, 12, 1509-1515.	9.1	34
22	Hot-Wire Chemical Vapor Deposition of Chalcogenide Materials for Phase Change Memory Applications. Chemistry of Materials, 2008, 20, 3557-3559.	6.7	33
23	Dynamics of laser-induced phase switching in GeTe films. Journal of Applied Physics, 2011, 109, 123102.	2.5	33
24	Hardness, elastic modulus, and wear resistance of hafnium oxide-based films grown by atomic layer deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2016, 34, .	2.1	32
25	Trends of structural and electrical properties in atomic layer deposited HfO2 films. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2004, 109, 11-16.	3.5	31
26	Thermally induced permittivity enhancement in La-doped ZrO2 grown by atomic layer deposition on Ge(100). Applied Physics Letters, 2009, 95, 122902.	3.3	31
27	Si surface passivation by Al2O3 thin films deposited using a low thermal budget atomic layer deposition process. Applied Physics Letters, 2013, 102, .	3.3	30
28	Phase Stabilization of Al:HfO₂ Grown on In_xGa_{1â€“x}As Substrates (x = 0, 0.15, 0.53) via Trimethylaluminum-Based Atomic Layer Deposition. ACS Applied Materials & Interfaces, 2014, 6, 3455-3461.	8.0	25
29	Study of the interfaces in resistive switching NiO thin films deposited by both ALD and e-beam coupled with different electrodes (Si, Ni, Pt, W, TiN). Microelectronic Engineering, 2008, 85, 2425-2429.	2.4	24
30	Germanium diffusion during HfO2 growth on Ge by molecular beam epitaxy. Applied Physics Letters, 2006, 89, 122906.	3.3	22
31	Au-catalyzed self assembly of GeTe nanowires by MOCVD. Journal of Crystal Growth, 2011, 315, 152-156.	1.5	21
32	Chemical vapor deposition of chalcogenide materials for phase-change memories. Microelectronic Engineering, 2008, 85, 2338-2341.	2.4	20
33	Growth study of GexSbyTez deposited by MOCVD under nitrogen for non-volatile memory applications. Journal of Crystal Growth, 2008, 310, 5053-5057.	1.5	19
34	Ultraviolet optical near-fields of microspheres imprinted in phase change films. Applied Physics Letters, 2010, 96, 193108.	3.3	19
35	Large Spinâ€toâ€Charge Conversion at Room Temperature in Extended Epitaxial Sb₂Te₃ Topological Insulator Chemically Grown on Silicon. Advanced Functional Materials, 2022, 32, 2109361.	14.9	19
36	Au-catalyzed synthesis and characterisation of phase change Ge-doped Sbâ€“Te nanowires by MOCVD. Journal of Crystal Growth, 2013, 370, 323-327.	1.5	18

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37	Low power phase change memory switching of ultra-thin In3Sb1Te2 nanowires. Applied Physics Letters, 2016, 109, .	3.3	18
38	Mechanisms for Substrate-Enhanced Growth during the Early Stages of Atomic Layer Deposition of Alumina onto Silicon Nitride Surfaces. Chemistry of Materials, 2012, 24, 1080-1090.	6.7	17
39	Thermal resistance at Al-Ge2Sb2Te5 interface. Applied Physics Letters, 2013, 102, .	3.3	17
40	Atomic layer-deposited Alâ€“HfO2/SiO2 bi-layers towards 3D charge trapping non-volatile memory. Thin Solid Films, 2013, 533, 9-14.	1.8	16
41	Evolution of crystallographic ordering in Hf1â^'xAlxOy high-Î° dielectric deposited by atomic layer deposition. Applied Physics Letters, 2003, 83, 5271-5273.	3.3	15
42	Weak Antilocalization in Granular Sb₂Te₃ Thin Films Deposited by MOCVD. Physica Status Solidi - Rapid Research Letters, 2018, 12, 1800155.	2.4	15
43	Epitaxial and large area Sb₂Te₃ thin films on silicon by MOCVD. RSC Advances, 2020, 10, 19936-19942.	3.6	15
44	An accurate low-frequency model for the 3Ï‰ method. Journal of Applied Physics, 2007, 101, 104510.	2.5	14
45	XPS composition study of stacked Si oxide/Si nitride/Si oxide nanoâ€layers. Surface and Interface Analysis, 2012, 44, 1209-1213.	1.8	14
46	Effects of thermal treatments on chemical composition and electrical properties of ultra-thin Lu oxide layers on Si. Microelectronic Engineering, 2007, 84, 2263-2266.	2.4	13
47	Understanding of the thermal stability of the hafnium oxide/TiN stack via 2 â€œhigh kâ€•and 2 metal deposition techniques. Microelectronic Engineering, 2007, 84, 1886-1889.	2.4	13
48	The international VAMAS project on X-ray reflectivity measurements for evaluation of thin films and multilayers â€” Preliminary results from the second round-robin. Thin Solid Films, 2008, 516, 7962-7966.	1.8	13
49	Effect of a thin Ti interfacial layer on the thermal resistance of Ge2Sb2Te5-TiN stack. Applied Physics Letters, 2014, 105, .	3.3	13
50	A Novel Sb₂Te₃ Polymorph Stable at the Nanoscale. Chemistry of Materials, 2015, 27, 4368-4373.	6.7	13
51	Advanced protective coatings for reflectivity enhancement by low temperature atomic layer deposition of HfO2 on Al surfaces for micromirror applications. Sensors and Actuators A: Physical, 2018, 282, 124-131.	4.1	13
52	Study on the effect of plasma treatment on TiN films in N2/H2 atmosphere using x-ray reflectivity and secondary ion mass spectroscopy. Applied Physics Letters, 2002, 80, 512-514.	3.3	12
53	High-k Materials in Flash Memories. ECS Transactions, 2006, 1, 91-105.	0.5	12
54	Epitaxial phase of hafnium dioxide for ultrascaled electronics. Physical Review B, 2007, 76, .	3.2	12

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55	The interface between Gd2O3 films and Ge(001): A comparative study between molecular and atomic oxygen mediated growths. Journal of Applied Physics, 2007, 102, 034513.	2.5	12
56	Preparation of SrRuO3 films for advanced CMOS metal gates. Materials Science in Semiconductor Processing, 2004, 7, 265-269.	4.0	11
57	Application of the X-ray combined analysis to the study of lead titanate based ferroelectric thin films. Thin Solid Films, 2004, 450, 128-133.	1.8	11
58	Hot-wire chemical vapor growth and characterization of crystalline GeTe films. Journal of Crystal Growth, 2009, 311, 362-367.	1.5	11
59	Growth study and characterization of Inâ€“Sbâ€“Te compounds deposited onto different substrates by metalâ€“organic chemical vapour deposition. Thin Solid Films, 2013, 533, 66-69.	1.8	11
60	Structural and electrical analysis of Inâ€“Sbâ€“Teâ€based PCM cells. Physica Status Solidi - Rapid Research Letters, 2013, 7, 1009-1013.	2.4	11
61	Thermal properties of Inâ€“Sbâ€“Te films and interfaces for phase change memory devices. Microelectronic Engineering, 2014, 120, 3-8.	2.4	11
62	Protective coatings of hafnium dioxide by atomic layer deposition for microelectromechanical systems applications. Applied Surface Science, 2016, 368, 470-476.	6.1	11
63	Sub-1 nm Equivalent Oxide Thickness Al-HfO2 Trapping Layer with Excellent Thermal Stability and Retention for Nonvolatile Memory. ACS Applied Nano Materials, 2018, 1, 4633-4641.	5.0	11
64	Atomic Layer Deposition of Lu Silicate Films Using [(Me[sub 3]Si)[sub 2]N][sub 3]Lu. Journal of the Electrochemical Society, 2006, 153, F271.	2.9	10
65	Nondestructive diagnostics of high-Îº dielectrics for advanced electronic devices. Applied Physics Letters, 2006, 89, 183521.	3.3	10
66	Influence of lattice parameters on the dielectric constant of tetragonal ZrO2 and La-doped ZrO2 crystals in thin films deposited by atomic layer deposition on Ge(001). Applied Physics Letters, 2011, 99, 232907.	3.3	10
67	Highâ€Density Sb 2 Te 3 Nanopillars Arrays by Templated, Bottomâ€Up MOCVD Growth. Small, 2019, 15, 1901743.	10.0	10
68	ALD growth of ultra-thin Co layers on the topological insulator Sb2Te3. Nano Research, 2020, 13, 570-575.	10.4	10
69	Improving HfO₂-Based Resistive Switching Devices by Inserting a TaO_x Thin Film via Engineered In Situ Oxidation. ACS Applied Materials & Interfaces, 2022, 14, 24565-24574.	8.0	10
70	Self-annealing and aging effect characterization on copper seed thin films. Microelectronic Engineering, 2005, 82, 289-295.	2.4	9
71	Atomic oxygen-assisted molecular beam deposition of Gd2O3 films for ultra-scaled Ge-based electronic devices. Materials Science in Semiconductor Processing, 2008, 11, 236-240.	4.0	9
72	Process dependence of BTI reliability in advanced HK MG stacks. Microelectronics Reliability, 2009, 49, 982-988.	1.7	9

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73	Rare earth-based high-k materials for non-volatile memory applications. Microelectronic Engineering, 2010, 87, 290-293.	2.4	9
74	Ferromagnetic resonance of Co thin films grown by atomic layer deposition on the Sb2Te3 topological insulator. Journal of Magnetism and Magnetic Materials, 2020, 509, 166885.	2.3	9
75	Structural and electrical properties of Er-doped HfO2 and of its interface with Ge (001). Microelectronic Engineering, 2011, 88, 415-418.	2.4	8
76	Effect of Substrates and Thermal Treatments on Metalorganic Chemical Vapor Deposition-Grown Sb₂Te₃Thin Films. Crystal Growth and Design, 2021, 21, 5135-5144.	3.0	8
77	Temperature dependence of transient and steady-state gate currents in HfO2 capacitors. Applied Physics Letters, 2006, 89, 103504.	3.3	7
78	Performance of Topological Insulator (Sb₂Te₃)-Based Vertical Stacking Photodetector on n-Si Substrate. IEEE Transactions on Electron Devices, 2022, 69, 4342-4348.	3.0	7
79	Electronic properties of crystalline Ge1-xSbxTey thin films. Applied Physics Letters, 2012, 101, .	3.3	6
80	Vapor phase epitaxy of antimonene-like nanocrystals on germanium by an MOCVD process. Applied Surface Science, 2021, 535, 147729.	6.1	6
81	MOCVD Growth of GeTe/Sb2Te3 Coreâ€“Shell Nanowires. Coatings, 2021, 11, 718.	2.6	6
82	Improved Performance of In$_{0.53}$Ga$_{0.47}$As-Based Metalâ€“Oxideâ€“Semiconductor Capacitors with Al:ZrO$_{2}$ Gate Dielectric Grown by Atomic Layer Deposition. Applied Physics Express, 2011, 4, 094103.	2.4	5
83	Single-step Au-catalysed synthesis and microstructural characterization of coreâ€“shell Ge/Inâ€“Te nanowires by MOCVD. Materials Research Letters, 2018, 6, 29-35.	8.7	5
84	Fe/Sb₂Te₃ Interface Reconstruction through Mild Thermal Annealing. Advanced Materials Interfaces, 2020, 7, 2000905.	3.7	5
85	Phase Change Ge-Rich Geâ€“Sbâ€“Te/Sb2Te3 Core-Shell Nanowires by Metal Organic Chemical Vapor Deposition. Nanomaterials, 2021, 11, 3358.	4.1	5
86	Structural characterization of epitaxial Y2O3 on Si (0 0 1) and of the Y2O3/Si interface. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2004, 109, 47-51.	3.5	4
87	Electrical Characterization of Rare Earth Oxides Grown by Atomic Layer Deposition. , 0, , 203-223.		4
88	Structural and Chemical Investigation of Annealed Al2O3 Films for Interpoly Dielectric Application in Flash Memories. ECS Transactions, 2006, 3, 183-192.	0.5	4
89	Thermal Properties of In-Sb-Te Thin Films for Phase Change Memory Application. Advances in Science and Technology, 0, , .	0.2	4
90	Interface Study in a "Metal / High-k" Gate Stack: Tantalum Nitride on Hafnium Oxide. ECS Transactions, 2008, 16, 99-110.	0.5	3

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91	A Morphological, Chemical and Electrical Study of HfSiON Films for Inter Poly Dielectric Applications in Flash Memories. ECS Transactions, 2007, 11, 497-508.	0.5	2
92	Temperature-dependent thermal characterization of Ge₂Sb₂Te₅and related interfaces by the photothermal radiometry technique. Journal of Physics: Conference Series, 2010, 214, 012102.	0.4	2
93	Atomic Layer Deposition of Al-Doped ZrO2 Thin Films for Advanced Gate Stack on III-V Substrates. ECS Transactions, 2011, 35, 431-440.	0.5	1
94	Detection of the Tetragonal and Monoclinic Phases and their Role on the Dielectric Constant of Atomic Layer Deposited La-Doped ZrO2 Thin Films on Ge (001). ECS Transactions, 2011, 35, 481-490.	0.5	1
95	Identification of the temperature-dependent thermal boundary resistance at a metal-phase change material. Inverse Problems in Science and Engineering, 2012, 20, 941-950.	1.2	1
96	Interface Analysis of MOCVD Grown GeTe/Sb2Te3 and Ge-Rich Ge-Sb-Te/Sb2Te3 Core-Shell Nanowires. Nanomaterials, 2022, 12, 1623.	4.1	1