

Claudia Wiemer

List of Publications by Year in descending order

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papers

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201674

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2365
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#	ARTICLE	IF	CITATIONS
1	Large Spin-to-Charge Conversion at Room Temperature in Extended Epitaxial Sb ₂ Te ₃ Topological Insulator Chemically Grown on Silicon. <i>Advanced Functional Materials</i> , 2022, 32, 2109361.	14.9	19
2	Interface Analysis of MOCVD Grown GeTe/Sb ₂ Te ₃ and Ge-Rich Ge-Sb-Te/Sb ₂ Te ₃ Core-Shell Nanowires. <i>Nanomaterials</i> , 2022, 12, 1623.	4.1	1
3	Improving HfO ₂ -Based Resistive Switching Devices by Inserting a TaO _x Thin Film via Engineered In Situ Oxidation. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 24565-24574.	8.0	10
4	Performance of Topological Insulator (Sb ₂ Te ₃)-Based Vertical Stacking Photodetector on n-Si Substrate. <i>IEEE Transactions on Electron Devices</i> , 2022, 69, 4342-4348.	3.0	7
5	Vapor phase epitaxy of antimonene-like nanocrystals on germanium by an MOCVD process. <i>Applied Surface Science</i> , 2021, 535, 147729.	6.1	6
6	MOCVD Growth of GeTe/Sb ₂ Te ₃ Core-Shell Nanowires. <i>Coatings</i> , 2021, 11, 718.	2.6	6
7	Effect of Substrates and Thermal Treatments on Metalorganic Chemical Vapor Deposition-Grown Sb ₂ Te ₃ Thin Films. <i>Crystal Growth and Design</i> , 2021, 21, 5135-5144.	3.0	8
8	Phase Change Ge-Rich Ge-Sb-Te/Sb ₂ Te ₃ Core-Shell Nanowires by Metal Organic Chemical Vapor Deposition. <i>Nanomaterials</i> , 2021, 11, 3358.	4.1	5
9	Fe/Sb ₂ Te ₃ Interface Reconstruction through Mild Thermal Annealing. <i>Advanced Materials Interfaces</i> , 2020, 7, 2000905.	3.7	5
10	Epitaxial and large area Sb ₂ Te ₃ thin films on silicon by MOCVD. <i>RSC Advances</i> , 2020, 10, 19936-19942.	3.6	15
11	ALD growth of ultra-thin Co layers on the topological insulator Sb ₂ Te ₃ . <i>Nano Research</i> , 2020, 13, 570-575.	10.4	10
12	Ferromagnetic resonance of Co thin films grown by atomic layer deposition on the Sb ₂ Te ₃ topological insulator. <i>Journal of Magnetism and Magnetic Materials</i> , 2020, 509, 166885.	2.3	9
13	High-Density Sb ₂ Te ₃ Nanopillars Arrays by Templated, Bottom-Up MOCVD Growth. <i>Small</i> , 2019, 15, 1901743.	10.0	10
14	Single-step Au-catalysed synthesis and microstructural characterization of core-shell Ge/InTe nanowires by MOCVD. <i>Materials Research Letters</i> , 2018, 6, 29-35.	8.7	5
15	Advanced protective coatings for reflectivity enhancement by low temperature atomic layer deposition of HfO ₂ on Al surfaces for micromirror applications. <i>Sensors and Actuators A: Physical</i> , 2018, 282, 124-131.	4.1	13
16	Sub-1 nm Equivalent Oxide Thickness Al-HfO ₂ Trapping Layer with Excellent Thermal Stability and Retention for Nonvolatile Memory. <i>ACS Applied Nano Materials</i> , 2018, 1, 4633-4641.	5.0	11
17	Weak Antilocalization in Granular Sb ₂ Te ₃ Thin Films Deposited by MOCVD. <i>Physica Status Solidi - Rapid Research Letters</i> , 2018, 12, 1800155.	2.4	15
18	Review Article: Recommended reading list of early publications on atomic layer deposition—Outcome of the Virtual Project on the History of ALD. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2017, 35, .	2.1	65

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19	Hardness, elastic modulus, and wear resistance of hafnium oxide-based films grown by atomic layer deposition. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2016, 34, .	2.1	32
20	Low power phase change memory switching of ultra-thin In ₃ Sb ₁ Te ₂ nanowires. <i>Applied Physics Letters</i> , 2016, 109, .	3.3	18
21	Protective coatings of hafnium dioxide by atomic layer deposition for microelectromechanical systems applications. <i>Applied Surface Science</i> , 2016, 368, 470-476.	6.1	11
22	A Novel Sb ₂ Te ₃ Polymorph Stable at the Nanoscale. <i>Chemistry of Materials</i> , 2015, 27, 4368-4373.	6.7	13
23	Effect of a thin Ti interfacial layer on the thermal resistance of Ge ₂ Sb ₂ Te ₅ -TiN stack. <i>Applied Physics Letters</i> , 2014, 105, .	3.3	13
24	Solid-state dewetting of ultra-thin Au films on SiO ₂ and HfO ₂ . <i>Nanotechnology</i> , 2014, 25, 495603.	2.6	41
25	Thermal properties of In ₂ Sb ₂ Te films and interfaces for phase change memory devices. <i>Microelectronic Engineering</i> , 2014, 120, 3-8.	2.4	11
26	Phase Stabilization of Al:HfO ₂ Grown on In _x Ga _{1-x} As Substrates ($x = 0, 0.15, 0.53$) via Trimethylaluminum-Based Atomic Layer Deposition. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 3455-3461.	8.0	25
27	High Temperature Thermal Conductivity of Amorphous Al ₂ O ₃ Thin Films Grown by Low Temperature ALD. <i>Advanced Engineering Materials</i> , 2013, 15, 1046-1050.	3.5	48
28	Growth study and characterization of In ₂ Sb ₂ Te compounds deposited onto different substrates by metal-organic chemical vapour deposition. <i>Thin Solid Films</i> , 2013, 533, 66-69.	1.8	11
29	Au-catalyzed synthesis and characterisation of phase change Ge-doped Sb ₂ Te nanowires by MOCVD. <i>Journal of Crystal Growth</i> , 2013, 370, 323-327.	1.5	18
30	Atomic layer-deposited Al ₂ O ₃ /SiO ₂ bi-layers towards 3D charge trapping non-volatile memory. <i>Thin Solid Films</i> , 2013, 533, 9-14.	1.8	16
31	Si surface passivation by Al ₂ O ₃ thin films deposited using a low thermal budget atomic layer deposition process. <i>Applied Physics Letters</i> , 2013, 102, .	3.3	30
32	Thermal resistance at Al-Ge ₂ Sb ₂ Te ₅ interface. <i>Applied Physics Letters</i> , 2013, 102, .	3.3	17
33	Structural and electrical analysis of In ₂ Sb ₂ Te-based PCM cells. <i>Physica Status Solidi - Rapid Research Letters</i> , 2013, 7, 1009-1013.	2.4	11
34	Effect of nitrogen doping on the thermal conductivity of GeTe thin films. <i>Physica Status Solidi - Rapid Research Letters</i> , 2013, 7, 1107-1111.	2.4	38
35	Electronic properties of crystalline Ge _{1-x} Sb _x Te _y thin films. <i>Applied Physics Letters</i> , 2012, 101, .	3.3	6
36	Identification of the temperature-dependent thermal boundary resistance at a metal-phase change material. <i>Inverse Problems in Science and Engineering</i> , 2012, 20, 941-950.	1.2	1

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37	Mechanisms for Substrate-Enhanced Growth during the Early Stages of Atomic Layer Deposition of Alumina onto Silicon Nitride Surfaces. <i>Chemistry of Materials</i> , 2012, 24, 1080-1090.	6.7	17
38	Metal Organic Chemical Vapor Deposition of Phase Change Ge ₁ Sb ₂ Te ₄ Nanowires. <i>Nano Letters</i> , 2012, 12, 1509-1515.	9.1	34
39	XPS composition study of stacked Si oxide/Si nitride/Si oxide nano-layers. <i>Surface and Interface Analysis</i> , 2012, 44, 1209-1213.	1.8	14
40	Dynamics of laser-induced phase switching in GeTe films. <i>Journal of Applied Physics</i> , 2011, 109, 123102.	2.5	33
41	Structural and electrical properties of Er-doped HfO ₂ and of its interface with Ge (001). <i>Microelectronic Engineering</i> , 2011, 88, 415-418.	2.4	8
42	Au-catalyzed self assembly of GeTe nanowires by MOCVD. <i>Journal of Crystal Growth</i> , 2011, 315, 152-156.	1.5	21
43	Influence of lattice parameters on the dielectric constant of tetragonal ZrO ₂ and La-doped ZrO ₂ crystals in thin films deposited by atomic layer deposition on Ge(001). <i>Applied Physics Letters</i> , 2011, 99, 232907.	3.3	10
44	Improved Performance of In _{0.53} Ga _{0.47} As-Based Metal-Oxide-Semiconductor Capacitors with Al ₂ ZrO ₃ Gate Dielectric Grown by Atomic Layer Deposition. <i>Applied Physics Express</i> , 2011, 4, 094103.	2.4	5
45	Atomic Layer Deposition of Al-Doped ZrO ₂ Thin Films for Advanced Gate Stack on III-V Substrates. <i>ECS Transactions</i> , 2011, 35, 431-440.	0.5	1
46	Detection of the Tetragonal and Monoclinic Phases and their Role on the Dielectric Constant of Atomic Layer Deposited La-Doped ZrO ₂ Thin Films on Ge (001). <i>ECS Transactions</i> , 2011, 35, 481-490.	0.5	1
47	Temperature-dependent thermal characterization of Ge ₂ Sb ₂ Te ₅ and related interfaces by the photothermal radiometry technique. <i>Journal of Physics: Conference Series</i> , 2010, 214, 012102.	0.4	2
48	Rare earth-based high-k materials for non-volatile memory applications. <i>Microelectronic Engineering</i> , 2010, 87, 290-293.	2.4	9
49	Ultraviolet optical near-fields of microspheres imprinted in phase change films. <i>Applied Physics Letters</i> , 2010, 96, 193108.	3.3	19
50	Dielectric properties of Er-doped HfO ₂ (Er ³⁺ 15%) grown by atomic layer deposition for high- κ gate stacks. <i>Applied Physics Letters</i> , 2010, 96, .	3.3	37
51	Process dependence of BTI reliability in advanced HK MG stacks. <i>Microelectronics Reliability</i> , 2009, 49, 982-988.	1.7	9
52	Hot-wire chemical vapor growth and characterization of crystalline GeTe films. <i>Journal of Crystal Growth</i> , 2009, 311, 362-367.	1.5	11
53	Thermally induced permittivity enhancement in La-doped ZrO ₂ grown by atomic layer deposition on Ge(100). <i>Applied Physics Letters</i> , 2009, 95, 122902.	3.3	31
54	Thermal and Electrical Characterization of Materials for Phase-Change Memory Cells. <i>Journal of Chemical & Engineering Data</i> , 2009, 54, 1698-1701.	1.9	47

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55	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
56	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
57	Chemical vapor deposition of chalcogenide materials for phase-change memories. Microelectronic Engineering, 2008, 85, 2338-2341.	2.4	20
58	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
59	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
60	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
61	The international VAMAS project on X-ray reflectivity measurements for evaluation of thin films and multilayers – Preliminary results from the second round-robin. Thin Solid Films, 2008, 516, 7962-7966.	1.8	13
62	Hot-Wire Chemical Vapor Deposition of Chalcogenide Materials for Phase Change Memory Applications. Chemistry of Materials, 2008, 20, 3557-3559.	6.7	33
63	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
64	Interface Study in a "Metal / High-k" Gate Stack: Tantalum Nitride on Hafnium Oxide. ECS Transactions, 2008, 16, 99-110.	0.5	3
65	Epitaxial phase of hafnium dioxide for ultrascaled electronics. Physical Review B, 2007, 76, .	3.2	12
66	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
67	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
68	An accurate low-frequency model for the 3i% method. Journal of Applied Physics, 2007, 101, 104510.	2.5	14
69	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
70	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
71	Understanding of the thermal stability of the hafnium oxide/TiN stack via 2 –high k – and 2 metal deposition techniques. Microelectronic Engineering, 2007, 84, 1886-1889.	2.4	13
72	Ozone-Based Atomic Layer Deposition of Alumina from TMA: Growth, Morphology, and Reaction Mechanism. Chemistry of Materials, 2006, 18, 3764-3773.	6.7	161

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73	Structural and Chemical Investigation of Annealed Al ₂ O ₃ Films for Interpoly Dielectric Application in Flash Memories. ECS Transactions, 2006, 3, 183-192.	0.5	4
74	High-k Materials in Flash Memories. ECS Transactions, 2006, 1, 91-105.	0.5	12
75	Atomic Layer Deposition of Lu Silicate Films Using [(Me ₃ Si) ₂ N] ₃ Lu. Journal of the Electrochemical Society, 2006, 153, F271.	2.9	10
76	Nondestructive diagnostics of high- $\hat{\epsilon}$ dielectrics for advanced electronic devices. Applied Physics Letters, 2006, 89, 183521.	3.3	10
77	Germanium diffusion during HfO ₂ growth on Ge by molecular beam epitaxy. Applied Physics Letters, 2006, 89, 122906.	3.3	22
78	Temperature dependence of transient and steady-state gate currents in HfO ₂ capacitors. Applied Physics Letters, 2006, 89, 103504.	3.3	7
79	Self-annealing and aging effect characterization on copper seed thin films. Microelectronic Engineering, 2005, 82, 289-295.	2.4	9
80	Effects of the oxygen precursor on the electrical and structural properties of HfO ₂ films grown by atomic layer deposition on Ge. Applied Physics Letters, 2005, 87, 112904.	3.3	52
81	Atomic-layer deposition of Lu ₂ O ₃ . Applied Physics Letters, 2004, 85, 630-632.	3.3	100
82	La ₂ Hf ₂ O ₇ high- $\hat{\epsilon}$ gate dielectric grown directly on Si(001) by molecular-beam epitaxy. Applied Physics Letters, 2004, 85, 3205-3207.	3.3	57
83	Trends of structural and electrical properties in atomic layer deposited HfO ₂ films. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2004, 109, 11-16.	3.5	31
84	Ru and RuO ₂ gate electrodes for advanced CMOS technology. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2004, 109, 117-121.	3.5	52
85	Preparation of SrRuO ₃ films for advanced CMOS metal gates. Materials Science in Semiconductor Processing, 2004, 7, 265-269.	4.0	11
86	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
87	Combining grazing incidence X-ray diffraction and X-ray reflectivity for the evaluation of the structural evolution of HfO ₂ thin films with annealing. Thin Solid Films, 2004, 450, 134-137.	1.8	76
88	Structural characterization of epitaxial Y ₂ O ₃ on Si (0 0 1) and of the Y ₂ O ₃ /Si interface. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2004, 109, 47-51.	3.5	4
89	Evolution of crystallographic ordering in Hf _{1-x} Al _x O _y high- $\hat{\epsilon}$ dielectric deposited by atomic layer deposition. Applied Physics Letters, 2003, 83, 5271-5273.	3.3	15
90	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

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91	High epitaxial quality Y2O3 high- $\hat{\epsilon}$ dielectric on vicinal Si(001) surfaces. Applied Physics Letters, 2002, 81, 3549-3551.	3.3	47
92	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
93	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
94	Structural and electrical characterization of ALCVD ZrO2 thin films on silicon. Journal of Non-Crystalline Solids, 2002, 303, 29-34.	3.1	35
95	Electrical Characterization of Rare Earth Oxides Grown by Atomic Layer Deposition. , 0, , 203-223.		4
96	Thermal Properties of In-Sb-Te Thin Films for Phase Change Memory Application. Advances in Science and Technology, 0, , .	0.2	4