Tony Schenk

List of Publications by Year
in descending order

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Version: 2024-02-01

59 papers	6,077 citations	159585 30 h-index	223800 46 g-index
59 all docs	59 docs citations	59 times ranked	2445 citing authors

#	Article	IF	Citations
1	Influence of substrate stress on in-plane and out-of-plane ferroelectric properties of PZT films. Journal of Applied Physics, 2022, 131, 014101.	2.5	5
2	Highly conductive low-temperature combustion-derived transparent indium tin oxide thin film. Materials Advances, 2021, 2, 700-705.	5.4	9
3	Enhancement of ferroelectricity and orientation in solution-derived hafnia thin films through heterogeneous grain nucleation. Applied Physics Letters, 2021, 118, .	3.3	11
4	Emerging Fluoriteâ€•and Wurtziteâ€Type Ferroelectrics: From (Hf,Zr)O₂ to AlN and Related Materials. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2100201.	2.4	2
5	A New Generation of Memory Devices Enabled by Ferroelectric Hafnia and Zirconia. , 2021, , .		11
6	Influence of tensile vs. compressive stress on fatigue of lead zirconate titanate thin films. Journal of the European Ceramic Society, 2021, 41, 6991-6999.	5.7	10
7	Toward Thick Piezoelectric HfO₂â€Based Films. Physica Status Solidi - Rapid Research Letters, 2020, 14, 1900626.	2.4	41
8	Memory technologyâ€"a primer for material scientists. Reports on Progress in Physics, 2020, 83, 086501.	20.1	64
9	Fully Transparent Frictionâ€Modulation Haptic Device Based on Piezoelectric Thin Film. Advanced Functional Materials, 2020, 30, 2003539.	14.9	25
10	On the importance of pyrolysis for inkjet-printed oxide piezoelectric thin films. Journal of Materials Chemistry C, 2020, 8, 3740-3747.	5.5	7
11	Effect of Dopant Ordering on the Stability of Ferroelectric Hafnia. Physica Status Solidi - Rapid Research Letters, 2020, 14, 2000047.	2.4	15
12	AFE-like Hysteresis Loops from Doped HfO₂: Field Induced Phase Changes and Depolarization Fields. , 2020, , .		2
13	On the Origin of the Large Remanent Polarization in La:HfO₂. Advanced Electronic Materials, 2019, 5, 1900303.	5.1	85
14	Fluid Imprint and Inertial Switching in Ferroelectric La:HfO₂ Capacitors. ACS Applied Materials & Interfaces, 2019, 11, 35115-35121.	8.0	58
15	Local structural investigation of hafnia-zirconia polymorphs in powders and thin films by X-ray absorption spectroscopy. Acta Materialia, 2019, 180, 158-169.	7.9	19
16	Dopants in Atomic Layer Deposited HfO2 Thin Films. , 2019, , 49-74.		13
17	Impact of Electrodes on the Ferroelectric Properties. , 2019, , 341-364.		3
18	Effect of Surface/Interface Energy and Stress on the Ferroelectric Properties. , 2019, , 145-172.		5

#	Article	IF	Citations
19	Piezoresponse Force Microscopy (PFM). , 2019, , 291-316.		4
20	Field Cycling Behavior of Ferroelectric HfO2-Based Capacitors. , 2019, , 381-398.		4
21	Pyroelectricity of silicon-doped hafnium oxide thin films. Applied Physics Letters, 2018, 112, 142901.	3.3	42
22	Origin of Temperatureâ€Dependent Ferroelectricity in Siâ€Doped HfO₂. Advanced Electronic Materials, 2018, 4, 1700489.	5.1	67
23	Lanthanum-Doped Hafnium Oxide: A Robust Ferroelectric Material. Inorganic Chemistry, 2018, 57, 2752-2765.	4.0	241
24	Atomic Structure of Domain and Interphase Boundaries in Ferroelectric HfO₂. Advanced Materials Interfaces, 2018, 5, 1701258.	3.7	114
25	Physical Approach to Ferroelectric Impedance Spectroscopy: The Rayleigh Element. Physical Review Applied, 2018, 10, .	3.8	14
26	Effect of Annealing Ferroelectric HfO₂ Thin Films: In Situ, High Temperature Xâ€Ray Diffraction. Advanced Electronic Materials, 2018, 4, 1800091.	5.1	81
27	Nanoscopic studies of domain structure dynamics in ferroelectric La:HfO2 capacitors. Applied Physics Letters, 2018, 112, .	3.3	85
28	Genuinely Ferroelectric Sub-1-Volt-Switchable Nanodomains in Hf_{<i>x</i>}Zr_(1â€“<i>x</i>)O₂ Ultrathin Capacitors. ACS Applied Materials & Interfaces, 2018, 10, 30514-30521.	8.0	36
29	Domain Pinning: Comparison of Hafnia and PZT Based Ferroelectrics. Advanced Electronic Materials, 2017, 3, 1600505.	5.1	99
30	A comprehensive study on the structural evolution of HfO₂thin films doped with various dopants. Journal of Materials Chemistry C, 2017, 5, 4677-4690.	5.5	250
31	Ferroelectric and piezoelectric properties of Hf1-xZrxO2 and pure ZrO2 films. Applied Physics Letters, 2017, 110, .	3.3	141
32	Effect of acceptor doping on phase transitions of HfO2 thin films for energy-related applications. Nano Energy, 2017, 36, 381-389.	16.0	64
33	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
34	Silicon-doped hafnium oxide anti-ferroelectric thin films for energy storage. Journal of Applied Physics, 2017, 122, .	2.5	93
35	Si Doped Hafnium Oxideâ€"A â€œFragileâ€•Ferroelectric System. Advanced Electronic Materials, 2017, 3, 1700131.	5.1	136
36	Insights into antiferroelectrics from first-order reversal curves. Applied Physics Letters, 2017, 111, .	3.3	25

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37	Physical Mechanisms behind the Fieldâ€Cycling Behavior of HfO₂â€Based Ferroelectric Capacitors. Advanced Functional Materials, 2016, 26, 4601-4612.	14.9	586
38	Impact of charge trapping on the ferroelectric switching behavior of doped HfO₂. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 270-273.	1.8	28
39	Structural Changes Underlying Fieldâ€Cycling Phenomena in Ferroelectric HfO₂ Thin Films. Advanced Electronic Materials, 2016, 2, 1600173.	5.1	301
40	Impact of field cycling on HfO₂ based non-volatile memory devices. , 2016, , .		6
41	Comparison of hafnia and PZT based ferroelectrics for future non-volatile FRAM applications. , 2016, , .		21
42	Evidence of single domain switching in hafnium oxide based FeFETs: Enabler for multi-level FeFET memory cells. , 2015, , .		93
43	The Rayleigh law in silicon doped hafnium oxide ferroelectric thin films. Physica Status Solidi - Rapid Research Letters, 2015, 9, 589-593.	2.4	10
44	Correspondence - Dynamic leakage current compensation revisited. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2015, 62, 596-599.	3.0	10
45	Complex Internal Bias Fields in Ferroelectric Hafnium Oxide. ACS Applied Materials & Interfaces, 2015, 7, 20224-20233.	8.0	200
46	On the structural origins of ferroelectricity in HfO2 thin films. Applied Physics Letters, 2015, 106, .	3.3	447
47	Low Temperature Compatible Hafnium Oxide Based Ferroelectrics. Ferroelectrics, 2015, 480, 16-23.	0.6	24
48	Stabilizing the ferroelectric phase in doped hafnium oxide. Journal of Applied Physics, 2015, 118, .	2.5	424
49	Electric field and temperature scaling of polarization reversal in silicon doped hafnium oxide ferroelectric thin films. Acta Materialia, 2015, 99, 240-246.	7.9	89
50	Impact of different dopants on the switching properties of ferroelectric hafniumoxide. Japanese Journal of Applied Physics, 2014, 53, 08LE02.	1.5	318
51	About the deformation of ferroelectric hystereses. Applied Physics Reviews, 2014, 1, 041103.	11.3	159
52	Film properties of low temperature HfO2 grown with H2O, O3, or remote O2-plasma. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2014, 32, .	2.1	19
53	Electric Field Cycling Behavior of Ferroelectric Hafnium Oxide. ACS Applied Materials & Interfaces, 2014, 6, 19744-19751.	8.0	154
54	Ferroelectricity in Siâ€Doped HfO₂ Revealed: A Binary Leadâ€Free Ferroelectric. Advanced Materials, 2014, 26, 8198-8202.	21.0	147

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55	Identification of the ferroelectric switching process and dopant-dependent switching properties in orthorhombic HfO2: A first principles insight. Applied Physics Letters, 2014, 104, .	3.3	183
56	Ferroelectric hafnium oxide: A CMOS-compatible and highly scalable approach to future ferroelectric memories. , 2013, , .		271
57	Strontium doped hafnium oxide thin films: Wide process window for ferroelectric memories. , 2013, , .		84
58	Wake-up effects in Si-doped hafnium oxide ferroelectric thin films. Applied Physics Letters, 2013, 103, .	3.3	309
59	Doped Hafnium Oxide â€" An Enabler for Ferroelectric Field Effect Transistors. Advances in Science and Technology, 0, , .	0.2	64