Holger von Wenckstern

List of Publications by Year
in descending order

161 papers	5,575 citations	94269 37 h-index	95083 68 g-index
163 all docs	163 docs citations	163 times ranked	4996 citing authors

#	Article	IF	Citations
1	High electron mobility of epitaxial ZnO thin films on c-plane sapphire grown by multistep pulsed-laser deposition. Applied Physics Letters, 2003, 82, 3901-3903.	1.5	596
2	Cuprous iodide - a p-type transparent semiconductor: history and novel applications. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 1671-1703.	0.8	178
3	Groupâ€III Sesquioxides: Growth, Physical Properties and Devices. Advanced Electronic Materials, 2017, 3, 1600350.	2.6	156
4	Mean barrier height of Pd Schottky contacts on ZnO thin films. Applied Physics Letters, 2006, 88, 092102.	1.5	154
5	Optical and electrical properties of epitaxial (Mg,Cd)xZn1âˆ’xO, ZnO, and ZnO:(Ga,Al) thin films on c-plane sapphire grown by pulsed laser deposition. Solid-State Electronics, 2003, 47, 2205-2209.	0.8	140
6	Recent Progress on ZnOâ€Based Metalâ€Semiconductor Fieldâ€Effect Transistors and Their Application in Transparent Integrated Circuits. Advanced Materials, 2010, 22, 5332-5349.	11.1	140
7	Defects in virgin andN+-implanted ZnO single crystals studied by positron annihilation, Hall effect, and deep-level transient spectroscopy. Physical Review B, 2006, 74, .	1.1	135
8	Transparent <i>p</i>-CuI/<i>n</i>-ZnO heterojunction diodes. Applied Physics Letters, 2013, 102, .	1.5	135
9	Transparent semiconducting oxides: materials and devices. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 1437-1449.	0.8	129
10	Optical signatures of deep level defects in Ga2O3. Applied Physics Letters, 2018, 112, .	1.5	113
11	Determination of the mean and the homogeneous barrier height of Cu Schottky contacts on heteroepitaxial Î²â€Ga₂O₃ thin films grown by pulsed laser deposition. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 40-47.	0.8	111
12	Phosphorus acceptor doped ZnO nanowires prepared by pulsed-laser deposition. Nanotechnology, 2007, 18, 455707.	1.3	109
13	Lateral homogeneity of Schottky contacts on n-type ZnO. Applied Physics Letters, 2004, 84, 79-81.	1.5	108
14	Epitaxial stabilization of pseudomorphic Î±-Ga₂O₃on sapphire (0001). Applied Physics Express, 2015, 8, 011101.	1.1	104
15	Tin-assisted heteroepitaxial PLD-growth of Îº-Ga2O3 thin films with high crystalline quality. APL Materials, 2019, 7, .	2.2	98
16	Control of the conductivity of Siâ€doped Î²â€<scp>G</scp>a₂<scp>O</scp>₃ thin films via growth temperature and pressure. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 34-39.	0.8	92
17	Anionic and cationic substitution in ZnO. Progress in Solid State Chemistry, 2009, 37, 153-172.	3.9	85
18	Oxide bipolar electronics: materials, devices and circuits. Journal Physics D: Applied Physics, 2016, 49, 213001.	1.3	83

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19	Lattice parameters and Raman-active phonon modes of <i>Î²</i>-(Al<i>x</i>Ga1âˆ’<i>x</i>)2O3. Journal of Applied Physics, 2015, 117, .	1.1	75
20	Properties of reactively sputtered Ag, Au, Pd, and Pt Schottky contacts on n-type ZnO. Journal of Vacuum Science & Technology B, 2009, 27, 1769.	1.3	73
21	Electrical and magnetic properties of RE-doped ZnO thin films (RE = Gd, Nd). Superlattices and Microstructures, 2007, 42, 231-235.	1.4	71
22	Deep acceptor states in ZnO single crystals. Applied Physics Letters, 2006, 89, 092122.	1.5	67
23	ZnO metal-semiconductor field-effect transistors with Ag-Schottky gates. Applied Physics Letters, 2008, 92, 192108.	1.5	66
24	Correlation of pre-breakdown sites and bulk defects in multicrystalline silicon solar cells. Physica Status Solidi - Rapid Research Letters, 2009, 3, 70-72.	1.2	62
25	Lattice parameters and Raman-active phonon modes of (In<i>x</i>Ga1â€“<i>x</i>)2O3 for <i>x</i>â€‰<â€‰0.4. Journal of Applied Physics, 2014, 116, .	1.1	59
26	Interface Recombination Current in Type II Heterostructure Bipolar Diodes. ACS Applied Materials & Interfaces, 2014, 6, 14785-14789.	4.0	57
27	Defects in hydrothermally grown bulk ZnO. Applied Physics Letters, 2007, 91, .	1.5	53
28	Donor-like defects in ZnO substrate materials and ZnO thin films. Applied Physics A: Materials Science and Processing, 2007, 88, 135-139.	1.1	49
29	pâ€type conducting ZnO:P microwires prepared by direct carbothermal growth. Physica Status Solidi - Rapid Research Letters, 2008, 2, 37-39.	1.2	47
30	Strain distribution in bent ZnO microwires. Applied Physics Letters, 2011, 98, 031105.	1.5	46
31	Highly rectifying p-ZnCo₂O₄/n-ZnO heterojunction diodes. Applied Physics Letters, 2014, 104, 022104.	1.5	45
32	All Amorphous Oxide Bipolar Heterojunction Diodes from Abundant Metals. Advanced Electronic Materials, 2015, 1, 1400023.	2.6	45
33	Comparison of Schottky contacts on Î²-gallium oxide thin films and bulk crystals. Applied Physics Express, 2015, 8, 121102.	1.1	44
34	Homoepitaxy of ZnO by pulsed-laser deposition. Physica Status Solidi - Rapid Research Letters, 2007, 1, 129-131.	1.2	41
35	High mobility, highly transparent, smooth, <i>p</i>-type CuI thin films grown by pulsed laser deposition. APL Materials, 2020, 8, .	2.2	41
36	Identification of pre-breakdown mechanism of silicon solar cells at low reverse voltages. Applied Physics Letters, 2010, 97, .	1.5	39

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37	Room-temperature ferromagnetic Mn-alloyed ZnO films obtained by pulsed laser deposition. Journal of Magnetism and Magnetic Materials, 2006, 307, 212-221.	1.0	38
38	Visible-blind and solar-blind ultraviolet photodiodes based on (In<i>x</i>Ga1âˆ’<i>x</i>)2O3. Applied Physics Letters, 2016, 108, .	1.5	38
39	Epitaxial stabilization of single phase <i>Î²</i>-(In<i>x</i>Ga1âˆ’<i>x</i>)2O3 thin films up to <i>x</i> = 0.28 on c-sapphire and <i>Î²</i>-Ga2O3(001) templates by tin-assisted VCCS-PLD. APL Materials, 2019, 7, .	2.2	38
40	SnO/<i>Î²</i>-Ga2O3 vertical <i>pn</i> heterojunction diodes. Applied Physics Letters, 2020, 117, .	1.5	38
41	A comparison between ZnO films doped with 3d and 4f magnetic ions. Thin Solid Films, 2007, 515, 8761-8763.	0.8	36
42	Temperature-Dependent Properties of Nearly Ideal ZnO Schottky Diodes. IEEE Transactions on Electron Devices, 2009, 56, 2160-2164.	1.6	34
43	Wavelength selective metal-semiconductor-metal photodetectors based on (Mg,Zn)O-heterostructures. Applied Physics Letters, 2011, 99, 083502.	1.5	34
44	Structural, optical, and electrical properties of orthorhombic Îº-(In<i>x</i>Ga1âˆ’<i>x</i>)2O3 thin films. APL Materials, 2019, 7, .	2.2	34
45	Rectifying semiconductor-ferroelectric polarization loops and offsets in Ptâ€“BaTiO3â€“ZnOâ€“Pt thin film capacitor structures. Thin Solid Films, 2005, 486, 153-157.	0.8	33
46	Morphological, structural and electrical investigations on non-polar a-plane ZnO epilayers. Journal of Crystal Growth, 2010, 312, 2078-2082.	0.7	33
47	Method of choice for fabrication of high-quality ZnO-based Schottky diodes. Journal of Applied Physics, 2014, 116, 194506.	1.1	33
48	Monolithic Multichannel Ultraviolet Photodiodes Based on (Mg,Zn)O Thin Films With Continuous Composition Spreads. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 106-111.	1.9	33
49	Formation of a two-dimensional electron gas in ZnO/MgZnO single heterostructures and quantum wells. Thin Solid Films, 2009, 518, 1048-1052.	0.8	32
50	Optical properties of homo- and heteroepitaxial single quantum wells grown by pulsed-laser deposition. Journal of Luminescence, 2010, 130, 520-526.	1.5	32
51	Electronic properties of defects in pulsed-laser deposition grown ZnO with levels at 300 and 370meV below the conduction band. Physica B: Condensed Matter, 2007, 401-402, 378-381.	1.3	30
52	pnâ€Heterojunction Diodes with nâ€Type In₂O₃. Advanced Electronic Materials, 2015, 1, 1400026.	2.6	30
53	Epitaxial <i>Î²</i>-(Al<i>x</i>Ga1âˆ’<i>x</i>)2O3 thin films and heterostructures grown by tin-assisted VCCS-PLD. APL Materials, 2019, 7, .	2.2	30
54	Photocurrent spectroscopy of deep levels in ZnO thin films. Physical Review B, 2007, 76, .	1.1	29

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55	Tungsten Oxide as a Gate Dielectric for Highly Transparent and Temperatureâ€Stable Zincâ€Oxideâ€Based Thinâ€Film Transistors. Advanced Materials, 2011, 23, 5383-5386.	11.1	29
56	Influence of Oxygen Deficiency on the Rectifying Behavior of Transparent-Semiconducting-Oxideâ€"Metal Interfaces. Physical Review Applied, 2018, 9, .	1.5	29
57	ZnO-Based n-Channel Junction Field-Effect Transistor With Room-Temperature-Fabricated Amorphous p-Type <formula formulatype="inline"><tex Notation="TeX">$hbox{ZnCo}_{2}hbox{O}_{4}$$</tex></formula> Gate. IEEE Electron Device Letters, 2012, 33, 676-678.	2.2	28
58	High electron mobility of phosphorous-doped homoepitaxial ZnO thin films grown by pulsed-laser deposition. Journal of Applied Physics, 2008, 104, 013708.	1.1	27
59	Energy-selective multichannel ultraviolet photodiodes based on (Mg,Zn)O. Applied Physics Letters, 2013, 103, 171111.	1.5	27
60	Electrical Properties of Vertical pâ€NiO/nâ€Ga 2 O 3 and pâ€ZnCo 2 O 4 /nâ€Ga 2 O 3 pnâ€Heterodiodes. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1800729.	0.8	27
61	Electrical properties of ZnO thin films and optical properties of ZnO-based nanostructures. Superlattices and Microstructures, 2005, 38, 317-328.	1.4	26
62	Suppression of Grain Boundary Scattering in Multifunctional pâ€Type Transparent Î³â€CuI Thin Films due to Interface Tunneling Currents. Advanced Materials Interfaces, 2018, 5, 1701411.	1.9	26
63	Solubility limit and material properties of a Îº-(AlxGa1âˆ'x)2O3 thin film with a lateral cation gradient on (00.1)Al2O3 by tin-assisted PLD. APL Materials, 2020, 8, 021103.	2.2	26
64	A Review of the Segmentedâ€Target Approach to Combinatorial Material Synthesis by Pulsedâ€Laser Deposition. Physica Status Solidi (B): Basic Research, 2020, 257, 1900626.	0.7	26
65	Properties of phosphorus doped ZnO. Applied Physics A: Materials Science and Processing, 2007, 88, 125-128.	1.1	25
66	Characterization of the postjunctional Î± 2C -adrenoceptor mediating vasoconstriction to UK14304 in porcine pulmonary veins. British Journal of Pharmacology, 2007, 151, 186-194.	2.7	24
67	Realization of highly rectifying Schottky barrier diodes and <i>pn</i> heterojunctions on <i>Îº</i>-Ga2O3 by overcoming the conductivity anisotropy. Journal of Applied Physics, 2021, 130, .	1.1	24
68	Growth, structural and optical properties of coherent <i>Îº</i>-(Al<i>x</i>Ga1âˆ'<i>x</i>)2O3/<i>Îº</i>-Ga2O3 quantum well superlattice heterostructures. APL Materials, 2020, 8, .	2.2	24
69	Control of phase formation of (Al x Ga1â€‰âˆ'â€‰x)2O3 thin films on c-plane Al2O3. Journal Physics D: Applied Physics, 2020, 53, 485105.	1.3	24
70	Comparison of ZnO-Based JFET, MESFET, and MISFET. IEEE Transactions on Electron Devices, 2013, 60, 1828-1833.	1.6	22
71	Schottky barrier diodes based on room temperature fabricated amorphous zinc tin oxide thin films. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1700210.	0.8	22
72	Room-temperature cathodoluminescence of n-type ZnO thin films grown by pulsed laser deposition in N2, N2O, and O2 background gas. Thin Solid Films, 2005, 486, 205-209.	0.8	21

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73	High-gain integrated inverters based on ZnO metal-semiconductor field-effect transistor technology. Applied Physics Letters, 2010, 96, 113502.	1.5	21
74	Combinatorial Material Science and Strain Engineering Enabled by Pulsed Laser Deposition Using Radially Segmented Targets. ACS Combinatorial Science, 2018, 20, 643-652.	3.8	21
75	Carrier redistribution in organic/inorganic (poly(3,4-ethylenedioxy) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 667 Td (thiophene/p Applied Physics Letters, 2004, 84, 1311-1313.	1.5	20
76	Defect properties of ZnO and ZnO:P microwires. Journal of Applied Physics, 2011, 109, 013712.	1.1	20
77	Method of choice for the fabrication of high-quality<i>Î²</i>-gallium oxide-based Schottky diodes. Semiconductor Science and Technology, 2017, 32, 065013.	1.0	20
78	Comparative characterization of differently grown ZnO single crystals by positron annihilation and Hall effect. Superlattices and Microstructures, 2007, 42, 259-264.	1.4	19
79	Transparent JFETs Based on <inline-formula> <tex-math notation="LaTeX">p </tex-math></inline-formula>-NiO/<inline-formula> <tex-math notation="LaTeX">n </tex-math></inline-formula>-ZnO Heterojunctions. IEEE Transactions on Electron Devices, 2015, 62, 3999-4003.	1.6	19
80	Stable p-type ZnO:P nanowire/n-type ZnO:Ga film junctions, reproducibly grown by two-step pulsed laser deposition. Journal of Vacuum Science & Technology B, 2009, 27, 1693-1697.	1.3	18
81	Influence of the Cation Ratio on Optical and Electrical Properties of Amorphous Zinc-Tin-Oxide Thin Films Grown by Pulsed Laser Deposition. ACS Combinatorial Science, 2016, 18, 188-194.	3.8	18
82	Influence of Oxygen Pressure on Growth of Si-Doped Î²-(Al_{<i>x</i>}Ga<sub>1 â^') Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 387 Deposition. ECS Journal of Solid State Science and Technology, 2019, 8, Q3217-Q3220.	0.9	18
83	Structural and Elastic Properties of Î±â€(Al_{<i>x</i>}Ga_{1â^'<i>x</i>})₂O₃ Thin Films on (11.0) Al₂O₃ Substrates for the Entire Composition Range. Physica Status Solidi (B): Basic Research, 2021, 258, 2000394.	0.7	18
84	Identification of a Deep Acceptor Level in ZnO Due to Silver Doping. Journal of Electronic Materials, 2010, 39, 577-583.	1.0	17
85	Defects in a nitrogenâ€implanted ZnO thin film. Physica Status Solidi (B): Basic Research, 2010, 247, 1220-1226.	0.7	17
86	MESFETs and inverters based on amorphous zinc-tin-oxide thin films prepared at room temperature. Applied Physics Letters, 2018, 113, .	1.5	17
87	Defect Manipulation To Control ZnO Micro-/Nanowire-Metal Contacts. Nano Letters, 2018, 18, 6974-6980.	4.5	17
88	Progression of group-III sesquioxides: epitaxy, solubility and desorption. Journal Physics D: Applied Physics, 2021, 54, 223001.	1.3	17
89	Dependence of Trap Concentrations in ZnO Thin Films on Annealing Conditions. Journal of the Korean Physical Society, 2008, 53, 2861-2863.	0.3	17
90	ZnO-based metal-semiconductor field-effect transistors on glass substrates. Applied Physics Letters, 2009, 95, 153503.	1.5	16

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91	Eclipse Pulsed Laser Deposition for Damageâ€Free Preparation of Transparent ZnO Electrodes on Top of Organic Solar Cells. Advanced Functional Materials, 2015, 25, 4321-4327.	7.8	16
92	Electro-optical properties of ZnO-BaTiO3-ZnO heterostructures grown by pulsed laser deposition. Annalen Der Physik, 2004, 13, 61-62.	0.9	15
93	Dielectric Passivation of ZnO-Based Schottky Diodes. Journal of Electronic Materials, 2010, 39, 559-562.	1.0	15
94	Ultrathin gate-contacts for metal-semiconductor field-effect transistor devices: An alternative approach in transparent electronics. Journal of Applied Physics, 2010, 107, 114515.	1.1	15
95	All-Oxide Inverters Based on ZnO Channel JFETs With Amorphous ZnCo₂O₄ Gates. IEEE Transactions on Electron Devices, 2015, 62, 4004-4008.	1.6	15
96	Deep defects generated in n-conducting ZnO:TM thin films. Solid State Communications, 2006, 137, 417-421.	0.9	14
97	Doping efficiency and limits in (Mg,Zn)O:Al,Ga thin films with twoâ€dimensional lateral composition spread. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 2850-2855.	0.8	14
98	Long-throw magnetron sputtering of amorphous Zn-Sn-O thin films at room temperature. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 1482-1486.	0.8	14
99	Valence band offsets for ALD SiO2 and Al2O3 on (InxGa1â^'x)2O3 for x = 0.25â€"0.74. APL Materials, 2019, 7, .	2.2	14
100	Single Metal Ohmic and Rectifying Contacts to ZnO Nanowires: A Defect Based Approach. Annalen Der Physik, 2018, 530, 1700335.	0.9	13
101	Full-Swing, High-Gain Inverters Based on ZnSnO JFETs and MESFETs. IEEE Transactions on Electron Devices, 2019, 66, 3376-3381.	1.6	13
102	pâ€Type Doping and Alloying of CuI Thin Films with Selenium. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2100214.	1.2	13
103	Defects in zinc-implanted ZnO thin films. Journal of Vacuum Science & Technology B, 2009, 27, 1597.	1.3	12
104	Band Alignment of Atomic Layer Deposited SiO2 and Al2O3 on (AlxGa1-x)2O3 for x = 0.2-0.65. ECS Journal of Solid State Science and Technology, 2019, 8, P351-P356.	0.9	12
105	Evidence for oxygen being a dominant shallow acceptor in p-type CuI. APL Materials, 2021, 9, 051101.	2.2	12
106	Effects of alloy composition and Si-doping on vacancy defect formation in (In<i>x</i>Ga1â€"<i>x</i>)2O3 thin films. Journal of Applied Physics, 2018, 123, .	1.1	11
107	Lowâ€Voltage Operation of Ring Oscillators Based on Roomâ€Temperatureâ€Deposited Amorphous Zincâ€Tinâ€Oxide Channel MESFETs. Advanced Electronic Materials, 2019, 5, 1900548.	2.6	11
108	Allâ€Oxide Transparent Thinâ€Film Transistors Based on Amorphous Zinc Tin Oxide Fabricated at Room Temperature: Approaching the Thermodynamic Limit of the Subthreshold Swing. Advanced Electronic Materials, 2020, 6, 2000423.	2.6	11

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109	Homoepitaxial MgxZn1â^’xO (0â‰¤xâ‰¤0.22) thin films grown by pulsed laser deposition. Thin Solid Films, 2010, 518, 4623-4629.	0.8	10
110	MgZnO/ZnO quantum well nanowire heterostructures with large confinement energies. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2011, 29, .	0.9	10
111	On the T2 trap in zinc oxide thin films. Physica Status Solidi (B): Basic Research, 2012, 249, 588-595.	0.7	10
112	Semitransparent ZnO-based UV-active solar cells: Analysis of electrical loss mechanisms. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2016, 34, 04J107.	0.6	10
113	Low voltage, high gain inverters based on amorphous zinc tin oxide on flexible substrates. APL Materials, 2020, 8, .	2.2	10
114	Modal gain and its diameter dependence in single-ZnO micro- and nanowires. Semiconductor Science and Technology, 2012, 27, 015005.	1.0	9
115	Electronic defects in In2 O3 and In2 O3 :Mg thin films on r -plane sapphire. Physica Status Solidi (B): Basic Research, 2015, 252, 2304-2308.	0.7	9
116	Vital Role of Oxygen for the Formation of Highly Rectifying Schottky Barrier Diodes on Amorphous Zincâ€"Tinâ€"Oxide with Various Cation Compositions. ACS Applied Materials & Interfaces, 2017, 9, 26574-26581.	4.0	9
117	Strain states and relaxation for $$alpha$$-(Al$$_x$$Ga$$_{1-x}$$)$$_2$$O$$_3$$ thin films on prismatic planes of $$alpha$$-Al$$_2$$O$$_3$$ in the full composition range: Fundamental difference of a- and m-epitaxial planes in the manifestation of shear strain and lattice tilt. Journal of Materials Research, 2021, 36, 4816-4831.	1.2	9
118	Semiconducting oxide heterostructures. Semiconductor Science and Technology, 2011, 26, 014040.	1.0	8
119	Transparent Rectifying Contacts for Visible-Blind Ultraviolet Photodiodes Based on ZnO. Journal of Electronic Materials, 2011, 40, 473-476.	1.0	8
120	Low rate deep level transient spectroscopy - a powerful tool for defect characterization in wide bandgap semiconductors. Solid-State Electronics, 2014, 92, 40-46.	0.8	8
121	High-Quality Schottky Barrier Diodes on Î²-Gallium Oxide Thin Films on Glass Substrate. ECS Journal of Solid State Science and Technology, 2019, 8, Q3126-Q3132.	0.9	8
122	Controlled formation of Schottky diodes on n-doped ZnO layers by deposition of p-conductive polymer layers with oxidative chemical vapor deposition. Nano Express, 2020, 1, 010013.	1.2	8
123	Identification of LiNi and VNi acceptor levels in doped nickel oxide. APL Materials, 2020, 8, .	2.2	8
124	Dynamics of excitonâ€"polariton emission in CuI. APL Materials, 2021, 9, .	2.2	8
125	Dopant activation in homoepitaxial MgZnO:P thin films. Journal of Vacuum Science & Technology B, 2009, 27, 1604.	1.3	7
126	Synthesis and physical properties of cylindrite micro tubes and lamellae. Physica Status Solidi (B): Basic Research, 2010, 247, 1335-1350.	0.7	7

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127	Microscopic Identification of Hot Spots in Multibarrier Schottky Contacts on Pulsed Laser Deposition Grown Zinc Oxide Thin Films. IEEE Transactions on Electron Devices, 2012, 59, 536-541.	1.6	7
128	Wavelength-selective ultraviolet (Mg,Zn)O photodiodes: Tuning of parallel composition gradients with oxygen pressure. Applied Physics Letters, 2016, 108, 243503.	1.5	7
129	Epitaxial Growth of <i>Îº</i>â€(Al_{<i>x</i>}Ga_{1âˆ’<i>x</i>})₂O₃ Layers and Superlattice Heterostructures up to <i>x</i>â€‰=â€‰0.48 on Highly Conductive Alâ€Doped ZnO Thinâ€Film Templates by Pulsed Laser Deposition. Physica Status Solidi (B): Basic Research, 2021, 258, 2000359.	0.7	7
130	Experimental exploration of the amphoteric defect model by cryogenic ion irradiation of a range of wide band gap oxide materials. Journal of Physics Condensed Matter, 2020, 32, 415704.	0.7	7
131	Cathodoluminescence of large-area PLD grown ZnO thin films measured in transmission and reflection. Applied Physics A: Materials Science and Processing, 2007, 88, 89-93.	1.1	6
132	Electrical and optical spectroscopy on ZnO:Co thin films. Applied Physics A: Materials Science and Processing, 2007, 88, 157-160.	1.1	6
133	The E3 Defect in MgxZn1âˆ’x O. Journal of Electronic Materials, 2010, 39, 584-588.	1.0	6
134	Transparent Conductive Oxides. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 1408-1408.	0.8	6
135	Electron transport mechanism in rfâ€sputtered amorphous zinc oxynitride thin films. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 1767-1773.	0.8	6
136	Effect of Annealing on the Band Alignment of ALD SiO₂ on (Al_xGa_{1-x})₂O₃ for x = 0.2 - 0.65. ECS Journal of Solid State Science and Technology, 2019, 8, P751-P756.	0.9	6
137	Changes in band alignment during annealing at 600â€‰Â°C of ALD Al2O3 on (InxGa1â€‰âˆ’â€‰x)2O3 for xâ€‰=â€‰0.25â€“0.74. Journal of Applied Physics, 2020, 127, 105701.	1.1	6
138	Investigation of acceptor states in ZnO by junction DLTS. Superlattices and Microstructures, 2007, 42, 14-20.	1.4	5
139	Shallow Donors and Compensation in Homoepitaxial ZnO Thin Films. Journal of Electronic Materials, 2010, 39, 595-600.	1.0	5
140	Nickelâ€related defects in ZnO â€“ A deepâ€level transient spectroscopy and photoâ€capacitance study. Physica Status Solidi (B): Basic Research, 2011, 248, 1949-1955.	0.7	5
141	Ring Oscillators Based on ZnO Channel JFETs and MESFETs. Advanced Electronic Materials, 2016, 2, 1500431.	2.6	5
142	Ultrahigh-performance integrated inverters based on amorphous zinc tin oxide deposited at room temperature. APL Materials, 2020, 8, .	2.2	5
143	Pulsed laser deposition of Fe- and Fe, Cu-doped ZnO thin films. Annalen Der Physik, 2004, 13, 57-58.	0.9	4
144	Donorâ€“acceptor pair recombination in non-stoichiometric ZnO thin films. Solid State Communications, 2010, 150, 379-382.	0.9	4

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145	Temperature dependent self-compensation in Al- and Ga-doped Mg0.05Zn0.95O thin films grown by pulsed laser deposition. Journal of Applied Physics, 2016, 120, .	1.1	4
146	Negativeâ€<i>U</i> Properties of the Deep Level E3 in ZnO. Physica Status Solidi (B): Basic Research, 2018, 255, 1700670.	0.7	4
147	Fermi level controlled point defect balance in ion irradiated indium oxide. Journal of Applied Physics, 2021, 130, 085703.	1.1	4
148	Gas phase synthesis of ionic solid solutions-crystalline bulk materials and thin films. Progress in Solid State Chemistry, 2009, 37, 57-69.	3.9	3
149	Gate- and drain-lag effects in (Mg,Zn)O-based metal-semiconductor field-effect transistors. Journal of Applied Physics, 2011, 109, 074515.	1.1	3
150	Light and Temperature Stability of Fully Transparent ZnO-Based Inverter Circuits. IEEE Electron Device Letters, 2011, 32, 515-517.	2.2	3
151	Impact of strain on electronic defects in (Mg,Zn)O thin films. Journal of Applied Physics, 2014, 116, .	1.1	3
152	Aluminium- and gallium-doped homoepitaxial ZnO thin films: Strain-engineering and electrical performance. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 1440-1447.	0.8	3
153	Properties of In₂S₃â€Based <i>pin</i>â€Heterojunctions. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700827.	0.8	3
154	Structural characterization of H plasmaâ€doped ZnO single crystals by Hall measurements and photoluminescence studies. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 2426-2431.	0.8	2
155	Tuning material properties of amorphous zinc oxynitride thin films by magnesium addition. APL Materials, 2021, 9, 021120.	2.2	2
156	Numerical Modeling of Schottky Barrier Diode Characteristics. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2100121.	0.8	2
157	Defect studies on Ar-implanted ZnO thin films. Physica Status Solidi (B): Basic Research, 2014, 251, 937-941.	0.7	1
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