

# Martin Allen

## List of Publications by Year in descending order

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90  
papers

2,533  
citations

201674

27  
h-index

214800

47  
g-index

93  
all docs

93  
docs citations

93  
times ranked

2817  
citing authors

#	ARTICLE	IF	CITATIONS
1	Effect of an interactive educational activity using handheld ultraviolet radiation dosimeters on sun protection knowledge among Australian primary school students. Preventive Medicine Reports, 2022, 25, 101690.	1.8	1
2	Performance of <i>in situ</i> oxidized platinum/iridium alloy Schottky contacts on (001), (2 $\bar{1}$ 01), and (010) $\beta$ -Ga <sub>2</sub> O <sub>3</sub> . Applied Physics Letters, 2022, 120, .	3.3	5
3	Identifying chemical and physical changes in wide-gap semiconductors using real-time and near ambient-pressure XPS. Faraday Discussions, 2022, , .	3.2	2
4	Dramatic Improvement in the Rectifying Properties of Pd Schottky Contacts on $\beta$ -Ga <sub>2</sub> O <sub>3</sub> During Their High-Temperature Operation. IEEE Transactions on Electron Devices, 2021, 68, 1791-1797.	3.0	13
5	Electroreduction of Aryldiazonium Ion at the Polar and Non-Polar Faces of ZnO: Characterisation of the Grafted Films and Their Influence on Near-Surface Band Bending. ChemPhysChem, 2021, 22, 1344-1351.	2.1	3
6	Impact of personal genomic risk information on melanoma prevention behaviors and psychological outcomes: a randomized controlled trial. Genetics in Medicine, 2021, 23, 2394-2403.	2.4	22
7	Performance of metal-semiconductor field effect transistors on mist chemical-vapor-deposition grown ZnO channels with intentionally oxidized AgOx Schottky contact gates. Journal of Applied Physics, 2021, 130, .	2.5	3
8	Persistent Photoconductivity in SnO <sub>2</sub> Thin Films Grown by Molecular Beam Epitaxy: The Dominant Roles of Water Vapor and Carrier Concentration. Journal of Physical Chemistry C, 2021, 125, 26967-26977.	3.1	7
9	Bidirectional Control of the Band Bending at the (2 $\bar{1}$ 01) and (010) Surfaces of $\beta$ -Ga <sub>2</sub> O <sub>3</sub> Using Aryldiazonium Ion and Phosphonic Acid Grafting. ACS Applied Electronic Materials, 2021, 3, 5608-5620.	4.3	4
10	Characterization of personal solar ultraviolet radiation exposure using detrended fluctuation analysis. Environmental Research, 2020, 182, 108976.	7.5	8
11	Relationship between the hydroxyl termination and band bending at $\beta$ -Ga <sub>2</sub> O <sub>3</sub> surfaces. Physical Review B, 2020, 102, .	3.2	16
12	High temperature (500 $\pm$ 50 $\text{^\circ}$ C) operating limits of oxidized platinum group metal (PtOx, IrOx, PdOx, RuOx) Schottky contacts on $\beta$ -Ga <sub>2</sub> O <sub>3</sub> . Applied Physics Letters, 2020, 117, .	3.3	28
13	Use of Electronic UV Dosimeters in Measuring Personal UV Exposures and Public Health Education. Atmosphere, 2020, 11, 744.	2.3	12
14	Temperature-Dependent Electrical Properties of Graphitic Carbon Schottky Contacts to $\beta$ -Ga <sub>2</sub> O <sub>3</sub> . IEEE Transactions on Electron Devices, 2020, 67, 5669-5675.	3.0	5
15	A Comparison of Solar Ultraviolet Radiation Exposure in Urban Canyons in Venice, Italy and Johannesburg, South Africa. Photochemistry and Photobiology, 2020, 96, 1148-1153.	2.5	3
16	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.	1.8	7
17	The effect of covalently bonded aryl layers on the band bending and electron density of SnO <sub>2</sub> surfaces probed by synchrotron X-ray photoelectron spectroscopy. Physical Chemistry Chemical Physics, 2019, 21, 17913-17922.	2.8	11
18	Native Point Defect Measurement and Manipulation in ZnO Nanostructures. Materials, 2019, 12, 2242.	2.9	17

#	ARTICLE	IF	CITATIONS
19	High-Temperature $\eta$ -Ga <sub>2</sub> O <sub>3</sub> Schottky Diodes and UVC Photodetectors Using RuO <sub>x</sub> Contacts. IEEE Electron Device Letters, 2019, 40, 1587-1590.	3.9	21
20	Optical and electronic properties of high quality Sb-doped SnO <sub>2</sub> thin films grown by mist chemical vapor deposition. Journal of Applied Physics, 2019, 126, .	2.5	21
21	Direct comparison of plain and oxidized metal Schottky contacts on $\eta$ -Ga <sub>2</sub> O <sub>3</sub> . Applied Physics Letters, 2019, 114, .	3.3	57
22	High-temperature (350°C) oxidized iridium Schottky contacts on $\eta$ -Ga <sub>2</sub> O <sub>3</sub> . Applied Physics Letters, 2019, 114, .	3.3	19
23	Electronic devices fabricated on mist-CVD-grown oxide semiconductors and their applications. Japanese Journal of Applied Physics, 2019, 58, 090606.	1.5	22
24	Exposure to Solar UVR Suppresses Cell-Mediated Immunization Responses in Humans: The Australian Ultraviolet Radiation and Immunity Study. Journal of Investigative Dermatology, 2019, 139, 1545-1553.e6.	0.7	14
25	Bistability of a hydrogen defect with a vibrational mode at 3326 cm <sup>-1</sup> in ZnO. Physical Review B, 2019, 99, .	2.9	10
26	Oxidized Metal Schottky Contacts on (010) $\eta$ -Ga <sub>2</sub> O <sub>3</sub> . IEEE Electron Device Letters, 2019, 40, 337-340.	3.9	49
27	Size-controlled, high optical quality ZnO nanowires grown using colloidal Au nanoparticles and ultra-small cluster catalysts. APL Materials, 2019, 7, 022518.	5.1	5
28	Prevalence of sun protection behaviors in Hispanic youth residing in a high ultraviolet light environment. Pediatric Dermatology, 2018, 35, e52-e54.	0.9	9
29	Synchrotron X-ray Photoelectron Spectroscopy Study of Electronic Changes at the ZnO Surface Following Aryldiazonium Ion Grafting: A Metal-to-Insulator Transition. Journal of Physical Chemistry C, 2018, 122, 12681-12693.	3.1	22
30	Defect Characterization, Imaging, and Control in Wide-Bandgap Semiconductors and Devices. Journal of Electronic Materials, 2018, 47, 4980-4986.	2.2	7
31	Conductivity and transparency limits of Sb-doped SnO <sub>2</sub> grown by molecular beam epitaxy. Physical Review B, 2018, 98, .	3.2	23
32	The melanoma genomics managing your risk study: A protocol for a randomized controlled trial evaluating the impact of personal genomic risk information on skin cancer prevention behaviors. Contemporary Clinical Trials, 2018, 70, 106-116.	1.8	19
33	Capturing Ultraviolet Radiation Exposure and Physical Activity: Feasibility Study and Comparison Between Self-Reports, Mobile Apps, Dosimeters, and Accelerometers. JMIR Research Protocols, 2018, 7, e102.	1.0	6
34	Giant improvement in the rectifying performance of oxidized Schottky contacts to ZnO. Journal of Applied Physics, 2017, 121, .	2.5	42
35	Hydrogen-related excitons and their excited-state transitions in ZnO. Physical Review B, 2017, 95, .	3.2	29
36	Thermal stability of oxidized noble metal Schottky contacts to ZnO. Materials Science in Semiconductor Processing, 2017, 69, 9-12.	4.0	10

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37	Zinc tin oxide metal semiconductor field effect transistors and their improvement under negative bias (illumination) temperature stress. Applied Physics Letters, 2017, 110, 073502.	3.3	22
38	Correlates of sun protection behaviors among Hispanic children residing in a high UVR environment. Photodermatology Photoimmunology and Photomedicine, 2017, 33, 75-83.	1.5	3
39	Impact of defect distribution on IrOx/ZnO interface doping and Schottky barriers. Applied Physics Letters, 2017, 111, .	3.3	10
40	Surface sensitivity of four-probe STM resistivity measurements of bulk ZnO correlated to XPS. Journal of Physics Condensed Matter, 2017, 29, 384001.	1.8	9
41	The validated sun exposure questionnaire: association of objective and subjective measures of sun exposure in a Danish population-based sample. British Journal of Dermatology, 2017, 176, 446-456.	1.5	41
42	Sun exposure and 25-hydroxyvitamin D3 levels in a community sample: Quantifying the association with electronic dosimeters. Journal of Exposure Science and Environmental Epidemiology, 2017, 27, 471-477.	3.9	22
43	Knowledge deficit, attitude and behavior scales association to objective measures of sun exposure and sunburn in a Danish population based sample. PLoS ONE, 2017, 12, e0178190.	2.5	13
44	Silver oxide Schottky contacts and metal semiconductor field-effect transistors on SnO <sub>2</sub> thin films. Applied Physics Express, 2016, 9, 041101.	2.4	30
45	Effects of smartphone diaries and personal dosimeters on behavior in a randomized study of methods to document sunlight exposure. Preventive Medicine Reports, 2016, 3, 367-372.	1.8	17
46	Comparing Handheld Meters and Electronic Dosimeters for Measuring Ultraviolet Levels under Shade and in the Sun. Photochemistry and Photobiology, 2016, 92, 208-214.	2.5	15
47	Tuning the Band Bending and Controlling the Surface Reactivity at Polar and Nonpolar Surfaces of ZnO through Phosphonic Acid Binding. ACS Applied Materials & Interfaces, 2016, 8, 31392-31402.	8.0	23
48	Novel approach to analysing large data sets of personal sun exposure measurements. Journal of Exposure Science and Environmental Epidemiology, 2016, 26, 613-620.	3.9	8
49	Stability of In-Ga-Zn-O metal-semiconductor field-effect-transistors under bias, illumination, and temperature stress. Applied Physics Letters, 2015, 107, .	3.3	16
50	Solar Ultraviolet Radiation Exposure of South African Marathon Runners During Competition Marathon Runs and Training Sessions: A Feasibility Study. Photochemistry and Photobiology, 2015, 91, 971-979.	2.5	15
51	Feasibility of smartphone diaries and personal dosimeters to quantitatively study exposure to ultraviolet radiation in a small national sample. Photodermatology Photoimmunology and Photomedicine, 2015, 31, 252-260.	1.5	23
52	Effect of Schottky gate type and channel defects on the stability of transparent ZnO MESFETs. Semiconductor Science and Technology, 2015, 30, 024008.	2.0	11
53	Metal-Semiconductor Field-Effect Transistors With In-Ga-Zn-O Channel Grown by Nonvacuum-Processed Mist Chemical Vapor Deposition. IEEE Electron Device Letters, 2015, 36, 463-465.	3.9	37
54	Growth of epitaxial ZnO films on sapphire substrates by plasma assisted molecular beam epitaxy. , 2015, , .		0

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55	Mist-CVD Grown Sn-Doped $\alpha$ -Ga <sub>2</sub> O <sub>3</sub> MESFETs. IEEE Transactions on Electron Devices, 2015, 62, 3640-3644.	3.0	97
56	Mobility of indium on the ZnO(0001) surface. Applied Physics Letters, 2015, 106, .	3.3	4
57	Patterns of sun protective behaviors among Hispanic children in a skin cancer prevention intervention. Preventive Medicine, 2015, 81, 303-308.	3.4	23
58	Characterization of Tin Oxide Grown by Molecular Beam Epitaxy. Materials Research Society Symposia Proceedings, 2014, 1633, 13-18.	0.1	1
59	Method of choice for fabrication of high-quality ZnO-based Schottky diodes. Journal of Applied Physics, 2014, 116, 194506.	2.5	33
60	Stability of the Surface Electron Accumulation Layers on the Nonpolar (101̄...0) and (112̄...0) Faces of ZnO. Journal of Physical Chemistry C, 2014, 118, 24575-24582.	3.1	31
61	Surface state modulation through wet chemical treatment as a route to controlling the electrical properties of ZnO nanowire arrays investigated with XPS. Applied Surface Science, 2014, 320, 664-669.	6.1	27
62	Comparative study of deep defects in ZnO microwires, thin films and bulk single crystals. Applied Physics Letters, 2013, 103, .	3.3	9
63	Structural investigation of ZnO O-polar (0001) surfaces and Schottky interfaces. Surface Science, 2013, 610, 22-26.	1.9	3
64	Polarity effects in the optical properties of hydrothermal ZnO. Applied Physics Letters, 2013, 103, .	3.3	15
65	Validation of Brief Questionnaire Measures of Sun Exposure and Skin Pigmentation Against Detailed and Objective Measures Including Vitamin D Status. Photochemistry and Photobiology, 2013, 89, 219-226.	2.5	50
66	Small doses from artificial UV sources elucidate the photo-production of vitamin D. Photochemical and Photobiological Sciences, 2013, 12, 1726-1737.	2.9	22
67	Influence of polarity and hydroxyl termination on the band bending at ZnO surfaces. Physical Review B, 2013, 88, .	3.2	89
68	Stable n-channel metal-semiconductor field effect transistors on ZnO films deposited using a filtered cathodic vacuum arc. Applied Physics Letters, 2012, 101, .	3.3	18
69	Optical and defect properties of hydrothermal ZnO with low lithium contamination. Applied Physics Letters, 2012, 101, 062105.	3.3	17
70	Polarity-dependent photoemission of in situ cleaved zinc oxide single crystals. Journal of Materials Research, 2012, 27, 2214-2219.	2.6	14
71	The interface structure of high performance ZnO Schottky diodes. Physica B: Condensed Matter, 2012, 407, 2867-2870.	2.7	6
72	Device quality ZnO grown using a Filtered Cathodic Vacuum Arc. Physica B: Condensed Matter, 2012, 407, 2903-2906.	2.7	7

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73	Electrical Characteristics of Top-Down ZnO Nanowire Transistors Using Remote Plasma ALD. IEEE Electron Device Letters, 2012, 33, 203-205.	3.9	20
74	The presence of a (1 Å <sup>-1</sup> ) oxygen overlayer on ZnO(0001) surfaces and at Schottky interfaces. Journal of Physics Condensed Matter, 2012, 24, 095007.	1.8	11
75	A Critical Assessment of Two Types of Personal UV Dosimeters. Photochemistry and Photobiology, 2012, 88, 215-222.	2.5	41
76	Polarity effects in the x-ray photoemission of ZnO and other wurtzite semiconductors. Applied Physics Letters, 2011, 98, .	3.3	64
77	Photoluminescence and the exciton-phonon coupling in hydrothermally grown ZnO. Physical Review B, 2011, 83, .	3.2	35
78	Bulk transport measurements in ZnO: The effect of surface electron layers. Physical Review B, 2010, 81, .	3.2	104
79	Role of a universal branch-point energy at ZnO interfaces. Physical Review B, 2010, 82, .	3.2	24
80	Temperature-Dependent Properties of Nearly Ideal ZnO Schottky Diodes. IEEE Transactions on Electron Devices, 2009, 56, 2160-2164.	3.0	34
81	Oxidized noble metal Schottky contacts to n-type ZnO. Applied Physics Letters, 2009, 94, .	3.3	71
82	Extracting the Richardson constant: IrOx/n-ZnO Schottky diodes. Applied Physics Letters, 2009, 94, .	3.3	35
83	Influence of oxygen vacancies on Schottky contacts to ZnO. Applied Physics Letters, 2008, 92, .	3.3	197
84	Influence of spontaneous polarization on the electrical and optical properties of bulk, single crystal ZnO. Applied Physics Letters, 2007, 90, 062104.	3.3	94
85	Defects in hydrothermally grown bulk ZnO. Applied Physics Letters, 2007, 91, .	3.3	53
86	Silver oxide Schottky contacts on n-type ZnO. Applied Physics Letters, 2007, 91, .	3.3	142
87	Metal Schottky diodes on Zn-polar and O-polar bulk ZnO. Applied Physics Letters, 2006, 89, 103520.	3.3	139
88	Schottky Contact Behaviour as a Function of Metal and ZnO Surface Polarity. Materials Research Society Symposia Proceedings, 2006, 957, 1.	0.1	2
89	Enhanced UV exposure on a ski-field compared with exposures at sea level. Photochemical and Photobiological Sciences, 2005, 4, 429.	2.9	57
90	Ion currents to cylindrical Langmuir probes in RF plasmas. Journal Physics D: Applied Physics, 1992, 25, 417-424.	2.8	80