

Patrick W Leech

List of Publications by Year in descending order

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times ranked

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citing authors

#	ARTICLE	IF	CITATIONS
1	Reactive ion etching of quartz and silica-based glasses in CF ₄ /CHF ₃ plasmas. <i>Vacuum</i> , 1999, 55, 191-196.	3.5	63
2	X-ray Photoelectron Spectroscopy Study of Optical Waveguide Glasses. <i>Surface and Interface Analysis</i> , 1996, 24, 605-610.	1.8	48
3	Comparison of abrasive wear of a complex high alloy hardfacing deposit and WC-Ni based metal matrix composite. <i>Wear</i> , 2012, 294-295, 380-386.	3.1	43
4	Observations of adiabatic shear band formation in 7039 aluminum alloy. <i>Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science</i> , 1985, 16, 1900-1903.	1.4	40
5	Production of monodispersed micron-sized bubbles at high rates in a microfluidic device. <i>Applied Physics Letters</i> , 2009, 95, .	3.3	36
6	Ion beam etching of CVD diamond film in Ar, Ar/O ₂ and Ar/CF ₄ gas mixtures. <i>Diamond and Related Materials</i> , 2002, 11, 833-836.	3.9	30
7	Novel CH ₄ /H ₂ metalorganic reactive ion etching of Hg _{1-x} CdxTe. <i>Applied Physics Letters</i> , 1991, 59, 1752-1754.	3.3	23
8	Reactive ion etching of piezoelectric materials in CF ₄ /CHF ₃ plasmas. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1998, 16, 2037-2041.	2.1	23
9	Pd/Zn/Pd/Au ohmic contacts top-type In _{0.47} Ga _{0.53} As/InP. <i>Journal of Applied Physics</i> , 1994, 76, 4713-4718.	2.5	19
10	Universal Error Corrections for Finite Semiconductor Resistivity in Cross-Kelvin Resistor Test Structures. <i>IEEE Transactions on Electron Devices</i> , 2004, 51, 914-919.	3.0	19
11	Laser surface melting of a complex high alloy steel. <i>Materials & Design</i> , 2014, 54, 539-543.	5.1	19
12	One step multifunctional micropatterning of surfaces using asymmetric glow discharge plasma polymerization. <i>Chemical Communications</i> , 2012, 48, 1907.	4.1	18
13	Antimony sources for MOCVD. The use of Et ₄ Sb ₂ as a p-type dopant for Hg _{1-x} CdxTe and crystal structure of the adduct [Et ₄ Sb ₂ · 2CdI ₂] _n . <i>Journal of Organometallic Chemistry</i> , 1993, 449, 131-139.	1.8	16
14	Hot embossing of micrographic elements in polypropylene. <i>Microelectronic Engineering</i> , 2007, 84, 109-113.	2.4	15
15	Analytical and Finite-Element Modeling of a Two-Contact Circular Test Structure for Specific Contact Resistivity. <i>IEEE Transactions on Electron Devices</i> , 2013, 60, 1202-1207.	3.0	15
16	Understanding the sheet resistance parameter of alloyed ohmic contacts using a transmission line model. <i>Solid-State Electronics</i> , 1995, 38, 745-751.	1.4	14
17	Microrelief structures for anti-counterfeiting applications. <i>Microelectronic Engineering</i> , 2003, 65, 439-446.	2.4	13
18	Optically variable micro-mirror arrays fabricated by graytone lithography. <i>Microelectronic Engineering</i> , 2006, 83, 351-356.	2.4	13

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19	Specific contact resistance of indium ohmic contacts to n-type Hg _{1-x} CdxTe. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1992, 10, 105-109.	2.1	12
20	SU-8 photolithography on reactive plasma thin-films: coated microwells for peptide display. Colloids and Surfaces B: Biointerfaces, 2013, 108, 313-321.	5.0	12
21	Printing via hot embossing of optically variable images in thermoplastic acrylic lacquer. Microelectronic Engineering, 2006, 83, 1961-1965.	2.4	10
22	Hot embossing of diffractive optically variable images in biaxially-oriented polypropylene. Microelectronic Engineering, 2007, 84, 25-30.	2.4	10
23	The specific contact resistance of Ohmic contacts to HgTe/Hg _{1-x} CdxTe heterostructures. Journal of Applied Physics, 1990, 68, 907-909.	2.5	9
24	Properties of Schottky diodes on n-type Hg _{1-x} CdxTe. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1991, 9, 1770.	1.6	8
25	Effect of layer structure on the electrical properties of contacts to p-type In _{0.53} Ga _{0.47} As/InP. Thin Solid Films, 1997, 298, 9-13.	1.8	7
26	Scanning probe microscope analysis of microstructures in optically variable devices. Microelectronic Engineering, 2002, 60, 339-346.	2.4	7
27	Patterning of PLZT and PSZT thin films by excimer laser. Applied Physics A: Materials Science and Processing, 2008, 91, 679-684.	2.3	6
28	Ohmic Contacts to p-Type InGaAs/InP with a Graded Bandgap Heterobarrier. Materials Research Society Symposia Proceedings, 1993, 318, 183.	0.1	5
29	Enhancement of the etch rate of LiNbO ₃ by prior bombardment with MeV O ₂ ⁺ ions. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1999, 17, 3358-3361.	2.1	5
30	Fabrication of hologram coins using electron beam lithography. Microelectronic Engineering, 2004, 71, 171-176.	2.4	5
31	Optically variable watermark (OVW) microstructures for transparent substrates. Microelectronic Engineering, 2006, 83, 2004-2008.	2.4	5
32	Effect of norbornene content on laser ablation of cyclic olefin copolymers. Materials & Design, 2010, 31, 4858-4861.	5.1	5
33	Graphitic Schottky Contacts to Si formed by Energetic Deposition. Materials Research Society Symposia Proceedings, 2015, 1786, 51-56.	0.1	5
34	Ohmic contacts to n-type 3C-SiC using Cr/Ni/Au and Ni/Cr/Au metallizations. Microelectronic Engineering, 2019, 215, 111016.	2.4	5
35	Electrical characteristics and thermal stability of ohmic contacts to p-type In _{0.47} Ga _{0.53} As/InP. Journal of Applied Physics, 1995, 77, 3908-3912.	2.5	4
36	Patterning and Reactive Ion Etching of Diamond Films using Light Coupling Masks. Materials Research Society Symposia Proceedings, 2004, 820, 312.	0.1	4

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37	Laser ablation of multilayered hot stamping foil. Journal of Materials Processing Technology, 2009, 209, 4281-4285.	6.3	4
38	Effect of norbornene content on deformation properties and hot embossing of cyclic olefin copolymers. Journal of Materials Science, 2010, 45, 5364-5369.	3.7	4
39	Ohmic Contacts on N-Type Hg _{0.4} Cd _{0.6} Te.. Materials Research Society Symposia Proceedings, 1990, 216, 155.	0.1	3
40	Electrical Modelling and Characterisation of Alloyed Ohmic Contacts. Materials Research Society Symposia Proceedings, 1993, 318, 153.	0.1	3
41	The modified sheet resistance of indium contacts to n-type Hg _{1-x} Cd _x Te. Solid-State Electronics, 1995, 38, 781-785.	1.4	3
42	Thermal stability of Pd/Zn and Pt based contacts to p-In _{0.53} Ga _{0.47} As/InP with various barrier layers. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1998, 16, 227.	1.6	3
43	Enhancement of the etch rate of CVD diamond by prior C and Ge implantation. Diamond and Related Materials, 2002, 11, 837-840.	3.9	3
44	The effect of Au and O implantation on the etch rate of CVD diamond. Applied Surface Science, 2004, 221, 302-307.	6.1	3
45	Pattern replication in polypropylene films by hot embossing. Microelectronic Engineering, 2008, 85, 181-186.	2.4	3
46	Optimising the Rectification Ratio of Schottky Diodes in n-SiC and n-Si by TCAD. MRS Advances, 2016, 1, 3655-3660.	0.9	3
47	Nuclear microprobe analysis of Hg _{1-x} Cd _x Te metal-semiconductor-metal detectors on substrates of GaAs and GaAs/Si. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1995, 13, 21-25.	2.1	2
48	Modified sheet resistance of ohmic contacts to p-type In _{0.47} Ga _{0.53} As/InP. Journal of Applied Physics, 1995, 77, 2544-2548.	2.5	2
49	Optical image formation using surface relief micrographic picture elements. Microelectronic Engineering, 2007, 84, 669-672.	2.4	2
50	Hot Embossing Of Microchannels in Cyclic Olefin Copolymers. Materials Research Society Symposia Proceedings, 2009, 1191, 18.	0.1	2
51	Ti/Ni/Au contacts to n-SiC after low energy implantation. Materials Letters, 2016, 166, 39-42.	2.6	2
52	Low Resistance Ohmic Contacts to n-Hg _{1-x} Cd _x Te Using a HgTe Cap Layer. Materials Research Society Symposia Proceedings, 1994, 299, 109.	0.1	1
53	An Electrical Model for Multilayered n+/n and Heterostructure Planar Ohmic Contacts. Materials Research Society Symposia Proceedings, 1995, 382, 443.	0.1	1
54	Waveguides Fabricated in Fused Silica by Germanium Ion Implantation at Varying Doses. Materials Research Society Symposia Proceedings, 1995, 392, 255.	0.1	1

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55	Modelling Geometrical Effects of Parasitic and Contact Resistance of FET Devices. Materials Research Society Symposia Proceedings, 1996, 427, 147.	0.1	1
56	A broadband model for Hg _{1-x} Cd _x Te MSM detectors. Solid-State Electronics, 1998, 42, 188-189.	1.4	1
57	Effect of MeV O ₂ ⁺ implantation on the reactive ion etch rate of LiTaO ₃ . Nuclear Instruments & Methods in Physics Research B, 1999, 159, 187-190.	1.4	1
58	Reactive ion etching of quartz and glasses for microfabrication. , 1999, , .		1
59	Fabrication of Hologram Coins using Electron Beam Lithography. Materials Research Society Symposia Proceedings, 2003, 777, 851.	0.1	1
60	Effect of prior C, Si and Sn implantation on the etch rate of CVD diamond. Diamond and Related Materials, 2006, 15, 1266-1270.	3.9	1
61	Hand-held analyser based on microchip electrophoresis with contactless conductivity detection for measurement of chemical warfare agent degradation products. Proceedings of SPIE, 2008, , .	0.8	1
62	Rapid prototyping of microfluidic chips for use in droplet formation and in-vitro compartmentalisation. Proceedings of SPIE, 2008, , .	0.8	1
63	The Study of Morphological Structure and Raman Spectra of 3C-SiC Membranes. Applied Mechanics and Materials, 2014, 554, 66-70.	0.2	1
64	Ohmic and rectifying contacts to n-SiC formed by energetic deposition of carbon. Materials Research Society Symposia Proceedings, 2014, 1693, 87.	0.1	1
65	Integrated MSM-FET Photoreceiver Fabricated on MOCVD Grown Hg _{1-x} Cd _x Te. Materials Research Society Symposia Proceedings, 1990, 216, 11.	0.1	0
66	Ion Beam Etching System for Mercury Cadmium Telluride and III-V Compound Semiconductors. Materials Research Society Symposia Proceedings, 1991, 236, 253.	0.1	0
67	Ion Beam Treatment of Ohmic Contacts to n-TYPE Hg _{1-x} Cd _x Te. Materials Research Society Symposia Proceedings, 1992, 260, 281.	0.1	0
68	Mapping of Defects in Metal-Semiconductor-Metal (MSM) Detectors in Hg _{1-x} Cd _x Te by Nuclear Microprobe. Materials Research Society Symposia Proceedings, 1993, 302, 411.	0.1	0
69	Studies of MOCVD grown HgCdMnTe by ion beam and related techniques. Nuclear Instruments & Methods in Physics Research B, 1994, 85, 929-932.	1.4	0
70	Mapping of Defects in Metal-Semiconductor-Metal (MSM) Detectors in Hg _{1-x} Cd _x Te by Nuclear Microprobe. Materials Research Society Symposia Proceedings, 1994, 299, 163.	0.1	0
71	Waveguide Formation in Silica by Implantation with Si, P and Ge ions. Materials Research Society Symposia Proceedings, 1995, 396, 417.	0.1	0
72	UV photosensitivity in PECVD-grown germanosilicate waveguides. , 1996, , .		0

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73	Resonant grating filter with low out-of-band reflectance. , 1999, , .		0
74	Reactive Ion Etching of CVD Diamond in CF ₄ /O ₂ , O ₂ and O ₂ /Ar Plasmas. Materials Research Society Symposia Proceedings, 2000, 622, 6361.	0.1	0
75	Fabrication of Micro-Relief Structures in Thick Resist for Anti-Counterfeiting Applications. Materials Research Society Symposia Proceedings, 2002, 741, 441.	0.1	0
76	Ion Beam Etching of CVD Diamond Enhanced by Prior Au and O Implantation.. Materials Research Society Symposia Proceedings, 2002, 750, 1.	0.1	0
77	New applications of modulated digital images in document security. , 2006, , .		0
78	Replication of Grating-Based Optically Variable Devices in Polypropylene. Materials Research Society Symposia Proceedings, 2006, 961, 1.	0.1	0
79	Hot Embossing of Electron Beam Generated Structures in Polypropylene. Materials Research Society Symposia Proceedings, 2007, 1002, 1.	0.1	0
80	Structuring of grating arrays in multilayered foil by excimer laser. , 2008, , .		0
81	Microfluidic production of ultrasound contrast agents with a capillary gas jet PDMS microchip. , 2008, , .		0
82	UV Laser Ablation of PLZT and PSZT Films. Materials Research Society Symposia Proceedings, 2008, 1075, 1.	0.1	0
83	Hot Embossing of Microfluidic Channel Structures in Cyclic Olefin Copolymers. Materials Research Society Symposia Proceedings, 2010, 1272, 1.	0.1	0
84	Investigating extremely low resistance ohmic contacts to silicon carbide using a novel test structure. , 2013, , .		0
85	dLow Temperature of formation of Nickel Germanide by reaction of Nickel and Crystalline Germanium. Materials Research Society Symposia Proceedings, 2014, 1655, 1.	0.1	0
86	Low specific contact resistivity nickel to silicon carbide determined using a two contact circular test structure. , 2014, , .		0
87	Low temperature of formation of nickel germanide on crystalline germanium. , 2014, , .		0
88	Effect of Low Energy Implantation on the Properties of Ti/Ni/Au Contacts to n-SiC. Materials Research Society Symposia Proceedings, 2015, 1743, 39.	0.1	0
89	Modified Linear Transmission Line Model Test Structure for Determining Specific Contact Resistance. MRS Advances, 2016, 1, 157-162.	0.9	0
90	Low Energy Ion Implantation and Annealing of Au/Ni/Ti Contacts to n-SiC. MRS Advances, 2017, 2, 2903-2908.	0.9	0

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91	TCAD simulation of a single Monolithic Active Pixel Sensors based on High Voltage CMOS technology. MRS Advances, 2018, 3, 3053-3059.	0.9	0
92	Modified sheet resistance and specific contact resistance of Ni-, Pt- and Ti-based contacts to n-type 3C-SiC. MRS Advances, 2021, 6, 445-449.	0.9	0
93	Analytical test structure model for determining lateral effects of tri-layer ohmic contact beyond the contact edge. Facta Universitatis - Series Electronics and Energetics, 2017, 30, 257-265.	0.9	0