Suzanne E Mohney

List of Publications by Year
in descending order

111	1,952	236833	302012
papers	citations	25 h-index	39 g-index

114	114	114	2482
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Analysis of a thin AlN interfacial layer in Ti/Al and Pd/Al ohmic contacts to n-type GaN. Applied Physics Letters, 1997, 71, 3859-3861.	1.5	89
2	Uncovering the Effects of Metal Contacts on Monolayer MoS₂. ACS Nano, 2020, 14, 14798-14808.	7.3	89
3	V/Al/Pt/Au Ohmic contact to n-AlGaN/GaN heterostructures. Applied Physics Letters, 2002, 80, 1954-1956.	1.5	72
4	Interfacial reactions between nickel thin films and GaN. Journal of Applied Physics, 1997, 82, 650-654.	1.1	68
5	Wet thermal oxidation of GaN. Journal of Electronic Materials, 1999, 28, 257-260.	1.0	60
6	Factors controlling the resistance of Ohmic contacts to n-InGaAs. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2012, 30, .	0.6	58
7	Titanium and titanium nitride contacts to n-type gallium nitride. Semiconductor Science and Technology, 1998, 13, 1322-1327.	1.0	57
8	Annealed Ag contacts to MoS2 field-effect transistors. Journal of Applied Physics, 2017, 122, .	1.1	53
9	Estimated phase equilibria in the transition metal-Ga-N systems: Consequences for electrical contacts to GaN. Journal of Electronic Materials, 1996, 25, 811-818.	1.0	52
10	Silicidation of Silicon Nanowires by Platinum. Nano Letters, 2007, 7, 818-824.	4.5	52
11	Chalcogen Precursor Effect on Cold-Wall Gas-Source Chemical Vapor Deposition Growth of WS₂. Crystal Growth and Design, 2018, 18, 4357-4364.	1.4	48
12	Ultrathin Titanium Dioxide Nanolayers by Atomic Layer Deposition for Surface Passivation of Crystalline Silicon. IEEE Journal of Photovoltaics, 2016, 6, 649-653.	1.5	46
13	Orientation dependence of nickel silicide formation in contacts to silicon nanowires. Journal of Applied Physics, 2009, 105, 094309.	1.1	45
14	Structural and electrical properties of epitaxial Bi₂Se₃ thin films grown by hybrid physical-chemical vapor deposition. Applied Physics Letters, 2012, 100, 162110.	1.5	44
15	Thermally stable rhenium Schottky contacts to n-GaN. Applied Physics Letters, 1998, 73, 1242-1244.	1.5	42
16	Nickel and nickel silicide Schottky barrier contacts to n-type silicon nanowires. Journal of Vacuum Science & Technology B, 2008, 26, 1592.	1.3	36
17	Extracting the Richardson constant: IrOx/n-ZnO Schottky diodes. Applied Physics Letters, 2009, 94, .	1.5	35
18	Transition Metalâ€“MoS2 Reactions: Review and Thermodynamic Predictions. Journal of Electronic Materials, 2015, 44, 4065-4079.	1.0	35

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19	Singleâ€Crystal Germanium Core Optoelectronic Fibers. Advanced Optical Materials, 2017, 5, 1600592.	3.6	35
20	Study of contact resistivity, mechanical integrity, and thermal stability of Ti/Al and Ta/Al ohmic contacts to n-type GaN. Journal of Electronic Materials, 1998, 27, 196-199.	1.0	34
21	Temperature-Dependent Properties of Nearly Ideal ZnO Schottky Diodes. IEEE Transactions on Electron Devices, 2009, 56, 2160-2164.	1.6	34
22	Formation of nickel germanide contacts to Ge nanowires. Applied Physics Letters, 2010, 97, 263116.	1.5	32
23	Characterization of low-resistance ohmic contacts to n- and p-type InGaAs. Journal of Applied Physics, 2013, 114, .	1.1	29
24	Room Temperature van der Waals Epitaxy of Metal Thin Films on Molybdenum Disulfide. Crystal Growth and Design, 2018, 18, 3494-3501.	1.4	28
25	Interfacial reactions in Pt/InP contacts. Journal of Applied Physics, 1993, 74, 4403-4408.	1.1	27
26	Vanadium-based ohmic contacts to n-type Al0.6Ga0.4N. Journal of Electronic Materials, 2004, 33, 418-421.	1.0	27
27	Pt Schottky contacts ton-GaN formed by electrodeposition and physical vapor deposition. Journal of Applied Physics, 2000, 88, 2593-2600.	1.1	25
28	Phase equilibria in the Ptâ€Inâ€P system. Journal of Applied Physics, 1993, 74, 4398-4402.	1.1	24
29	Cosputtered Calcium Manganese Oxide Electrodes for Water Oxidation. Inorganic Chemistry, 2018, 57, 785-792.	1.9	24
30	High temperature stability of chromium boride ohmic contacts to p-type 6H-SiC. Journal of Electronic Materials, 1998, 27, 324-329.	1.0	23
31	Atomic layer deposition of ZnO on MoS2 and WSe2. Applied Surface Science, 2019, 480, 43-51.	3.1	23
32	Evaporated manganese films as a starting point for the preparation of thin-layer MnO_x water-oxidation anodes. Sustainable Energy and Fuels, 2017, 1, 1162-1170.	2.5	22
33	Improved ohmic contact to n-type 4H and 6H-SiC using nichrome. Journal of Electronic Materials, 1998, 27, 330-334.	1.0	21
34	Ultra low-resistance palladium silicide Ohmic contacts to lightly doped n-InGaAs. Journal of Applied Physics, 2012, 112, 054510.	1.1	21
35	Confined Chemical Fluid Deposition of Ferromagnetic Metalattices. Nano Letters, 2018, 18, 546-552.	4.5	21
36	Phase Formation and Morphology in Nickel and Nickel/Gold Contacts to Gallium Nitride. Materials Research Society Symposia Proceedings, 1997, 468, 431.	0.1	20

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37	Electron microscopy of GaAs/MnAs core/shell nanowires. Applied Physics Letters, 2010, 97, 072505.	1.5	18
38	Effect of substrate on the growth and properties of MoS2 thin films grown by plasma-enhanced atomic layer deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2019, 37, .	0.9	18
39	Kinetics of reactions of Ni contact pads with Si nanowires. Journal of Materials Research, 2011, 26, 2282-2285.	1.2	17
40	Approaches to designing thermally stable Schottky contacts to n-GaN. Semiconductor Science and Technology, 1999, 14, 757-761.	1.0	16
41	Effects of barrier height inhomogeneities on the determination of the Richardson constant. Journal of Applied Physics, 2011, 109, .	1.1	16
42	Sulfidation of 2D transition metals (Mo, W, Re, Nb, Ta): thermodynamics, processing, and characterization. Journal of Materials Science, 2017, 52, 10127-10139.	1.7	16
43	Morphology of nickel and nickel/gold contacts to gallium nitride. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1998, 16, 607-610.	0.9	15
44	Phase equilibria in transition metal Al-Ga-N systems and thermal stability of contacts to AlGaN. Journal of Electronic Materials, 2001, 30, 175-182.	1.0	15
45	Condensed phase equilibria in transition metal-Ga-Sb systems and predictions for thermally stable contacts to GaSb. Journal of Electronic Materials, 2003, 32, 1090-1099.	1.0	14
46	Silicide formation in contacts to Si nanowires. Journal of Materials Science, 2012, 47, 6189-6205.	1.7	14
47	Achieving Minimal Heat Conductivity by Ballistic Confinement in Phononic Metalattices. ACS Nano, 2020, 14, 4235-4243.	7.3	14
48	Reliability of aluminum-bearing ohmic contacts to SiC under high current density. Microelectronics Reliability, 2010, 50, 1967-1972.	0.9	13
49	Gas phase equilibrium limitations on the vaporâ€“liquidâ€“solid growth of epitaxial silicon nanowires using SiCl₄. Journal of Materials Research, 2011, 26, 2207-2214.	1.2	13
50	Phase equilibria and ternary phase formation in the Inâ€“Niâ€“P system. Journal of Materials Research, 1992, 7, 955-960.	1.2	12
51	Room-temperature epitaxy of metal thin films on tungsten diselenide. Journal of Crystal Growth, 2019, 505, 44-51.	0.7	12
52	Phase formation in Ni/InP contacts. Journal of Applied Physics, 1995, 78, 1342-1347.	1.1	11
53	Condensed phase equilibria in the metal-In-P systems. Journal of Electronic Materials, 1998, 27, 26-31.	1.0	11
54	Conformal coating of amorphous silicon and germanium by high pressure chemical vapor deposition for photovoltaic fabrics. APL Materials, 2018, 6, 046105.	2.2	11

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55	Developing Niâ€“Al and Ruâ€“Al intermetallic films for use in microelectromechanical systems. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2011, 29, 042002.	0.6	10
56	Intermetallic growth between lead-free solders and palladium. Journal of Electronic Materials, 2003, 32, 1209-1213.	1.0	9
57	Thermodynamic modeling of the Niâ€“Alâ€“Gaâ€“N system. Journal of Materials Research, 2004, 19, 1742-1751.	1.2	9
58	Impact of Premetallization Surface Preparation on Nickel-based Ohmic Contacts to Germanium Telluride: An X-ray Photoelectron Spectroscopic Study. ACS Applied Materials & Interfaces, 2016, 8, 34802-34809.	4.0	9
59	Review of electrical contacts to phase change materials and an unexpected trend between metal work function and contact resistance to germanium telluride. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2020, 38, .	0.9	9
60	Low-frequency Raman signature of Ag-intercalated few-layer MoS₂. 2D Materials, 2021, 8, 025031.	2.0	9
61	Refractory metal boride ohmic contacts to P-type 6H-SiC. Journal of Electronic Materials, 1998, 27, 14-18.	1.0	8
62	Shallow and thermally stable Ptâˆ•Wâˆ•Au Ohmic contacts to p-type InGaSb. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2005, 23, 293-297.	0.9	8
63	Thermal stability of Pd/Pt/Au Ohmic contacts to InAlSb/InAs heterostructures for high electron mobility transistors. Journal of Applied Physics, 2009, 105, 044505.	1.1	8
64	Condensed phase diagrams for the metalâ€“Wâ€“S systems and their relevance for contacts to WS2. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2016, 212, 78-88.	1.7	8
65	Reactivity of contact metals on monolayer WS2. Journal of Applied Physics, 2020, 128, 055306.	1.1	8
66	Solid-state phase formation between Pd thin films and GaSb. Journal of Electronic Materials, 2006, 35, 48-55.	1.0	7
67	The effect of Si doping on the electrical properties of B12As2 thin films on (0001) 6H-SiC substrates. Journal of Applied Physics, 2007, 101, 053710.	1.1	7
68	Laser-enhanced electroless plating of silver seed layers for selective electroless copper deposition. Journal of Laser Applications, 2008, 20, 218-223.	0.8	7
69	Thermal stability of low-resistance Au Ohmic contacts to GeTe. Thin Solid Films, 2017, 621, 145-150.	0.8	7
70	Very low-resistance Mo-based Ohmic contacts to GeTe. Journal of Applied Physics, 2017, 122, .	1.1	7
71	Phase formation and stability in the Pd/GaP system. Applied Physics Letters, 1993, 63, 1255-1257.	1.5	6
72	Thermal stability of metallizations on GaN/AlxGa1â^'xN/GaN heterostructures. Semiconductor Science and Technology, 2005, 20, 389-397.	1.0	6

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73	Novel Sn-Based Contact Structure for GeTe Phase Change Materials. ACS Applied Materials & Interfaces, 2018, 10, 16623-16627.	4.0	6
74	Fabrication and Electrical Characterization of Silicon Nanowire Arrays. Materials Research Society Symposia Proceedings, 2004, 832, 364.	0.1	5
75	Environmental sensitivity of Au diodes on n-AlGaN. Journal of Electronic Materials, 2005, 34, 375-381.	1.0	5
76	Investigation of Aluminum and Titanium/Aluminum Contacts to n-Type Gallium Nitride. Materials Research Society Symposia Proceedings, 1996, 449, 1097.	0.1	4
77	Growth and Characterization of Thermal Oxides on Gallium Nitride. Materials Research Society Symposia Proceedings, 1997, 468, 495.	0.1	4
78	Oxidation of RuAl and NiAl Thin Films: Evolution of Surface Morphology and Electrical Resistance. Journal of Microelectromechanical Systems, 2011, 20, 933-942.	1.7	4
79	Reduction of Ohmic Contact Resistance of Solid Phase Regrowth Contacts to n-InGaAs Using a Sulfur Pretreatment. IEEE Electron Device Letters, 2013, 34, 1184-1186.	2.2	4
80	Employing microsecond pulses to form laserâ€fired contacts in photovoltaic devices. Progress in Photovoltaics: Research and Applications, 2015, 23, 1025-1036.	4.4	4
81	Pd and Au Contacts to SnS: Thermodynamic Predictions and Annealing Study. Journal of Electronic Materials, 2016, 45, 6300-6304.	1.0	4
82	Thermally tunable VO2-SiO2 nanocomposite thin-film capacitors. Journal of Applied Physics, 2018, 123, .	1.1	4
83	Reactivity in metal-Ge-Te systems: Thermodynamic predictions and experimental observations. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2019, 37, .	0.9	4
84	Effect of diazotization and magnetic assembly on CNT dispersion observed with hardness and modulus measurement of their epoxy composite of low CNT volume fraction. Journal of Nanoparticle Research, 2019, 21, 1.	0.8	4
85	Nickel diffusion into MoS2 and the effect of annealing on contact resistance. Materials Science in Semiconductor Processing, 2020, 107, 104850.	1.9	4
86	First-principles study and experimental characterization of metal incorporation in germanium telluride. Journal of Applied Physics, 2020, 128, .	1.1	4
87	Vapor phase passivation of (100) germanium surfaces with HBr. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2020, 38, 023208.	0.9	4
88	Molybdenum carbonitride deposited by plasma atomic layer deposition as a Schottky contact to gallium nitride. Applied Physics Letters, 2021, 119, 102102.	1.5	4
89	Inversion-mode Operation of Thermally-oxidized Modulation-doped Silicon Nanowire Field Effect Devices. , 2006, , .		3
90	Minority carrier injection limited current in Re/4Hâ€SiC Schottky diodes. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 1509-1513.	0.8	3

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91	Improved Stability of Pd/Ti Contacts to p-Type SiC Under Continuous DC and Pulsed DC Current Stress. Journal of Electronic Materials, 2011, 40, 406-412.	1.0	3
92	Quantum transport in three-dimensional metalattices of platinum featuring an unprecedentedly large surface area to volume ratio. Physical Review Materials, 2020, 4, .	0.9	3
93	Interfacial Reactions and Phase Stability in the Ni/InP System. Materials Research Society Symposia Proceedings, 1994, 337, 393.	0.1	2
94	Phase equilibria in the semiconductor-rich portions of the Pt-Ti-Ga-As and Pt-Ti-In-As systems. Journal of Materials Science: Materials in Electronics, 1998, 9, 357-360.	1.1	2
95	Engineering the Al-Ti/p-SiC Ohmic Contact for Improved Performance. Materials Research Society Symposia Proceedings, 2000, 640, 1.	0.1	2
96	The Influence of Contact Composition, Pretreatment, and Annealing Gas on the Ohmic Behavior of Ti/Al-Based Ohmic Contacts to n-Al_{0.4}Ga_{0.6}N. Materials Research Society Symposia Proceedings, 2001, 680, 1.	0.1	2
97	Contacts to High Aluminum Fraction p-type Aluminum Gallium Nitride. Materials Research Society Symposia Proceedings, 2002, 743, L12.2.1.	0.1	2
98	Electron beam evaporated Au islands as a nanoscale etch mask on few-layer MoS₂ and fabrication of top-edge hybrid contacts for field-effect transistors. Nanotechnology, 2021, 32, 025203.	1.3	2
99	Improved rhenium Schottky diodes to n-type gallium nitride. Materials Science in Semiconductor Processing, 2022, 148, 106799.	1.9	2
100	Approaches to High Temperature Contacts to Silicon Carbide. Materials Research Society Symposia Proceedings, 1996, 423, 137.	0.1	1
101	Investigation of polarity effects on the degradation of Pd/Ti/Pt ohmic contacts to p-type SiC under current stress. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2011, 29, 061205.	0.6	1
102	Ti/Al Ohmic Contacts to n-Type GaN Nanowires. Journal of Nanomaterials, 2011, 2011, 1-6.	1.5	1
103	Thermally Stable Schottky Contacts TO n-GaN. Materials Research Society Symposia Proceedings, 1998, 512, 279.	0.1	0
104	Top-gated field effect transistors fabricated using thermally-oxidized silicon nanowires synthesized by vapor-liquid solid growth. , 2007, , .		0
105	Axially-doped n⁺-p[−]-n⁺ and p⁺-n[−]-p⁺ silicon nanowires: vapor-liquid-solid growth and field effect transistor characterization. , 2008, , .		0
106	Extreme sensitivity of contact resistance to variations in the interfacial composition of Ti/Al-based contacts to N-face GaN/AlGaN heterostructures. Applied Physics Letters, 2012, 101, 243504.	1.5	0
107	Effect of polarity on Ni/InN interfacial reactions. Applied Physics Letters, 2013, 102, 021607.	1.5	0
108	Optoelectronic Fibers: Singleâ€Crystal Germanium Core Optoelectronic Fibers (Advanced Optical) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	3.6	0

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109	High Work Function Metallizations on Gallium Nitride for Schottky Diodes. ECS Meeting Abstracts, 2021, MA2021-01, 1072-1072.	0.0	0
110	Electroless deposition of palladium films on gallium nitride for Schottky diodes. Journal of Materials Science: Materials in Electronics, 2022, 33, 7598-7605.	1.1	0
111	Modeling of the Effect of Metal Islands in Hybrid Contacts to MoS2. Journal of Electronic Materials, 0, , 1.	1.0	0