

Suzanne E Mohney

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/310853/publications.pdf>

Version: 2024-02-01

111
papers

1,952
citations

236833

25
h-index

302012

39
g-index

114
all docs

114
docs citations

114
times ranked

2482
citing authors

#	ARTICLE	IF	CITATIONS
1	Electroless deposition of palladium films on gallium nitride for Schottky diodes. <i>Journal of Materials Science: Materials in Electronics</i> , 2022, 33, 7598-7605.	1.1	0
2	Improved rhenium Schottky diodes to n-type gallium nitride. <i>Materials Science in Semiconductor Processing</i> , 2022, 148, 106799.	1.9	2
3	Low-frequency Raman signature of Ag-intercalated few-layer MoS ₂ . <i>2D Materials</i> , 2021, 8, 025031.	2.0	9
4	High Work Function Metallizations on Gallium Nitride for Schottky Diodes. <i>ECS Meeting Abstracts</i> , 2021, MA2021-01, 1072-1072.	0.0	0
5	Molybdenum carbonitride deposited by plasma atomic layer deposition as a Schottky contact to gallium nitride. <i>Applied Physics Letters</i> , 2021, 119, 102102.	1.5	4
6	Electron beam evaporated Au islands as a nanoscale etch mask on few-layer MoS ₂ and fabrication of top-edge hybrid contacts for field-effect transistors. <i>Nanotechnology</i> , 2021, 32, 025203.	1.3	2
7	Nickel diffusion into MoS ₂ and the effect of annealing on contact resistance. <i>Materials Science in Semiconductor Processing</i> , 2020, 107, 104850.	1.9	4
8	Reactivity of contact metals on monolayer WS ₂ . <i>Journal of Applied Physics</i> , 2020, 128, 055306.	1.1	8
9	Review of electrical contacts to phase change materials and an unexpected trend between metal work function and contact resistance to germanium telluride. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2020, 38, .	0.9	9
10	Uncovering the Effects of Metal Contacts on Monolayer MoS ₂ . <i>ACS Nano</i> , 2020, 14, 14798-14808.	7.3	89
11	First-principles study and experimental characterization of metal incorporation in germanium telluride. <i>Journal of Applied Physics</i> , 2020, 128, .	1.1	4
12	Achieving Minimal Heat Conductivity by Ballistic Confinement in Phononic Metalattices. <i>ACS Nano</i> , 2020, 14, 4235-4243.	7.3	14
13	Vapor phase passivation of (100) germanium surfaces with HBr. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2020, 38, 023208.	0.9	4
14	Quantum transport in three-dimensional metalattices of platinum featuring an unprecedentedly large surface area to volume ratio. <i>Physical Review Materials</i> , 2020, 4, .	0.9	3
15	Reactivity in metal-Ge-Te systems: Thermodynamic predictions and experimental observations. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2019, 37, .	0.9	4
16	Atomic layer deposition of ZnO on MoS ₂ and WSe ₂ . <i>Applied Surface Science</i> , 2019, 480, 43-51.	3.1	23
17	Effect of diazotization and magnetic assembly on CNT dispersion observed with hardness and modulus measurement of their epoxy composite of low CNT volume fraction. <i>Journal of Nanoparticle Research</i> , 2019, 21, 1.	0.8	4
18	Effect of substrate on the growth and properties of MoS ₂ thin films grown by plasma-enhanced atomic layer deposition. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2019, 37, .	0.9	18

#	ARTICLE	IF	CITATIONS
19	Room-temperature epitaxy of metal thin films on tungsten diselenide. <i>Journal of Crystal Growth</i> , 2019, 505, 44-51.	0.7	12
20	Novel Sn-Based Contact Structure for GeTe Phase Change Materials. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 16623-16627.	4.0	6
21	Cosputtered Calcium Manganese Oxide Electrodes for Water Oxidation. <i>Inorganic Chemistry</i> , 2018, 57, 785-792.	1.9	24
22	Confined Chemical Fluid Deposition of Ferromagnetic Metal lattices. <i>Nano Letters</i> , 2018, 18, 546-552.	4.5	21
23	Room Temperature van der Waals Epitaxy of Metal Thin Films on Molybdenum Disulfide. <i>Crystal Growth and Design</i> , 2018, 18, 3494-3501.	1.4	28
24	Conformal coating of amorphous silicon and germanium by high pressure chemical vapor deposition for photovoltaic fabrics. <i>APL Materials</i> , 2018, 6, 046105.	2.2	11
25	Thermally tunable VO ₂ -SiO ₂ nanocomposite thin-film capacitors. <i>Journal of Applied Physics</i> , 2018, 123, .	1.1	4
26	Chalcogen Precursor Effect on Cold-Wall Gas-Source Chemical Vapor Deposition Growth of WS ₂ . <i>Crystal Growth and Design</i> , 2018, 18, 4357-4364.	1.4	48
27	Thermal stability of low-resistance Au Ohmic contacts to GeTe. <i>Thin Solid Films</i> , 2017, 621, 145-150.	0.8	7
28	Evaporated manganese films as a starting point for the preparation of thin-layer MnO _x water-oxidation anodes. <i>Sustainable Energy and Fuels</i> , 2017, 1, 1162-1170.	2.5	22
29	Sulfidation of 2D transition metals (Mo, W, Re, Nb, Ta): thermodynamics, processing, and characterization. <i>Journal of Materials Science</i> , 2017, 52, 10127-10139.	1.7	16
30	Optoelectronic Fibers: Single-Crystal Germanium Core Optoelectronic Fibers (Advanced Optical) $T_j \approx T_{j0} \left(1 + \frac{1}{10} \frac{R_T}{R_{T0}}\right)$ $\approx 10 T_f$	3.6	10
31	Annealed Ag contacts to MoS ₂ field-effect transistors. <i>Journal of Applied Physics</i> , 2017, 122, .	1.1	53
32	Very low-resistance Mo-based Ohmic contacts to GeTe. <i>Journal of Applied Physics</i> , 2017, 122, .	1.1	7
33	Single-Crystal Germanium Core Optoelectronic Fibers. <i>Advanced Optical Materials</i> , 2017, 5, 1600592.	3.6	35
34	Impact of Premetallization Surface Preparation on Nickel-based Ohmic Contacts to Germanium Telluride: An X-ray Photoelectron Spectroscopic Study. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 34802-34809.	4.0	9
35	Ultrathin Titanium Dioxide Nanolayers by Atomic Layer Deposition for Surface Passivation of Crystalline Silicon. <i>IEEE Journal of Photovoltaics</i> , 2016, 6, 649-653.	1.5	46
36	Condensed phase diagrams for the metal-W-S systems and their relevance for contacts to WS ₂ . <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2016, 212, 78-88.	1.7	8

#	ARTICLE	IF	CITATIONS
37	Pd and Au Contacts to SnS: Thermodynamic Predictions and Annealing Study. Journal of Electronic Materials, 2016, 45, 6300-6304.	1.0	4
38	Employing microsecond pulses to form laser-fired contacts in photovoltaic devices. Progress in Photovoltaics: Research and Applications, 2015, 23, 1025-1036.	4.4	4
39	Transition Metal-MoS ₂ Reactions: Review and Thermodynamic Predictions. Journal of Electronic Materials, 2015, 44, 4065-4079.	1.0	35
40	Effect of polarity on Ni/InN interfacial reactions. Applied Physics Letters, 2013, 102, 021607.	1.5	0
41	Characterization of low-resistance ohmic contacts to n- and p-type InGaAs. Journal of Applied Physics, 2013, 114, .	1.1	29
42	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
43	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
44	Ultra low-resistance palladium silicide Ohmic contacts to lightly doped n-InGaAs. Journal of Applied Physics, 2012, 112, 054510.	1.1	21
45	Structural and electrical properties of epitaxial Bi ₂ Se ₃ thin films grown by hybrid physical-chemical vapor deposition. Applied Physics Letters, 2012, 100, 162110.	1.5	44
46	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
47	Silicide formation in contacts to Si nanowires. Journal of Materials Science, 2012, 47, 6189-6205.	1.7	14
48	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
49	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
50	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
51	Developing Ni-Al and Ru-Al intermetallic films for use in microelectromechanical systems. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2011, 29, 042002.	0.6	10
52	Effects of barrier height inhomogeneities on the determination of the Richardson constant. Journal of Applied Physics, 2011, 109, .	1.1	16
53	Gas phase equilibrium limitations on the vapor-liquid-solid growth of epitaxial silicon nanowires using SiCl ₄ . Journal of Materials Research, 2011, 26, 2207-2214.	1.2	13
54	Kinetics of reactions of Ni contact pads with Si nanowires. Journal of Materials Research, 2011, 26, 2282-2285.	1.2	17

#	ARTICLE	IF	CITATIONS
55	Ti/Al Ohmic Contacts to n-Type GaN Nanowires. Journal of Nanomaterials, 2011, 2011, 1-6.	1.5	1
56	Reliability of aluminum-bearing ohmic contacts to SiC under high current density. Microelectronics Reliability, 2010, 50, 1967-1972.	0.9	13
57	Minority carrier injection limited current in Re/4H-SiC Schottky diodes. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 1509-1513.	0.8	3
58	Electron microscopy of GaAs/MnAs core/shell nanowires. Applied Physics Letters, 2010, 97, 072505.	1.5	18
59	Formation of nickel germanide contacts to Ge nanowires. Applied Physics Letters, 2010, 97, 263116.	1.5	32
60	Temperature-Dependent Properties of Nearly Ideal ZnO Schottky Diodes. IEEE Transactions on Electron Devices, 2009, 56, 2160-2164.	1.6	34
61	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
62	Extracting the Richardson constant: IrOx/n-ZnO Schottky diodes. Applied Physics Letters, 2009, 94, .	1.5	35
63	Orientation dependence of nickel silicide formation in contacts to silicon nanowires. Journal of Applied Physics, 2009, 105, 094309.	1.1	45
64	Axially-doped n ⁺ and p ⁺ and n ⁻ and p ⁻ silicon nanowires: vapor-liquid-solid growth and field effect transistor characterization. , 2008, , .		0
65	Laser-enhanced electroless plating of silver seed layers for selective electroless copper deposition. Journal of Laser Applications, 2008, 20, 218-223.	0.8	7
66	Nickel and nickel silicide Schottky barrier contacts to n-type silicon nanowires. Journal of Vacuum Science & Technology B, 2008, 26, 1592.	1.3	36
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	Top-gated field effect transistors fabricated using thermally-oxidized silicon nanowires synthesized by vapor-liquid solid growth. , 2007, , .		0
69	Silicidation of Silicon Nanowires by Platinum. Nano Letters, 2007, 7, 818-824.	4.5	52
70	Inversion-mode Operation of Thermally-oxidized Modulation-doped Silicon Nanowire Field Effect Devices. , 2006, , .		3
71	Solid-state phase formation between Pd thin films and GaSb. Journal of Electronic Materials, 2006, 35, 48-55.	1.0	7
72	Environmental sensitivity of Au diodes on n-AlGaIn. Journal of Electronic Materials, 2005, 34, 375-381.	1.0	5

#	ARTICLE	IF	CITATIONS
73	Shallow and thermally stable Pt ^W /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
74	Thermal stability of metallizations on GaN/Al _x Ga _{1-x} N/GaN heterostructures. Semiconductor Science and Technology, 2005, 20, 389-397.	1.0	6
75	Fabrication and Electrical Characterization of Silicon Nanowire Arrays. Materials Research Society Symposia Proceedings, 2004, 832, 364.	0.1	5
76	Thermodynamic modeling of the Ni-Al-GaN system. Journal of Materials Research, 2004, 19, 1742-1751.	1.2	9
77	Vanadium-based ohmic contacts to n-type Al _{0.6} Ga _{0.4} N. Journal of Electronic Materials, 2004, 33, 418-421.	1.0	27
78	Intermetallic growth between lead-free solders and palladium. Journal of Electronic Materials, 2003, 32, 1209-1213.	1.0	9
79	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
80	V/Al/Pt/Au Ohmic contact to n-AlGa _x GaN heterostructures. Applied Physics Letters, 2002, 80, 1954-1956.	1.5	72
81	Contacts to High Aluminum Fraction p-type Aluminum Gallium Nitride. Materials Research Society Symposia Proceedings, 2002, 743, L12.2.1.	0.1	2
82	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
83	Phase equilibria in transition metal Al-Ga-N systems and thermal stability of contacts to AlGa _x N. Journal of Electronic Materials, 2001, 30, 175-182.	1.0	15
84	Engineering the Al-Ti/p-SiC Ohmic Contact for Improved Performance. Materials Research Society Symposia Proceedings, 2000, 640, 1.	0.1	2
85	Pt Schottky contacts on GaN formed by electrodeposition and physical vapor deposition. Journal of Applied Physics, 2000, 88, 2593-2600.	1.1	25
86	Approaches to designing thermally stable Schottky contacts to n-GaN. Semiconductor Science and Technology, 1999, 14, 757-761.	1.0	16
87	Wet thermal oxidation of GaN. Journal of Electronic Materials, 1999, 28, 257-260.	1.0	60
88	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
89	Refractory metal boride ohmic contacts to P-type 6H-SiC. Journal of Electronic Materials, 1998, 27, 14-18.	1.0	8
90	Condensed phase equilibria in the metal-In-P systems. Journal of Electronic Materials, 1998, 27, 26-31.	1.0	11

#	ARTICLE	IF	CITATIONS
91	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
92	High temperature stability of chromium boride ohmic contacts to p-type 6H-SiC. Journal of Electronic Materials, 1998, 27, 324-329.	1.0	23
93	Improved ohmic contact to n-type 4H and 6H-SiC using nichrome. Journal of Electronic Materials, 1998, 27, 330-334.	1.0	21
94	Titanium and titanium nitride contacts to n-type gallium nitride. Semiconductor Science and Technology, 1998, 13, 1322-1327.	1.0	57
95	Thermally stable rhenium Schottky contacts to n-GaN. Applied Physics Letters, 1998, 73, 1242-1244.	1.5	42
96	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
97	Thermally Stable Schottky Contacts TO n-GaN. Materials Research Society Symposia Proceedings, 1998, 512, 279.	0.1	0
98	Interfacial reactions between nickel thin films and GaN. Journal of Applied Physics, 1997, 82, 650-654.	1.1	68
99	Growth and Characterization of Thermal Oxides on Gallium Nitride. Materials Research Society Symposia Proceedings, 1997, 468, 495.	0.1	4
100	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
101	Phase Formation and Morphology in Nickel and Nickel/Gold Contacts to Gallium Nitride. Materials Research Society Symposia Proceedings, 1997, 468, 431.	0.1	20
102	Investigation of Aluminum and Titanium/Aluminum Contacts to n-Type Gallium Nitride. Materials Research Society Symposia Proceedings, 1996, 449, 1097.	0.1	4
103	Approaches to High Temperature Contacts to Silicon Carbide. Materials Research Society Symposia Proceedings, 1996, 423, 137.	0.1	1
104	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
105	Phase formation in Ni/InP contacts. Journal of Applied Physics, 1995, 78, 1342-1347.	1.1	11
106	Interfacial Reactions and Phase Stability in the Ni/InP System. Materials Research Society Symposia Proceedings, 1994, 337, 393.	0.1	2
107	Interfacial reactions in Pt/InP contacts. Journal of Applied Physics, 1993, 74, 4403-4408.	1.1	27
108	Phase equilibria in the Pt-In-P system. Journal of Applied Physics, 1993, 74, 4398-4402.	1.1	24

#	ARTICLE	IF	CITATIONS
109	Phase formation and stability in the Pd/GaP system. Applied Physics Letters, 1993, 63, 1255-1257.	1.5	6
110	Phase equilibria and ternary phase formation in the In-Ni-P system. Journal of Materials Research, 1992, 7, 955-960.	1.2	12
111	Modeling of the Effect of Metal Islands in Hybrid Contacts to MoS ₂ . Journal of Electronic Materials, 0, , 1.	1.0	0