Wendy L Sarney

List of Publications by Year
in descending order

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105	1,868	279798	289244
papers	citations	23 h-index	40 g-index

105	105	105	1537
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	WSe₂ growth on hafnium zirconium oxide by molecular beam epitaxy: the effect of the WSe₂ growth conditions on the ferroelectric properties of HZO. 2D Materials, 2022, 9, 015001.	4.4	0
2	Plasma enhanced atomic layer deposition of textured aluminum nitride on platinized substrates for MEMS. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2022, 40, .	2.1	11
3	Tailoring superconducting phases observed in hyperdoped Si:Ga for cryogenic circuit applications. Applied Physics Letters, 2021, 118, .	3.3	4
4	Tuning superconductivity in Ge:Ga using <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mrow><mml:mi>Ga</mml:mi></mml:mrow><mml:mo>+</mml:mo></mml:msup></mml:math> implantation energy. Physical Review Materials, 2021, 5, .	2.4	1
5	A comparison of indium arsenide antimonide and mercury cadmium telluride as long wavelength infrared detector materials. Journal of Applied Physics, 2020, 128, .	2.5	2
6	Electrical modulation of the LWIR absorption and refractive index in InAsSb-based strained layer superlattice heterostructures. Journal of Applied Physics, 2020, 128, 083101.	2.5	3
7	Superconducting Proximity Effect in InAsSb Surface Quantum Wells with In Situ Al Contacts. ACS Applied Electronic Materials, 2020, 2, 2351-2356.	4.3	22
8	Dirac energy spectrum and inverted bandgap in metamorphic InAsSb/InSb superlattices. Applied Physics Letters, 2020, 116, 032101.	3.3	5
9	Influence of strain on the InAs1â€‰â€“â€‰xSbx composition. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2020, 38, 032206.	1.2	1
10	Aluminum metallization of IIIâ€“V semiconductors for the study of proximity superconductivity. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2020, 38, 032212.	1.2	7
11	P-doping with beryllium of long-wavelength InAsSb. Semiconductor Science and Technology, 2020, 35, 125001.	2.0	0
12	Observation of a Direct Correlation of the Crystallite Morphology and the Optical Properties in Indium Tin Oxide Thin Films. Microscopy and Microanalysis, 2019, 25, 2356-2357.	0.4	0
13	On the predictive, quantitative properties of the amphoteric native defect model. Semiconductor Science and Technology, 2019, 34, 10LT01.	2.0	1
14	InAsSb-based heterostructures for infrared light modulation. Applied Physics Letters, 2019, 115, .	3.3	4
15	Temperature dependent Hall effect in InAsSb with a 0.11â€‰eV 77â€‰K-bandgap. Applied Physics Letters, 2019, 114, 122102.	3.3	9
16	Engineering Dirac Materials: Metamorphic InAs_{1â€“x}Sb_x/InAs_{1â€“y}Sb_y Superlattices with Ultralow Bandgap. Nano Letters, 2018, 18, 412-417.	9.1	21
17	Thick Epsilon-Near-Zero ITO Metamaterial Films. , 2018, , .		0
18	Metamorphic narrow-gap InSb/InAsSb superlattices with ultra-thin layers. Applied Physics Letters, 2018, 113, .	3.3	6

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19	Reactivity studies and structural properties of Al on compound semiconductor surfaces. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2018, 36, 062903.	1.2	10
20	Ultra-short period Ga-free superlattice growth on GaSb. Journal of Applied Physics, 2018, 124, .	2.5	8
21	Assessment of nitrogen incorporation in dilute GaAsN films using isotopically enriched molecular beam epitaxy and resonant nuclear reaction analysis. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2017, 35, .	1.2	1
22	Bulk InAsSb with 0.1 eV bandgap on GaAs. Journal of Applied Physics, 2017, 122, .	2.5	19
23	Intermixing studies in GaN_1â^'xSb_x highly mismatched alloys. Applied Optics, 2017, 56, B64.	2.1	3
24	Materials design parameters for infrared device applications based on III-V semiconductors. Applied Optics, 2017, 56, B58.	2.1	15
25	Interband absorption strength in long-wave infrared type-II superlattices with small and large superlattice periods compared to bulk materials. Applied Physics Letters, 2016, 108, .	3.3	71
26	Undoped p-type GaN1â€“xSbx alloys: Effects of annealing. Applied Physics Letters, 2016, 109, .	3.3	6
27	Extremely small bandgaps, engineered by controlled multi-scale ordering in InAsSb. Journal of Applied Physics, 2016, 119, 215704.	2.5	10
28	Highly mismatched GaN_{1â^'x}Sb_xalloys: synthesis, structure and electronic properties. Semiconductor Science and Technology, 2016, 31, 083001.	2.0	16
29	Electronic properties of unstrained unrelaxed narrow gap InAs_xSb_{1â^'x} alloys. Journal Physics D: Applied Physics, 2016, 49, 105101.	2.8	27
30	Flux dependent Sb-incorporation during molecular beam epitaxy of InAsSb. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2015, 33, .	1.2	12
31	Electronic band structure of highly mismatched GaN1â^'xSbx alloys in a broad composition range. Applied Physics Letters, 2015, 107, .	3.3	25
32	Determination of N-/Ga-rich growth conditions, using in-situ auger electron spectroscopy. Journal of Crystal Growth, 2015, 425, 2-4.	1.5	3
33	Development of Bulk InAsSb Alloys and Barrier Heterostructures for Long-Wave Infrared Detectors. Journal of Electronic Materials, 2015, 44, 3360-3366.	2.2	27
34	AlInAsSb for M-LWIR detectors. Journal of Crystal Growth, 2015, 425, 357-359.	1.5	7
35	Growth temperature and surfactant effects on the properties of mixed group V alloys. Journal of Crystal Growth, 2015, 425, 234-236.	1.5	2
36	Background and interface electron populations in InAs_{0.58}Sb_{0.42}. Semiconductor Science and Technology, 2015, 30, 035018.	2.0	17

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37	Effects of native defects on properties of low temperature grown, non-stoichiomtric gallium nitride. Journal Physics D: Applied Physics, 2015, 48, 385101.	2.8	6
38	Exploration of the growth parameter space for MBE-grown GaN1âˆ'Sb highly mismatched alloys. Journal of Crystal Growth, 2015, 425, 255-257.	1.5	8
39	Composition modulated InAsSb superlattice induced by non-incorporating Bismuth. Journal of Crystal Growth, 2015, 432, 105-107.	1.5	2
40	Structural and Optical Characteristics of Metamorphic Bulk InAsSb. International Journal of High Speed Electronics and Systems, 2014, 23, 1450021.	0.7	0
41	Influence of a Bi surfactant on Sb incorporation in InAsSb alloys. Journal of Applied Physics, 2014, 116, .	2.5	7
42	Composition and optical properties of dilute-Sb GaN_{1âˆ'x}Sb_xhighly mismatched alloys grown by MBE. Journal Physics D: Applied Physics, 2014, 47, 465102.	2.8	9
43	Growth and characterization of highly mismatched GaN1âˆ'xSbx alloys. Journal of Applied Physics, 2014, 116, .	2.5	20
44	Tellurium n-type doping of highly mismatched amorphous GaN1âˆ'As alloys in plasma-assisted molecular beam epitaxy. Journal of Crystal Growth, 2014, 404, 9-13.	1.5	3
45	The influence of growth temperature on Sb incorporation in InAsSb, and the temperature-dependent impact of Bi surfactants. Journal of Crystal Growth, 2014, 406, 8-11.	1.5	13
46	Minority Carrier Lifetime in Beryllium-Doped InAs/InAsSb Strained Layer Superlattices. Journal of Electronic Materials, 2014, 43, 3184-3190.	2.2	8
47	Metamorphic InAsSb-based barrier photodetectors for the long wave infrared region. Applied Physics Letters, 2013, 103, .	3.3	30
48	Metamorphic InAsSb/AlInAsSb heterostructures for optoelectronic applications. Applied Physics Letters, 2013, 102, .	3.3	28
49	Infrared emitters and photodetectors with InAsSb bulk active region. Proceedings of SPIE, 2013, , .	0.8	4
50	Conduction- and Valence-Band Energies in Bulk InAs1âˆ'x Sb x and TypeÂII InAs1âˆ'x Sb x /InAs Strained-Layer Superlattices. Journal of Electronic Materials, 2013, 42, 918-926.	2.2	26
51	GaN1âˆ'xSbx highly mismatched alloys grown by low temperature molecular beam epitaxy under Ga-rich conditions. Journal of Crystal Growth, 2013, 383, 95-99.	1.5	14
52	Molecular beam epitaxy of highly mismatched N-rich GaN1âˆ'xSbx and InN1âˆ'xAsx alloys. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2013, 31, .	1.2	12
53	Incorporation kinetics in mixed anion compound semiconductor alloys. Journal of Applied Physics, 2013, 114, 234907.	2.5	10
54	Discrepancies in the nature of nitrogen incorporation in dilute-nitride GaSbN and GaAsN films. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2013, 31, .	1.2	3

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55	Enhanced dielectric properties from barium strontium titanate films with strontium titanate buffer layers. Journal of Applied Physics, 2013, 114, 164107.	2.5	28
56	Antimony-assisted carbonization of Si(111) with solid source molecular beam epitaxy. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2013, 31, 061511.	2.1	2
57	Highly mismatched N-rich GaN1â^'xSbx films grown by low temperature molecular beam epitaxy. Applied Physics Letters, 2013, 102, .	3.3	26
58	InAs1-xSbx ALLOYS WITH NATIVE LATTICE PARAMETERS GROWN ON COMPOSITIONALLY GRADED BUFFERS: STRUCTURAL AND OPTICAL PROPERTIES. International Journal of High Speed Electronics and Systems, 2012, 21, 1250013.	0.7	0
59	Molecular beam epitaxy control and photoluminescence properties of InAsBi. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2012, 30, 02B109.	1.2	42
60	Unrelaxed bulk InAsSb with novel absorption, carrier transport, and recombination properties for MWIR and LWIR photodetectors. Proceedings of SPIE, 2012, , .	0.8	9
61	3 Âµm diode lasers grown on (Al)GaInSb compositionally graded metamorphic buffer layers. Semiconductor Science and Technology, 2012, 27, 055011.	2.0	18
62	Band gap of InAs<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>1</mml:mn><mml:mo>â^'</mml:mo><mml:mi>x</mml:mi></mml:mrow></mml:msub></mml:math>Sb<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mi>x</mml:mi></mml:msub></mml:math>with native lattice constant. Physical Review B, 2012, 86, .	3.2	76
63	Structural and luminescent properties of bulk InAsSb. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2012, 30, 02B105.	1.2	21
64	High-Power 2.2-mum Diode Lasers With Metamorphic Arsenic-Free Heterostructures. IEEE Photonics Technology Letters, 2011, 23, 317-319.	2.5	21
65	Effects of carrier concentration and phonon energy on carrier lifetime in type-2 SLS and properties of InAs 1-X Sb X alloys. Proceedings of SPIE, 2011, , .	0.8	24
66	New Approaches to Direct Bandgap III-V Materials for LWIR Detector Applications. AIP Conference Proceedings, 2011, , .	0.4	3
67	Effect of As Passivation on Vapor-Phase Epitaxial Growth of Ge on (211)Si as a Buffer Layer for CdTe Epitaxy. Journal of Electronic Materials, 2011, 40, 1637-1641.	2.2	1
68	Dislocations and stacking faults in hexagonal GaN. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 1566-1568.	1.8	12
69	Properties of unrelaxed InAs1â^'XSbX alloys grown on compositionally graded buffers. Applied Physics Letters, 2011, 99, .	3.3	60
70	Ultrasound-assisted micro-emulsion for synthesis of Pt and PtCo nano-particles. Electrochimica Acta, 2010, 55, 6872-6878.	5.2	11
71	Formation of periodic nanotube array through the Kirkendall effect in epitaxial heterostructures. Applied Physics Letters, 2010, 97, 203105.	3.3	1
72	Bio-inspired synthesis and laser processing of nanostructured barium titanate thin films: implications for uncooled IR sensor development. , 2009, , .		6

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73	THE EFFECTS OF INCREASING AlN MOLE FRACTION ON THE PERFORMANCE OF AlGaN ACTIVE REGIONS CONTAINING NANOMETER SCALE COMPOSITIONALLY INHOMOGENEITIES. International Journal of High Speed Electronics and Systems, 2009, 19, 69-76.	0.7	0
74	Materials Study of the Competing Group-V Element Incorporation Process in Dilute-Nitride Films. Materials Research Society Symposia Proceedings, 2009, 1202, 126.	0.1	1
75	Deep UV light emitting diodes grown by gas source molecular beam epitaxy. Journal of Materials Science: Materials in Electronics, 2008, 19, 764-769.	2.2	9
76	Luminescence properties of AlxGa1â€“xN(0.4 < x < 0.5)/AlyGa1â€“yN (0.6 < y â‰¤ 1) quantum structures grown by gas source molecular beam epitaxy. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1852-1854.	0.8	5
77	Correlations between the Growth Modes and Luminescence Properties of AlGaN Quantum Structures. Japanese Journal of Applied Physics, 2008, 47, 1556-1558.	1.5	3
78	Enhanced luminescence from Al x Ga 1-x N/Al y Ga 1-y N quantum wells grown by gas source molecular beam epitaxy with ammonia. , 2007, , .		3
79	The Effects of Multiphase Formation on Strain Relaxation and Magnetization in Multiferroic BiFeO₃ Thin Films. Advanced Functional Materials, 2007, 17, 2594-2599.	14.9	42
80	Characterization of compositional oscillations in InGaAs films induced by MBE cell configuration and substrate rotation. Materials Characterization, 2007, 58, 284-288.	4.4	4
81	Defect density dependence of luminescence efficiency and lifetimes in AlGaN active regions exhibiting enhanced emission from nanoscale compositional inhomogeneities. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 2125-2128.	0.8	7
82	Microstructural characterization of quantum dots with type-II band alignments. Solid-State Electronics, 2006, 50, 1124-1127.	1.4	2
83	Growth of AlGaN alloys exhibiting enhanced luminescence efficiency. Journal of Electronic Materials, 2006, 35, 641-646.	2.2	28
84	Molecular beam epitaxial growth and characterization of Cd-based IIâ€“VI wide-bandgap compounds on Si substrates. Journal of Electronic Materials, 2005, 34, 655-661.	2.2	31
85	Time-resolved reflectivity studies of coherent longitudinal acoustic phonon pulses in bulk III-nitride semiconductors. Physica Status Solidi (A) Applications and Materials Science, 2005, 202, 790-794.	1.8	5
86	Enhanced room-temperature luminescence efficiency through carrier localization in AlxGa1â^'xN alloys. Applied Physics Letters, 2005, 86, 031916.	3.3	90
87	Characterization of InGaAs self-mixing detectors for chirp amplitude-modulated ladar (CAML). , 2004, , .		3
88	A microstructural study of the CdTe/ZnTe film morphology as related to the Si substrate orientation. Solid-State Electronics, 2004, 48, 1917-1920.	1.4	7
89	Role of Ge on film quality of SiC grown on Si. Journal of Applied Physics, 2002, 91, 668-671.	2.5	13
90	Strain relaxation in AlSb/GaSb heterostructures. Solid-State Electronics, 2002, 46, 1643-1649.	1.4	6

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91	Properties of GaN epitaxial layers grown on 6H-SiC(0001) by plasma-assisted molecular beam epitaxy. Journal of Electronic Materials, 2001, 30, 162-169.	2.2	34
92	Growth of GaN on SiC(0001) by Molecular Beam Epitaxy. Physica Status Solidi A, 2001, 188, 595-599.	1.7	10
93	Growth of GaN nanowires by direct reaction of Ga with NH3. Journal of Crystal Growth, 2001, 231, 357-365.	1.5	113
94	Role of Ga flux in dislocation reduction in GaN films grown on SiC(0001). Applied Physics Letters, 2001, 79, 3428-3430.	3.3	59
95	Growth and characterization of hexagonal (Zn,Mg)(S,Se) bulk substrates. Journal of Crystal Growth, 2000, 212, 83-91.	1.5	9
96	SiC/Si(111) film quality as a function of GeH4 flow in an MOCVD reactor. Journal of Electronic Materials, 2000, 29, 359-363.	2.2	4
97	TEM Study of Bulk AlN Growth by Physical Vapor Transport. MRS Internet Journal of Nitride Semiconductor Research, 2000, 5, 384-390.	1.0	0
98	Optimized structural properties of wurtzite GaN on SiC(0001) grown by molecular beam epitaxy. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2000, 18, 1915-1918.	2.1	21
99	Growth of large-scale GaN nanowires and tubes by direct reaction of Ga with NH3. Applied Physics Letters, 2000, 77, 3731-3733.	3.3	199
100	TEM Study of the Morphology Of GaN/SiC (0001) Grown at Various Temperatures by MBE. MRS Internet Journal of Nitride Semiconductor Research, 2000, 5, 238-244.	1.0	1
101	Inversion of wurtzite GaN(0001) by exposure to magnesium. Applied Physics Letters, 1999, 75, 808-810.	3.3	187
102	Pulsed laser deposition and processing of wide band gap semiconductors and related materials. Journal of Electronic Materials, 1999, 28, 275-286.	2.2	30
103	TEM Study of the Morphology Of GaN/SiC (0001) Grown at Various Temperatures by MBE. Materials Research Society Symposia Proceedings, 1999, 595, 1.	0.1	0
104	TEM Study of Bulk AlN Growth by Physical Vapor Transport. Materials Research Society Symposia Proceedings, 1999, 595, 1.	0.1	2
105	Tem Investigation of Growth Temperature Dependence in Pulsed-Laser Ablated PLZT Films for Pyroelectric Applications. Materials Research Society Symposia Proceedings, 1999, 596, 563.	0.1	0