Edward T Yu

List of Publications by Year in descending order

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235 papers

11,294 citations

52 h-index 100 g-index

236 all docs

 $\begin{array}{c} 236 \\ \text{docs citations} \end{array}$

times ranked

236

11243 citing authors

#	Article	IF	CITATIONS
1	Enhanced semiconductor optical absorption via surface plasmon excitation in metal nanoparticles. Applied Physics Letters, 2005, 86, 063106.	1.5	1,043
2	Improved performance of amorphous silicon solar cells via scattering from surface plasmon polaritons in nearby metallic nanoparticles. Applied Physics Letters, 2006, 89, 093103.	1.5	715
3	A silicon-based photocathode for water reduction with an epitaxial SrTiO3 protection layer and a nanostructured catalyst. Nature Nanotechnology, 2015, 10, 84-90.	15.6	353
4	Measurement of piezoelectrically induced charge in GaN/AlGaN heterostructure field-effect transistors. Applied Physics Letters, 1997, 71, 2794-2796.	1.5	336
5	Photocurrent spectroscopy of optical absorption enhancement in silicon photodiodes via scattering from surface plasmon polaritons in gold nanoparticles. Journal of Applied Physics, 2007, 101, 104309.	1.1	327
6	High Electron Mobility InAs Nanowire Field-Effect Transistors. Small, 2007, 3, 326-332.	5.2	293
7	Analysis of leakage current mechanisms in Schottky contacts to GaN and Al0.25Ga0.75Nâ •GaN grown by molecular-beam epitaxy. Journal of Applied Physics, 2006, 99, 023703.	1.1	283
8	Analysis of reverse-bias leakage current mechanisms in GaN grown by molecular-beam epitaxy. Applied Physics Letters, 2004, 84, 535-537.	1.5	257
9	Piezoelectric charge densities in AlGaN/GaN HFETs. Electronics Letters, 1997, 33, 1230.	0.5	253
10	Metal and dielectric nanoparticle scattering for improved optical absorption in photovoltaic devices. Applied Physics Letters, 2008, 93, 113108.	1.5	243
11	Correlated scanning Kelvin probe and conductive atomic force microscopy studies of dislocations in gallium nitride. Journal of Applied Physics, 2003, 94, 1448-1453.	1.1	190
12	Precise Semiconductor Nanowire Placement Through Dielectrophoresis. Nano Letters, 2009, 9, 2260-2266.	4.5	188
13	Gate leakage current mechanisms in AlGaN/GaN heterostructure field-effect transistors. Journal of Applied Physics, 2000, 88, 5951-5958.	1.1	184
14	Spontaneous and piezoelectric polarization effects in III–V nitride heterostructures. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1999, 17, 1742.	1.6	180
15	Multiband treatment of quantum transport in interband tunnel devices. Physical Review B, 1992, 45, 3583-3592.	1.1	170
16	Illâ^'V Nanowire Growth Mechanism:  V/III Ratio and Temperature Effects. Nano Letters, 2007, 7, 2486-2490.	4.5	166
17	InP Nanowire/Polymer Hybrid Photodiode. Nano Letters, 2008, 8, 775-779.	4.5	166
18	Nanoparticle-induced light scattering for improved performance of quantum-well solar cells. Applied Physics Letters, 2008, 93, 091107.	1.5	134

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19	Critical dimensions in coherently strained coaxial nanowire heterostructures. Journal of Applied Physics, 2006, 99, 114308.	1.1	133
20	Schottky barrier engineering in Ill–V nitrides via the piezoelectric effect. Applied Physics Letters, 1998, 73, 1880-1882.	1.5	130
21	Measurement of polarization charge and conduction-band offset at InxGa1â^'xN/GaN heterojunction interfaces. Applied Physics Letters, 2004, 84, 4644-4646.	1.5	126
22	Deep level defects in n-type GaN grown by molecular beam epitaxy. Applied Physics Letters, 1998, 72, 1211-1213.	1.5	123
23	Highly Controllable and Stable Quantized Conductance and Resistive Switching Mechanism in Single-Crystal TiO ₂ Resistive Memory on Silicon. Nano Letters, 2014, 14, 4360-4367.	4.5	121
24	Design of Tunneling Field-Effect Transistors Based on Staggered Heterojunctions for Ultralow-Power Applications. IEEE Electron Device Letters, 2010, 31, 431-433.	2.2	116
25	Influence of surface states on the extraction of transport parameters from InAs nanowire field effect transistors. Applied Physics Letters, 2007, 90, 162112.	1.5	112
26	Trap characterization by gate-drain conductance and capacitance dispersion studies of an AlGaN/GaN heterostructure field-effect transistor. Journal of Applied Physics, 2000, 87, 8070-8073.	1.1	111
27	Charge storage in Co nanoclusters embedded in SiO2 by scanning force microscopy. Applied Physics Letters, 1999, 74, 472-474.	1.5	109
28	Band Offsets in Semiconductor Heterojunctions. Solid State Physics, 1992, , 1-146.	1.3	98
29	Integrated One Diode–One Resistor Architecture in Nanopillar SiO _{<i>x</i>} Resistive Switching Memory by Nanosphere Lithography. Nano Letters, 2014, 14, 813-818.	4.5	97
30	Out-of-Plane Electromechanical Response of Monolayer Molybdenum Disulfide Measured by Piezoresponse Force Microscopy. Nano Letters, 2017, 17, 5464-5471.	4.5	94
31	Reduction of reverse-bias leakage current in Schottky diodes on GaN grown by molecular-beam epitaxy using surface modification with an atomic force microscope. Journal of Applied Physics, 2002, 91, 9821.	1.1	93
32	Measurement of drift mobility in AlGaN/GaN heterostructure field-effect transistor. Applied Physics Letters, 1999, 74, 3890-3892.	1,5	89
33	Crossâ€sectional imaging and spectroscopy of GaAs doping superlattices by scanning tunneling microscopy. Applied Physics Letters, 1992, 61, 795-797.	1.5	88
34	Structural and Roomâ€Temperature Transport Properties of Zinc Blende and Wurtzite InAs Nanowires. Advanced Functional Materials, 2009, 19, 2102-2108.	7.8	86
35	Interface Adhesion between 2D Materials and Elastomers Measured by Buckle Delaminations. Advanced Materials Interfaces, 2015, 2, 1500176.	1.9	85
36	Direct observation of ballistic and drift carrier transport regimes in InAs nanowires. Applied Physics Letters, 2006, 89, 053113.	1,5	78

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37	Persistent photoconductivity and defect levels in n-type AlGaN/GaN heterostructures. Applied Physics Letters, 1998, 72, 2745-2747.	1.5	75
38	Transport properties of InAs nanowire field effect transistors: The effects of surface states. Journal of Vacuum Science & Technology B, 2007, 25, 1432.	1.3	74
39	Surface Diffusion and Substrateâ^'Nanowire Adatom Exchange in InAs Nanowire Growth. Nano Letters, 2009, 9, 1967-1972.	4.5	71
40	Electrodeposition of crystalline silicon films from silicon dioxide for low-cost photovoltaic applications. Nature Communications, 2019, 10, 5772.	5.8	70
41	Scanning tunneling spectroscopy and Kelvin probe force microscopy investigation of Fermi energy level pinning mechanism on InAs and InGaAs clean surfaces. Journal of Applied Physics, 2010, 108, .	1.1	69
42	Toward Costâ€Effective Manufacturing of Silicon Solar Cells: Electrodeposition of Highâ€Quality Si Films in a CaCl ₂ â€based Molten Salt. Angewandte Chemie - International Edition, 2017, 56, 15078-15082.	7.2	66
43	Transport Coefficients of InAs Nanowires as a Function of Diameter. Small, 2009, 5, 77-81.	5.2	63
44	Photon management for photovoltaics. MRS Bulletin, 2011, 36, 424-428.	1.7	63
45	nâ€CdSe/pâ€ZnTe based wide bandâ€gap light emitters: Numerical simulation and design. Journal of Applied Physics, 1993, 73, 4660-4668.	1.1	62
46	Localized dielectric breakdown and antireflection coating in metal–oxide–semiconductor photoelectrodes. Nature Materials, 2017, 16, 127-131.	13.3	60
47	Cross-Sectional Scanning Tunneling Microscopy of Semiconductor Heterostructures. MRS Bulletin, 1997, 22, 22-26.	1.7	59
48	Piezoelectric polarization associated with dislocations in wurtzite GaN. Applied Physics Letters, 1999, 74, 573-575.	1.5	59
49	Lateral variations in threshold voltage of an AlxGa1â^'xN/GaN heterostructure field-effect transistor measured by scanning capacitance spectroscopy. Applied Physics Letters, 2001, 78, 88-90.	1.5	59
50	Epitaxial <i>>c</i> -axis oriented BaTiO3 thin films on SrTiO3-buffered Si(001) by atomic layer deposition. Applied Physics Letters, 2014, 104, .	1.5	59
51	Influence of surface processing and passivation on carrier concentrations and transport properties in AlGaN/GaN heterostructures. Journal of Applied Physics, 2001, 90, 1357-1361.	1.1	56
52	Electrochemical Formation of a <i>p–n</i> Junction on Thin Film Silicon Deposited in Molten Salt. Journal of the American Chemical Society, 2017, 139, 16060-16063.	6.6	56
53	A Liquid Junction Photoelectrochemical Solar Cell Based on p-Type MeNH ₃ Pbl ₃ Perovskite with 1.05 V Open-Circuit Photovoltage. Journal of the American Chemical Society, 2015, 137, 14758-14764.	6.6	52
54	Xâ€ray photoelectron spectroscopy measurement of valenceâ€band offsets for Mgâ€based semiconductor compounds. Applied Physics Letters, 1994, 64, 3455-3457.	1.5	50

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55	Optimization of Pbl ₂ /MAPbl ₃ Perovskite Composites by Scanning Electrochemical Microscopy. Journal of Physical Chemistry C, 2016, 120, 19890-19895.	1.5	50
56	Reverse-bias leakage current reduction in GaN Schottky diodes by electrochemical surface treatment. Applied Physics Letters, 2003, 82, 1293-1295.	1.5	49
57	Measurement of the valenceâ€band offset in strained Si/Ge (100) heterojunctions by xâ€ray photoelectron spectroscopy. Applied Physics Letters, 1990, 56, 569-571.	1.5	48
58	Anisotropy and growth-sequence dependence of atomic-scale interface structure in InAs/Ga1â^'xInxSb superlattices. Applied Physics Letters, 1997, 70, 75-77.	1.5	48
59	Optimization of Lead-free Organic–inorganic Tin(II) Halide Perovskite Semiconductors by Scanning Electrochemical Microscopy. Electrochimica Acta, 2016, 220, 205-210.	2.6	47
60	Calculation of critical dimensions for wurtzite and cubic zinc blende coaxial nanowire heterostructures. Journal of Vacuum Science & Technology B, 2006, 24, 2053.	1.3	46
61	Electrical profiling of Si(001) pâ€n junctions by scanning tunneling microscopy. Applied Physics Letters, 1992, 61, 201-203.	1.5	45
62	Direct measurement of the polarization charge in AlGaN/GaN heterostructures using capacitance–voltage carrier profiling. Applied Physics Letters, 2002, 80, 3551-3553.	1.5	44
63	Experimental realization and modeling of a subwavelength frequency-selective plasmonic metasurface. Applied Physics Letters, $2011,99,\ldots$	1.5	44
64	Measurement of the CdSe/ZnTe valence band offset by x-ray photoelectron spectroscopy. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1991, 9, 2233.	1.6	43
65	Scanning Kelvin probe microscopy of surface electronic structure in GaN grown by hydride vapor phase epitaxy. Journal of Applied Physics, 2002, 91, 9924.	1.1	43
66	Atomic layer deposition of crystalline SrHfO3 directly on Ge (001) for high- $\langle i \rangle k \langle i \rangle$ dielectric applications. Journal of Applied Physics, 2015, 117, .	1.1	43
67	Improved Performance of Zinc Oxide Thin Film Transistor Pressure Sensors and a Demonstration of a Commercial Chip Compatibility with the New Force Sensing Technology. Advanced Materials Technologies, 2018, 3, 1700279.	3.0	43
68	Hole tunneling times in GaAs/AlAs doubleâ€barrier structures. Applied Physics Letters, 1989, 55, 744-746.	1.5	42
69	Role of heavyâ€hole states in interband tunnel structures. Applied Physics Letters, 1991, 58, 292-294.	1.5	42
70	Large peak current densities in novel resonant interband tunneling heterostructures. Applied Physics Letters, 1990, 57, 1257-1259.	1.5	41
71	Experimental observation of negative differential resistance from an InAs/GaSb interface. Applied Physics Letters, 1990, 57, 683-685.	1.5	40
72	A Chemical Route to Monolithic Integration of Crystalline Oxides on Semiconductors. Advanced Materials Interfaces, 2014, 1, 1400081.	1.9	40

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73	Cross-Sectional Scanning Tunneling Microscopy. Chemical Reviews, 1997, 97, 1017-1044.	23.0	39
74	Modeling of novel heterojunction tunnel structures. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1990, 8, 810.	1.6	38
75	Growth of InAs Nanowires on SiO ₂ Substrates:  Nucleation, Evolution, and the Role of Au Nanoparticles. Journal of Physical Chemistry C, 2007, 111, 13331-13336.	1.5	38
76	Light trapping in thin-film solar cells via scattering by nanostructured antireflection coatings. Journal of Applied Physics, 2013 , 114 , 044310 .	1.1	38
77	Fabrication and characterisation of enhanced barrier AlGaN/GaN HFET. Electronics Letters, 1999, 35, 602.	0.5	37
78	Origin and microscopic mechanism for suppression of leakage currents in Schottky contacts to GaN grown by molecular-beam epitaxy. Journal of Applied Physics, 2003, 94, 7611.	1.1	37
79	Enhancement of base conductivity via the piezoelectric effect in AlGaN/GaN HBTs. Solid-State Electronics, 2000, 44, 211-219.	0.8	36
80	Low defect-mediated reverse-bias leakage in (0001) GaN via high-temperature molecular beam epitaxy. Applied Physics Letters, 2010, 96, .	1.5	35
81	Measurement of the valence band offset in novel heterojunction systems: Si/Ge (100) and AlSb/ZnTe (100). Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1990, 8, 908.	1.6	34
82	Demonstration of resonant transmission in InAs/GaSb/InAs interband tunneling devices. Applied Physics Letters, 1990, 57, 2675-2677.	1.5	33
83	Field Dependent Transport Properties in InAs Nanowire Field Effect Transistors. Nano Letters, 2008, 8, 3114-3119.	4.5	33
84	Plasmonic nanoparticle scattering for enhanced performance of photovoltaic and photodetector devices. Proceedings of SPIE, 2008, , .	0.8	33
85	Excess Indium and Substrate Effects on the Growth of InAs Nanowires. Small, 2007, 3, 1683-1687.	5.2	31
86	High ON/OFF Ratio and Quantized Conductance in Resistive Switching of \${m TiO}_{2}\$ on Silicon. IEEE Electron Device Letters, 2013, 34, 1385-1387.	2.2	31
87	Asymmetric light reflectance from metal nanoparticle arrays on dielectric surfaces. Scientific Reports, 2015, 5, 18331.	1.6	31
88	Oxygen-induced bi-modal failure phenomenon in SiOx-based resistive switching memory. Applied Physics Letters, 2013, 103, 033521.	1.5	30
89	Scanning tunneling microscopy of InAs/Ga1â°'xlnxSb superlattices. Applied Physics Letters, 1994, 65, 201-203.	1.5	29
90	Nanoscale characterization of semiconductor materials and devices using scanning probe techniques. Materials Science and Engineering Reports, 1996, 17, 147-206.	14.8	29

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91	Twoâ€dimensional profiling of shallow junctions in Si metalâ€oxideâ€semiconductor structures using scanning tunneling spectroscopy and transmission electron microscopy. Journal of Applied Physics, 1996, 79, 2115-2121.	1.1	28
92	Band offsets in Si/Si1â^'xâ^'yGexCy heterojunctions measured by admittance spectroscopy. Applied Physics Letters, 1997, 70, 3413-3415.	1.5	28
93	IIIâ€V/IIâ€VI doubleâ€barrier resonant tunneling structures. Applied Physics Letters, 1988, 53, 60-62.	1.5	27
94	Characterization of AlxGa1â^'xAs/GaAs heterojunction bipolar transistor structures using cross-sectional scanning force microscopy. Journal of Applied Physics, 2000, 87, 1937-1942.	1.1	27
95	Improved performance of In(Ga)As/GaAs quantum dot solar cells via light scattering by nanoparticles. Journal of Applied Physics, 2009, 106, .	1.1	27
96	Investigation of edge- and bulk-related resistive switching behaviors and backward-scan effects in SiO _x -based resistive switching memory. Applied Physics Letters, 2013, 103, 193508.	1.5	26
97	Zeta Potential Dependent Self-Assembly for Very Large Area Nanosphere Lithography. Nano Letters, 2020, 20, 5090-5096.	4.5	26
98	Scanning capacitance microscopy of AlGaN/GaN heterostructure field-effect transistor epitaxial layer structures. Applied Physics Letters, 1999, 75, 2250-2252.	1.5	25
99	Correlation between atomic-scale structure and mobility anisotropy inInAs/Ga1â^'xInxSbsuperlattices. Physical Review B, 1998, 57, 6534-6539.	1.1	24
100	Electrochemical Monitoring of TiO ₂ Atomic Layer Deposition by Chronoamperometry and Scanning Electrochemical Microscopy. Chemistry of Materials, 2013, 25, 4165-4172.	3.2	24
101	Epitaxial ALD BeO: Efficient Oxygen Diffusion Barrier for EOT Scaling and Reliability Improvement. IEEE Transactions on Electron Devices, 2011, 58, 4384-4392.	1.6	23
102	Scalable, highly stable Si-based metal-insulator-semiconductor photoanodes for water oxidation fabricated using thin-film reactions and electrodeposition. Nature Communications, 2021, 12, 3982.	5.8	23
103	Observation of subsurface monolayer thickness fluctuations in InGaNâ [•] GaN quantum wells by scanning capacitance microscopy and spectroscopy. Applied Physics Letters, 2004, 85, 407-409.	1.5	22
104	Light scattering into silicon-on-insulator waveguide modes by random and periodic gold nanodot arrays. Journal of Applied Physics, 2009, 105, 073101.	1.1	22
105	Nanoscale current transport in epitaxial SrTiO[sub 3] on n[sup +]-Si investigated with conductive atomic force microscopy. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2004, 22, 2030.	1.6	21
106	Flexible, low-loss, large-area, wide-angle, wavelength-selective plasmonic multilayer metasurface. Journal of Applied Physics, 2013, 114, .	1.1	21
107	Out-of-plane electromechanical coupling in transition metal dichalcogenides. Applied Physics Letters, 2020, $116,\ldots$	1.5	21
108	Scanning tunneling microscopy and spectroscopy of Si/SiGe(001) superlattices. Applied Physics Letters, 1992, 61, 3166-3168.	1.5	20

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109	Ultra-stable 2D layered methylammonium cadmium trihalide perovskite photoelectrodes. Journal of Materials Chemistry C, 2018, 6, 11552-11560.	2.7	20
110	Plasma-implanted Ti-doped hematite photoanodes with enhanced photoelectrochemical water oxidation performance. Journal of Alloys and Compounds, 2021, 870, 159376.	2.8	20
111	Local conductivity and surface photovoltage variations due to magnesium segregation inp-type GaN. Journal of Applied Physics, 2004, 95, 6225-6231.	1.1	19
112	Direct measurement and characterization of n+ superhalo implants in a 120 nm gate-length Si metal–oxide–semiconductor field-effect transistor using cross-sectional scanning capacitance microscopy. Applied Physics Letters, 2002, 81, 3993-3995.	1.5	18
113	Integration of vertical InAs nanowire arrays on insulator-on-silicon for electrical isolation. Applied Physics Letters, 2008, 93, 203109.	1.5	18
114	Atomic-scale structure of InAs/InAs1â^'xSbx superlattices grown by modulated molecular beam epitaxy. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1996, 14, 2940.	1.6	17
115	Miscut-angle dependence of perpendicular magnetic anisotropy in thin epitaxial CoPt3 films grown on vicinal MgO. Applied Physics Letters, 2002, 81, 517-519.	1.5	17
116	Scanning gate microscopy of InAs nanowires. Applied Physics Letters, 2007, 90, 233118.	1.5	17
117	Increased InAs quantum dot size and density using bismuth as a surfactant. Applied Physics Letters, 2014, 105, .	1.5	17
118	Commutativity of the GaAs/AlAs(100) band offset. Physical Review B, 1988, 38, 12764-12767.	1.1	16
119	Effect of band mixing on hole-tunneling times in GaAs/AlAs double-barrier heterostructures. Physical Review B, 1992, 45, 3576-3582.	1.1	16
120	Interfacial reactions and band offsets in the AlSb/GaSb/ZnTe material system. Physical Review B, 1992, 46, 13379-13388.	1.1	16
121	Characterization of arsenide/phosphide heterostructure interfaces grown by gasâ€source molecular beam epitaxy. Applied Physics Letters, 1995, 67, 932-934.	1.5	16
122	Charging effects in AlGaN/GaN heterostructures probed using scanning capacitance microscopy. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2000, 18, 2304.	1.6	16
123	Scanned electrical probe characterization of carrier transport behavior in InAs nanowires. Journal of Vacuum Science & Technology B, 2006, 24, 2036.	1.3	16
124	Quantum state engineering with ultra-short-period (AlN)m/(GaN)nsuperlattices for narrowband deep-ultraviolet detection. Nanoscale, 2014, 6, 14733-14739.	2.8	16
125	Subwavelength nanostructures integrated with polymerâ€packaged iii–v solar cells for omnidirectional, broadâ€spectrum improvement of photovoltaic performance. Progress in Photovoltaics: Research and Applications, 2015, 23, 1398-1405.	4.4	16
126	Transfer of patterned ion-cut silicon layers. Applied Physics Letters, 1998, 73, 2772-2774.	1.5	15

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127	Structural coloration with hourglass-shaped vertical silicon nanopillar arrays. Optics Express, 2018, 26, 30952.	1.7	15
128	Epitaxy of Al films on GaN studied by reflection high-energy electron diffraction and atomic force microscopy. Applied Physics Letters, 1997, 70, 990-992.	1.5	14
129	Cross-sectional scanning tunneling microscopy of GaAsSb/GaAs quantum well structures. Journal of Applied Physics, 2002, 92, 3761-3770.	1.1	14
130	Large-area omnidirectional antireflection coating on low-index materials. Journal of the Optical Society of America B: Optical Physics, 2013, 30, 2584.	0.9	14
131	Interface structure in arsenide/phosphide heterostructun grown by gas-source MBE and low-pressure MOVPE. Journal of Electronic Materials, 1997, 26, 64-69.	1.0	13
132	Local electronic properties of AlGaN/GaN heterostructures probed by scanning capacitance microscopy. Journal of Electronic Materials, 2000, 29, 274-280.	1.0	13
133	Voltage-controlled ferromagnetism and magnetoresistance in LaCoO3/SrTiO3 heterostructures. Journal of Applied Physics, 2013, 114, .	1.1	13
134	Wide-angle wavelength-selective multilayer optical metasurfaces robust to interlayer misalignment. Journal of the Optical Society of America B: Optical Physics, 2013, 30, 27.	0.9	13
135	Monolithic integration of perovskites on $Ge(001)$ by atomic layer deposition: a case study with SrHfxTi1-xO3. MRS Communications, 2016, 6, 125-132.	0.8	13
136	Influence of the Substrate to the LSP Coupling Wavelength and Strength. Nanoscale Research Letters, 2018, 13, 280.	3.1	13
137	A scanning tunneling microscopy study of atomic-scale clustering in InAsP/InP heterostructures. Applied Physics Letters, 1998, 72, 2135-2137.	1.5	12
138	Polarization charges and polarization-induced barriers in AlxGalâ^'xN/GaN and InyGalâ^'yN/GaN heterostructures. Applied Physics Letters, 2001, 79, 2916-2918.	1.5	12
139	Scanning capacitance spectroscopy of an Al[sub x]Ga[sub 1â^'x]N/GaN heterostructure field-effect transistor structure: Analysis of probe tip effects. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2002. 20. 1671.	1.6	12
140	Toward Costâ€Effective Manufacturing of Silicon Solar Cells: Electrodeposition of Highâ€Quality Si Films in a CaCl 2 â€based Molten Salt. Angewandte Chemie, 2017, 129, 15274-15278.	1.6	12
141	Growth Mechanisms and Morphology Engineering of Atomic Layer-Deposited WS ₂ . ACS Applied Materials & Deposited WS ₂ . ACS	4.0	12
142	Commutativity of the GaAs/AlAs (100) band offset. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1989, 7, 391.	1.6	11
143	Large peak-to-valley current ratios in triple barrier heterostructures. Solid-State Electronics, 1989, 32, 1095-1099.	0.8	11
144	Semiconductor heterostructures and optimization of light-trapping structures for efficient thin-film solar cells. Journal of Optics (United Kingdom), 2012, 14, 024007.	1.0	11

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145	Hyperspectral imaging for high-throughput, spatially resolved spectroscopic scatterometry of silicon nanopillar arrays. Optics Express, 2020, 28, 14209.	1.7	11
146	Measurement of band offsets in Si/Si[sub 1â^'x]Ge[sub x] and Si/Si[sub 1â^'xâ^'y]Ge[sub x]C[sub y] heterojunctions. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1997, 15, 1108.	1.6	10
147	Nanometer-scale compositional variations in III-V semiconductor heterostructures characterized by scanning tunneling microscopy. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1999, 17, 2246-2250.	0.9	10
148	Long Time-Constant Trap Effects in Nitride Heterostructure Field Effect Transistors. Materials Research Society Symposia Proceedings, 2000, 622, 6281.	0.1	10
149	Demonstration and analysis of reduced reverse-bias leakage current via design of nitride semiconductor heterostructures grown by molecular-beam epitaxy. Journal of Applied Physics, 2006, 99, 014501.	1.1	10
150	Cross-sectional scanning thermal microscopy of ErAs/GaAs superlattices grown by molecular beam epitaxy. Nanotechnology, 2015, 26, 265701.	1.3	10
151	Cost-effective liquid-junction solar devices with plasma-implanted Ni/TiN/CNF hierarchically structured nanofibers. Journal of Electroanalytical Chemistry, 2021, 887, 115167.	1.9	10
152	Wafer-Scale Synthesis of WS ₂ Films with In Situ Controllable p-Type Doping by Atomic Layer Deposition. Research, 2021, 2021, 9862483.	2.8	10
153	Negative differential resistance due to resonant interband tunneling of holes. Journal of Applied Physics, 1990, 68, 3744-3746.	1.1	9
154	Characterization of CdSe/ZnTe heterojunctions. Journal of Crystal Growth, 1991, 111, 820-822.	0.7	9
155	Nanoscale Characterization of Materials. MRS Bulletin, 1997, 22, 17-21.	1.7	9
156	Improvement of performance of InAs quantum dot solar cell by inserting thin AlAs layers. Nanoscale Research Letters, 2011, 6, 83.	3.1	9
157	Computational analysis of thin film InGaAs/GaAs quantum well solar cells with back side light trapping structures. Optics Express, 2012, 20, A864.	1.7	9
158	A Low-Leakage Epitaxial High-κ Gate Oxide for Germanium Metal–Oxide–Semiconductor Devices. ACS Applied Materials & Devices. ACS Applied Materials & Devices. ACS Applied Materials & Devices. ACS	4.0	9
159	Probing nanoscale variations in strain and band structure of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Mo</mml:mi><mml:msub><mml:m mathvariant="normal">S<mml:mn>2</mml:mn></mml:m></mml:msub></mml:mrow></mml:math> on Au nanonyramids using tip-enhanced Raman spectroscopy. Physical Review B. 2018. 97.	i _{1.1}	9
160	Crystalline SrZrO3 deposition on Ge (001) by atomic layer deposition for high- <i>k</i> dielectric applications. Journal of Applied Physics, 2018, 124, .	1.1	9
161	Band structure effects in interband tunnel devices. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1991, 9, 2405.	1.6	8
162	Atomic-scale compositional structure of InAsP/InP and InNAsP/InP heterostructures grown by molecular-beam epitaxy. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1998, 16, 2395.	1.6	8

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163	Cross-sectional scanning tunneling microscopy of InAsSb/InAsP superlattices. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1999, 17, 1781.	1.6	8
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