## Karen L Kavanagh

## List of Publications by Citations

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 ext. citations
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 L-index

#	Paper	IF	Citations
192	Surface plasmon sensor based on the enhanced light transmission through arrays of nanoholes in gold films. <i>Langmuir</i> , <b>2004</b> , 20, 4813-5	4	620
191	Generation of misfit dislocations in semiconductors. <i>Journal of Applied Physics</i> , <b>1987</b> , 62, 4413-4420	2.5	440
190	A new generation of sensors based on extraordinary optical transmission. <i>Accounts of Chemical Research</i> , <b>2008</b> , 41, 1049-57	24.3	423
189	Strong polarization in the optical transmission through elliptical nanohole arrays. <i>Physical Review Letters</i> , <b>2004</b> , 92, 037401	7.4	384
188	Nanohole-Enhanced Raman Scattering. <i>Nano Letters</i> , <b>2004</b> , 4, 2015-2018	11.5	382
187	Luminescent colloidal silicon suspensions from porous silicon. <i>Science</i> , <b>1992</b> , 255, 66-8	33.3	206
186	Asymmetries in dislocation densities, surface morphology, and strain of GaInAs/GaAs single heterolayers. <i>Journal of Applied Physics</i> , <b>1988</b> , 64, 4843-4852	2.5	195
185	Nonalloyed ohmic contacts to n-GaAs by solid-phase epitaxy of Ge. <i>Journal of Applied Physics</i> , <b>1987</b> , 62, 942-947	2.5	182
184	Enhanced fluorescence from arrays of nanoholes in a gold film. <i>Journal of the American Chemical Society</i> , <b>2005</b> , 127, 14936-41	16.4	179
183	Thin epitaxial GeBi(111) films: Study and control of morphology. Surface Science, 1987, 191, 305-328	1.8	154
182	Fermi-Level Pinning by Misfit Dislocations at GaAs Interfaces. <i>Physical Review Letters</i> , <b>1983</b> , 51, 1783-17	78 <del>,6</del> 4	126
181	Resonant optical transmission through hole-arrays in metal films: physics and applications. <i>Laser and Photonics Reviews</i> , <b>2010</b> , 4, 311-335	8.3	124
180	Misfit dislocations in nanowire heterostructures. Semiconductor Science and Technology, <b>2010</b> , 25, 0240	<b>0<u>6</u>8</b>	122
179	Observation of quantum dot-like behavior of GaInNAs in GaInNAs/GaAs quantum wells. <i>Applied Physics Letters</i> , <b>1999</b> , 74, 2337-2339	3.4	120
178	Growth, branching, and kinking of molecular-beam epitaxial <110> GaAs nanowires. <i>Applied Physics Letters</i> , <b>2003</b> , 83, 3368-3370	3.4	102
177	Lattice compression from conduction electrons in heavily doped Si:As. <i>Physical Review Letters</i> , <b>1988</b> , 61, 1748-1751	7.4	102
176	Effects of GaAs substrate misorientation on strain relaxation in InxGa1⊠As films and multilayers. Journal of Applied Physics, <b>1998</b> , 83, 5137-5149	2.5	91

## (1994-2008)

175	Heteroepitaxial growth of vertical GaAs nanowires on Si(111) substrates by metal-organic chemical vapor deposition. <i>Nano Letters</i> , <b>2008</b> , 8, 3755-60	11.5	89
174	Apex-Enhanced Raman Spectroscopy Using Double-Hole Arrays in a Gold Film. <i>Journal of Physical Chemistry C</i> , <b>2007</b> , 111, 2347-2350	3.8	87
173	Strain relaxation of compositionally graded InxGa1NAs buffer layers for modulation-doped In0.3Ga0.7As/In0.29Al0.71As heterostructures. <i>Applied Physics Letters</i> , <b>1992</b> , 60, 1129-1131	3.4	83
172	Structural and Room-Temperature Transport Properties of Zinc Blende and Wurtzite InAs Nanowires. <i>Advanced Functional Materials</i> , <b>2009</b> , 19, 2102-2108	15.6	82
171	Direct measurement of coherency limits for strain relaxation in heteroepitaxial core/shell nanowires. <i>Nano Letters</i> , <b>2013</b> , 13, 1869-76	11.5	69
170	Electron-energy-loss scattering near a single misfit dislocation at the GaAs/GaInAs interface. <i>Physical Review Letters</i> , <b>1986</b> , 57, 2729-2732	7.4	69
169	Enhancement of band edge luminescence in ZnSe nanowires. <i>Journal of Applied Physics</i> , <b>2006</b> , 100, 0843	3165	67
168	Basis and lattice polarization mechanisms for light transmission through nanohole arrays in a metal film. <i>Nano Letters</i> , <b>2005</b> , 5, 1243-6	11.5	63
167	Effects of rapid thermal annealing on GaInNAs/GaAs multiple quantum wells. <i>Journal of Crystal Growth</i> , <b>1999</b> , 201-202, 419-422	1.6	61
166	Surface plasmon-quantum dot coupling from arrays of nanoholes. <i>Journal of Physical Chemistry B</i> , <b>2006</b> , 110, 8307-13	3.4	56
165	Transport and strain relaxation in wurtzite InAsCaAs core-shell heterowires. <i>Applied Physics Letters</i> , <b>2011</b> , 98, 152103	3.4	55
164	Silicon diffusion at polycrystalline-Si/GaAs interfaces. <i>Applied Physics Letters</i> , <b>1985</b> , 47, 1208-1210	3.4	55
163	Lattice-strained heterojunction InGaAs/GaAs bipolar structures: Recombination properties and device performance. <i>Journal of Applied Physics</i> , <b>1987</b> , 61, 1234-1236	2.5	51
162	Growth-induced magnetic anisotropy and clustering in vapor-deposited Co-Pt alloy films. <i>Physical Review B</i> , <b>1999</b> , 60, 12826-12836	3.3	49
161	Faster radial strain relaxation in InAs©aAs coreBhell heterowires. <i>Journal of Applied Physics</i> , <b>2012</b> , 111, 044301	2.5	48
160	Lattice tilt and dislocations in compositionally step-graded buffer layers for mismatched InGaAs/GaAs heterointerfaces. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>1992</b> , 10, 1820		46
159	Probing the electrical transport properties of intrinsic InN nanowires. <i>Applied Physics Letters</i> , <b>2013</b> , 102, 073102	3.4	44
158	Nanometer-resolved spatial variations in the Schottky barrier height of a Au/n-type GaAs diode. <i>Physical Review B</i> , <b>1994</b> , 49, 16474-16479	3.3	43

157	Ohmic contacts to n-GaAs using In/Pd metallization. <i>Applied Physics Letters</i> , <b>1987</b> , 51, 326-327	3.4	43
156	Developing 1D nanostructure arrays for future nanophotonics. <i>Nanoscale Research Letters</i> , <b>2006</b> , 1, 99-	-1 <del>§</del> 9	42
155	Nanoscale Electrical and Structural Characterization of Gold/Alkyl Monolayer/Silicon Diode Junctions. <i>Journal of Physical Chemistry C</i> , <b>2008</b> , 112, 9081-9088	3.8	37
154	The interdiffusion of Si, P, and In at polysilicon/GaAs interfaces. <i>Journal of Applied Physics</i> , <b>1988</b> , 64, 18	4 <del>5.</del> ჭ85	5436
153	Molecular orientation in octanedithiol and hexadecanethiol monolayers on GaAs and Au measured by infrared spectroscopic ellipsometry. <i>Langmuir</i> , <b>2009</b> , 25, 919-23	4	35
152	Twinning modulation in ZnSe nanowires. Semiconductor Science and Technology, 2007, 22, 175-178	1.8	35
151	Geometric limits of coherent III-V core/shell nanowires. Journal of Applied Physics, 2013, 114, 054301	2.5	34
150	Structure and photoluminescence of ZnSe nanostructures fabricated by vapor phase growth. <i>Journal of Applied Physics</i> , <b>2007</b> , 101, 014326	2.5	33
149	Scanning spreading resistance microscopy current transport studies on doped III <b>V</b> semiconductors. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>2002</b> , 20, 1682		33
148	Gas-source molecular beam epitaxial growth and thermal annealing of GaInNAs/GaAs quantum wells. <i>Journal of Crystal Growth</i> , <b>2000</b> , 208, 145-152	1.6	33
147	Relationship between surface morphology and strain relaxation during growth of InGaAs strained layers. <i>Applied Physics Letters</i> , <b>1995</b> , 67, 3744-3746	3.4	32
146	Ballistic electron emission microscopy studies of Au/molecule/n-GaAs diodes. <i>Journal of Physical Chemistry B</i> , <b>2005</b> , 109, 6252-6	3.4	31
145	Field dependent transport properties in InAs nanowire field effect transistors. <i>Nano Letters</i> , <b>2008</b> , 8, 3114-9	11.5	30
144	Defect studies of ZnSe nanowires. <i>Nanotechnology</i> , <b>2008</b> , 19, 215715	3.4	30
143	Correlation of anisotropic strain relaxation with substrate misorientation direction at InGaAs/GaAs(001) interfaces. <i>Applied Physics Letters</i> , <b>1995</b> , 67, 344-346	3.4	30
142	Rectifying characteristics of Te-doped GaAs nanowires. <i>Applied Physics Letters</i> , <b>2011</b> , 99, 182102	3.4	29
141	Calibrated scanning spreading resistance microscopy profiling of carriers in III <b>V</b> structures. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, <b>2001</b>, 19, 1662</i>		29
140	Growth of InAsSb/InAs MQWs on GaSb for mid-IR photodetector applications. <i>Journal of Crystal Growth</i> , <b>2009</b> , 311, 3563-3567	1.6	27

139	Anisotropic resistivity correlated with atomic ordering in p-type GaAsSb. <i>Applied Physics Letters</i> , <b>2001</b> , 79, 2384-2386	27	
138	Substrate effects on the ferroelectric properties of fine-grained BaTiO3 films. <i>Journal of Applied Physics</i> , <b>2003</b> , 94, 5982-5989	25	
137	Study of th-scale spatial variations in strain of a compositionally step-graded InxGa1NAs/GaAs(001) heterostructure. <i>Applied Physics Letters</i> , <b>1995</b> , 66, 869-871	25	
136	Gas-source molecular beam epitaxial growth, characterization, and light-emitting diode application of InxGa1\( \text{P} \) on GaP(100). <i>Applied Physics Letters</i> , <b>1993</b> , 62, 2369-2371	25	
135	Lateral variation in the Schottky barrier height of Au/PtSi/(100)Si diodes. <i>Journal of Vacuum Science</i> & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, <b>1994</b> , 12, 2634	25	
134	Time dependent ballistic electron emission microscopy studies of a Au/(100)GaAs interface with a native oxide diffusion barrier. <i>Applied Physics Letters</i> , <b>1993</b> , 62, 2965-2967	24	
133	Multiple dislocation loops in linearly graded InxGa1\( \text{QA}\( \text{D}\).53) on GaAs and InxGa1\( \text{P}\) (0\( \text{Q}\( \text{D}\).32) on GaP. Applied Physics Letters, <b>1993</b> , 63, 500-502	24	
132	Reduction of Gold Penetration through Phenyl-Terminated Alkyl Monolayers on Silicon. <i>Journal of Physical Chemistry C</i> , <b>2012</b> , 116, 17040-17047	23	
131	Preparation of ideal molecular junctions: depositing non-invasive gold contacts on molecularly modified silicon. <i>Nanoscale</i> , <b>2011</b> , 3, 1434-45	22	
130	Improved Performance of Nanohole Surface Plasmon Resonance Sensors by the Integrated Response Method. <i>IEEE Photonics Journal</i> , <b>2011</b> , 3, 441-449	22	
129	Antimony segregation in GaAs-based multiple quantum well structures. <i>Journal of Crystal Growth</i> , <b>2003</b> , 254, 28-34	22	
128	Growth and strain relaxation of GaAs and GaP nanowires with GaSb shells. <i>Journal of Applied Physics</i> , <b>2013</b> , 113, 134309	20	
127	Metastable phase formation in the Au-Si system via ultrafast nanocalorimetry. <i>Journal of Applied Physics</i> , <b>2012</b> , 111, 093516	20	
126	Aligned Co nanodiscs by electrodeposition on GaAs. <i>Journal of Crystal Growth</i> , <b>2006</b> , 287, 514-517 1.6	20	
125	Comparison of strain relaxation in InGaAsN and InGaAs thin films. <i>Applied Physics Letters</i> , <b>2002</b> , 80, 4357-4459	20	
124	Hot-electron attenuation lengths in ultrathin magnetic films. <i>Journal of Applied Physics</i> , <b>2000</b> , 87, 5164-5 <b>4</b> . <b>6</b> 6	20	
123	Anisotropic structural, electronic, and optical properties of InGaAs grown by molecular beam epitaxy on misoriented substrates. <i>Applied Physics Letters</i> , <b>1994</b> , 65, 1424-1426	19	
122	Lattice strain from substitutional Ga and from holes in heavily doped Si:Ga. <i>Physical Review B</i> , <b>1992</b> , 45, 3323-3331	19	

121	Direct Measurement of the Electrical Abruptness of a Nanowire p-n Junction. <i>Nano Letters</i> , <b>2016</b> , 16, 3982-8	11.5	18
120	Quantum dot-like behavior of GaInNAs in GaInNAs/GaAs quantum wells grown by gas-source molecular-beam epitaxy. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>1999</b> , 17, 1649		18
119	Epitaxial BillaAs diodes via electrodeposition. <i>Journal of Vacuum Science &amp; Technology B</i> , <b>2006</b> , 24, 213	8	17
118	Epitaxial Bi <b>G</b> aAs(111) diodes via electrodeposition. <i>Applied Physics Letters</i> , <b>2006</b> , 88, 022102	3.4	17
117	Planar Ge/Pd and alloyed Au-Ge-Ni ohmic contacts to n-AlxGa1🛮 As (O🖾 0.3). <i>Applied Physics Letters</i> , <b>1989</b> , 54, 721-723	3.4	17
116	Modulation-doped In0.3Ga0.7As/In0.29Al0.71As heterostructures grown on GaAs by step grading. <i>Semiconductor Science and Technology</i> , <b>1992</b> , 7, 601-603	1.8	16
115	High-resolution x-ray diffraction of InAlAs/InP superlattices grown by gas source molecular beam epitaxy. <i>Applied Physics Letters</i> , <b>1991</b> , 58, 1530-1532	3.4	16
114	Space-charge-limited current in nanowires. <i>Journal of Applied Physics</i> , <b>2017</b> , 121, 174301	2.5	15
113	Structural and magnetic properties of NiMnSb/InGaAs/InP(001). <i>Journal of Applied Physics</i> , <b>2005</b> , 97, 073906	2.5	15
112	Lithography-Free Fabrication of Core-Shell GaAs Nanowire Tunnel Diodes. <i>Nano Letters</i> , <b>2015</b> , 15, 5408	- <b>1</b> 1 <u>3</u> 1.5	14
112	Lithography-Free Fabrication of Core-Shell GaAs Nanowire Tunnel Diodes. <i>Nano Letters</i> , <b>2015</b> , 15, 5408 p-type doping of GaAs nanowires using carbon. <i>Journal of Applied Physics</i> , <b>2012</b> , 112, 094323	-1 <sub>1</sub> 3.5	14
111	p-type doping of GaAs nanowires using carbon. <i>Journal of Applied Physics</i> , <b>2012</b> , 112, 094323  Role of interface microstructure in rectifying metal/semiconductor contacts: Ballistic electron emission observations correlated to microstructure. <i>Journal of Vacuum Science &amp; Technology an</i>		14
111	p-type doping of GaAs nanowires using carbon. <i>Journal of Applied Physics</i> , <b>2012</b> , 112, 094323  Role of interface microstructure in rectifying metal/semiconductor contacts: Ballistic electron emission observations correlated to microstructure. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>1996</b> , 44, 2008  Au/ZnSe contacts characterized by ballistic electron emission microscopy. <i>Journal of Applied Physics</i>	2.5	14
1111 1100 109	p-type doping of GaAs nanowires using carbon. <i>Journal of Applied Physics</i> , <b>2012</b> , 112, 094323  Role of interface microstructure in rectifying metal/semiconductor contacts: Ballistic electron emission observations correlated to microstructure. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>1996</b> ,  Au/ZnSe contacts characterized by ballistic electron emission microscopy. <i>Journal of Applied Physics</i> , <b>1996</b> , 79, 1532-1535  Large-Area Low-Cost Flexible Plastic Nanohole Arrays for Integrated Bio-Chemical Sensing. <i>IEEE</i>	2.5	14 14 14
111 110 109 108	p-type doping of GaAs nanowires using carbon. <i>Journal of Applied Physics</i> , <b>2012</b> , 112, 094323  Role of interface microstructure in rectifying metal/semiconductor contacts: Ballistic electron emission observations correlated to microstructure. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>1996</b> , Au/ZnSe contacts characterized by ballistic electron emission microscopy. <i>Journal of Applied Physics</i> , <b>1996</b> , 79, 1532-1535  Large-Area Low-Cost Flexible Plastic Nanohole Arrays for Integrated Bio-Chemical Sensing. <i>IEEE Sensors Journal</i> , <b>2013</b> , 13, 3982-3990  Electrodeposition, characterization and morphological investigations of NiFe/Cu multilayers	2.5	14 14 14
1111 1100 109 108	p-type doping of GaAs nanowires using carbon. <i>Journal of Applied Physics</i> , <b>2012</b> , 112, 094323  Role of interface microstructure in rectifying metal/semiconductor contacts: Ballistic electron emission observations correlated to microstructure. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>1996</b> ,  Au/ZnSe contacts characterized by ballistic electron emission microscopy. <i>Journal of Applied Physics</i> , <b>1996</b> , 79, 1532-1535  Large-Area Low-Cost Flexible Plastic Nanohole Arrays for Integrated Bio-Chemical Sensing. <i>IEEE Sensors Journal</i> , <b>2013</b> , 13, 3982-3990  Electrodeposition, characterization and morphological investigations of NiFe/Cu multilayers prepared by pulsed galvanostatic, dual bath technique. <i>Materials Characterization</i> , <b>2011</b> , 62, 204-210  Relaxation-induced polarized luminescence from InxGa1-xAs films grown on GaAs(001). <i>Physical</i>	2.5 2.5 4 3.9	14 14 14 13

103	Controlled axial and radial Te-doping of GaAs nanowires. <i>Journal of Applied Physics</i> , <b>2012</b> , 112, 054324	2.5	11
102	Tensile strain relaxation in GaNxP1\( \text{\mathbb{\omega}}\) (x\( \mathbb{\omega}\).1) grown by chemical beam epitaxy. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, <b>1996</b> , 14, 2952		11
101	Ballistic electron and photocurrent transport in Au-molecular layer-GaAs diodes. <i>Journal of Applied Physics</i> , <b>2007</b> , 102, 013703	2.5	11
100	Faceting transition in epitaxial growth of dilute GaNAs films on GaAs. <i>Journal of Vacuum Science</i> & <i>Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>2001</b> , 19, 1417		11
99	Effect of Bi surfactant on atomic ordering of GaAsSb. <i>Applied Physics Letters</i> , <b>2004</b> , 85, 5589-5591	3.4	10
98	The Polycrystalline-Si Contact to GaAs. <i>Journal of the Electrochemical Society</i> , <b>1986</b> , 133, 1176-1179	3.9	10
97	Long-lasting flexible organic solar cells stored and tested entirely in air. <i>Applied Physics Letters</i> , <b>2011</b> , 99, 263305	3.4	9
96	Planar defects and phase transformation in ZnSe nanosaws. <i>Journal of Materials Science: Materials in Electronics</i> , <b>2006</b> , 17, 1065-1070	2.1	9
95	The growth of SiGe on sapphire using rapid thermal chemical vapor deposition. <i>Journal of Crystal Growth</i> , <b>2001</b> , 222, 20-28	1.6	9
94	Correlation of buffer strain relaxation modes with transport properties of two-dimensional electron gases. <i>Journal of Applied Physics</i> , <b>1996</b> , 80, 6849-6854	2.5	9
93	Role of Hydrogen Evolution during Epitaxial Electrodeposition of Fe on GaAs. <i>Journal of the Electrochemical Society</i> , <b>2018</b> , 165, H3076-H3079	3.9	8
92	Growth of h-BN on copper (110) in a LEEM. Surface Science, 2018, 669, 133-139	1.8	8
91	Epitaxial Fe[sub x]Ni[sub $1$ $\boxed{M}$ ] Thin Film Contacts to GaAs via Electrochemistry. <i>Journal of the Electrochemical Society</i> , <b>2008</b> , 155, H841	3.9	8
90	Effects of capillary forces on copperdielectric interfacial void evolution. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 5201-5203	3.4	8
89	Hole confinement and low-frequency noise in SiGe pFETs on silicon-on-sapphire. <i>IEEE Electron Device Letters</i> , <b>1999</b> , 20, 173-175	4.4	8
88	Comparison of Au contacts to Si, GaAs, InxGa1 IkP, and ZnSe measured by ballistic electron emission microscopy. <i>Materials Chemistry and Physics</i> , <b>1996</b> , 46, 224-229	4.4	8
87	Si diffusion and segregation in low-temperature grown GaAs. <i>Applied Physics Letters</i> , <b>1993</b> , 62, 286-288	3.4	8
86	Lateral spin injection and detection through electrodeposited Fe/GaAs contacts. <i>Semiconductor Science and Technology</i> , <b>2013</b> , 28, 035003	1.8	7

85	Detecting Antibodies Secreted by Trapped Cells Using Extraordinary Optical Transmission. <i>IEEE Sensors Journal</i> , <b>2011</b> , 11, 2732-2739	4	7
84	Modulation-doped In0.53Ga0.47As/In0.52Al0.48As heterostructures grown on GaAs substrates using step-graded InxGa1\( \text{N}\) As buffers. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, <b>1996</b> , 14, 3035		7
83	Strain relaxation by <100> misfit dislocations in dilute nitride InxGa1\( \mathbb{A}\)As1\( \mathbb{N}\)Ny/GaAs quantum wells. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2005</b> , 202, 2849-2857	1.6	7
82	Room-temperature electrosynthesis of carbonaceous fibers. <i>Advanced Materials</i> , <b>1995</b> , 7, 398-401	24	7
81	Aligned cuboid iron nanoparticles by epitaxial electrodeposition. <i>Nanoscale</i> , <b>2017</b> , 9, 5315-5322	7.7	6
80	Electrical properties of lightly Ga-doped ZnO nanowires. <i>Semiconductor Science and Technology</i> , <b>2017</b> , 32, 125010	1.8	6
79	Interfacial reactions at Fe/topological insulator spin contacts. <i>Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics</i> , <b>2017</b> , 35, 04F105	1.3	6
78	Plasmonic sensors based on nano-holes: technology and integration 2008,		6
77	AuAg and AuPd molecular contacts to GaAs. <i>Journal of Vacuum Science &amp; Technology B</i> , <b>2008</b> , 26, 1597		6
76	Recycling gold nanohole arrays. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2014</b> , 32, 031403	2.9	5
75	Improved chemical and electrical stability of gold silicon contacts via epitaxial electrodeposition. <i>Journal of Applied Physics</i> , <b>2013</b> , 113, 063708	2.5	5
74	Atomic ordering in GaAsSb (0 0 1) grown by metalorganic vapor phase epitaxy. <i>Journal of Crystal Growth</i> , <b>2009</b> , 311, 4391-4397	1.6	5
73	Transparent conducting indium bismuth oxide. <i>Thin Solid Films</i> , <b>2007</b> , 515, 3760-3765	2.2	5
72	Structural and electrical characteristics of microcrystalline silicon prepared by hot-wire chemical vapor deposition using a graphite filament. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films,</i> <b>2007</b> , 25, 464-467	2.9	5
71	Interfacial scattering of hot electrons in ultrathin Au/Co films. <i>Journal of Vacuum Science</i> & <i>Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>2000</b> , 18, 2047		5
70	. Journal of Medical and Biological Engineering, <b>2011</b> , 31, 121	2.2	5
69	Evolution of interface voids under current and temperature stress in integrated circuit metallization. <i>Metals and Materials International</i> , <b>2004</b> , 10, 411-415	2.4	4
68	X-Ray Diffuse Scattering from Misfit Dislocation at Buried Interface. <i>Materials Research Society Symposia Proceedings</i> , <b>2001</b> , 673, 1		4

## (2008-1993)

67	Anisotropic Surface Roughness in Strain Relaxed in0.40GA0.60on Gaas with a Step-Graded INXGA1-XAs Buffer Layer. <i>Materials Research Society Symposia Proceedings</i> , <b>1993</b> , 312, 107		4	
66	The Diffusion of Phosphorus and Indium into Gallium Arsenide from Polycrystalline-Silicon. <i>Materials Research Society Symposia Proceedings</i> , <b>1986</b> , 77, 785		4	
65	Cw laser crystallization of glow discharge a-Si:H on glass substrates. <i>Journal of Electronic Materials</i> , <b>1982</b> , 11, 303-320	1.9	4	
64	Three-Dimensional Imaging of Beam-Induced Biasing of InP/GaInP Tunnel Diodes. <i>Nano Letters</i> , <b>2019</b> , 19, 3490-3497	11.5	3	
63	Measuring Surface Energies of GaAs (100) and Si (100) by Three Liquid Contact Angle Analysis (3LCAA) for Heterogeneous Nano-BondingTM. <i>MRS Advances</i> , <b>2018</b> , 3, 3403-3411	0.7	3	
62	Regrowth mechanism for oxide isolation of GaAs nanowires. <i>Nanotechnology</i> , <b>2017</b> , 28, 385302	3.4	3	
61	2010,		3	
60	Effect of annealing on the structural and optical properties of heavily carbon-doped ZnO. <i>Semiconductor Science and Technology</i> , <b>2010</b> , 25, 045023	1.8	3	
59	Microstructure of ordered nanodomains induced by Bi surfactant in OMVPE-grown GaAsSb. <i>Journal of Crystal Growth</i> , <b>2006</b> , 287, 541-544	1.6	3	
58	Dislocation-Induced deep level states in In0.08Ga0.92As/GaAs heterostructures. <i>Journal of Electronic Materials</i> , <b>1994</b> , 23, 929-933	1.9	3	
57	Control of surface morphology and strain relaxation in InGaAs grown on GaAs using a step-graded buffer <b>1994</b> , 2140, 179		3	
56	Beem Investigation of Oxide and Sulfide Passivated GaAs. <i>Materials Research Society Symposia Proceedings</i> , <b>1992</b> , 281, 653		3	
55	Electrical characterization of Si/InN nanowire heterojunctions. <i>Semiconductor Science and Technology</i> , <b>2018</b> , 33, 015008	1.8	3	
54	Characterization of solution-bonded GaAs/InGaAs/GaAs features on GaAs. <i>Semiconductor Science and Technology</i> , <b>2014</b> , 29, 075009	1.8	2	
53	Hanle measurements of electrodeposited Fe/GaAs spin tunnel contacts. <i>Journal of Applied Physics</i> , <b>2014</b> , 115, 123709	2.5	2	
52	Inhomogeneous magnetization processes in electrodeposited iron thin films on GaAs. <i>Journal of Applied Physics</i> , <b>2009</b> , 105, 07D543	2.5	2	
51	Insights into semiconductor nanowire conductivity using electrodeposition. <i>Semiconductor Science and Technology</i> , <b>2012</b> , 27, 105020	1.8	2	
50	Nanoholes in metals with applications to sensors and spectroscopy. <i>International Journal of Nanotechnology</i> , <b>2008</b> , 5, 1058	1.5	2	

49	Temporary extrusion failures in accelerated lifetime tests of copper interconnects. <i>IEEE Electron Device Letters</i> , <b>2005</b> , 26, 622-624	4.4	2
48	Influence of GaAs(001) substrate misorientation towards {111} on the optical properties of InxGa1\( \text{Mas}/\text{GaAs}\). Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, <b>1995</b> , 13, 1766		2
47	Strain relaxation induced deep levels in In1\(\mathbb{I}\)GaxAs thin films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>1994</b> , 12, 1050-1053	2.9	2
46	Lateral Variation in the Schottky Barrier Height and Observation of Critical Lengths at Au/PtSi/(100)Si and Au/(100)GaAs Diodes. <i>Materials Research Society Symposia Proceedings</i> , <b>1994</b> , 337, 319		2
45	Beem and UHV-Tem Studies of PtSi/Si(001). <i>Materials Research Society Symposia Proceedings</i> , <b>1995</b> , 402, 461		2
44	A New Technique for Magnetic Nanoparticle Imaging Using Magnetoencephalography Frequency Data. <i>IFMBE Proceedings</i> , <b>2010</b> , 443-446	0.2	2
43	Three-Dimensional Conductive Fingerprint Phantoms Made of Ethylene-Vinyl Acetate/Graphene Nanocomposite for Evaluating Smartphone Scanners. <i>ACS Applied Electronic Materials</i> , <b>2021</b> , 3, 2097-27	105	2
42	Axial EBIC oscillations at core/shell GaAs/Fe nanowire contacts. <i>Nanotechnology</i> , <b>2019</b> , 30, 025701	3.4	2
41	Abrupt degenerately-doped silicon nanowire tunnel junctions. <i>Nanotechnology</i> , <b>2020</b> , 31, 415708	3.4	1
40	Epitaxial Growth of Metals on Semiconductors Via Electrodeposition <b>2012</b> , 217-235		1
39	In-situ measurement of roughness spectra using diffuse scattering 1997,		1
38	Compositional Effects on the Degradation of PVD-TiSiN. <i>Materials Research Society Symposia Proceedings</i> , <b>1997</b> , 472, 325		1
37	SU-8 polymer enclosed microchannels with interconnect and nanohole arrays as an optical detection device for biospecies. Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference,	0.9	1
36	<b>2008</b> , 2008, 5652-5 Structural and electrical characteristics of nanocrystalline silicon prepared by hot-wire chemical vapor deposition on polymer substrates. <i>Thin Solid Films</i> , <b>2008</b> , 516, 7418-7421	2.2	1
35	Effects of HWCVD-deposited Seed Layers on Hydrogenated Microcrystalline Silicon Films on Glass Substrates. <i>Materials Research Society Symposia Proceedings</i> , <b>2006</b> , 910, 5		1
34	Structural Analysis of Nanocrystalline Silicon Prepared by Hot-wire Chemical Vapor Deposition on Polymer Substrates. <i>Materials Research Society Symposia Proceedings</i> , <b>2007</b> , 989, 3		1
33	Wavelength-Invariant Resist Composed of Bimetallic Layers. <i>Materials Research Society Symposia Proceedings</i> , <b>2002</b> , 745, 381		1
32	Effect of Oxygen on the Degradation of Ti-Si-N Diffusion Barriers in Cu Metallization. <i>Materials Research Society Symposia Proceedings</i> , <b>1998</b> , 514, 321		1

31	Analysis of Sige Fet Device Structures on Silicon-on-sapphire Substrates by X-Ray Diffraction. <i>Materials Research Society Symposia Proceedings</i> , <b>1998</b> , 533, 55		1
30	Suppression of growth-induced perpendicular magnetic anisotropy in Co <b>P</b> t alloys by trace amounts of Si. <i>Applied Physics Letters</i> , <b>1999</b> , 75, 4177-4179	3.4	1
29	Anisotropic Structural and Electronic Properties of InGaAs/GaAs Heterojunctions. <i>Materials Research Society Symposia Proceedings</i> , <b>1994</b> , 340, 349		1
28	The Effect of Starting Silicon Crystal Structure on Photoluminescence Intensity of Porous Silicon. <i>Materials Research Society Symposia Proceedings</i> , <b>1994</b> , 358, 351		1
27	Luminescent Colloidal SI Suspensions from Porous SI. <i>Materials Research Society Symposia Proceedings</i> , <b>1991</b> , 256, 131		1
26	Oxidation induced AlAs/GaAs superlattice disordering. <i>Applied Physics Letters</i> , <b>1992</b> , 60, 1235-1237	3.4	1
25	Preparation of Cross Sectional TEM Samples Using Lithographic Techniques and Reactive Ion Etching. <i>Materials Research Society Symposia Proceedings</i> , <b>1990</b> , 199, 43		1
24	RBS and TEM Analysis of Ta Silicides on GaAs. <i>Materials Research Society Symposia Proceedings</i> , <b>1983</b> , 25, 143		1
23	Homogeneous Strain Relaxation and Mosaic Spread in IngaAs/GaAs Heterostructures Using Triple Axis Diffractometry <b>1995</b> , 221-226		1
22	Rotational epitaxy of h-BNIon Cu (110). Surface Science, <b>2022</b> , 721, 122080	1.8	1
21	Understanding gaas Native Oxides By Correlating Three Liquid Contact Angle Analysis (3LCAA) and High Resolution Ion Beam Analysis (HR-IBA) to X-Ray Photoelectron Spectroscopy (XPS) as Function of Surface Processing. <i>MRS Advances</i> , <b>2019</b> , 4, 2249-2263	0.7	0
20	Electrokinetically-Induced Flow Over a Nano-Hole Array Sensor <b>2004</b> , 213		О
19	Atomic interface structure-property investigations. Canadian Journal of Physics, 2000, 78, 201-210	1.1	О
18	Magnetic Characterization of Isolated CoFeB/Cu Nanowires by Off-Axis Electron Holography. <i>Microscopy and Microanalysis</i> , <b>2014</b> , 20, 280-281	0.5	
17	Magnetic phase shift reconstruction for uniformly magnetized nanowires. <i>Ultramicroscopy</i> , <b>2017</b> , 172, 10-16	3.1	
17 16		3.1	
	172, 10-16  Compositional Effects on the Degradation of PVD-Tisin. <i>Materials Research Society Symposia</i>		

- Ballistic electron emission microscopy studies of ZnSe**B**eTe heterojunctions. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **2002**, 20, 1781
- Atomic interface structure-property investigations. *Canadian Journal of Physics*, **2000**, 77, 985-994 1.1
- A Study of Low-Temperature Grown GaP by Gas-Source Molecular Beam Epitaxy. *Materials Research Society Symposia Proceedings*, **1996**, 421, 293
- Homogeneous Strain Relaxation and Mosaic Spread in InGaAs/GaAs Heterostructures Using Triple Axis Diffractometry. *Advances in X-ray Analysis*, **1994**, 38, 221-226
- Light Scattering Study of the Evolution of the Surface Morphology During Growth of Ingaas on GaAs. *Materials Research Society Symposia Proceedings*, **1994**, 375, 193
- 8 Effects of Substrate Misorientation Direction on Strain Relaxation at InGaAs/GaAs(001) Interfaces.
  Materials Research Society Symposia Proceedings, 1995, 379, 21
- Structural and Electrical Characterization of Si-Implanted TiN as a Diffusion Barrier for Cu Metallization. *Materials Research Society Symposia Proceedings*, **1995**, 391, 327
- Oxidation and Diffusion at Poly-SiGe/GaAs Interfaces. *Materials Research Society Symposia Proceedings*, **1991**, 240, 581
- Growth and Characterization of InxGa1s-xP(x0.38) on GaP(100) with a Linearly Graded Buffer Layer by Gas-Source Molecular Beam Epitaxy. *Materials Research Society Symposia Proceedings*, **1992**, 281, 227
- Lattice Strain from Holes in Heavily Doped Si:Ga. *Materials Research Society Symposia Proceedings*, **1989**, 147, 53
- Cathodoluminescence of Ingaas-GaAs Single Heterostructures. *Materials Research Society Symposia Proceedings*, **1986**, 82, 367
- Vacancy Diffusion at Polysilicon Encapsulated GaAs Surfaces. *Materials Research Society Symposia*Proceedings, **1987**, 104, 463
- Geometric effects on carrier collection in coreEhell nanowire pl junctions. Nano Futures, 2021, 5, 0250073.6