Thierry Baron

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/2697/publications.pdf

Version: 2024-02-01

243 papers	5,076 citations	76326 40 h-index	133252 59 g-index
248 all docs	248 docs citations	248 times ranked	5168 citing authors

#	Article	IF	Citations
1	Size Effects in Mechanical Deformation and Fracture of Cantilevered Silicon Nanowires. Nano Letters, 2009, 9, 525-529.	9.1	216
2	Experimental and theoretical investigation of nano-crystal and nitride-trap memory devices. IEEE Transactions on Electron Devices, 2001, 48, 1789-1799.	3.0	134
3	Electrical study of Ge-nanocrystal-based metal-oxide-semiconductor structures for p-type nonvolatile memory applications. Applied Physics Letters, 2004, 84, 5079-5081.	3.3	110
4	Control of Gold Surface Diffusion on Si Nanowires. Nano Letters, 2008, 8, 1544-1550.	9.1	108
5	Statistics of electrical breakdown field in HfO2 and SiO2 films from millimeter to nanometer length scales. Applied Physics Letters, 2007, 91, .	3.3	103
6	Electrically pumped continuous-wave 13 Âµm InAs/GaAs quantum dot lasers monolithically grown on on-axis Si (001) substrates. Optics Express, 2017, 25, 4632.	3.4	102
7	Epitaxial growth of antiphase boundary free GaAs layer on 300 mm Si(001) substrate by metalorganic chemical vapour deposition with high mobility. APL Materials, 2016, 4, .	5.1	99
8	Silicon quantum dot nucleation on Si3N4, SiO2 and SiOxNy substrates for nanoelectronic devices. Journal of Crystal Growth, 2000, 209, 1004-1008.	1.5	89
9	Chemical vapor deposition of Ge nanocrystals on SiO2. Applied Physics Letters, 2003, 83, 1444-1446.	3.3	84
10	Performance and Reliability Features of Advanced Nonvolatile Memories Based on Discrete Traps (Silicon Nanocrystals, SONOS). IEEE Transactions on Device and Materials Reliability, 2004, 4, 377-389.	2.0	82
11	Massless Dirac Fermions in ZrTe₂ Semimetal Grown on InAs(111) by van der Waals Epitaxy. ACS Nano, 2018, 12, 1696-1703.	14.6	82
12	Single-electron charging effect in individual Si nanocrystals. Applied Physics Letters, 2001, 79, 1175-1177.	3.3	80
13	A Group-Delay-Based Chipless RFID Humidity Tag Sensor Using Silicon Nanowires. IEEE Antennas and Wireless Propagation Letters, 2013, 12, 729-732.	4.0	76
14	Atomic force microscopy nanomanipulation of silicon nanocrystals for nanodevice fabrication. Nanotechnology, 2003, 14, 1272-1278.	2.6	74
15	Toward a Reliable Chipless RFID Humidity Sensor Tag Based on Silicon Nanowires. IEEE Transactions on Microwave Theory and Techniques, 2016, 64, 2977-2985.	4.6	73
16	Electronic properties of Ge nanocrystals for non volatile memory applications. Solid-State Electronics, 2006, 50, 1310-1314.	1.4	71
17	Silicon nanocrystal memories. Microelectronic Engineering, 2004, 72, 388-394.	2.4	70
18	Nitrogen doping of Te-based IIâ€“VI compounds during growth by molecular beam epitaxy. Journal of Applied Physics, 1998, 83, 1354-1370.	2.5	67

#	Article	IF	Citations
19	Strongly Directional Scattering from Dielectric Nanowires. ACS Photonics, 2017, 4, 2036-2046.	6.6	67
20	Silicon nanowires: Diameter dependence of growth rate and delay in growth. Applied Physics Letters, 2010, 96, .	3.3	64
21	Effect of HCl on the doping and shape control of silicon nanowires. Nanotechnology, 2012, 23, 215702.	2.6	64
22	Continuous-wave quantum dot photonic crystal lasers grown on on-axis Si (001). Nature Communications, 2020, 11, 977.	12.8	61
23	Si nanowire growth and characterization using a microelectronics-compatible catalyst: PtSi. Applied Physics Letters, 2006, 89, 233111.	3.3	58
24	Study of self-limiting oxidation of silicon nanoclusters by atomistic simulations. Journal of Applied Physics, 2002, 92, 1084-1094.	2.5	57
25	Plasma nitrogen doping of ZnTe, Cd1â^'xZnxTe, and CdTe by molecular beam epitaxy. Applied Physics Letters, 1994, 65, 1284-1286.	3.3	55
26	Critical condition for growth of silicon nanowires. Journal of Applied Physics, 2007, 102, 094906.	2.5	55
27	Growth of Si nanocrystals on alumina and integration in memory devices. Applied Physics Letters, 2003, 82, 4151-4153.	3.3	54
28	Control of 10 nm scale cylinder orientation in self-organized sugar-based block copolymer thin films. Nanoscale, 2013, 5, 2637.	5.6	53
29	How far will silicon nanocrystals push the scaling limits of NVMs technologies?. , 0, , .		52
30	Influence of the Chemical Properties of the Substrate on Silicon Quantum Dot Nucleation. Journal of the Electrochemical Society, 2003, 150, G203.	2.9	51
31	The Importance of the Radial Growth in the Faceting of Silicon Nanowires. Nano Letters, 2010, 10, 2335-2341.	9.1	49
32	Fabrication of silicon nanowire networks for biological sensing. Sensors and Actuators B: Chemical, 2013, 182, 390-395.	7.8	48
33	Direct Quantification of Gold along a Single Si Nanowire. Nano Letters, 2008, 8, 3709-3714.	9.1	46
34	Toward the IIIâ€“V/Si co-integration by controlling the biatomic steps on hydrogenated Si(001). Applied Physics Letters, 2016, 109, .	3.3	46
35	Origin of Defect Tolerance in InAs/GaAs Quantum Dot Lasers Grown on Silicon. Journal of Lightwave Technology, 2020, 38, 240-248.	4.6	46
36	Discharge mechanisms modeling in LPCVD silicon nanocrystals usingCâ€“Vand capacitance transient techniquesâ€. Superlattices and Microstructures, 2000, 28, 493-500.	3.1	43

#	Article	IF	Citations
37	A two steps CVD process for the growth of silicon nano-crystals. Applied Surface Science, 2003, 214, 359-363.	6.1	43
38	The growth of small diameter silicon nanowires to nanotrees. Nanotechnology, 2008, 19, 125608.	2.6	42
39	Low defect InGaAs quantum well selectively grown by metal organic chemical vapor deposition on Si(100) 300â€‰mm wafers for next generation non planar devices. Applied Physics Letters, 2014, 104, .	3.3	42
40	pH driven addressing of silicon nanowires onto Si₃N₄/SiO₂micro-patterned surfaces. Nanotechnology, 2016, 27, 295602.	2.6	42
41	Low pressure chemical vapor deposition growth of silicon quantum dots on insulator for nanoelectronics devices. Applied Surface Science, 2000, 164, 29-34.	6.1	41
42	Ultra-thin oxides grown on silicon (1 0 0) by rapid thermal oxidation for CMOS and advanced devices. Applied Surface Science, 2001, 175-176, 726-733.	6.1	41
43	Nucleation control of CVD growth silicon nanocrystals for quantum devices. Microelectronic Engineering, 2002, 61-62, 511-515.	2.4	41
44	The effects of HCl on silicon nanowire growth: surface chlorination and existence of a â€˜diffusion-limited minimum diameterâ€™. Nanotechnology, 2009, 20, 475307.	2.6	41
45	High-performance silicon nanowire field-effect transistor with silicided contacts. Semiconductor Science and Technology, 2011, 26, 085020.	2.0	40
46	Ultra-low threshold InAs/GaAs quantum dot microdisk lasers on planar on-axis Si (001) substrates. Optica, 2019, 6, 430.	9.3	37
47	MOCVD of BiFeO3 Thin Films on SrTiO3. Chemical Vapor Deposition, 2007, 13, 232-238.	1.3	36
48	Evolution of Bulk c-Si Properties during the Processing of GaP/c-Si Heterojunction Cell. Energy Procedia, 2015, 77, 493-499.	1.8	36
49	Fabrication of SiC nanopillars by inductively coupled SF₆/O₂ plasma etching. Journal Physics D: Applied Physics, 2012, 45, 235204.	2.8	35
50	Self-assembled block polymer templates as high resolution lithographic masks. Surface Science, 2007, 601, 2611-2614.	1.9	34
51	Composition-Dependent Interfacial Abruptness in Au-Catalyzed Si_{1â€“x}Ge_x/Si/Si_{1â€“x}Ge_x Nanowire Heterostructures. Nano Letters, 2014, 14, 5140-5147.	9.1	34
52	An improved AFM cross-sectional method for piezoelectric nanostructures properties investigation: application to GaN nanowires. Nanotechnology, 2011, 22, 105704.	2.6	33
53	Hidden defects in silicon nanowires. Nanotechnology, 2012, 23, 025701.	2.6	33
54	Strain mapping at the nanoscale using precession electron diffraction in transmission electron microscope with off axis camera. Applied Physics Letters, 2014, 105, 191906.	3.3	33

#	Article	IF	Citations
55	Structural properties of films grown by magnetron sputtering of a BiFeO3 target. Thin Solid Films, 2006, 515, 481-484.	1.8	32
56	Multimode Silicon Nanowire Transistors. Nano Letters, 2014, 14, 6699-6703.	9.1	31
57	O-band InAs/GaAs quantum dot laser monolithically integrated on exact (0â€¯0â€¯1) Si substrate. Journal of Crystal Growth, 2019, 511, 56-60.	1.5	31
58	Metallic nano-crystals for flash memories. Materials Science and Engineering C, 2007, 27, 1496-1499.	7.3	29
59	Siâ€“SiC coreâ€“shell nanowires. Journal of Crystal Growth, 2013, 363, 158-163.	1.5	29
60	Origin of second-harmonic generation from individual silicon nanowires. Physical Review B, 2016, 93, .	3.2	29
61	Midwave infrared barrier detector based on Ga-free InAs/InAsSb type-II superlattice grown by molecular beam epitaxy on Si substrate. Infrared Physics and Technology, 2019, 96, 39-43.	2.9	29
62	Nitrogen doping of telluriumâ€based IIâ€“VI compounds during growth by molecular beam epitaxy. Applied Physics Letters, 1995, 67, 2972-2974.	3.3	28
63	CMOS compatible strategy based on selective atomic layer deposition of a hard mask for transferring block copolymer lithography patterns. Nanotechnology, 2010, 21, 435301.	2.6	28
64	Monolithically Integrated Electrically Pumped Continuous-Wave III-V Quantum Dot Light Sources on Silicon. IEEE Journal of Selected Topics in Quantum Electronics, 2017, 23, 1-10.	2.9	28
65	Modeling of the programming window distribution in multinanocrystals memories. IEEE Nanotechnology Magazine, 2003, 2, 277-284.	2.0	26
66	Controlled growth of SiGe nanowires by addition of HCl in the gas phase. Journal of Applied Physics, 2011, 110, 024311.	2.5	26
67	(Invited) SOI-Type Bonded Structures for Advanced Technology Nodes. ECS Transactions, 2014, 64, 35-48.	0.5	26
68	Percolating silicon nanowire networks with highly reproducible electrical properties. Nanotechnology, 2015, 26, 015201.	2.6	26
69	Transport mechanisms and charge trapping in thin dielectric/Si nano-crystals structures. Solid-State Electronics, 2001, 45, 1513-1519.	1.4	25
70	Ultra high density three dimensional capacitors based on Si nanowires array grown on a metal layer. Applied Physics Letters, 2012, 101, 083110.	3.3	25
71	Threading dislocations in GaAs epitaxial layers on various thickness Ge buffers on 300 mm Si substrates. Journal of Crystal Growth, 2016, 453, 180-187.	1.5	24
72	Growth and characterization of LPCVD Si quantum dots on insulators. Solid-State Electronics, 2004, 48, 1503-1509.	1.4	23

#	Article	IF	Citations
73	Improved electrical properties using SrTiO3/Y2O3 bilayer dielectrics for MIM capacitor applications. Microelectronics Reliability, 2007, 47, 773-776.	1.7	23
74	From Si nanowire to SiC nanotube. Journal of Nanoparticle Research, 2011, 13, 5425-5433.	1.9	23
75	Vertically integrated silicon-germanium nanowire field-effect transistor. Applied Physics Letters, 2011, 99, 193107.	3.3	23
76	Enhanced nonlinear optical response from individual silicon nanowires. Physical Review B, 2015, 91, .	3.2	23
77	Anti-phase boundariesâ€“Free GaAs epilayers on â€œquasi-nominalâ€•Ge-buffered silicon substrates. Applied Physics Letters, 2015, 107, .	3.3	23
78	Iodine doping of CdTe and CdZnTe layers grown by molecular beam epitaxy. Applied Physics Letters, 1995, 67, 965-967.	3.3	22
79	Tunable enhancement of light absorption and scattering in Si<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:mi>Ge</mml:mi><mml:msub><mml:mrow /><mml:mi>x</mml:mi></mml:msub></mml:math> nanowires. Physical Review B, 2012, 86, .	3.2	22
80	Silicon nanonets for biological sensing applications with enhanced optical detection ability. Biosensors and Bioelectronics, 2015, 68, 336-342.	10.1	22
81	Phase Behavior in Thin Films of Cylinder-Forming Diblock Copolymer:Â Deformation and Division of Heptacoordinated Microdomains. Macromolecules, 2007, 40, 5054-5059.	4.8	21
82	Nitrogen doping of Te-based IIâ€“VI compounds. Journal of Crystal Growth, 1997, 175-176, 682-687.	1.5	20
83	Photoluminescence of confined electron-hole plasma in core-shell silicon/silicon oxide nanowires. Applied Physics Letters, 2008, 93, .	3.3	20
84	Low Temperature Processing to Form Oxidation Insensitive Electrical Contact at Silicon Nanowire/Nanowire Junctions. Advanced Electronic Materials, 2015, 1, 1500172.	5.1	20
85	Improvement of AlN Film Quality Using Plasma Enhanced Atomic Layer Deposition with Substrate Biasing. ACS Applied Materials & Interfaces, 2020, 12, 39870-39880.	8.0	20
86	Amplitude-mode electrostatic force microscopy in UHV: Quantification of nanocrystal charge storage. Physical Review B, 2005, 72, .	3.2	19
87	Enhancement of the photoluminescence of silicon oxide defect states by combining silicon oxide with silicon nanowires. Journal of Applied Physics, 2007, 102, 016103.	2.5	19
88	Growth and characterization of gold catalyzed SiGe nanowires and alternative metal-catalyzed Si nanowires. Nanoscale Research Letters, 2011, 6, 187.	5.7	19
89	Investigation of charging/discharging phenomena in nano-crystal memories. Superlattices and Microstructures, 2000, 28, 339-344.	3.1	18
90	Photoluminescence enhancement of silicon nanocrystals placed in the near field of a silicon nanowire. Physical Review B, 2013, 88, .	3.2	18

#	Article	IF	Citations
91	300 mm InGaAs-on-insulator substrates fabricated using direct wafer bonding and the Smart Cutâ„¢ technology. Japanese Journal of Applied Physics, 2016, 55, 04EB10.	1.5	18
92	Anti phase boundary free GaSb layer grown on 300 mm (001)-Si substrate by metal organic chemical vapor deposition. Thin Solid Films, 2018, 645, 5-9.	1.8	18
93	Growth of Ge_{1â^'x}Sn_x Nanowires by Chemical Vapor Deposition via Vaporâ€“Liquidâ€“Solid Mechanism Using GeH₄ and SnCl₄. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700743.	1.8	18
94	Trions, excitons, and scattering states in multiple quantum wells with a variable-concentration electron gas. Physical Review B, 2004, 69, .	3.2	17
95	Electrical characteristics of a vertically integrated field-effect transistor using non-intentionally doped Si nanowires. Microelectronic Engineering, 2011, 88, 3312-3315.	2.4	17
96	Fabrication and electrical characterization of homo- and hetero-structure Si/SiGe nanowire Tunnel Field Effect Transistor grown by vaporâ€“liquidâ€“solid mechanism. Solid-State Electronics, 2016, 118, 26-29.	1.4	17
97	Hysteretic behavior of the charge injection in single silicon nanoparticles. Applied Physics Letters, 2004, 85, 3546-3548.	3.3	16
98	The morphology of silicon nanowires grown in the presence of trimethylaluminium. Nanotechnology, 2009, 20, 245602.	2.6	16
99	High aspect ratio semiconducting nanostructure random networks: highly versatile materials for multiple applications. Physica Status Solidi - Rapid Research Letters, 2013, 7, 919-923.	2.4	16
100	Growth strategies to control tapering in Ge nanowires. APL Materials, 2014, 2, .	5.1	16
101	Electronic properties of silicon nanocrystallites obtained by SiOx (x<2) annealing. Materials Science and Engineering C, 2002, 19, 237-241.	7.3	15
102	Modeling the XPS Si 2p core-level intensities of silicon nanocrystals for determination of oxide shell thickness. Surface and Interface Analysis, 2006, 38, 486-488.	1.8	15
103	Photoluminescence of silicon nanowires obtained by epitaxial chemical vapor deposition. Physica E: Low-Dimensional Systems and Nanostructures, 2009, 41, 963-965.	2.7	14
104	Passivated TiN nanocrystals/SiN trapping layer for enhanced erasing in nonvolatile memory. Applied Physics Letters, 2010, 97, 152112.	3.3	14
105	Impact of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>n</mml:mi></mml:math>-type doping on the carrier dynamics of silicon nanowires studied using optical-pump terahertz-probe spectroscopy. Physical Review B, 2014, 89, .	3.2	14
106	Functionalized silicon nanowires/conjugated polymer hybrid solar cells: Optical, electrical and morphological characterizations. Journal of Luminescence, 2015, 168, 315-324.	3.1	14
107	Plasma nitrogen doping efficiency in molecular beam epitaxy of tellurium-based IIâ€“VI compounds. Journal of Crystal Growth, 1996, 159, 271-275.	1.5	13
108	Relative absorption strengths of neutral and negatively charged excitons in CdTe quantum wells. Journal of Crystal Growth, 1998, 184-185, 822-825.	1.5	13

#	Article	IF	Citations
109	Transport process in thin SiO2 films with an embedded 2-D array of Si nanocrystals. Microelectronics Reliability, 2000, 40, 863-866.	1.7	13
110	Fabrication of Well-Organized and Densely Packed Si Nanopillars Containing SiGe Nanodots by Using Block Copolymer Templates. Chemistry of Materials, 2008, 20, 6183-6188.	6.7	13
111	Fabrication and characterization of silicon nanowire p-i-n MOS gated diode for use as p-type tunnel FET. Applied Physics A: Materials Science and Processing, 2015, 121, 1285-1290.	2.3	13
112	Influence of dots size and dots number fluctuations on the electrical characteristics of multi-nanocrystal memory devices. Solid-State Electronics, 2003, 47, 1637-1640.	1.4	12
113	A new memory concept: the nano-multiple-tunnel-junction memory with embedded Si nano-crystals. Microelectronic Engineering, 2004, 72, 399-404.	2.4	11
114	Synchrotron radiation x-ray photoelectron spectroscopy of Si nanocrystals grown onto Al2O3âˆ•Si surfaces. Applied Physics Letters, 2005, 87, 163119.	3.3	11
115	Self-assembling study of a cylinder-forming block copolymer via a nucleationâ€“growth mechanism. Nanotechnology, 2009, 20, 095602.	2.6	11
116	Performance and Modeling of Si-Nanocrystal Double-Layer Memory Devices With High- k Control Dielectrics. IEEE Transactions on Electron Devices, 2012, 59, 933-940.	3.0	11
117	Fabrication of high-density Si and SixGe1â”x nanowire arrays based on the single step plasma etching process. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2013, 31, 041806.	1.2	11
118	Dopant profiling in silicon nanowires measured by scanning capacitance microscopy. Physica Status Solidi - Rapid Research Letters, 2014, 8, 312-316.	2.4	11
119	Hybrid nanocomposites based on conducting polymer and silicon nanowires for photovoltaic application. Journal of Luminescence, 2014, 156, 30-35.	3.1	11
120	Optical creation of a metastable two-dimensional electron gas in a ZnSe/BeTe quantum structure. Applied Physics Letters, 1998, 73, 656-658.	3.3	10
121	Hydrogen passivation of nitrogen acceptors confined in CdZnTe quantum well structures. Journal of Applied Physics, 2001, 90, 2329-2332.	2.5	10
122	A new architecture for selfâ€organized silicon nanowire growth integrated on a ã€ˆ100ã€‰ silicon substrate. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 1606-1614.	1.8	10
123	Self-connected horizontal silicon nanowire field effect transistor. Solid State Communications, 2009, 149, 799-801.	1.9	10
124	Highâ€density guided growth of silicon nanowires in nanoporous alumina on Si(100) substrate: Estimation of activation energy. Physica Status Solidi - Rapid Research Letters, 2009, 3, 19-21.	2.4	10
125	Patterned growth of high aspect ratio silicon wire arrays at moderate temperature. Journal of Crystal Growth, 2011, 321, 151-156.	1.5	10
126	Direct top-down ordering of diblock copolymers through nanoimprint lithography. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2011, 29, 06F208.	1.2	10

#	Article	IF	Citations
127	Comparative study on dry etching of Î±- and Î²-SiC nano-pillars. Materials Letters, 2012, 87, 9-12.	2.6	10
128	Block copolymer technology applied to nanoelectronics. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 1195-1206.	0.8	10
129	Depth profiling investigation by pARXPS and MEIS of advanced transistor technology gate stack. Microelectronic Engineering, 2017, 169, 24-28.	2.4	9
130	Etched-cavity GaSb laser diodes on a MOVPE GaSb-on-Si template. Optics Express, 2020, 28, 20785.	3.4	9
131	Giant interdiffusion induced by nitrogen doping in CdZnMgTe/CdZnTe superlattices. Applied Physics Letters, 1997, 70, 2963-2965.	3.3	8
132	Preferential nucleation of silicon nano-crystals on electron beam exposed SiO2 surfaces. Microelectronic Engineering, 2004, 73-74, 632-638.	2.4	8
133	Sequential growth of bistable copperâ€“molybdenum coordination nanolayers on inorganic surfaces. Dalton Transactions, 2013, 42, 8034.	3.3	8
134	Solar cells with gallium phosphide/silicon heterojunction. AIP Conference Proceedings, 2015, , .	0.4	8
135	Electrical properties of metal/Al2O3/In0.53Ga0.47As capacitors grown on InP. Journal of Applied Physics, 2018, 123, 161534.	2.5	8
136	Epitaxial Growth of Highâ€Quality AlGaInAsâ€Based Active Structures on a Directly Bonded InPâ€SiO₂/Si Substrate. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900523.	1.8	8
137	Comparison of AlGaInAs-Based Laser Behavior Grown on Hybrid InP-SiOâ„/Si and InP Substrates. IEEE Photonics Technology Letters, 2020, 32, 469-472.	2.5	8
138	Nitrogen acceptors confined in CdZnTe quantum well structures. Journal of Applied Physics, 1996, 79, 2070-2073.	2.5	7
139	Nanoscale elemental quantification in heterostructured SiGe nanowires. Nanoscale, 2015, 7, 8544-8553.	5.6	7
140	Study of trap centres in silicon nanocrystal memories. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2003, 102, 99-107.	3.5	6
141	On the saturation mechanism in the Ge nanocrystals-based non-volatile memory. Solid-State Electronics, 2006, 50, 769-773.	1.4	6
142	Silicon nanowires grown in nanoporous alumina matrices on oriented silicon substrates investigated by electron microscopy. Superlattices and Microstructures, 2008, 44, 354-361.	3.1	6
143	Chemical-vapour-deposition growth and electrical characterization of intrinsic silicon nanowires. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2009, 159-160, 83-86.	3.5	6
144	Nanostructured Films Made from Zwitterionic Phosphorylcholine Diblock Copolymer Systems. Macromolecules, 2011, 44, 2240-2244.	4.8	6

#	Article	IF	Citations
145	Interfacial abruptness in axial Si/SiGe heterostructures in nanowires probed by scanning capacitance microscopy. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 509-513.	1.8	6
146	Spatially correlated structural and optical characterization of a single InGaAs quantum well fin selectively grown on Si by microscopy and cathodoluminescence techniques. APL Materials, 2016, 4, .	5.1	6
147	Benefits of XPS nanocharacterization for process development and industrial control of thin SiGe channel layers in advanced CMOS technologies. Materials Science in Semiconductor Processing, 2017, 70, 105-110.	4.0	6
148	Fabrication of top-down gold nanostructures using a damascene process. Microelectronic Engineering, 2017, 177, 41-45.	2.4	6
149	Suppression of self-organized surface nanopatterning on GaSb/InAs multilayers induced by low energy oxygen ion bombardment by using simultaneously sample rotation and oxygen flooding. Applied Surface Science, 2018, 441, 218-222.	6.1	6
150	Indium-oxide nanoparticles for RRAM devices compatible with CMOS back-end-off-line. Solid-State Electronics, 2018, 143, 20-26.	1.4	6
151	Electromagnetic field enhancement effects in group IV semiconductor nanowires. A Raman spectroscopy approach. Journal of Applied Physics, 2018, 123, .	2.5	6
152	Low temperature growth and physical properties of InAs thin films grown on Si, GaAs and In0.53Ga0.47As template. Thin Solid Films, 2018, 645, 119-123.	1.8	6
153	Growth dynamics of SiGe nanowires by the vapourâ€“liquidâ€“solid method and its impact on SiGe/Si axial heterojunction abruptness. Nanotechnology, 2018, 29, 355602.	2.6	6
154	Characterization of Deposited Nanocrystalline Silicon by Spectroscopic Ellipsometry. Physica Status Solidi A, 1999, 175, 405-412.	1.7	5
155	Investigation of Dynamic Memory Effects in Si-dot Devices. , 2000, , .		5
156	Few electrons injection in silicon nanocrystals probed by ultrahigh vacuum atomic force microscopy. Applied Physics Letters, 2005, 86, 033109.	3.3	5
157	Hybrid silicon nanocrystals/SiN charge trapping layer with high-k dielectrics for FN and CHE programming. , 2010, , .		5
158	Ni silicide nanowires analysis by atom probe tomography. Microelectronic Engineering, 2014, 120, 47-51.	2.4	5
159	Monolithic integration of GaAs pâ€“iâ€“n photodetectors grown on 300 mm silicon wafers. AIP Advances, 2020, 10, .	1.3	5
160	O-Band Emitting InAs Quantum Dots Grown by MOCVD on a 300 mm Ge-Buffered Si (001) Substrate. Nanomaterials, 2020, 10, 2450.	4.1	5
161	Selective epitaxial growth of AlGaAs/GaAs heterostructures on 300Âmm Si(001) for red optical emission. Thin Solid Films, 2021, 721, 138541.	1.8	5
162	Gallium Selenide Nanoribbons on Silicon Substrates for Photodetection. ACS Applied Nano Materials, 2021, 4, 7820-7831.	5.0	5

#	Article	IF	Citations
163	Monolithically integrated InGaAs/AlGaAs multiple quantum well photodetectors on 300Âmm Si wafers. AIP Advances, 2021, 11, .	1.3	5
164	Electric measurements by AFM on silicon nanocrystals. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 17, 543-545.	2.7	4
165	Off axis holography of doped and intrinsic silicon nanowires: Interpretation and influence of fields in the vacuum. Journal of Physics: Conference Series, 2010, 209, 012027.	0.4	4
166	Double-port AlN/Sapphire high overtone bulk acoustic resonators for the stabilization of radio-frequency oscillators. , 2012, , .		4
167	Control of the interfacial abruptness of Au-catalyzed Si-Si1â^'xGex heterostructured nanowires grown by vaporâ€“liquidâ€“solid. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2014, 32, .	2.1	4
168	Chemical depth profiling and 3D reconstruction of IIIâ€“V heterostructures selectively grown on nonâ€planar Si substrates by MOCVD. Physica Status Solidi - Rapid Research Letters, 2015, 9, 202-205.	2.4	4
169	Carbon Nanotube Sheet as Top Contact Electrode for Nanowires: Highly Versatile and Simple Process. Journal of Nanoscience and Nanotechnology, 2015, 15, 1669-1673.	0.9	4
170	HfO2/Al2O3/InGaAs MOSCAP Structures and InGaAs Plasma Nitridation Elaborated in a 300mm Pilot Line. ECS Transactions, 2015, 69, 9-13.	0.5	4
171	3D Auger quantitative depth profiling of individual nanoscaled IIIâ€“V heterostructures. Journal of Electron Spectroscopy and Related Phenomena, 2016, 213, 1-10.	1.7	4
172	Fano-resonances in High Index Dielectric Nanowires for Directional Scattering. Springer Series in Optical Sciences, 2018, , 283-309.	0.7	4
173	Reversible Al Propagation in Si_xGe_{1â€“x} Nanowires: Implications for Electrical Contact Formation. ACS Applied Nano Materials, 2020, 3, 10427-10436.	5.0	4
174	Single-Mode Photonic Crystal Nanobeam Lasers Monolithically Grown on Si for Dense Integration. IEEE Journal of Selected Topics in Quantum Electronics, 2022, 28, 1-6.	2.9	4
175	Large-Scale Monolithic Fabrication of IIIâ€“V Vertical Nanowires on a Standard Si(100) Microelectronic Substrate. ACS Omega, 2022, 7, 5836-5843.	3.5	4
176	Influence of carrier and doping gases on silicon quantum dots nucleation. Journal of Crystal Growth, 2003, 255, 250-257.	1.5	3
177	Chemical characterization of IIIâ€“V heterostructures in 3D architecture. Microelectronic Engineering, 2015, 147, 219-222.	2.4	3
178	InGaAs-OI Substrate Fabrication on a 300 mm Wafer. Journal of Low Power Electronics and Applications, 2016, 6, 19.	2.0	3
179	Fabrication of monodisperse magnetic nanoparticles released in solution using a block copolymer template. Journal Physics D: Applied Physics, 2017, 50, 295001.	2.8	3
180	Direct examination of Si atoms spatial distribution and clustering in GaAs thin films with atom probe tomography. Scripta Materialia, 2018, 153, 109-113.	5.2	3

#	Article	IF	Citations
181	InAs/GaSb thin layers directly grown on nominal (0â€¯0â€¯1)-Si substrate by MOVPE for the fabrication of InAs FINFET. Journal of Crystal Growth, 2019, 510, 18-22.	1.5	3
182	Study of physisorption phenomena of chemical species on 300Âmm Si wafers during controlled mini-environment transfers between microelectronic equipments. Microelectronic Engineering, 2020, 231, 111401.	2.4	3
183	Influence of carrier and doping gases on the chemical vapor deposition of silicon quantum dots. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2003, 101, 164-168.	3.5	2
184	Modelling of the programming window distribution in multi nanocrystals memories. , 0, , .		2
185	Electric Force Microscopy Of Individually Charged Silicon Nanoparticles. Materials Research Society Symposia Proceedings, 2004, 832, 331.	0.1	2
186	Charging effects in Ge nanocrystals embedded in SiO2 matrix for non volatile memory applications. Materials Science and Engineering C, 2006, 26, 360-363.	7.3	2
187	Fabrication of SiC Nanopillars by Inductively Coupled SF₆/O₂ Plasma. Materials Science Forum, 2012, 711, 66-69.	0.3	2
188	300 mm InGaAsOI substrate fabrication using the Smart Cut^{TM} technology. , 2015, , .		2
189	Sub-10â€‰nm plasma nanopatterning of InGaAs with nearly vertical and smooth sidewalls for advanced n-fin field effect transistors on silicon. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2017, 35, 021206.	1.2	2
190	Fabrication and characterization of a germanium nanowire light emitting diode. Applied Physics Letters, 2017, 111, 233103.	3.3	2
191	Understanding and improving the low optical emission of InGaAs quantum wells grown on oxidized patterned (001) silicon substrate. Applied Physics Letters, 2018, 112, .	3.3	2
192	Strategies for Patterning Silicon Nanostructures with Diblock Copolymers, in View of Application to Microelectronics and Optoelectronics. Science of Advanced Materials, 2011, 3, 490-495.	0.7	2
193	Impact of Substrate Biasing During AlN Growth by PEALD on Al ₂ O ₃ /AlN/GaN MOS Capacitors. Advanced Materials Interfaces, 2022, 9, 2101731.	3.7	2
194	Control of Silicon Quantum Dots nucleation and growth by CVD. Materials Research Society Symposia Proceedings, 2002, 737, 355.	0.1	1
195	Optical manipulation of silicon nanowires on silicon nitride waveguides. , 2008, , .		1
196	Carburization of Si Microwires by Chemical Vapour Deposition. Journal of Nanoscience and Nanotechnology, 2011, 11, 8412-8415.	0.9	1
197	Growth of SiC Microwires through Si Microwires Carburization. Materials Science Forum, 0, 679-680, 512-515.	0.3	1
198	Hexagonal Faceted SiC Nanopillars Fabricated by Inductively Coupled SF₆/O₂ Plasma Method. Materials Science Forum, 0, 717-720, 893-896.	0.3	1

#	Article	IF	Citations
199	PiezoNEMS: Semiconductor nanowires and heterostructures for sensing and energy harvesting. , 2012, , .		1
200	High density and taper-free boron doped Si1â^'xGex nanowire via two-step growth process. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2014, 32, 041401.	2.1	1
201	Nanoscale Surface and Sub-Surface Chemical Analysis of SiGe Nanowires. Microscopy and Microanalysis, 2014, 20, 2052-2053.	0.4	1
202	Electroluminescence from NiSi₂/Si/NiSi₂ nanowire heterostructures operated at high electric fields. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 2895-2900.	1.8	1
203	Fabrication of GaAs nanowires and GaAs-Si axial heterostructure nanowires on Si (100) substrate for new applications. , 2016, , .		1
204	Depth profiling analysis of HfON on SiON ultrathin films by parallel angle resolved xâ€ray photoelectron spectroscopy and medium energy ion scattering. Surface and Interface Analysis, 2016, 48, 436-439.	1.8	1
205	Indium-oxide nanoparticles for Ox-RRAM in CMOS back-end-off-line. , 2017, , .		1
206	Direct measurement of AC electrokinetics properties and capture frequencies of silicon and siliconâ€“germanium nanowires. Semiconductor Science and Technology, 2018, 33, 015005.	2.0	1
207	Indium Oxide Nanostructure Optimization for RRAM Integration on CMOS BEOL. , 2018, , .		1
208	Electromagnetic Field Enhancement on Axially Heterostructured NWs: The Role of the Heterojunctions. Journal of Electronic Materials, 2018, 47, 5072-5076.	2.2	1
209	Comprehension of peculiar local emission behavior of InGaAs quantum well by colocalized nanocharacterization combining cathodoluminescence and electron microscopy techniques. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2018, 36, 042901.	1.2	1
210	High-quality Epitaxial Growth of AlGaInAs-based Active Structure on a Directly-Bonded InPoSi Substrate. , 2019, , .		1
211	A fabrication process for self-connected horizontal SiGe nanowires. Microelectronic Engineering, 2020, 220, 111150.	2.4	1
212	Kinetic study of hydrogen lateral diffusion at high temperature in a directly-bonded InP-SiO₂/Si substrate. Nanotechnology, 2020, 31, 135205.	2.6	1
213	GaAs Compounds Heteroepitaxy on Silicon for Opto and Nano Electronic Applications. , 0, , .		1
214	200 mm-scale growth of 2D layered GaSe with preferential orientation. APL Materials, 2022, 10, 051106.	5.1	1
215	Nitrogen doping in molecular-beam epitaxy growth of IIâ€“VI semiconductors. Journal of Crystal Growth, 1998, 184-185, 415-418.	1.5	0
216	Single electron charging effect in individual Si nanocrystals.. Materials Research Society Symposia Proceedings, 2000, 638, 1.	0.1	0

#	Article	IF	Citations
217	Electrical Characterization of Memory-Cell Structures Employing Ultra-Thin Al2O3 Film as Storage Node. , 2001, , .		0
218	Nano Crystal Memory Devices Characterization Using the Charge Pumping Technique. , 2002, , .		0
219	Improved size dispersion of silicon nanocrystals grown in a batch LPCVD reactor. Materials Research Society Symposia Proceedings, 2004, 830, 13.	0.1	0
220	Growth and low temperature photoluminescence of silicon nanowires for different catalysts. Materials Research Society Symposia Proceedings, 2009, 1178, 50.	0.1	0
221	Performance and Reliability of Si-Nanocrystal Double Layer Memory Devices with High-k Control Dielectrics. , 2009, , .		0
222	The Benefits of HCl in the Growth of Silicon Nanowires by Chemical Vapour Deposition: Growth of Small Diameter Nanowires and Controlled Facet Evolution. Materials Research Society Symposia Proceedings, 2010, 1258, 1.	0.1	0
223	Silicon nanowires for multisensing applications. , 2010, , .		0
224	NEMS nanostructures with enhanced piezoresistive and piezoelectric properties. Application to sensor devices and energy harvesting. , 2011, , .		0
225	Study of CVD nanowire high-k metal interface quality for interconnect level MOS devices. Microelectronic Engineering, 2011, 88, 1228-1231.	2.4	0
226	Conversion of Si Nanowires into SiC Nanotubes. Materials Science Forum, 0, 717-720, 1275-1278.	0.3	0
227	ELECTRICAL CHARACTERIZATION OF PLANAR SILICON NANOWIRE FIELD-EFFECT TRANSISTORS. International Journal of Nanoscience, 2012, 11, 1240011.	0.7	0
228	Composition and Size Effects on the Optical Properties of Isolated Silicon-Germanium Nanowires. Materials Research Society Symposia Proceedings, 2012, 1408, 3.	0.1	0
229	From planar to vertical nanowires field-effect transistors. Materials Research Society Symposia Proceedings, 2012, 1439, 101-107.	0.1	0
230	Elaboration of Core Si/Shell SiC Nanowires. Materials Science Forum, 0, 740-742, 306-310.	0.3	0
231	Comparative Study on Dry Etching of Î±- and Î²-SiC Nano-Pillars. Materials Science Forum, 2013, 740-742, 817-820.	0.3	0
232	Control of heterointerface and strain mapping in Au catalyzed axial Si-Si1-xGex nanowires. Materials Research Society Symposia Proceedings, 2014, 1707, 37.	0.1	0
233	(Invited) Photoluminescence Enhancement of a Silicon Nanocrystal Plane Positioned in the Near-Field of a Silicon Nanowire. ECS Transactions, 2014, 61, 189-197.	0.5	0
234	Electrical characterisation of horizontal and vertical gate-all-around Si/SiGe nanowires field effect transistors. , 2014, , .		0

#	Article	IF	Citations
235	Publisher's Note: Enhanced nonlinear optical response from individual silicon nanowires [Phys. Rev. B91, 121416(R) (2015)]. Physical Review B, 2015, 91, .	3.2	0
236	Silicon Nanowires: Low Temperature Processing to Form Oxidation Insensitive Electrical Contact at Silicon Nanowire/Nanowire Junctions (Adv. Electron. Mater. 10/2015). Advanced Electronic Materials, 2015, 1, .	5.1	0
237	Synthesis of mono disperse magnetic nanoparticles prepared on block copolymer templates for medical imaging techniques. , 2015, , .		0
238	Al<inf>2</inf>O<inf>3</inf>/InGaAs interface study on MOS capacitors for a 300mm process integration. , 2015, , .		0
239	Enhanced nonlinear optical properties from individual silicon nanowires. , 2016, , .		0
240	SIMS depth profiling and topography studies of repetitive IIIâ€“V trenches under low energy oxygen ion beam sputtering. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2016, 34, 03H131.	1.2	0
241	3D field confinement in the near-field interaction between graphene and Si/SiGe axially heterostructured NWs. Applied Physics Letters, 2021, 118, 211104.	3.3	0
242	Fabry Perot Laser Arrays Covering C+L Band Obtained by Selective Area Growth on InP-SiO2/Si Substrate. , 2020, , .		0
243	Surface chemistry along a single silicon nanowire: Quantitative x-ray photoelectron emission microscopy (XPEEM) of the metal catalyst diffusion. , 2008, , 151-152.		0