Karl K Berggren

List of Publications by Year
in descending order

212 papers	11,495 citations	25034 57 h-index	30087 103 g-index
220 all docs	220 docs citations	220 times ranked	9827 citing authors

#	Article	IF	Citations
1	Graphoepitaxy of Self-Assembled Block Copolymers on Two-Dimensional Periodic Patterned Templates. Science, 2008, 321, 939-943.	12.6	760
2	MoS₂ Field-Effect Transistor with Sub-10 nm Channel Length. Nano Letters, 2016, 16, 7798-7806.	9.1	389
3	Mach-Zehnder Interferometry in a Strongly Driven Superconducting Qubit. Science, 2005, 310, 1653-1657.	12.6	379
4	Kinetic-inductance-limited reset time of superconducting nanowire photon counters. Applied Physics Letters, 2006, 88, 111116.	3.3	358
5	Nanowire single-photon detector with an integrated optical cavity and anti-reflection coating. Optics Express, 2006, 14, 527.	3.4	350
6	Resolution Limits of Electron-Beam Lithography toward the Atomic Scale. Nano Letters, 2013, 13, 1555-1558.	9.1	350
7	Demonstration of sub-3 ps temporal resolution with a superconducting nanowire single-photon detector. Nature Photonics, 2020, 14, 250-255.	31.4	285
8	Complex self-assembled patterns using sparse commensurate templates with locally varying motifs. Nature Nanotechnology, 2010, 5, 256-260.	31.5	245
9	On-chip detection of non-classical light by scalable integration of single-photon detectors. Nature Communications, 2015, 6, 5873.	12.8	238
10	A Path to Ultranarrow Patterns Using Self-Assembled Lithography. Nano Letters, 2010, 10, 1000-1005.	9.1	229
11	Microlithography by using neutral metastable atoms and self-assembled monolayers. Science, 1995, 269, 1255-1257.	12.6	212
12	Geometry-dependent critical currents in superconducting nanocircuits. Physical Review B, 2011, 84, .	3.2	193
13	Modeling the Electrical and Thermal Response of Superconducting Nanowire Single-Photon Detectors. IEEE Transactions on Applied Superconductivity, 2007, 17, 581-585.	1.7	174
14	Development of Quantum Interconnects (QuICs) for Next-Generation Information Technologies. PRX Quantum, 2021, 2, .	9.2	172
15	Using high-contrast salty development of hydrogen silsesquioxane for sub-10-nm half-pitch lithography. Journal of Vacuum Science & Technology B, 2007, 25, 2025-2029.	1.3	167
16	Single-Photon Detectors Based on Ultranarrow Superconducting Nanowires. Nano Letters, 2011, 11, 2048-2053.	9.1	167
17	Constriction-limited detection efficiency of superconducting nanowire single-photon detectors. Applied Physics Letters, 2007, 90, 101110.	3.3	163
18	781 Mbit/s photon-counting optical communications using a superconducting nanowire detector. Optics Letters, 2006, 31, 444.	3.3	161

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19	Efficient Single Photon Detection from 500 nm to 5 Î¼m Wavelength. Nano Letters, 2012, 12, 4799-4804.	9.1	155
20	Threeâ€Dimensional Nanofabrication by Block Copolymer Selfâ€Assembly. Advanced Materials, 2014, 26, 4386-4396.	21.0	155
21	Understanding of hydrogen silsesquioxane electron resist for sub-5-nm-half-pitch lithography. Journal of Vacuum Science & Technology B, 2009, 27, 2622-2627.	1.3	148
22	Optical properties of superconducting nanowire single-photon detectors. Optics Express, 2008, 16, 10750.	3.4	146
23	Amplitude spectroscopy of a solid-state artificial atom. Nature, 2008, 455, 51-57.	27.8	134
24	Electrothermal feedback in superconducting nanowire single-photon detectors. Physical Review B, 2009, 79, .	3.2	132
25	Optical-field-controlled photoemission from plasmonic nanoparticles. Nature Physics, 2017, 13, 335-339.	16.7	129
26	Single-photon imager based on a superconducting nanowire delay line. Nature Photonics, 2017, 11, 247-251.	31.4	127
27	Microwave-Induced Cooling of a Superconducting Qubit. Science, 2006, 314, 1589-1592.	12.6	126
28	Photon-number-resolution with sub-30-ps timing using multi-element superconducting nanowire single photon detectors. Journal of Modern Optics, 2009, 56, 364-373.	1.3	122
29	Designs for a quantum electron microscope. Ultramicroscopy, 2016, 164, 31-45.	1.9	122
30	A Superconducting-Nanowire Three-Terminal Electrothermal Device. Nano Letters, 2014, 14, 5748-5753.	9.1	116
31	Detecting Sub-GeV Dark Matter with Superconducting Nanowires. Physical Review Letters, 2019, 123, 151802.	7.8	116
32	Directed Self-Assembly at the 10 nm Scale by Using Capillary Force-Induced Nanocohesion. Nano Letters, 2010, 10, 3710-3716.	9.1	114
33	Multi-Element Superconducting Nanowire Single-Photon Detector. IEEE Transactions on Applied Superconductivity, 2007, 17, 279-284.	1.7	113
34	Assembly of Sub-10-nm Block Copolymer Patterns with Mixed Morphology and Period Using Electron Irradiation and Solvent Annealing. Nano Letters, 2011, 11, 5079-5084.	9.1	113
35	Superconducting nanowire single-photon detectors integrated with optical nano-antennae. Optics Express, 2011, 19, 17.	3.4	112
36	Roadmap on emerging hardware and technology for machine learning. Nanotechnology, 2021, 32, 012002.	2.6	104

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37	A general theoretical and experimental framework for nanoscale electromagnetism. Nature, 2019, 576, 248-252.	27.8	103
38	Scanning-helium-ion-beam lithography with hydrogen silsesquioxane resist. Journal of Vacuum Science & Technology B, 2009, 27, 2702-2706.	1.3	95
39	Sub-10-nm half-pitch electron-beam lithography by using poly(methyl methacrylate) as a negative resist. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2010, 28, C6C58-C6C62.	1.2	86
40	Sub-10 nm structures on silicon by thermal dewetting of platinum. Nanotechnology, 2010, 21, 505301.	2.6	86
41	Superconducting nanowire detector jitter limited by detector geometry. Applied Physics Letters, 2016, 109, .	3.3	86
42	Multilayer block copolymer meshes by orthogonal self-assembly. Nature Communications, 2016, 7, 10518.	12.8	85
43	Critical-current reduction in thin superconducting wires due to current crowding. Applied Physics Letters, 2012, 100, .	3.3	84
44	AXSIS: Exploring the frontiers in attosecond X-ray science, imaging and spectroscopy. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 829, 24-29.	1.6	80
45	Design rules for self-assembled block copolymer patterns using tiled templates. Nature Communications, 2014, 5, 3305.	12.8	78
46	Optimal temperature for development of poly(methylmethacrylate). Journal of Vacuum Science & Technology B, 2007, 25, 2013.	1.3	75
47	Sub-10 nm Nanoimprint Lithography by Wafer Bowing. Nano Letters, 2008, 8, 3865-3869.	9.1	75
48	Aligned Sub-10-nm Block Copolymer Patterns Templated by Post Arrays. ACS Nano, 2012, 6, 2071-2077.	14.6	74
49	Universal scaling of the critical temperature for thin films near the superconducting-to-insulating transition. Physical Review B, 2014, 90, .	3.2	70
50	Neon Ion Beam Lithography (NIBL). Nano Letters, 2011, 11, 4343-4347.	9.1	69
51	Single-photon detection in the mid-infrared up to 10 <i>Î¼</i>m wavelength using tungsten silicide superconducting nanowire detectors. APL Photonics, 2021, 6, .	5.7	68
52	High-Yield, Ultrafast, Surface Plasmon-Enhanced, Au Nanorod Optical Field Electron Emitter Arrays. ACS Nano, 2014, 8, 11474-11482.	14.6	67
53	Determining the Resolution Limits of Electron-Beam Lithography: Direct Measurement of the Point-Spread Function. Nano Letters, 2014, 14, 4406-4412.	9.1	67
54	Dimensional Tailoring of Hydrothermally Grown Zinc Oxide Nanowire Arrays. Nano Letters, 2016, 16, 753-759.	9.1	66

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55	Cavity electro-optics in thin-film lithium niobate for efficient microwave-to-optical transduction. Optica, 2020, 7, 1714.	9.3	66
56	A scalable multi-photon coincidence detector based on superconducting nanowires. Nature Nanotechnology, 2018, 13, 596-601.	31.5	62
57	High-order temporal coherences ofâ€¨chaotic and laser light. Optics Express, 2010, 18, 1430.	3.4	60
58	On-chip sampling of optical fields with attosecond resolution. Nature Photonics, 2021, 15, 456-460.	31.4	60
59	Mapping Photoemission and Hot-Electron Emission from Plasmonic Nanoantennas. Nano Letters, 2017, 17, 6069-6076.	9.1	57
60	Resolving Photon Numbers Using a Superconducting Nanowire with Impedance-Matching Taper. Nano Letters, 2020, 20, 3858-3863.	9.1	57
61	Limiting factors in sub-10â€‚nm scanning-electron-beam lithography. Journal of Vacuum Science & Technology B, 2009, 27, 2616.	1.3	55
62	Highly Ordered Square Arrays from a Templated ABC Triblock Terpolymer. Nano Letters, 2011, 11, 2849-2855.	9.1	55
63	Towards integrated tunable all-silicon free-electron light sources. Nature Communications, 2019, 10, 3176.	12.8	55
64	Fiber-coupled nanowire photon counter at 1550 nm with 24% system detection efficiency. Optics Letters, 2009, 34, 3607.	3.3	51
65	Large-area microwire MoSi single-photon detectors at 1550â€‰nm wavelength. Applied Physics Letters, 2020, 116, .	3.3	49
66	Broadband Solenoidal Haloscope for Terahertz Axion Detection. Physical Review Letters, 2022, 128, 131801.	7.8	49
67	Single Photon Counting from Individual Nanocrystals in the Infrared. Nano Letters, 2012, 12, 2953-2958.	9.1	48
68	High-quality fiber-optic polarization entanglement distribution at 13â€‰Î¼m telecom wavelength. Optics Letters, 2010, 35, 1392.	3.3	47
69	Bias sputtered NbN and superconducting nanowire devices. Applied Physics Letters, 2017, 111, .	3.3	46
70	Smithâ€"Purcell Radiation from Low-Energy Electrons. ACS Photonics, 2018, 5, 3513-3518.	6.6	46
71	Controlled Collapse of Highâ€Aspectâ€Ratio Nanostructures. Small, 2011, 7, 2661-2668.	10.0	44
72	Afterpulsing and instability in superconducting nanowire avalanche photodetectors. Applied Physics Letters, 2012, 100, .	3.3	43

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73	New Constraints on Dark Photon Dark Matter with Superconducting Nanowire Detectors in an Optical Haloscope. Physical Review Letters, 2022, 128, .	7.8	43
74	Sub-15nm nanoimprint molds and pattern transfer. Journal of Vacuum Science & Technology B, 2009, 27, 2837-2840.	1.3	42
75	A compact superconducting nanowire memory element operated by nanowire cryotrons. Superconductor Science and Technology, 2018, 31, 035009.	3.5	40
76	Determining Dark-Matterâ€"Electron Scattering Rates from the Dielectric Function. Physical Review Letters, 2021, 127, 151802.	7.8	40
77	Superconducting microfabricated ion traps. Applied Physics Letters, 2010, 97, .	3.3	39
78	A superconducting nanowire can be modeled by using SPICE. Superconductor Science and Technology, 2018, 31, 055010.	3.5	39
79	Metrology for electron-beam lithography and resist contrast at the sub-10 nm scale. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2010, 28, C6H11-C6H17.	1.2	38
80	Enhancing the Potential of Block Copolymer Lithography with Polymer Self-Consistent Field Theory Simulations. Macromolecules, 2010, 43, 8290-8295.	4.8	38
81	High-Energy Surface and Volume Plasmons in Nanopatterned Sub-10 nm Aluminum Nanostructures. Nano Letters, 2016, 16, 4149-4157.	9.1	38
82	Superconducting-nanowire single-photon-detector linear array. Applied Physics Letters, 2013, 103, 142602.	3.3	37
83	Microwave dynamics of high aspect ratio superconducting nanowires studied using self-resonance. Journal of Applied Physics, 2016, 119, .	2.5	37
84	Free-space-coupled superconducting nanowire single-photon detectors for infrared optical communications. Optics Express, 2016, 24, 3248.	3.4	37
85	Light phase detection with on-chip petahertz electronic networks. Nature Communications, 2020, 11, 3407.	12.8	37
86	A nanocryotron comparator can connect single-flux-quantum circuits to conventional electronics. Superconductor Science and Technology, 2017, 30, 044002.	3.5	36
87	Design of a Power Efficient Artificial Neuron Using Superconducting Nanowires. Frontiers in Neuroscience, 2019, 13, 933.	2.8	33
88	Low-cost interference lithography. Journal of Vacuum Science & Technology B, 2009, 27, 2958.	1.3	31
89	Timing performance of 30-nm-wide superconducting nanowire avalanche photodetectors. Applied Physics Letters, 2012, 100, .	3.3	31
90	Modular assembly of a protein nanotriangle using orthogonally interacting coiled coils. Scientific Reports, 2017, 7, 10577.	3.3	31

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91	Determining the depairing current in superconducting nanowire single-photon detectors. Physical Review B, 2019, 100, .	3.2	31
92	Electrothermal simulation of superconducting nanowire avalanche photodetectors. Applied Physics Letters, 2011, 98, .	3.3	30
93	Control of zinc oxide nanowire array properties with electron-beam lithography templating for photovoltaic applications. Nanotechnology, 2015, 26, 075303.	2.6	30
94	Superconducting Nanowire Spiking Element for Neural Networks. Nano Letters, 2020, 20, 8059-8066.	9.1	30
95	Rectangular Symmetry Morphologies in a Topographically Templated Block Copolymer. Advanced Materials, 2012, 24, 4249-4254.	21.0	29
96	Superconducting nanowire single-photon detector with integrated impedance-matching taper. Applied Physics Letters, 2019, 114, .	3.3	29
97	1.25-Gbit/s photon-counting optical communications using a two-element superconducting nanowire single photon detector. , 2006, 6372, 286.		27
98	Fabrication Process Yielding Saturated Nanowire Single-Photon Detectors With 24-ps Jitter. IEEE Journal of Selected Topics in Quantum Electronics, 2015, 21, 1-7.	2.9	27
99	Vanishing carrier-envelope-phase-sensitive response in optical-field photoemission from plasmonic nanoantennas. Nature Physics, 2019, 15, 1128-1133.	16.7	27
100	Pulse imaging and nonadiabatic control of solid-state artificial atoms. Physical Review B, 2009, 80, .	3.2	26
101	Contrast enhancement behavior of hydrogen silsesquioxane in a salty developer. Journal of Vacuum Science & Technology B, 2009, 27, 2635-2639.	1.3	26
102	Nanoscale spirals by directed self-assembly. Nano Futures, 2017, 1, 015001.	2.2	26
103	Sacrificialâ€Post Templating Method for Block Copolymer Selfâ€Assembly. Small, 2014, 10, 493-499.	10.0	25
104	Using Geometry To Sense Current. Nano Letters, 2016, 16, 7626-7631.	9.1	25
105	Cryogenic Memory Architecture Integrating Spin Hall Effect based Magnetic Memory and Superconductive Cryotron Devices. Scientific Reports, 2020, 10, 248.	3.3	25
106	Suppressed Critical Current in Superconducting Nanowire Single-Photon Detectors With High Fill-Factors. IEEE Transactions on Applied Superconductivity, 2009, 19, 318-322.	1.7	24
107	Demonstration of Microwave Multiplexed Readout of DC-Biased Superconducting Nanowire Detectors. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-4.	1.7	22
108	Electrical control of surface acoustic waves. Nature Electronics, 2022, 5, 348-355.	26.0	22

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109	Modeling the Pointâ€Spread Function in Heliumâ€Ion Lithography. Scanning, 2012, 34, 121-128.	1.5	20
110	Enhancing etch resistance of hydrogen silsesquioxane via postdevelop electron curing. Journal of Vacuum Science & Technology B, 2006, 24, 3157.	1.3	19
111	Nonlinear resonant behavior of a dispersive readout circuit for a superconducting flux qubit. Physical Review B, 2007, 75, .	3.2	19
112	Development of a simple, compact, low-cost interference lithography system. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2010, 28, C6Q20-C6Q24.	1.2	19
113	Sub-5keV electron-beam lithography in hydrogen silsesquioxane resist. Microelectronic Engineering, 2011, 88, 3070-3074.	2.4	19
114	Improvement of infrared single-photon detectors absorptance by integrated plasmonic structures. Scientific Reports, 2013, 3, 2406.	3.3	17
115	Frequency Pulling and Mixing of Relaxation Oscillations in Superconducting Nanowires. Physical Review Applied, 2018, 9, .	3.8	17
116	Source shot noise mitigation in focused ion beam microscopy by time-resolved measurement. Ultramicroscopy, 2020, 211, 112948.	1.9	17
117	Controlled placement of colloidal quantum dots in sub-15 nm clusters. Nanotechnology, 2013, 24, 125302.	2.6	16
118	Focused-helium-ion-beam blow forming of nanostructures: radiation damage and nanofabrication. Nanotechnology, 2020, 31, 045302.	2.6	16
119	Measuring intensity correlations with a two-element superconducting nanowire single-photon detector. Physical Review A, 2008, 78, .	2.5	15
120	Demonstration of a nanolithographic technique using a self-assembled monolayer resist for neutral atomic cesium. Advanced Materials, 1997, 9, 52-55.	21.0	14
121	Nano-beam and nano-target effects in ion radiation. Nanoscale, 2018, 10, 1598-1606.	5.6	14
122	Bridging the Gap Between Nanowires and Josephson Junctions: A Superconducting Device Based on Controlled Fluxon Transfer. Physical Review Applied, 2019, 11, .	3.8	14
123	Enhancing the performance of superconducting nanowire-based detectors with high-filling factor by using variable thickness. Superconductor Science and Technology, 2021, 34, 035010.	3.5	14
124	Superconductorâ€"superconductor bilayers for enhancing single-photon detection. Nanotechnology, 2017, 28, 435205.	2.6	13
125	Large-Area Superconducting Nanowire Single-Photon Detectors for Operation at Wavelengths up to 7.4 Î¼m. Nano Letters, 2022, 22, 5667-5673.	9.1	13
126	Eight-fold signal amplification of a superconducting nanowire single-photon detector using a multiple-avalanche architecture. Optics Express, 2014, 22, 24574.	3.4	12

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127	nanoSQUID operation using kinetic rather than magnetic induction. Scientific Reports, 2016, 6, 28095.	3.3	12
128	Orientational Preference in Multilayer Block Copolymer Nanomeshes with Respect to Layer-to-Layer Commensurability. Macromolecules, 2017, 50, 8258-8266.	4.8	12
129	Exploring proximity effects and large depth of field in helium ion beam lithography: large-area dense patterns and tilted surface exposure. Nanotechnology, 2018, 29, 275301.	2.6	12
130	A distributed electrical model for superconducting nanowire single photon detectors. Applied Physics Letters, 2018, 113, .	3.3	12
131	Oscilloscopic Capture of Greater-Than-100 GHz, Ultra-Low Power Optical Waveforms Enabled by Integrated Electrooptic Devices. Journal of Lightwave Technology, 2020, 38, 166-173.	4.6	12
132	Multilayered Heater Nanocryotron: A Superconducting-Nanowire-Based Thermal Switch. Physical Review Applied, 2020, 14, .	3.8	12
133	A kinetic-inductance-based superconducting memory element with shunting and sub-nanosecond write times. Superconductor Science and Technology, 2019, 32, 015005.	3.5	11
134	Electron Emission Regimes of Planar Nano Vacuum Emitters. IEEE Transactions on Electron Devices, 2022, 69, 3953-3959.	3.0	11
135	Design and simulation of a linear electron cavity for quantum electron microscopy. Ultramicroscopy, 2019, 199, 50-61.	1.9	10
136	Templated self-assembly of Si-containing block copolymers for nanoscale device fabrication. Proceedings of SPIE, 2010, , .	0.8	9
137	Numerical method to optimize the polar-azimuthal orientation of infrared superconducting-nanowire single-photon detectors. Applied Optics, 2011, 50, 5949.	2.1	9
138	A nanofabricated, monolithic, path-separated electron interferometer. Scientific Reports, 2017, 7, 1677.	3.3	9
139	Superconducting MoN thin films prepared by DC reactive magnetron sputtering for nanowire single-photon detectors. Superconductor Science and Technology, 2021, 34, 035012.	3.5	9
140	Physical properties of amorphous molybdenum silicide films for single-photon detectors. Superconductor Science and Technology, 2021, 34, 095003.	3.5	9
141	Initial Design of a W-Band Superconducting Kinetic Inductance Qubit. IEEE Transactions on Applied Superconductivity, 2021, 31, 1-5.	1.7	9
142	<i>In situ</i> study of hydrogen silsesquioxane dissolution rate in salty and electrochemical developers. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2011, 29, 06FJ01.	1.2	8
143	Optical modeling of superconducting nanowire single photon detectors using the transfer matrix method. Applied Optics, 2018, 57, 4872.	1.8	8
144	Measuring thickness in thin NbN films for superconducting devices. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2019, 37, 041501.	2.1	8

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145	Design and characterization of superconducting nanowire-based processors for acceleration of deep neural network training. Nanotechnology, 2020, 31, 025204.	2.6	8
146	Impact of DC bias on weak optical-field-driven electron emission in nano-vacuum-gap detectors. Journal of the Optical Society of America B: Optical Physics, 2021, 38, 1009.	2.1	8
147	Nanoantenna design for enhanced carrierâ€"envelope-phase sensitivity. Journal of the Optical Society of America B: Optical Physics, 2021, 38, C11.	2.1	8
148	A scalable superconducting nanowire memory cell and preliminary array test. Superconductor Science and Technology, 2021, 34, 035003.	3.5	8
149	Superconducting Nanowire Single-Photon Detector on Aluminum Nitride. , 2016, , .		8
150	Directed self-assembly of a two-state block copolymer system. Nano Convergence, 2018, 5, 25.	12.1	7
151	Efficient two-port electron beam splitter via a quantum interaction-free measurement. Physical Review A, 2018, 98, .	2.5	7
152	Jitter Characterization of a Dual-Readout SNSPD. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-4.	1.7	7
153	Long term field emission current stability characterization of planar field emitter devices. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2021, 39, .	1.2	7
154	Electrochemical development of hydrogen silsesquioxane by applying an electrical potential. Nanotechnology, 2011, 22, 375301.	2.6	6
155	Superconducting nanowire single photon detectors. , 2011, , .		6
156	Superconducting Nanowire Architectures for Single Photon Detection. Quantum Science and Technology, 2016, , 3-30.	2.6	6
157	Enhancing Plasmonic Spectral Tunability with Anomalous Material Dispersion. Nano Letters, 2021, 21, 91-98.	9.1	6
158	Electron energy loss of ultraviolet plasmonic modes in aluminum nanodisks. Optics Express, 2020, 28, 27405.	3.4	6
159	Pattern Generation by Using Multistep Room-Temperature Nanoimprint Lithography. IEEE Nanotechnology Magazine, 2007, 6, 639-644.	2.0	5
160	Demonstration of gigabit-per-second and higher data rates at extremely high efficiency using superconducting nanowire single photon detectors. , 2007, , .		5
161	Lithography. Nanoscale, 2011, 3, 2662.	5.6	5
162	Three-dimensional nanofabrication using hydrogen silsesquioxane/poly(methylmethacrylate) bilayer resists. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2014, 32, .	1.2	5

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163	Commensurability-Driven Orientation Control during Block Copolymer Directed Self-Assembly. ACS Applied Materials & Interfaces, 2020, 12, 10852-10857.	8.0	5
164	Compact and Tunable Forward Coupler Based on High-Impedance Superconducting Nanowires. Physical Review Applied, 2021, 15, .	3.8	5
165	High-data-rate photon-counting optical communications using a NbN-nanowire superconducting detector. , 2006, , .		4
166	Rapid shear alignment of sub-10 nm cylinder-forming block copolymer films based on thermal expansion mismatch. Nano Futures, 2017, 1, 035006.	2.2	4
167	Investigation of ma-N 2400 series photoresist as an electron-beam resist for superconducting nanoscale devices. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2019, 37, 051207.	1.2	4
168	Single-Photon Single-Flux Coupled Detectors. Nano Letters, 2020, 20, 664-668.	9.1	4
169	Superconducting Nanowire Fabrication using Dislocation Engineering. , 2019, , .		4
170	Optimized polar-azimuthal orientations for polarized light illumination of different superconducting nanowire single-photon detector designs. Journal of Nanophotonics, 2012, 6, 063523.	1.0	3
171	Self-assembly of block copolymers by graphoepitaxy. , 2015, , 199-232.		3
172	Infrared transmissometer to measure the thickness of NbN thin films. Applied Optics, 2015, 54, 5743.	2.1	3
173	Atom sieve for nanometer resolution neutral helium microscopy. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2017, 35, .	1.2	3
174	Enhancement of Optical Response in Nanowires by Negative-Tone PMMA Lithography. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-5.	1.7	3
175	Fabrication of gold nanostructures using wet lift-off without adhesion promotion. Microelectronic Engineering, 2020, 233, 111420.	2.4	3
176	Image-histogram-based secondary electron counting to evaluate detective quantum efficiency in SEM. Ultramicroscopy, 2021, 224, 113238.	1.9	3
177	Surface Plasmon Enhanced Upconversion Fluorescence in Short-Wave Infrared for In Vivo Imaging of Ovarian Cancer. ACS Nano, 2022, 16, 12930-12940.	14.6	3
178	Efficient Single Photon Detection From 0.5 To 5 Micron Wavelength. , 2012, , .		2
179	Cavity-Integrated Ultra-Narrow Superconducting Nanowire Single-Photon Detector Based on a Thick Niobium Nitride Film. , 2012, , .		2
180	The Orientations of Large Aspectâ€Ratio Coiledâ€Coil Proteins Attached to Gold Nanostructures. Small, 2016, 12, 1498-1505.	10.0	2

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181	Nanostructured-membrane electron phase plates. Ultramicroscopy, 2020, 217, 113053.	1.9	2
182	Precise, subnanosecond, and high-voltage switching enabled by gallium nitride electronics integrated into complex loads. Review of Scientific Instruments, 2021, 92, 074704.	1.3	2
183	Real-time dose control for electron-beam lithography. Nanotechnology, 2021, 32, 095302.	2.6	2
184	50â€‰Î© transmission lines with extreme wavelength compression based on superconducting nanowires on high-permittivity substrates. Applied Physics Letters, 2021, 119, .	3.3	2
185	<title>Demonstration of a nanolithographic system using a self-assembled monolayer resist for neutral atomic cesium</title>. , 1997, , .		1
186	Increased detection efficiencies of nanowire single-photon detectors by integration of an optical cavity and anti-reflection coating. , 2006, , .		1
187	On the "Evolvable Hardware" Approach to Electronic Design Invention. , 2007, , .		1
188	Polar-azimuthal angle dependent efficiency of different infrared superconducting nanowire single-photon detector designs. Proceedings of SPIE, 2011, , .	0.8	1
189	Topographic Templating: Rectangular Symmetry Morphologies in a Topographically Templated Block Copolymer (Adv. Mater. 31/2012). Advanced Materials, 2012, 24, 4343-4343.	21.0	1
190	On-fiber assembly of membrane-integrated superconducting-nanowire single-photon detectors. , 2013, , .		1
191	Detectors Based on Superconductors. Experimental Methods in the Physical Sciences, 2013, 45, 185-216.	0.1	1
192	Saturated Photon Detection Efficiency in NbN Superconducting Photon Detectors. , 2015, , .		1
193	Antiresonant-like behavior in carrier-envelope-phase-sensitive sub-optical-cycle photoemission from plasmonic nanoantennas. EPJ Web of Conferences, 2019, 205, 08011.	0.3	1
194	Operation of a Superconducting Nanowire in Two Detection Modes: KID and SPD. Journal of Low Temperature Physics, 2019, 194, 386-393.	1.4	1
195	Properties of a Nanowire Kinetic Inductance Detector Array. Journal of Low Temperature Physics, 2020, 199, 631-638.	1.4	1
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