

Munho Kim

List of Publications by Year in descending order

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Version: 2024-02-01

61
papers

2,109
citations

361413

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h-index

233421

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65
docs citations

65
times ranked

3211
citing authors

#	ARTICLE	IF	CITATIONS
1	Black Germanium Photodetector Exceeds External Quantum Efficiency of 160%. <i>Advanced Materials Technologies</i> , 2022, 7, 2100912.	5.8	8
2	Tunable Optical Vortex from a Nanogroove-Structured Optofluidic Microlaser. <i>Nano Letters</i> , 2022, 22, 1425-1432.	9.1	8
3	Releasable AlGaIn/GaN 2D Electron Gas Heterostructure Membranes for Flexible Wide-Bandgap Electronics. <i>Advanced Electronic Materials</i> , 2022, 8, 2100652.	5.1	8
4	Direct Chemisorption-Assisted Nanotransfer Printing with Wafer-Scale Uniformity and Controllability. <i>ACS Nano</i> , 2022, 16, 378-385.	14.6	15
5	Ultraviolet antireflective porous nanoscale periodic hole array of 4H-SiC by Photon-Enhanced Metal-assisted chemical etching. <i>Applied Surface Science</i> , 2022, 581, 152387.	6.1	4
6	Enzyme-Programmable Microgel Lasers for Information Encoding and Anti-Counterfeiting. <i>Advanced Materials</i> , 2022, 34, e2107809.	21.0	20
7	A heavily doped germanium pyramid array for tunable optical antireflection in the broadband mid-infrared range. <i>Journal of Materials Chemistry C</i> , 2022, 10, 5797-5804.	5.5	3
8	Distinct UV-Visible Responsivity Enhancement of GaAs Photodetectors via Monolithic Integration of Antireflective Nanopillar Structure and UV Absorbing IGZO Layer. <i>Advanced Optical Materials</i> , 2022, 10, .	7.3	13
9	Direct Imaging of Weak-to-Strong Coupling Dynamics in Biological Plasmon-Exciton Systems. <i>Laser and Photonics Reviews</i> , 2022, 16, .	8.7	3
10	A highly ordered and damage-free Ge inverted pyramid array structure for broadband antireflection in the mid-infrared. <i>Journal of Materials Chemistry C</i> , 2021, 9, 9884-9891.	5.5	10
11	Lasing action in microdroplets modulated by interfacial molecular forces. <i>Advanced Photonics</i> , 2021, 3, .	11.8	15
12	High Performance Flexible Visible-Blind Ultraviolet Photodetectors with Two-Dimensional Electron Gas Based on Unconventional Release Strategy. <i>ACS Nano</i> , 2021, 15, 8386-8396.	14.6	38
13	Anti-reflective porous Ge by open-circuit and lithography-free metal-assisted chemical etching. <i>Applied Surface Science</i> , 2021, 546, 149083.	6.1	9
14	High-Sensitivity and Mechanically Compliant Flexible Ge Photodetectors with a Vertical p-n Configuration. <i>ACS Applied Electronic Materials</i> , 2021, 3, 1780-1786.	4.3	7
15	Raman scattering study of GeSn under $\sim 1.0 \times 10^4\%$ and $\sim 1.1 \times 10^4\%$ uniaxial stress. <i>Nanotechnology</i> , 2021, 32, 355704. 9		
16	Producing Silicon Carbide Micro and Nanostructures by Plasma-Free Metal-Assisted Chemical Etching. <i>Advanced Functional Materials</i> , 2021, 31, 2103298.	14.9	22
17	An Intrinsically Micro/Nanostructured Pollen Substrate with Tunable Optical Properties for Optoelectronic Applications. <i>Advanced Materials</i> , 2021, 33, e2100566.	21.0	9
18	Flexible single-crystalline GeSn metal-semiconductor-metal photodetectors. , 2021, , .		0

#	ARTICLE	IF	CITATIONS
19	Producing Microscale Ge Textures via Titanium Nitride and Nickel-Assisted Chemical Etching with CMOS-Compatibility. <i>Advanced Materials Interfaces</i> , 2021, 8, 2100937.	3.7	5
20	Effect of thickness on the electronic structure and optical properties of quasi two-dimensional perovskite CsPbBr ₃ nanoplatelets. <i>Journal of Luminescence</i> , 2021, 239, 118392.	3.1	5
21	Flexible Titanium Nitride/Germanium-Tin Photodetectors Based on Sub-Bandgap Absorption. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 61396-61403.	8.0	14
22	Modulation of light absorption in flexible GeSn metal-semiconductor-metal photodetectors by mechanical bending. <i>Journal of Materials Chemistry C</i> , 2020, 8, 13557-13562.	5.5	21
23	Metal-Semiconductor-Metal GeSn Photodetectors on Silicon for Short-Wave Infrared Applications. <i>Micromachines</i> , 2020, 11, 795.	2.9	24
24	Flexible crystalline $\text{In}^2\text{-Ga}_2\text{O}_3$ solar-blind photodetectors. <i>Journal of Materials Chemistry C</i> , 2020, 8, 14732-14739.	5.5	34
25	Low dimensional freestanding semiconductors for flexible optoelectronics: materials, synthesis, process, and applications. <i>Materials Research Letters</i> , 2020, 8, 123-144.	8.7	32
26	Strain-free GeSn nanomembranes enabled by transfer-printing techniques for advanced optoelectronic applications. <i>Nanotechnology</i> , 2020, 31, 445301.	2.6	10
27	CMOS-Compatible Catalyst for MacEtch: Titanium Nitride-Assisted Chemical Etching in Vapor phase for High Aspect Ratio Silicon Nanostructures. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 27371-27377.	8.0	28
28	High Aspect Ratio $\text{In}^2\text{-Ga}_2\text{O}_3$ Fin Arrays with Low-Interface Charge Density by Inverse Metal-Assisted Chemical Etching. <i>ACS Nano</i> , 2019, 13, 8784-8792.	14.6	57
29	P-type silicon as hole supplier for nitride-based UVC LEDs. <i>New Journal of Physics</i> , 2019, 21, 023011.	2.9	16
30	Design and Analysis of Tensile-Strained GeSn Mid-Infrared Photodetectors on Silicon. , 2019, , .		0
31	Design and Analysis of Tensile-Strained GeSn Mid-Infrared Photodetectors on Silicon. , 2019, , .		0
32	Germanium photodiodes on pyramidal textured surface by Metal-Assisted Chemical Etching. , 2019, , .		0
33	229-nm UV LEDs on aluminum nitride single crystal substrates using p-type silicon for increased hole injection. <i>Applied Physics Letters</i> , 2018, 112, .	3.3	52
34	Self-Anchored Catalyst Interface Enables Ordered Via Array Formation from Submicrometer to Millimeter Scale for Polycrystalline and Single-Crystalline Silicon. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 9116-9122.	8.0	26
35	Fabrication of Ge-on-insulator wafers by Smart-Cut TM with thermal management for undamaged donor Ge wafers. <i>Semiconductor Science and Technology</i> , 2018, 33, 015017.	2.0	11
36	Nanoscale groove textured $\text{In}^2\text{-Ga}_2\text{O}_3$ by room temperature inverse metal-assisted chemical etching and photodiodes with enhanced responsivity. <i>Applied Physics Letters</i> , 2018, 113, .	3.3	36

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37	Enhanced Performance of Ge Photodiodes via Monolithic Antireflection Texturing and In_2S_3 -Ge Self-Passivation by Inverse Metal-Assisted Chemical Etching. ACS Nano, 2018, 12, 6748-6755.	14.6	50
38	226-nm AlGaIn/AlN UV LEDs using p-type Si for hole injection and UV reflection. Applied Physics Letters, 2018, 113, .	3.3	59
39	Transferrable single crystalline 4H-SiC nanomembranes. Journal of Materials Chemistry C, 2017, 5, 264-268.	5.5	30
40	Recent advances in free-standing single crystalline wide band-gap semiconductors and their applications: GaN, SiC, ZnO, $\text{In}_2\text{Ga}_2\text{O}_3$, and diamond. Journal of Materials Chemistry C, 2017, 5, 8338-8354.	5.5	180
41	High-performance flexible BiCMOS electronics based on single-crystal Si nanomembrane. Npj Flexible Electronics, 2017, 1, .	10.7	36
42	Single-crystalline germanium nanomembrane photodetectors on foreign nanocavities. Science Advances, 2017, 3, e1602783.	10.3	76
43	Origami silicon optoelectronics for hemispherical electronic eye systems. Nature Communications, 2017, 8, 1782.	12.8	177
44	Triaxial compressive strain in bilayer graphene enabled by nitride stressor layer. Extreme Mechanics Letters, 2017, 11, 77-83.	4.1	6
45	Nano-indented Ge surfaces by metal-assisted chemical etching (MacEtch) and its application for optoelectronic devices. , 2017, , .		0
46	High performance flexible phototransistors based on transferrable silicon nanomembranes. , 2016, , .		1
47	Amorphous Si/SiO ₂ distributed Bragg reflectors with transfer printed single-crystalline Si nanomembranes. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2016, 34, .	1.2	10
48	Flexible germanium nanomembrane metal-semiconductor-metal photodiodes. Applied Physics Letters, 2016, 109, .	3.3	30
49	Resonant cavity germanium photodetector via stacked single-crystalline nanomembranes. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2016, 34, .	1.2	12
50	Light absorption enhancement in Ge nanomembrane and its optoelectronic application. Optics Express, 2016, 24, 16894.	3.4	21
51	Flexible Phototransistors Based on Single-Crystalline Silicon Nanomembranes. Advanced Optical Materials, 2016, 4, 120-125.	7.3	76
52	Cavity enhanced 1.5- μm LED with silicon as a hole injector. , 2016, , .		0
53	Photodetecting MOSFET based on ultrathin single-crystal germanium nanomembrane. , 2016, , .		0
54	High-performance green flexible electronics based on biodegradable cellulose nanofibril paper. Nature Communications, 2015, 6, 7170.	12.8	707

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55	Polycrystalline GeSn thin films on Si formed by alloy evaporation. Applied Physics Express, 2015, 8, 061301.	2.4	20
56	Ultra-thin distributed Bragg reflectors via stacked single-crystal silicon nanomembranes. Applied Physics Letters, 2015, 106, .	3.3	16
57	Tunable biaxial in-plane compressive strain in a Si nanomembrane transferred on a polyimide film. Applied Physics Letters, 2015, 106, .	3.3	14
58	Germanium photodetectors coupled with silicon waveguides on a flexible substrate using nanomembrane transfer printing method. , 2013, , .		1
59	Fabrication and Characterization of Si/GaInP Heterojunction Photodetectors. , 2012, , .		0
60	Switched transmission-line type Q-band 4-bit MMIC phase shifter using InGaAs pin diodes. Electronics Letters, 2010, 46, 219.	1.0	7
61	An InGaAs PIN-diode based broadband traveling-wave switch with high-isolation characteristics. , 2009, , .		4