

# Shamsul Arafin

## List of Publications by Year in descending order

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72  
papers

1,093  
citations

393982

19  
h-index

433756

31  
g-index

72  
all docs

72  
docs citations

72  
times ranked

1713  
citing authors

#	ARTICLE	IF	CITATIONS
1	Design of Green Light Sources Using Nonlinear Photonics and On-Chip Pump Lasers. IEEE Journal of Selected Topics in Quantum Electronics, 2022, 28, 1-8.	1.9	0
2	Sub-bandgap photoluminescence properties of multilayer h-BN-on-sapphire. Nanotechnology, 2022, 33, 215702.	1.3	2
3	Ultra-hard BC5 “ An efficient nanoscale heat conductor through dominant contribution of optical phonons. Computational Materials Science, 2022, 206, 111276.	1.4	1
4	Effects of InGaN quantum disk thickness on the optical properties of GaN nanowires. Journal of Crystal Growth, 2022, 588, 126654.	0.7	3
5	Morphological and optical characterization of self-assembled InAlGaAs/GaAs quantum dots. Journal of Applied Physics, 2022, 131, 233104.	1.1	2
6	Low voltage drop tunnel junctions grown monolithically by MOCVD. Applied Physics Letters, 2021, 118, .	1.5	11
7	Comprehensive characterization and analysis of hexagonal boron nitride on sapphire. AIP Advances, 2021, 11, .	0.6	27
8	Recent Progress of Electrically Pumped AlGaIn Diode Lasers in the UV-B and -C Bands. Photonics, 2021, 8, 267.	0.9	12
9	MBE Growth and Characterization of InAlGaAs/GaAs Quantum Dots. , 2021, , .		1
10	All-MOCVD-grown gallium nitride diodes with ultra-low resistance tunnel junctions. Journal Physics D: Applied Physics, 2021, 54, 155103.	1.3	5
11	Fully transparent GaN homojunction tunnel junction-enabled cascaded blue LEDs. Applied Physics Letters, 2020, 117, .	1.5	9
12	Theoretical Analysis of Tunnel-Injected Sub-300 nm AlGaIn Laser Diodes. IEEE Journal of Quantum Electronics, 2020, 56, 1-10.	1.0	9
13	III-N/Siâ,fNâ,, Integrated Photonics Platform for Blue Wavelengths. IEEE Journal of Quantum Electronics, 2020, 56, 1-9.	1.0	8
14	Intestinal iontophoresis from mucoadhesive patches: a strategy for oral delivery. Journal of Controlled Release, 2019, 297, 71-78.	4.8	47
15	Design of AlGaIn-based lasers with a buried tunnel junction for sub-300 nm emission. Semiconductor Science and Technology, 2019, 34, 074002.	1.0	4
16	Design of High-Power Electrically-Pumped VECSELs for the 3â€“4 1/4m Wavelength Range. , 2019, , .		0
17	Study of wet and dry etching processes for antimonide-based photonic ICs. Optical Materials Express, 2019, 9, 1786.	1.6	5
18	Recent progress on GaSb-based electrically-pumped VCSELs for wavelengths above 4 Âµm. , 2019, , .		0

#	ARTICLE	IF	CITATIONS
19	Highly-integrated optical phased-locked loop for LiDAR/remote sensing (Conference Presentation). , 2019, , .		0
20	Evolution of Chip-Scale Heterodyne Optical Phase-Locked Loops Toward Watt Level Power Consumption. Journal of Lightwave Technology, 2018, 36, 258-264.	2.7	4
21	Advanced InP Photonic Integrated Circuits for Communication and Sensing. IEEE Journal of Selected Topics in Quantum Electronics, 2018, 24, 1-12.	1.9	83
22	Investigation of single-mode vertical-cavity surface-emitting lasers with graphene-bubble dielectric DBR. Photonics and Nanostructures - Fundamentals and Applications, 2018, 28, 56-60.	1.0	7
23	Indium Phosphide Photonic Integrated Circuit Transmitter with Integrated Linewidth Narrowing for Laser Communications and Sensing. , 2018, , .		3
24	Mid-infrared Lasers for Medical Applications: introduction to the feature issue. Biomedical Optics Express, 2018, 9, 6255.	1.5	29
25	Non-destructive Photo-modulated Reflectance Study of GaInAsSb- based VCSEL. , 2018, , .		0
26	Power-Efficient Kerr Frequency Comb Based Tunable Optical Source. IEEE Photonics Journal, 2017, 9, 1-14.	1.0	14
27	Compact Low-Power Consumption Single-Mode Coupled Cavity Lasers. IEEE Journal of Selected Topics in Quantum Electronics, 2017, 23, 1-9.	1.9	6
28	Wavelength Dependence of Efficiency Limiting Mechanisms in Type-I Mid-Infrared GaInAsSb/GaSb Lasers. IEEE Journal of Selected Topics in Quantum Electronics, 2017, 23, 1-9.	1.9	19
29	Optical synthesis using Kerr frequency combs. , 2017, , .		1
30	Near- to mid-IR (1â€“13â€“14â€“m) III-V semiconductor lasers: introduction to the feature issue. Applied Optics, 2017, 56, NIR1.	0.9	2
31	Towards chip-scale optical frequency synthesis based on optical heterodyne phase-locked loop. Optics Express, 2017, 25, 681.	1.7	39
32	Heterodyne locking of a fully integrated optical phase-locked loop with on-chip modulators. Optics Letters, 2017, 42, 3745.	1.7	10
33	Optical frequency synthesis by offset-locking the tunable local-oscillator of a low-power integrated receiver to a microresonator comb. , 2017, , .		0
34	Auger recombination in type I GaInAsSb/GaSb lasers and its variation with wavelength in the 2â€“3 Î¼m range. , 2017, , .		0
35	A Chip-Scale Heterodyne Optical Phase-Locked Loop with Low-Power Consumption. , 2017, , .		5
36	Coupled-Cavity Lasers for a Low-Power Integrated Coherent Optical Receiver. , 2017, , .		0

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37	Offset Locking of a Fully Integrated Optical Phase-Locked Loop Using On-chip Modulators. , 2017, , .		0
38	Optical Frequency Synthesis by Offset-Locking to a Microresonator Comb. , 2017, , .		1
39	Heteroepitaxial Growth of III-V Semiconductors on 2D Materials. , 2016, , .		4
40	Nanostructured Optoelectronics: Materials and Devices. Journal of Nanomaterials, 2016, 2016, 1-2.	1.5	5
41	Temperature stable mid-infrared GaInAsSb/GaSb Vertical Cavity Surface Emitting Lasers (VCSELs). Scientific Reports, 2016, 6, 19595.	1.6	38
42	First Monolithically Integrated Dual-Pumped Phase-Sensitive Amplifier Chip Based on a Saturated Semiconductor Optical Amplifier. IEEE Journal of Quantum Electronics, 2016, 52, 1-12.	1.0	11
43	Theoretical and experimental study of highly textured GaAs on silicon using a graphene buffer layer. Journal of Crystal Growth, 2015, 425, 268-273.	0.7	25
44	Single-chip dual-pumped SOA-based phase-sensitive amplifier at 1550nm. , 2015, , .		2
45	First Demonstration of an Integrated Photonic Phase-Sensitive Amplifier. , 2015, , .		4
46	Selectively grown GaAs nanodisks on Si(100) by molecular beam epitaxy. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2014, 32, 02C111.	0.6	3
47	Nanoscale Growth of GaAs on Patterned Si(111) Substrates by Molecular Beam Epitaxy. Crystal Growth and Design, 2014, 14, 593-598.	1.4	24
48	Electric-Field Control of Ferromagnetism in Mn-Doped ZnO Nanowires. Nano Letters, 2014, 14, 1823-1829.	4.5	76
49	Temperature dependent polarization switch of 850-nm VCSELs with different apertures. Optics and Laser Technology, 2014, 63, 19-23.	2.2	3
50	Towards van der Waals Epitaxial Growth of GaAs on Si using a Graphene Buffer Layer. Advanced Functional Materials, 2014, 24, 6629-6638.	7.8	113
51	Characterization of 2.3-µm GaInAsSb-based vertical-cavity surface-emitting laser structures using photo-modulated reflectance. Journal of Applied Physics, 2014, 115, 013102.	1.1	2
52	Optically pumped rolled-up InAs/InGaAsP quantum dash lasers at room temperature. Semiconductor Science and Technology, 2013, 28, 094007.	1.0	13
53	Review of recent progress of III-nitride nanowire lasers. Journal of Nanophotonics, 2013, 7, 074599.	0.4	93
54	Temperature dependence of electrical characteristics of Pt/GaN Schottky diode fabricated by UHV e-beam evaporation. Nanoscale Research Letters, 2013, 8, 481.	3.1	57

#	ARTICLE	IF	CITATIONS
55	The effect of hole leakage and Auger recombination on the temperature sensitivity of GaInAsSb/GaSb mid-infrared lasers. , 2013, , .		1
56	Ultra-low resistive GaSb/InAs tunnel junctions. Semiconductor Science and Technology, 2011, 26, 075021.	1.0	24
57	Comprehensive analysis of electrically-pumped GaSb-based VCSELs. Optics Express, 2011, 19, 17267.	1.7	19
58	Single mode and tunable GaSb-based VCSELs for wavelengths above 2 $\mu\text{m}$ . , 2011, , .		4
59	GaSb and InP-based VCSELs at 2.3 $\mu\text{m}$ emission wavelength for tuneable diode laser spectroscopy of carbon monoxide. , 2011, , .		7
60	Transverse-Mode Characteristics of GaSb-Based VCSELs With Buried-Tunnel Junctions. IEEE Journal of Selected Topics in Quantum Electronics, 2011, 17, 1576-1583.	1.9	17
61	MBE growth of low threshold GaSb-based lasers with emission wavelengths in the range of 2.5â€“2.7 $\mu\text{m}$ . Journal of Crystal Growth, 2011, 323, 446-449.	0.7	6
62	2.34- $\mu\text{m}$ electrically pumped VCSEL with buried tunnel junction. , 2010, , .		3
63	Long wavelength electrically pumped GaSb-based buried tunnel junction VCSELs. Physics Procedia, 2010, 3, 1155-1159.	1.2	4
64	Large-aperture single-mode GaSb-based BTJ-VCSELs at 2.62 $\mu\text{m}$ . , 2010, , .		7
65	Large-area single-mode GaSb-based VCSELs using an inverted surface relief. , 2010, , .		3
66	Electrically pumped continuous-wave vertical-cavity surface-emitting lasers at 2.6 $\mu\text{m}$ . Applied Physics Letters, 2009, 95, 131120.	1.5	34
67	Single-mode electrically pumped GaSb-based VCSELs emitting continuous-wave at 2.4 and 2.6 $\mu\text{m}$ . New Journal of Physics, 2009, 11, 125014.	1.2	33
68	GaSb-Based VCSEL With Buried Tunnel Junction for Emission Around 2.3 $\mu\text{m}$ . IEEE Journal of Selected Topics in Quantum Electronics, 2009, 15, 933-940.	1.9	48
69	Low-Threshold Strained Quantum-Well GaSb-Based Lasers Emitting in the 2.5- to 2.7- $\mu\text{m}$ Wavelength Range. IEEE Photonics Technology Letters, 2009, 21, 1106-1108.	1.3	32
70	Continuous-wave single-mode electrically -pumped GaSb-based VCSELs at 2.5 $\mu\text{m}$ . , 2009, , .		1
71	Low-resistive sulphur-treated ohmic contacts to n-type InAsSb. IET Optoelectronics, 2009, 3, 259-263.	1.8	1
72	Continuous-wave electrically-pumped GaSb-based VCSELs at 2.6 $\mu\text{m}$ operating up to 50 $^\circ\text{C}$ . , 2009, , .		7