

Markku A Sopanen

List of Publications by Year in descending order

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53
papers

1,098
citations

567281

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414414

32
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all docs

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docs citations

53
times ranked

976
citing authors

#	ARTICLE	IF	CITATIONS
1	Luminescence from excited states in strain-induced $\text{In}_x\text{Ga}_{1-x}\text{As}$ quantum dots. <i>Physical Review B</i> , 1995, 51, 13868-13871.	3.2	174
2	Zeeman Effect in Parabolic Quantum Dots. <i>Physical Review Letters</i> , 1996, 77, 342-345.	7.8	99
3	Selective growth of InGaAs on nanoscale InP islands. <i>Applied Physics Letters</i> , 1994, 65, 1662-1664.	3.3	93
4	Strain-induced quantum dots by self-organized stressors. <i>Applied Physics Letters</i> , 1995, 66, 2364-2366.	3.3	88
5	Photocatalytic degradation of dyes by CdS microspheres under near UV and blue LED radiation. <i>Separation and Purification Technology</i> , 2013, 120, 206-214.	7.9	72
6	Self-organized InP islands on (100) GaAs by metalorganic vapor phase epitaxy. <i>Applied Physics Letters</i> , 1995, 67, 3768-3770.	3.3	70
7	High Quality GaAs Nanowires Grown on Glass Substrates. <i>Nano Letters</i> , 2012, 12, 1912-1918.	9.1	70
8	Grass-like Alumina with Low Refractive Index for Scalable, Broadband, Omnidirectional Antireflection Coatings on Glass Using Atomic Layer Deposition. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 15038-15043.	8.0	38
9	Atomic layer etching of gallium nitride (0001). <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2017, 35, .	2.1	37
10	Transformation of Self-Assembled InAs/InP Quantum Dots into Quantum Rings without Capping. <i>Nano Letters</i> , 2005, 5, 1541-1543.	9.1	36
11	Enhanced optical properties of in situ passivated near-surface $\text{Al}_x\text{Ga}_{1-x}\text{As/GaAs}$ quantum wells. <i>Applied Physics Letters</i> , 1996, 68, 2216-2218.	3.3	32
12	Growth of GaInAsSb using tertiarybutylarsine as arsenic source. <i>Journal of Crystal Growth</i> , 1994, 145, 492-497.	1.5	30
13	Metal Contacts on InN : Proposal for Schottky Contact. <i>Japanese Journal of Applied Physics</i> , 2006, 45, 36-39.	1.5	22
14	Growth of high-quality GaSb by metalorganic vapor phase epitaxy. <i>Journal of Electronic Materials</i> , 1995, 24, 1691-1696.	2.2	20
15	Metalorganic vapor phase epitaxial growth of AlGaSb and AlGaAsSb using all-organometallic sources. <i>Journal of Crystal Growth</i> , 1996, 169, 417-423.	1.5	17
16	Red luminescence from strain-induced GaInP quantum dots. <i>Applied Physics Letters</i> , 1996, 69, 3393-3395.	3.3	17
17	Fabrication and photoluminescence of quantum dots induced by strain of self-organized stressors. <i>Solid-State Electronics</i> , 1996, 40, 601-604.	1.4	15
18	InGaN -based 405 nm near-ultraviolet light emitting diodes on pillar patterned sapphire substrates. <i>CrystEngComm</i> , 2010, 12, 3152.	2.6	13

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19	Growth and characterization of GaP layers on silicon substrates by metal-organic vapour phase epitaxy. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2012, 9, 1607-1609.	0.8	11
20	Temperature Dependence of Current-Voltage Characteristics of Au ^δ Ga _[sub 0.51] In _[sub 0.49] P Schottky Barrier Diodes. <i>AIP Conference Proceedings</i> , 2011, , .	0.4	10
21	Inhomogeneous Barrier Height Analysis of (Ni/Au) ^δ InAlGaN/GaN Schottky Barrier Diode. <i>Japanese Journal of Applied Physics</i> , 2011, 50, 030201.	1.5	10
22	Recombination lifetime in InGaN/GaN based light emitting diodes at low current densities by differential carrier lifetime analysis. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2013, 10, 327-331.	0.8	10
23	Fluorescence-enhancing plasmonic silver nanostructures using azopolymer lithography. <i>RSC Advances</i> , 2016, 6, 48129-48136.	3.6	9
24	A technique for large-area position-controlled growth of GaAs nanowire arrays. <i>Nanotechnology</i> , 2016, 27, 135601.	2.6	9
25	Tailoring of Energy Levels in Strain-Induced Quantum Dots. <i>Japanese Journal of Applied Physics</i> , 1999, 38, 1081-1084.	1.5	8
26	InGaAs/InP Quantum Dots Induced by Self-Organized InAs Stressor-Islands. <i>Japanese Journal of Applied Physics</i> , 2005, 44, L518-L520.	1.5	8
27	Tunneling Explanation for the Temperature Dependence of Current-Voltage Characteristics of Pt/InN Schottky Barrier Diodes. <i>Japanese Journal of Applied Physics</i> , 2009, 48, 070201.	1.5	8
28	Recombination processes in strain-induced InGaAs quantum dots. <i>Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics</i> , 1995, 17, 1699-1703.	0.4	7
29	Low energy electron beam induced damage on gallium nitride based materials. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2012, 9, 1563-1565.	0.8	7
30	Synchrotron radiation X-ray topography and X-ray diffraction of homoepitaxial GaN grown on ammonothermal GaN. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2012, 9, 1630-1632.	0.8	7
31	Nonlinear plasmonic behavior of nanohole arrays in thin gold films for imaging lipids. <i>Applied Physics Letters</i> , 2018, 112, .	3.3	7
32	Effect Of Inp Passivation On Carrier Recombination in In _x Ga _{1-x} As/GaAs Surface Quantum Wells. <i>Japanese Journal of Applied Physics</i> , 1999, 38, 1133-1134.	1.5	6
33	Longitudinal Stark Effect in Parabolic Quantum Dots. <i>Japanese Journal of Applied Physics</i> , 2001, 40, 2002-2005.	1.5	6
34	Photoluminescence of buried InGaAs grown on nanoscale InP islands by MOVPE. <i>Journal of Crystal Growth</i> , 1994, 145, 988-989.	1.5	3
35	Fabrication of GaInAs quantum disks using self-organized InP islands as a mask in wet chemical etching. <i>Applied Physics Letters</i> , 1996, 69, 4029-4031.	3.3	3
36	Evolution of Self-Assembled InAs/InP Islands into Quantum Rings. <i>Japanese Journal of Applied Physics</i> , 2005, 44, L1323-L1325.	1.5	3

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37	Thermally assisted recovery of low energy electron beam irradiation induced optical degradation of GaN. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2013, 10, 461-463.	0.8	3
38	Praseodymium Dioxide Doping of In _{1-x} Ga _x As _y P _{1-y} Epilayer Grown with Liquid Phase Epitaxy. <i>Materials Research Society Symposia Proceedings</i> , 1993, 301, 27.	0.1	2
39	Highly Tunable Emission from Strain-Induced InGaAsP/InP Quantum Dots. <i>Japanese Journal of Applied Physics</i> , 2005, 44, L976-L978.	1.5	2
40	Forward Bias Capacitance-Voltage Measurements on Semiconductors Using Co-Planar Ohmic and Schottky Contacts in a Cylindrical Geometry. <i>Journal of Nano Research</i> , 2010, 12, 45-54.	0.8	2
41	GaAs Nanowire and Crystallite Growth on Amorphous Substrate from Metalorganic Precursors. <i>Japanese Journal of Applied Physics</i> , 2010, 49, 020213.	1.5	2
42	Nonlinear dynamics of non-equilibrium holes in p-type modulation-doped GaInNAs/GaAs quantum wells. <i>Nanoscale Research Letters</i> , 2011, 6, 191.	5.7	2
43	Analysis of Dislocations Generated during Metal-Organic Vapor Phase Epitaxy of GaN on Patterned Templates. <i>Japanese Journal of Applied Physics</i> , 2013, 52, 01AF01.	1.5	2
44	Metalorganic vapor phase epitaxy of wurtzite InP nanowires on GaN. <i>Applied Physics Letters</i> , 2020, 116, 093101.	3.3	2
45	Fabrication of nanostructures using MBE and MOVPE. <i>Physica Scripta</i> , 1994, T54, 241-243.	2.5	1
46	Optical properties of self-organized InGaAs/InP dots. , 0, , .		1
47	Recent progress towards acoustically mediated carrier injection into individual nanostructures for single photon generation. <i>Proceedings of SPIE</i> , 2010, , .	0.8	1
48	Defect studies with positrons: What could we learn on III-nitride heterostructures?. <i>Journal of Physics: Conference Series</i> , 2010, 225, 012057.	0.4	1
49	Temperature Dependence Of Current-Voltage Characteristics Of Au ^p -GaAsN Schottky Barrier Diodes, With Small N Content. , 2011, , .		1
50	Effect of atomic-layer-deposited AlN on near-surface InGaAs/GaAs structures. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2012, 9, 1560-1562.	0.8	1
51	Carrier Dynamics in Strain Induced Quantum Dots Modeled by Rate Equations and Gaussian Excitation Beam Distribution. <i>Japanese Journal of Applied Physics</i> , 2008, 47, 5499-5502.	1.5	0
52	Band-Edge Luminescence Degradation by Low Energy Electron Beam Irradiation in GaN Grown by Metal-Organic Vapor Phase Epitaxy in H ₂ and N ₂ Ambients. <i>Japanese Journal of Applied Physics</i> , 2013, 52, 11NH04.	1.5	0
53	Optical degradation and defect activation in MOVPE grown near surface InGaN quantum wells under low energy electron beam irradiation. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2014, 11, 806-809.	0.8	0