Henning Riechert

List of Publications by Year
in descending order

66 papers	3,257 citations	126901 33 h-index	144002 57 g-index
66 all docs	66 docs citations	66 times ranked	3849 citing authors

#	Article	IF	Citations
1	Protection Mechanism against Photocorrosion of GaN Photoanodes Provided by NiO Thin Layers. Solar Rrl, 2020, 4, 2000568.	5.8	2
2	p-Type Doping of GaN Nanowires Characterized by Photoelectrochemical Measurements. Nano Letters, 2017, 17, 1529-1537.	9.1	77
3	Surface preparation and patterning by nano imprint lithography for the selective area growth of GaAs nanowires on Si(111). Semiconductor Science and Technology, 2017, 32, 115003.	2.0	21
4	Metal-Exchange Catalysis in the Growth of Sesquioxides: Towards Heterostructures of Transparent Oxide Semiconductors. Physical Review Letters, 2017, 119, 196001.	7.8	68
5	Formation of resonant bonding during growth of ultrathin GeTe films. NPG Asia Materials, 2017, 9, e396-e396.	7.9	25
6	Broad Band Light Absorption and High Photocurrent of (In,Ga)N Nanowire Photoanodes Resulting from a Radial Stark Effect. ACS Applied Materials & Interfaces, 2016, 8, 34490-34496.	8.0	5
7	Nickel enhanced graphene growth directly on dielectric substrates by molecular beam epitaxy. Journal of Applied Physics, 2016, 120, 045309.	2.5	7
8	Metal - Insulator Transition Driven by Vacancy Ordering in GeSbTe Phase Change Materials. Scientific Reports, 2016, 6, 23843.	3.3	93
9	Light coupling between vertical III-As nanowires and planar Si photonic waveguides for the monolithic integration of active optoelectronic devices on a Si platform. Optics Express, 2016, 24, 18417.	3.4	13
10	Coincident-site lattice matching during van der Waals epitaxy. Scientific Reports, 2016, 5, 18079.	3.3	31
11	Sub-nanometre resolution of atomic motion during electronic excitation in phase-change materials. Scientific Reports, 2016, 6, 20633.	3.3	29
12	Computing Equilibrium Shapes of Wurtzite Crystals: The Example of GaN. Physical Review Letters, 2015, 115, 085503.	7.8	66
13	Synthesis of quasi-free-standing bilayer graphene nanoribbons on SiC surfaces. Nature Communications, 2015, 6, 7632.	12.8	42
14	Electrical performance of phase change memory cells with Ge3Sb2Te6 deposited by molecular beam epitaxy. Applied Physics Letters, 2015, 106, .	3.3	17
15	High-Temperature Growth of GaN Nanowires by Molecular Beam Epitaxy: Toward the Material Quality of Bulk GaN. Crystal Growth and Design, 2015, 15, 4104-4109.	3.0	34
16	Integration of GaN Crystals on Micropatterned Si(0 0 1) Substrates by Plasma-Assisted Molecular Beam Epitaxy. Crystal Growth and Design, 2015, 15, 4886-4892.	3.0	10
17	Plan-view transmission electron microscopy investigation of GaAs/(In,Ga)As core-shell nanowires. Applied Physics Letters, 2014, 105, 121602.	3.3	16
18	Toward Truly Single Crystalline GeTe Films: The Relevance of the Substrate Surface. Journal of Physical Chemistry C, 2014, 118, 29724-29730.	3.1	61

#	ARTICLE	IF	CITATIONS
19	Coaxial Multishell (In,Ga)As/GaAs Nanowires for Near-Infrared Emission on Si Substrates. Nano Letters, 2014, 14, 2604-2609.	9.1	111
20	Surface Reconstruction-Induced Coincidence Lattice Formation Between Two-Dimensionally Bonded Materials and a Three-Dimensionally Bonded Substrate. Nano Letters, 2014, 14, 3534-3538.	9.1	70
21	Control over the Number Density and Diameter of GaAs Nanowires on Si(111) Mediated by Droplet Epitaxy. Nano Letters, 2013, 13, 3607-3613.	9.1	41
22	Photoelectrochemical Properties of (In,Ga)N Nanowires for Water Splitting Investigated by in Situ Electrochemical Mass Spectroscopy. Journal of the American Chemical Society, 2013, 135, 10242-10245.	13.7	58
23	Continuous-Flow MOVPE of Ga-Polar GaN Column Arrays and Coreâ€“Shell LED Structures. Crystal Growth and Design, 2013, 13, 3475-3480.	3.0	80
24	<i>In situ</i> doping of catalyst-free InAs nanowires with Si: Growth, polytypism, and local vibrational modes of Si. Applied Physics Letters, 2013, 103, .	3.3	15
25	Strain Engineering of Nanowire Multi-Quantum Well Demonstrated by Raman Spectroscopy. Nano Letters, 2013, 13, 4053-4059.	9.1	33
26	Mono- and few-layer nanocrystalline graphene grown on Al2O3(0 0 0 1) by molecular beam epitaxy. Carbon, 2013, 56, 339-350.	10.3	54
27	Formation of high-quality quasi-free-standing bilayer graphene on SiC(0 0 0 1) by oxygen intercalation upon annealing in air. Carbon, 2013, 52, 83-89.	10.3	104
28	Influence of nanowire template morphology on the coalescence overgrowth of GaN nanowires on Si by molecular beam epitaxy. Proceedings of SPIE, 2012, , .	0.8	0
29	Growth of wurtzite InN on bulk In2O3(111) wafers. Applied Physics Letters, 2012, 101, .	3.3	16
30	Band gap of wurtzite GaAs: A resonant Raman study. Physical Review B, 2012, 86, .	3.2	68
31	Polarity Control in 3D GaN Structures Grown by Selective Area MOVPE. Crystal Growth and Design, 2012, 12, 2552-2556.	3.0	45
32	Scaling growth kinetics of self-induced GaN nanowires. Applied Physics Letters, 2012, 100, .	3.3	60
33	Epitaxial phaseâ€change materials. Physica Status Solidi - Rapid Research Letters, 2012, 6, 415-417.	2.4	29
34	Scaling thermodynamic model for the self-induced nucleation of GaN nanowires. Physical Review B, 2012, 85, .	3.2	53
35	On the epitaxy of germanium telluride thin films on silicon substrates. Physica Status Solidi (B): Basic Research, 2012, 249, 1939-1944.	1.5	35
36	Polarized recombination of acoustically transported carriers in GaAs nanowires. Nanoscale Research Letters, 2012, 7, 247.	5.7	1

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37	Nitrogen-polar core-shell GaN light-emitting diodes grown by selective area metalorganic vapor phase epitaxy. Applied Physics Letters, 2012, 101, .	3.3	29
38	Shell-doping of GaAs nanowires with Si for n-type conductivity. Nano Research, 2012, 5, 796-804.	10.4	42
39	Insight into the Growth and Control of Single-Crystal Layers of Geâ€“Sbâ€“Te Phase-Change Material. Crystal Growth and Design, 2011, 11, 4606-4610.	3.0	34
40	Suitability of Au- and Self-Assisted GaAs Nanowires for Optoelectronic Applications. Nano Letters, 2011, 11, 1276-1279.	9.1	180
41	Self-Assisted Nucleation and Vaporâ€“Solid Growth of InAs Nanowires on Bare Si(111). Crystal Growth and Design, 2011, 11, 4001-4008.	3.0	95
42	Formation of High-Quality GaN Microcrystals by Pendeoepitaxial Overgrowth of GaN Nanowires on Si(111) by Molecular Beam Epitaxy. Crystal Growth and Design, 2011, 11, 4257-4260.	3.0	30
43	Nitride nanowire structures for LED applications. Proceedings of SPIE, 2011, , .	0.8	1
44	Properties of GaN Nanowires Grown by Molecular Beam Epitaxy. IEEE Journal of Selected Topics in Quantum Electronics, 2011, 17, 878-888.	2.9	104
45	The nanorod approach: GaN NanoLEDs for solid state lighting. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 2296-2301.	0.8	128
46	GaN nanowire templates for the pendeoepitaxial coalescence overgrowth on Si(111) by molecular beam epitaxy. Journal of Crystal Growth, 2011, 323, 418-421.	1.5	21
47	Direct Probing of Schottky Barriers in Si Nanowire Schottky Barrier Field Effect Transistors. Physical Review Letters, 2011, 107, 216807.	7.8	45
48	Direct comparison of catalyst-free and catalyst-induced GaN nanowires. Nano Research, 2010, 3, 528-536.	10.4	161
49	Statistical analysis of excitonic transitions in single, free-standing GaN nanowires: Probing impurity incorporation in the poissonian limit. Nano Research, 2010, 3, 881-888.	10.4	24
50	Collector Phase Transitions during Vaporâ^'Solidâ^'Solid Nucleation of GaN Nanowires. Nano Letters, 2010, 10, 3426-3431.	9.1	46
51	Sub-meV linewidth of excitonic luminescence in single GaN nanowires: Direct evidence for surface excitons. Physical Review B, 2010, 81, .	3.2	104
52	Epitaxy of Geâ€“Sbâ€“Te phase-change memory alloys. Applied Physics Letters, 2009, 94, .	3.3	32
53	Temperature and pressure dependence of the recombination mechanisms in 1.3 Î¼m and 1.5 Î¼m GaInNAs lasers. Physica Status Solidi (B): Basic Research, 2007, 244, 208-212.	1.5	8
54	Silicon to nickel-silicide axial nanowire heterostructures for high performance electronics. Physica Status Solidi (B): Basic Research, 2007, 244, 4170-4175.	1.5	34

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55	Silicon-Nanowire Transistors with Intruded Nickel-Silicide Contacts. Nano Letters, 2006, 6, 2660-2666.	9.1	231
56	Silicon nanowires: catalytic growth and electrical characterization. Physica Status Solidi (B): Basic Research, 2006, 243, 3340-3345.	1.5	26
57	Quadrupole mass spectrometry desorption analysis of Ga adsorbate on AlN (0001). Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2006, 24, 1979-1984.	2.1	9
58	In situ characterization of GaN quantum dot growth with reflection high-energy electron diffraction and line-of-sight mass spectrometry. Journal of Applied Physics, 2006, 99, 124909.	2.5	6
59	Ga adsorbate on (0001) GaN:In situcharacterization with quadrupole mass spectrometry and reflection high-energy electron diffraction. Journal of Applied Physics, 2006, 99, 074902.	2.5	41
60	Ga Adlayer Governed Surface Defect Evolution of (0001)GaN Films Grown by Plasma-Assisted Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2005, 44, L906-L908.	1.5	50
61	Nitrogen and indium dependence of the band offsets in InGaAsN quantum wells. Applied Physics Letters, 2005, 86, 131925.	3.3	24
62	Bound-to-bound and bound-to-free transitions in surface photovoltage spectra: Determination of the band offsets forInxGa1â^'xAsandInxGa1â^'xAs1â^'yNyquantum wells. Physical Review B, 2005, 72, .	3.2	29
63	Quantitative spectroscopy of substitutional nitrogen in GaAs1ÂxNxepitaxial layers by local vibrational mode absorption. Semiconductor Science and Technology, 2003, 18, 303-306.	2.0	11
64	Development of InGaAsN-based 1.3 Âm VCSELs. Semiconductor Science and Technology, 2002, 17, 892-897.	2.0	132
65	Preconditioning of c-plane sapphire for GaN epitaxy by radio frequency plasma nitridation. Applied Physics Letters, 1997, 71, 341-343.	3.3	63
66	Plasma preconditioning of sapphire substrate for GaN epitaxy. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1997, 43, 253-257.	3.5	27