

# Stanislav HasenÅhrl

## List of Publications by Year in descending order

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99  
docs citations

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times ranked

378  
citing authors

#	ARTICLE	IF	CITATIONS
1	Formation of interfaces in InGaP/GaAs/InGaP quantum wells. Journal of Crystal Growth, 2000, 212, 21-28.	0.7	23
2	Gettering properties of PrO <sub>2</sub> in In <sub>0.53</sub> Ga <sub>0.47</sub> As LPE growth. Journal of Crystal Growth, 1991, 110, 862-866.	0.7	21
3	Zinc-doped gallium phosphide nanowires for photovoltaic structures. Applied Surface Science, 2013, 269, 72-76.	3.1	18
4	Material properties of graded composition In <sub>x</sub> Ga <sub>1-x</sub> P buffer layers grown on GaP by organometallic vapor phase epitaxy. Journal of Crystal Growth, 2004, 272, 633-641.	0.7	15
5	Wet-etch bulk micromachining of (100) InP substrates. Journal of Micromechanics and Microengineering, 2004, 14, 1205-1214.	1.5	15
6	Preparation of thin Ga-doped ZnO layers for core-shell GaP/ZnO nanowires. Applied Surface Science, 2012, 258, 7607-7611.	3.1	15
7	Resistivity anisotropy in ordered In <sub>x</sub> Ga <sub>1-x</sub> P grown at 640°C. Applied Physics Letters, 1998, 73, 369-371.	1.5	13
8	A new approach towards low-pressure metalorganic vapor phase epitaxy of (AlGa)As using triethylgallium and dimethylethylaminealane. Journal of Crystal Growth, 1994, 145, 478-484.	0.7	12
9	Growth and characterisation of layers with composition close to crossover from direct to indirect band gap. Journal of Crystal Growth, 2005, 275, e1281-e1286.	0.7	12
10	Nanorods and nanocones for advanced sensor applications. Applied Surface Science, 2018, 461, 61-65.	3.1	11
11	Characterization of interface states in AlGaIn/GaN metal-oxide-semiconductor heterostructure field-effect transistors with HfO <sub>2</sub> gate dielectric grown by atomic layer deposition. Applied Surface Science, 2018, 461, 255-259.	3.1	11
12	Effects of inhomogeneities and ordering in InGaP/GaAs system grown by MOVPE. Materials Chemistry and Physics, 2000, 66, 246-252.	2.0	10
13	Approaching the pT range with a 2DEG InGaAs/InP Hall sensor at 77 K. Microelectronic Engineering, 2000, 51-52, 333-342.	1.1	10
14	Influence of tensile and compressive strain on the band gap energy of ordered InGaP. Applied Physics Letters, 2001, 79, 2758-2760.	1.5	10
15	Evidence of relationship between strain and In-incorporation: Growth of N-polar In-rich InAlN buffer layer by OMCVD. Journal of Applied Physics, 2019, 125, .	1.1	10
16	Anisotropic surface structure in ordered strained InGaP. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2002, 88, 134-138.	1.7	9
17	Directional temperature and carrier gas flow properties of GaInP nanowires. Applied Surface Science, 2013, 269, 72-76.	3.1	9
18	Hall bar device processing on patterned substrates using optical lithography. Sensors and Actuators A: Physical, 2002, 101, 150-155.	2.0	8

#	ARTICLE	IF	CITATIONS
19	GaP nanocones covered with silver nanoparticles for surface-enhanced Raman spectroscopy. Applied Surface Science, 2018, 461, 149-153.	3.1	8
20	Growth evolution of N-polar indium-rich InAlN layer on c-sapphire via strain relaxation by ultrathin AlON interlayer. Applied Surface Science, 2020, 502, 144086.	3.1	8
21	Out-of-Plane Weak Localization in Two-Dimensional Electron Structures. Physical Review Letters, 1998, 80, 4020-4023.	2.9	7
22	Crystallographic dependence of OMVPE InGaAs/InP lateral growth on patterned (100) InP substrates prepared by wet etching. Thin Solid Films, 2000, 380, 105-107.	0.8	7
23	Effect of strain and ordering on the band-gap energy of InGaP. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2002, 88, 139-142.	1.7	7
24	Influence of surface strain on the MOVPE growth of InGaP epitaxial layers. Applied Physics A: Materials Science and Processing, 2007, 87, 511-516.	1.1	7
25	MOVPE growth and properties of light emitting diodes with an incorporated InMnAs ferromagnetic layer. Journal of Crystal Growth, 2011, 315, 78-81.	0.7	7
26	Ohmic contacts to p-GaP/n-ZnO core/shell nanowires based on Au metallization. Applied Surface Science, 2013, 269, 60-64.	3.1	7
27	Semi-insulating GaN for vertical structures: role of substrate selection and growth pressure. Materials Science in Semiconductor Processing, 2020, 118, 105203.	1.9	7
28	OMCVD growth of InP and InGaAs on InP non-planar substrates patterned with {110} quasi facets. Journal of Crystal Growth, 2001, 233, 141-149.	0.7	6
29	Dependence of Curie temperature on surface strain in InMnAs epitaxial structures. Applied Surface Science, 2010, 256, 5672-5675.	3.1	6
30	Electrical properties of individual GaP nanowires doped by zinc. Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 2505-2509.	0.8	6
31	Structural and optical properties of individual GaP/ZnO core-shell nanowires. Vacuum, 2013, 98, 106-110.	1.6	6
32	InAlGaAs-InGaAs-InP RCE pin photodiode 1300 nm wavelength region. , 0, , .		5
33	SEM and AFM characterisation of high-mesa patterned InP substrates prepared by wet etching. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1999, 66, 15-20.	1.7	5
34	SIMS and SEM analysis of In <sub>1-x</sub> Al <sub>x</sub> Ga <sub>1-x</sub> P LED structure grown on In <sub>x</sub> Ga <sub>1-x</sub> P graded buffer. Applied Surface Science, 2006, 252, 7279-7282.	3.1	5
35	Columnar microstructure of the ZnO shell layer deposited on the GaP nanowires. Applied Surface Science, 2014, 312, 162-166.	3.1	5
36	Non-conventional scans in high-resolution X-ray diffraction analysis of epitaxial systems. Applied Surface Science, 2018, 461, 23-32.	3.1	5

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37	Generation of hole gas in non-inverted InAl(Ga)N/GaN heterostructures. Applied Physics Express, 2019, 12, 014001.	1.1	5
38	Analysis and Modeling of Vertical Current Conduction and Breakdown Mechanisms in Semi-Insulating GaN Grown on GaN: Role of Deep Levels. IEEE Transactions on Electron Devices, 2021, 68, 2365-2371.	1.6	5
39	InGaP/GaAs/InGaP quantum wires grown on pre-patterned substrates by MOVPE. Microelectronic Engineering, 2000, 51-52, 11-17.	1.1	4
40	Technology and performance of 150nm gate length InGaP/InGaAs/GaAs pHEMTs. Vacuum, 2001, 61, 323-327.	1.6	4
41	TEM analysis of InMnAs layers and dots prepared by low pressure MOVPE. Vacuum, 2012, 86, 657-660.	1.6	4
42	Magnetic properties of InMnAs nanodots prepared by MOVPE. Journal of Magnetism and Magnetic Materials, 2013, 327, 20-23.	1.0	4
43	Analysis of the core-shell interface between zinc-blende GaP and wurtzite ZnO. Solid-State Electronics, 2014, 100, 7-10.	0.8	4
44	Growth and Properties of N-polar InN/InAlN Heterostructures. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 2000197.	0.8	4
45	Twinned nanoparticle structures for surface enhanced Raman scattering. Applied Surface Science, 2020, 528, 146548.	3.1	4
46	Sulphur doping of GaSb grown by atmospheric pressure MOVPE. Journal of Crystal Growth, 1998, 183, 69-74.	0.7	3
47	Anisotropy in transport properties of ordered strained InGaP. Journal of Crystal Growth, 2003, 248, 369-374.	0.7	3
48	Nano-patterning surfaces by the self-organized growth of ordered and strained epitaxial layers. Superlattices and Microstructures, 2004, 36, 123-131.	1.4	3
49	Investigation of graded In <sub>x</sub> Ga <sub>1-x</sub> P buffer by Raman scattering method. Microelectronics Journal, 2006, 37, 487-490.	1.1	3
50	Spinodal-like decomposition of InGaP epitaxial layers grown on GaP substrates. Applied Surface Science, 2006, 252, 4178-4184.	3.1	3
51	Role of the V-III ratio and growth rate in decomposition of In <sub>0.27</sub> Ga <sub>0.73</sub> P/GaP grown by MOVPE. Journal of Crystal Growth, 2007, 298, 76-80.	0.7	3
52	Impact of growth conditions on the spatial non-uniformities of composition in InGaP epitaxial layers. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 1419-1422.	0.8	3
53	InGaN/(Ga)N/AlGaIn/GaN normally-off metal-oxide-semiconductor high-electron mobility transistors with etched access region. Japanese Journal of Applied Physics, 2019, 58, SCCD21.	0.8	3
54	Investigation of interfaces and threshold voltage instabilities in normally-off MOS-gated InGaN/AlGaIn/GaN HEMTs. Applied Surface Science, 2020, 528, 146824.	3.1	3

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55	Epitaxial Growth of GaP/In <sub>x</sub> Ga <sub>1-x</sub> P (xIn ≈ 0.27) Virtual Substrate for Optoelectronic Applications. Journal of Electrical Engineering, 2011, 62, 93-98.	0.4	3
56	Praseodymium Dioxide Doping of In <sub>1-x</sub> Ga <sub>x</sub> As <sub>y</sub> P <sub>1-y</sub> Epilayer Grown with Liquid Phase Epitaxy. Materials Research Society Symposia Proceedings, 1993, 301, 27.	0.1	2
57	MOCVD growth of In <sub>x</sub> Ga <sub>1-x</sub> As/GaAs multiple quantum well and superlattice structures for optical modulators. Solid-State Electronics, 1998, 42, 263-267.	0.8	2
58	Characterisation of InGaAs/InP microscopic Hall probe arrays with a 2DEG active layer. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1998, 51, 188-191.	1.7	2
59	Photoluminescence characterization of InGaP/GaAs/InGaP quantum wires. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2001, 80, 184-187.	1.7	2
60	Polar diagram of wet-etched [100] InP. , 0, , .		2
61	Micro-Raman study of InGaP composition grown on V-grooved substrates. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2004, 113, 111-116.	1.7	2
62	Role of growth mode in the formation of magnetic properties of InMnAs grown by MOVPE. Journal of Crystal Growth, 2011, 318, 576-579.	0.7	2
63	Optical and mechanical properties of a compact ZnO layer with embedded GaP nanowires. Applied Surface Science, 2017, 395, 180-184.	3.1	2
64	Determination of Secondary-Ions Yield in SIMS Depth Profiling of Si, Mg, and C Ions Implanted GaN Epitaxial Layers. , 2018, , .		2
65	A systematic study of MOCVD reactor conditions and Ga memory effect on properties of thick InAl(Ga)N layers: a complete depth-resolved investigation. CrystEngComm, 2020, 22, 130-141.	1.3	2
66	Large activation of praseodymium in In <sub>0.53</sub> Ga <sub>0.47</sub> As. Semiconductor Science and Technology, 1993, 8, 747-749.	1.0	1
67	Highly disordered two-dimensional electron system in a weak magnetic field. Europhysics Letters, 1999, 45, 374-380.	0.7	1
68	Preparation of stair-step grooves by wet etching of AlAs/GaAs heterostructures and MOCVD growth of QWR. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1999, 65, 106-110.	1.7	1
69	InGaAs/InGaP HEMTs: technological optimization and analytical modelling. Vacuum, 2001, 61, 333-337.	1.6	1
70	Study of the growth and structural properties of InMnAs dots grown on high-index surfaces by MOVPE. Materials Science in Semiconductor Processing, 2010, 13, 167-172.	1.9	1
71	Reinforcement role of GaP nanowires in a ZnO layer prepared by RF sputtering. Vacuum, 2017, 138, 218-223.	1.6	1
72	Formation of a compact Ga-doped ZnO layer over vertical free-standing GaP nanowires. Applied Surface Science, 2017, 395, 162-165.	3.1	1

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73	Morphology, Crystalline Quality, and Optical Properties of MOCVD-grown InN/InAlN Heterostructures. , 2020, , .		1
74	Nanocone structures with limited interspace grown by MOVPE. Lithuanian Journal of Physics, 2020, 59, .	0.1	1
75	Investigation of a nanostructured GaP/MoS <sub>2</sub> p-n heterojunction photodiode. AIP Advances, 2022, 12, 065004.	0.6	1
76	Characterisation of 2DEG Hall probes in high magnetic field at 4.2 K. , 0, , .		0
77	Resistivity anisotropy and surface morphology in ordered In <sub>x</sub> Ga <sub>1-x</sub> P grown at 640Å°C. , 0, , .		0
78	Electrical and morphological properties of ordered In <sub>x</sub> Ga <sub>1-x</sub> P. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1999, 66, 102-105.	1.7	0
79	Resistivity and mobility in ordered InGaP grown by MOVPE. Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, 382-387.	0.8	0
80	Photoluminescence and TEM characterization of (Al <sub>y</sub> Ga <sub>1-y</sub> ) <sub>1-x</sub> In <sub>x</sub> P layers grown on graded buffers. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 1503-1507.	0.8	0
81	OMVPE growth and characterization of Ga <sub>1-x</sub> Mn <sub>x</sub> As diluted magnetic semiconductor. , 2008, , .		0
82	InMnAs dots grown on GaAs surfaces etched via AlAs sacrificial layer. , 2008, , .		0
83	Design, preparation and properties of spin-LED structures based on InMnAs. , 2010, , .		0
84	Photoluminescence of single GaP/ZnO core-shell nanowires. , 2012, , .		0
85	GaP/ZnO nanowires with a radial pn heterojunction. , 2012, , .		0
86	Deposition and properties of ZnO thin films on GaP nanowires. , 2012, , .		0
87	Properties of individual GaP/ZnO core-shell nanowires with radial PN junction. , 2013, , .		0
88	Predefined planar structures in semiconductor surfaces patterned by NSOM lithography. Proceedings of SPIE, 2013, , .	0.8	0
89	Growth and properties of core-shell GaP/ZnO nanowires. , 2014, , .		0
90	Annealing of gold nanoparticles on GaP(111)B: initial stage of GaP nanowire growth. Physica Status Solidi - Rapid Research Letters, 2014, 8, 321-324.	1.2	0

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91	Near-field analysis of GaP nanocones. Applied Surface Science, 2021, 539, 148213.	3.1	0
92	InN crystal habit, structural, electrical, and optical properties affected by sapphire substrate nitridation in N-polar InN/InAlN heterostructures. Semiconductor Science and Technology, 2021, 36, 075025.	1.0	0
93	Preparation of Stair-Step Grooves by Wet Etching of AlAs/GaAs Heterostructures & MOCVD Growth of QWR. , 1998, , 203-206.		0
94	Testing Superconducting Tapes by a 2DEG Hall Probe Array. , 1998, , 277-280.		0
95	Preparation of Microscopic Hall Probes and Arrays. , 1998, , 273-276.		0
96	Methanol sensor for integration with GaP nanowire photocathode. , 2017, , .		0
97	Improvement of GaN crystalline quality by SiN <sub>x</sub> layer grown by MOVPE. Lithuanian Journal of Physics, 2020, 59, .	0.1	0
98	Invited: Polarization engineering in GaN-based normally-off transistors. , 2021, , .		0