

Markus Pristovsek

List of Publications by Year in descending order

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citations

218677

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135
all docs

135
docs citations

135
times ranked

1709
citing authors

#	ARTICLE	IF	CITATIONS
1	The critical thickness of InGaN on (0001)GaN. Journal of Crystal Growth, 2008, 310, 4913-4915.	1.5	104
2	Atomic structure of InP(001)-(2 \times 4): A dimer reconstruction. Physical Review B, 1998, 57, 14596-14599.	3.2	64
3	(2 \times 4)GaP(001) surface: Atomic structure and optical anisotropy. Physical Review B, 1999, 60, 2488-2494.	3.2	58
4	Real-time monitoring of MOVPE device growth by reflectance anisotropy spectroscopy and related optical techniques. Journal of Crystal Growth, 1998, 195, 151-162.	1.5	54
5	Insight into the performance of multi-color InGaN/GaN nanorod light emitting diodes. Scientific Reports, 2018, 8, 7311.	3.3	51
6	GaP(001) and InP(001): Reflectance anisotropy and surface geometry. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1999, 17, 1691.	1.6	50
7	Surface diffusion and layer morphology of ((112 \hat{A} ²)) GaN grown by metal-organic vapor phase epitaxy. Journal of Applied Physics, 2012, 111, .	2.5	48
8	Growth of hexagonal boron nitride on sapphire substrate by pulsed-mode metalorganic vapor phase epitaxy. Journal of Crystal Growth, 2018, 482, 1-8.	1.5	46
9	Reflectance anisotropy oscillations during MOCVD and MBE growth of GaAs (001). Physica Status Solidi A, 1995, 152, 35-47.	1.5	45
10	Reflectance anisotropy oscillations during MOCVD and MBE growth of GaAs (001). Physica Status Solidi A, 1995, 152, 35-47.	1.7	43
11	Surface processes before and during growth of GaAs (001). Journal of Crystal Growth, 1994, 145, 44-52.	1.5	42
12	Orientation control of GaN and grown on sapphire by metal-organic vapor phase epitaxy. Journal of Crystal Growth, 2010, 312, 2171-2174.	1.5	42
13	Crystal orientation of GaN layers on (101 0) m -plane sapphire. Physica Status Solidi (B): Basic Research, 2011, 248, 583-587.	1.5	42
14	Growth oscillations with monolayer periodicity monitored by ellipsometry during metalorganic vapor phase epitaxy of GaAs(001). Applied Physics Letters, 1995, 67, 3783-3785.	3.3	41
15	Radiative recombination mechanisms in polar and non-polar InGaN/GaN quantum well LED structures. Applied Physics Letters, 2016, 109, .	3.3	41
16	Structural and optical properties of semipolar AlGaIn grown on sapphire by metal-organic vapor phase epitaxy. Journal of Crystal Growth, 2013, 367, 42-47.	1.5	40
17	Scanning-tunneling-microscopy study of InP(001) surfaces prepared by UHV decapping of metal-organic vapor-phase-epitaxy-grown samples. Physical Review B, 1996, 53, R13257-R13259.	3.2	37
18	Spectroscopic process sensors in MOVPE device production. Applied Physics A: Materials Science and Processing, 1999, 68, 309-313.	2.3	32

#	ARTICLE	IF	CITATIONS
19	Effect of heterostructure design on carrier injection and emission characteristics of 295-nm light emitting diodes. Journal of Applied Physics, 2015, 117, .	2.5	32
20	Topography of $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si0005.gif" overflow="scroll" \rangle \langle \text{mml:mo stretchy="false" \rangle} \langle \text{mml:mo} \rangle \langle \text{mml:mn} \rangle 20 \langle \text{mml:mn} \rangle \langle \text{mml:mover} \rangle \text{Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 7}$ phase epitaxy. Journal of Crystal Growth, 2012, 356, 70-74.	1.5	31
21	In situ characterization of GaAs growth in nitrogen atmosphere during MOVPE: a comparison to hydrogen atmosphere. Journal of Crystal Growth, 1998, 195, 211-216.	1.5	30
22	High aluminium content and high growth rates of AlGaIn in a close-coupled showerhead MOVPE reactor. Journal of Crystal Growth, 2011, 315, 229-232.	1.5	30
23	Polarity determination of polar and semipolar $(112\bar{2})$ InN and GaN layers by valence band photoemission spectroscopy. Journal of Applied Physics, 2013, 114, .	2.5	30
24	Structure analysis of the Ga-stabilized GaAs(001) $\sqrt{3} \times \sqrt{3}$ surface at high temperatures. Physical Review B, 2002, 65, .	3.2	28
25	Real-time calibration of wafer temperature, growth rate and composition by optical in-situ techniques during Al _x Ga _{1-x} As growth in MOVPE. Journal of Crystal Growth, 2002, 240, 87-97.	1.5	28
26	Gallium-rich reconstructions on GaAs(001). Physica Status Solidi (B): Basic Research, 2003, 240, 91-98.	1.5	27
27	What is red? On the chromaticity of orange-red InGaIn/GaN based LEDs. Journal of Applied Physics, 2018, 124, .	2.5	27
28	Growth of strained GaAsSb layers on GaAs (001) by MOVPE. Journal of Crystal Growth, 2005, 276, 347-353.	1.5	26
29	Growth and characterizations of semipolar $(112\bar{2})$ InN. Journal of Applied Physics, 2012, 112, .	2.5	26
30	In situ study of GaAs growth mechanisms using tri-methyl gallium and tri-ethyl gallium precursors in metal-organic vapour phase epitaxy. Journal of Crystal Growth, 2004, 262, 78-83.	1.5	25
31	In situ surface passivation of III-V semiconductors in MOVPE by amorphous As and P layers. Journal of Crystal Growth, 1997, 170, 230-236.	1.5	24
32	Ellipsometric and reflectance-anisotropy measurements on rotating samples. Thin Solid Films, 1998, 313-314, 620-624.	1.8	24
33	The stability of graphene and boron nitride for III-nitride epitaxy and post-growth exfoliation. Chemical Science, 2021, 12, 7713-7719.	7.4	24
34	Surface structure of ordered InGaP(001): The $(2\bar{4})$ reconstruction. Physical Review B, 2000, 62, 12601-12604.	3.2	23
35	Single phase $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si0012.gif" overflow="scroll" \rangle \langle \text{mml:mo stretchy="false" \rangle} \langle \text{mml:mo} \rangle \langle \text{mml:mn} \rangle 1 \langle \text{mml:mn} \rangle \langle \text{mml:mpace width="0.25em" /} \rangle \langle \text{mml:mn} \rangle 1 \langle \text{mml:mn} \rangle \langle \text{mml:mpace width="0.25em" /} \rangle \langle \text{mml:mover accent="true" \rangle} \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mn} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mo} \rangle \bar{2} \langle \text{mml:mo} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mover} \rangle \langle \text{mml:math} \rangle$ GaN on $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si0012.gif" overflow="scroll" \rangle \langle \text{mml:mo stretchy="false" \rangle} \langle \text{mml:mo} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mn} \rangle \langle \text{mml:mpace width="0.25em" /} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mn} \rangle \langle \text{mml:mpace width="0.25em" /} \rangle \langle \text{mml:mover accent="true" \rangle} \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mn} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mo} \rangle \bar{2} \langle \text{mml:mo} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mover} \rangle \langle \text{mml:math} \rangle$ al. Journal of Crystal Growth, 2011, 331, 231-236.	1.5	23
36	Growth mode of InGaIn on GaN (0001) in MOVPE. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, S565-S569.	0.8	22

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37	Metalorganic vapour phase epitaxial growth on vicinal GaAs (001) surfaces studied by reflectance anisotropy spectroscopy. <i>Physica Status Solidi A</i> , 1995, 152, 49-59.	1.7	21
38	In situ investigation of GaAs (001) intrinsic carbon p-doping in metal-organic vapour phase epitaxy. <i>Journal of Crystal Growth</i> , 2000, 221, 149-155.	1.5	21
39	In-situ Determination of the Carrier Concentration of (001) GaAs by Reflectance Anisotropy Spectroscopy. <i>Physica Status Solidi A</i> , 2001, 188, 1423-1429.	1.7	21
40	Indium incorporation efficiency and critical layer thickness of (202 ⁻¹) InGaN layers on GaN. <i>Applied Physics Letters</i> , 2012, 101, .	3.3	21
41	Efficiency of arsenic and phosphorus precursors investigated by reflectance anisotropy spectroscopy. <i>Journal of Crystal Growth</i> , 1994, 145, 36-43.	1.5	19
42	<i>In situ</i> access to the dielectric anisotropy of buried III-V/Si(100) heterointerfaces. <i>Physical Review B</i> , 2012, 86, .	3.2	19
43	Growth mode transition and relaxation of thin InGaN layers on GaN (0001). <i>Journal of Crystal Growth</i> , 2013, 372, 65-72.	1.5	19
44	Optimizing GaN () heteroepitaxial templates grown on () sapphire. <i>Physica Status Solidi (B): Basic Research</i> , 2016, 253, 61-66.	1.5	19
45	Monolithic integration of tricolor micro-LEDs and color mixing investigation by analog and digital dimming. <i>Japanese Journal of Applied Physics</i> , 2019, 58, SCCC06.	1.5	19
46	Structure of InP (001) surfaces prepared by decapping and by ion bombardment and annealing. <i>Physical Review B</i> , 1997, 56, R1661-R1663.	3.2	18
47	Volmer-Weber growth mode of InN quantum dots on GaN by MOVPE. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2009, 6, S545. High-temperature thermal annealing of nonpolar (1 0) InGaInN/GaN heterostructure. <i>Journal of Applied Physics</i> , 2010, 108, 043107.	0.8	18
48			

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55	Effects of Wavelength and Defect Density on the Efficiency of (In,Ga)N-Based Light-Emitting Diodes. <i>Physical Review Applied</i> , 2017, 7, .	3.8	16
56	How to obtain metal-polar untwinned high-quality ($1\text{--}10^{13}$) GaN on m-plane sapphire. <i>Journal of Crystal Growth</i> , 2019, 507, 205-208.	1.5	16
57	Interplay of sidewall damage and light extraction efficiency of micro-LEDs. <i>Optics Letters</i> , 2022, 47, 2250.	3.3	15
58	Reconstructions of the GaAs (113) surface. <i>Journal of Crystal Growth</i> , 1998, 195, 1-5.	1.5	14
59	Dynamic study of the surfaces of (001) gallium arsenide in metal-organic vapor-phase epitaxy during arsenic desorption. <i>Journal of Applied Physics</i> , 2000, 87, 1245-1250.	2.5	14
60	In situ scanning tunneling microscopy of InAs quantum dots on GaAs(001) during molecular beam epitaxial growth. <i>Surface Science</i> , 2003, 544, 234-240.	1.9	14
61	InN growth and annealing investigations using in-situ spectroscopic ellipsometry. <i>Journal of Crystal Growth</i> , 2004, 272, 87-93.	1.5	14
62	Growth of semipolar (10 $\bar{1}$ 1) InN on c-plane sapphire using MOVPE. <i>Physica Status Solidi - Rapid Research Letters</i> , 2010, 4, 127-129.	2.4	14
63	Growth mechanism of InGaN quantum dots during metalorganic vapor phase epitaxy. <i>Journal of Crystal Growth</i> , 2011, 334, 40-45.	1.5	14
64	Determination of axial and lateral exciton diffusion length in GaN by electron energy dependent cathodoluminescence. <i>Journal of Applied Physics</i> , 2016, 120, .	2.5	14
65	MOVPE growth and high-temperature annealing of (101 $\bar{0}$) AlN layers on (101 $\bar{0}$) sapphire. <i>Journal of Crystal Growth</i> , 2018, 502, 14-18.	1.5	14
66	Simultaneous Growth of Various InGaN/GaN Core-shell Microstructures for Color Tunable Device Applications. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2018, 215, 1800361.	1.8	14
67	Ripening of InAs quantum dots on GaAs (001) investigated with in situ scanning tunneling microscopy in metal-organic vapor phase epitaxy. <i>Journal of Crystal Growth</i> , 2008, 310, 4751-4753.	1.5	13
68	Structural and optical properties of Gd implanted GaN with various crystallographic orientations. <i>Thin Solid Films</i> , 2017, 638, 63-72.	1.8	13
69	Effect of substrate misorientation on the concentration of impurities and surface morphology of an epitaxial GaN layer on N-polar GaN substrate by MOVPE. <i>Journal of Crystal Growth</i> , 2019, 512, 78-83.	1.5	13
70	Epitaxial Combination of Two-Dimensional Hexagonal Boron Nitride with Single-Crystalline Diamond Substrate. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 46466-46475.	8.0	13
71	Influence of the reconstruction of GaAs (001) on the electro-optical bulk properties. <i>Journal of Crystal Growth</i> , 2003, 248, 254-258.	1.5	12
72	Surface transition induced island formation on thin strained InGaN layers on GaN (0001) in metal-organic vapour phase epitaxy. <i>Journal of Applied Physics</i> , 2011, 110, .	2.5	12

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91	In situ scanning tunnelling microscopy during metal-organic vapour phase epitaxy. Journal of Crystal Growth, 2007, 298, 8-11.	1.5	7
92	Energetics of Quantum Dot Formation and Relaxation of InGaAs on GaAs(001). Japanese Journal of Applied Physics, 2013, 52, 041201.	1.5	7
93	Comparative study of (0001) and $\{11\bar{2}\}$ InGaN based light emitting diodes. Japanese Journal of Applied Physics, 2016, 55, 05FJ10.	1.5	7
94	Surface reconstructions of (0001) AlN during metal-organic vapor phase epitaxy. Physica Status Solidi (B): Basic Research, 2017, 254, 1600711.	1.5	7
95	Strain-induced yellow to blue emission tailoring of axial InGaN/GaN quantum wells in GaN nanorods synthesized by nanoimprint lithography. Scientific Reports, 2021, 11, 6754.	3.3	7
96	Diffusion of Ga on the GaAs (113) surface in the $[1\bar{1},0]$ direction during MOVPE growth. Applied Surface Science, 2000, 166, 433-436.	6.1	6
97	In situ scanning tunneling microscopy during metal-organic vapor phase epitaxy. Applied Physics Letters, 2006, 89, 063108.	3.3	6
98	Homoepitaxial growth rate measurement using in situ reflectance anisotropy spectroscopy. Journal of Crystal Growth, 2007, 298, 46-49.	1.5	6
99	Comparison study of N- and In-polar {0001} InN layers grown by MOVPE. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 977-981.	0.8	6
100	Surface Transitions During InGaN Growth on GaN(0001) in Metal-Organic Vapor Phase Epitaxy. Japanese Journal of Applied Physics, 2013, 52, 08JB23.	1.5	6
101	Structure of Ga-stabilized GaAs(0 0 1) surfaces at high temperatures. Applied Surface Science, 2003, 212-213, 146-150.	6.1	5
102	Role of nitridation on polarity and growth of InN by metal-organic vapor phase epitaxy. Journal of Crystal Growth, 2013, 376, 17-22.	1.5	5
103	Toward defect-free semi-polar GaN templates on pre-structured sapphire. Physica Status Solidi (B): Basic Research, 2016, 253, 834-839.	1.5	5
104	MOVPE growth and indium incorporation of polar, semipolar (112) and (201)-InGaN. Physica Status Solidi (B): Basic Research, 2016, 253, 93-98.	1.5	5
105	Structural and optical properties of $(112\bar{1}..2)$ InGaN quantum wells compared to (0001) and $(112\bar{1}..0)$. Semiconductor Science and Technology, 2016, 31, 085007.	2.0	5
106	Comparing high-purity $\langle 100 \rangle$ - and $\langle 110 \rangle$ -plane GaN layers for Schottky barrier diodes grown homoepitaxially by metalorganic vapor phase epitaxy. Japanese Journal of Applied Physics, 2018, 57, 105501.	1.5	5
107	The Effect of Interface Diffusion on Raman Spectra of Wurtzite Short-Period GaN/AlN Superlattices. Nanomaterials, 2021, 11, 2396.	4.1	5
108	Defect characterization of $\{101\bar{1}3\}$ GaN by electron microscopy. Journal of Applied Physics, 2022, 131, .	2.5	5

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109	Photoluminescence Scanning Near-Field Optical Microscopy on III-V Quantum Dots. Physica Status Solidi A, 1998, 170, 401-410.	1.7	4
110	Structural analysis by reflectance anisotropy spectroscopy: As and Sb on GaAs(110). Journal of Physics Condensed Matter, 2004, 16, S4367-S4374.	1.8	4
111	Nitrogen-arsenic exchange processes and investigation of the nitrated GaAs surfaces in MOVPE. Journal of Crystal Growth, 2004, 272, 30-36.	1.5	4
112	Properties of InMnP (001) grown by MOVPE. Journal of Crystal Growth, 2008, 310, 4046-4049.	1.5	4
113	Determination of the complex linear electro-optic coefficient of GaAs and InP. Physica Status Solidi (B): Basic Research, 2010, 247, 1974-1978.	1.5	4
114	Influence of group III and group V partial pressures on the size and density of InGaN quantum dots in MOVPE. Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 2487-2491.	1.8	4
115	Nucleation and Coalescence of Indium Rich InGaN Layers on Nitridated Sapphire in Metal-Organic Vapor Phase Epitaxy. Japanese Journal of Applied Physics, 2013, 52, 08JD03.	1.5	4
116	The impact of the surface on step-bunching and diffusion of Ga on GaAs (001) in metal-organic vapour phase epitaxy. Materials Research Express, 2016, 3, 075902.	1.6	4
117	Untwinned semipolar (101̄...3) Al _x Ga _{1-x} N layers grown on m-plane sapphire. Semiconductor Science and Technology, 2019, 34, 125012.	2.0	4
118	Effect of gas phase temperature on InGaN grown by metalorganic vapor phase epitaxy. Journal of Crystal Growth, 2019, 509, 50-53.	1.5	4
119	X-ray characterisation of the basal stacking fault densities of (112̄ ₁ ,2) GaN. CrystEngComm, 2021, 23, 6059-6069.	2.6	4
120	Limitation of simple np-n tunnel junction based LEDs grown by metal-organic vapor phase epitaxy. Semiconductor Science and Technology, 2020, 35, 115005.	2.0	4
121	Lateral short range ordering of step bunches in InGaAs/GaAs superlattices. Journal of Applied Physics, 2004, 95, 1736-1739.	2.5	3
122	Development of InN metalorganic vapor phase epitaxy using in-situ spectroscopic ellipsometry. Crystal Research and Technology, 2005, 40, 993-996.	1.3	3
123	Shape of indium nitride quantum dots and nanostructures grown by metal organic vapour phase epitaxy. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, S574-S577.	0.8	3
124	Controlling the orientations of directional sputtered non- and semi-polar GaN/AlN layers. Japanese Journal of Applied Physics, 2019, 58, SC1044.	1.5	3
125	Influence of a GaN Cap Layer on the Morphology and the Physical Properties of Embedded Self-Organized InN Quantum Dots on GaN(0001) Grown by Metal-Organic Vapour Phase Epitaxy. Japanese Journal of Applied Physics, 2011, 50, 031004.	1.5	3
126	Wurtzite AlP y N1 ^z y : a new III-V compound semiconductor lattice-matched to GaN (0001). Applied Physics Express, 2020, 13, 111001.	2.4	3

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127	In situ study of low-temperature growth and Mn, Si, Sn doping of GaAs () in molecular beam epitaxy. Journal of Crystal Growth, 2004, 265, 425-433. Increasing the Luminescence Efficiency of Long-Wavelength (<math>T_j ETQq0 0 0 rgBT /Overlock 10 Tf 50 727 Td (xmlns:mml="ht	1.5	2
128		3.8	2
129	xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:mrow> Metalorganic vapor phase epitaxy of InN on GaN using tertiary-butylhydrazine as nitrogen source. Journal of Crystal Growth, 2010, 312, 1983-1985.	1.5	1
130	Corrigendum to "Morphological study of InGaN on GaN substrate by supersaturation" [J. Cryst. Growth 508 (2019) 58-65]. Journal of Crystal Growth, 2019, 514, 13.	1.5	1
131	Growth and characterization of manganese-doped InAsP. Journal of Crystal Growth, 2008, 310, 5028-5031.	1.5	0
132	In-Situ Monitoring for Nano-Structure Growth in MOVPE. Nanoscience and Technology, 2008, , 67-86.	1.5	0
133	Interface and surface dielectric anisotropies of GaP/Si(100). , 2012, , .		0
134	Breakdown of the green gap in (0001) InGaN LEDs. , 2016, , .		0
135	Toward defect-free semi-polar GaN templates on pre-structured sapphire (Phys. Status Solidi B 5/2016). Physica Status Solidi (B): Basic Research, 2016, 253, 1024-1024.	1.5	0