Wondwosen Metaferia

List of Publications by Year
in descending order

40 papers	423 citations	623734 14 h-index	752698 20 g-index
41 all docs	41 docs citations	41 times ranked	543 citing authors

#	Article	IF	Citations
1	(110)-Oriented GaAs Devices and Spalling as a Platform for Low-Cost III-V Photovoltaics. IEEE Journal of Photovoltaics, 2022, 12, 962-967.	2.5	2
2	Compositionally graded Ga1â^ˆ’xInxP buffers grown by static and dynamic hydride vapor phase epitaxy at rates up to 1 <i>Î¼</i>m/min. Applied Physics Letters, 2021, 118, .	3.3	4
3	Control of Surface Morphology during the Growth of (110)-Oriented GaAs by Hydride Vapor Phase Epitaxy. Crystal Growth and Design, 2021, 21, 3916-3921.	3.0	3
4	(110)-Oriented GaAs Devices and Spalling as a Platform for Low-Cost III-V Photovoltaics. , 2021, , .		2
5	Aerotaxy: gas-phase epitaxy of quasi 1D nanostructures. Nanotechnology, 2021, 32, 025605.	2.6	11
6	Calculation of Hole Concentrations in Zn Doped GaAs Nanowires. Nanomaterials, 2020, 10, 2524.	4.1	2
7	GaAs growth rates of 528 Î¼m/h using dynamic-hydride vapor phase epitaxy with a nitrogen carrier gas. Applied Physics Letters, 2020, 116, .	3.3	14
8	Hot-Carrier Extraction in Nanowire-Nanoantenna Photovoltaic Devices. Nano Letters, 2020, 20, 4064-4072.	9.1	21
9	GaAs Solar Cell Grown by Dynamic Hydride Vapor Phase Epitaxy Using Nitrogen Carrier Gas. , 2020, , .		0
10	Gallium arsenide solar cells grown at rates exceeding 300â€‰Âµmâ€‰hâˆ’1 by hydride vapor phase epitaxy. Nature Communications, 2019, 10, 3361.	12.8	61
11	Analysis of GaAs Solar Cells Grown on 50 mm Wafers at 700 Â°C by Dynamic Hydride Vapor Phase Epitaxy. , 2019, , .		0
12	Growth of AlGaAs, AlInP, and AlGaInP by Hydride Vapor Phase Epitaxy. ACS Applied Energy Materials, 2019, 2, 8405-8410.	5.1	19
13	<i>n</i>-type doping and morphology of GaAs nanowires in Aerotaxy. Nanotechnology, 2018, 29, 285601.	2.6	15
14	Electron Tomography Reveals the Droplet Covered Surface Structure of Nanowires Grown by Aerotaxy. Small, 2018, 14, e1801285.	10.0	5
15	Trends in heteroepitaxy of III-Vs on silicon for photonic and photovoltaic applications. Proceedings of SPIE, 2017, , .	0.8	1
16	Advanced Fabrication of Single-Mode and Multi-Wavelength MIR-QCLs. Photonics, 2016, 3, 26.	2.0	16
17	Room temperature operation of a deep etched buried heterostructure photonic crystal quantum cascade laser. Laser and Photonics Reviews, 2016, 10, 843-848.	8.7	8
18	GaAsP Nanowires Grown by Aerotaxy. Nano Letters, 2016, 16, 5701-5707.	9.1	36

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19	Growth of InP directly on Si by corrugated epitaxial lateral overgrowth. Journal Physics D: Applied Physics, 2015, 48, 045102.	2.8	19
20	Optical and structural properties of sulfur-doped ELOG InP on Si. Journal of Applied Physics, 2015, 117, .	2.5	5
21	Demonstration of a quick process to achieve buried heterostructure quantum cascade laser leading to high power and wall plug efficiency. Optical Engineering, 2014, 53, 087104.	1.0	11
22	Demonstration of a quick process to achieve buried heterostructure QCL leading to high power and wall plug efficiency. , 2014, , .		0
23	(Invited) Monolithic Integration of InP Based Structures on Silicon for Optical Interconnects. ECS Transactions, 2014, 64, 523-531.	0.5	0
24	Polycrystalline indium phosphide on silicon by indium assisted growth in hydride vapor phase epitaxy. Journal of Applied Physics, 2014, 116, 033519.	2.5	2
25	Realization of an atomically abrupt InP/Si heterojunction via corrugated epitaxial lateral overgrowth. CrystEngComm, 2014, 16, 7889.	2.6	14
26	High quality InP nanopyramidal frusta on Si. CrystEngComm, 2014, 16, 4624-4632.	2.6	4
27	Alternative approaches in growth of polycrystalline InP on Si. , 2014, , .		0
28	Effects of thermal treatment on radiative properties of HVPE grown InP layers. Solid-State Electronics, 2014, 95, 15-18.	1.4	0
29	Simple Epitaxial Lateral Overgrowth Process as a Strategy for Photonic Integration on Silicon. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 380-386.	2.9	25
30	High quality large area ELOG InP on silicon for photonic integration using conventional optical lithography. , 2014, , .		1
31	Study of planar defect filtering in InP grown on Si by epitaxial lateral overgrowth. Optical Materials Express, 2013, 3, 1960.	3.0	25
32	Towards a monolithically integrated IIIâ€"V laser on silicon: optimization of multi-quantum well growth on InP on Si. Semiconductor Science and Technology, 2013, 28, 094008.	2.0	16
33	Polycrystalline indium phosphide on silicon using a simple chemical route. Journal of Applied Physics, 2013, 113, .	2.5	3
34	Selective area heteroepitaxy of InP nanopyramidal frusta on Si for nanophotonics. , 2012, , .		0
35	IIIâ€"Vs on Si for photonic applicationsâ€"A monolithic approach. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2012, 177, 1551-1557.	3.5	40
36	Effect of the Surface Morphology of Seed and Mask Layers on InP Grown on Si by Epitaxial Lateral Overgrowth. Journal of Electronic Materials, 2012, 41, 2345-2349.	2.2	16

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37	Selective area heteroepitaxy through nanoimprint lithography for large area InP on Si. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 1610-1613.	0.8	3
38	Morphological evolution during epitaxial lateral overgrowth of indium phosphide on silicon. Journal of Crystal Growth, 2011, 332, 27-33.	1.5	18
39	Hetero-epitaxial indium phosphide on silicon. , 2010, , .		1
40	InP lateral overgrowth technology for silicon photonics. Proceedings of SPIE, 2010, , .	0.8	0