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	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
2	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
3	GaAsP Nanowires Grown by Aerotaxy. Nano Letters, 2016, 16, 5701-5707.	9.1	36
4	Study of planar defect filtering in InP grown on Si by epitaxial lateral overgrowth. Optical Materials Express, 2013, 3, 1960.	3.0	25
5	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
6	Hot-Carrier Extraction in Nanowire-Nanoantenna Photovoltaic Devices. Nano Letters, 2020, 20, 4064-4072.	9.1	21
7	Growth of InP directly on Si by corrugated epitaxial lateral overgrowth. Journal Physics D: Applied Physics, 2015, 48, 045102.	2.8	19
8	Growth of AlGaAs, AlInP, and AlGaInP by Hydride Vapor Phase Epitaxy. ACS Applied Energy Materials, 2019, 2, 8405-8410.	5.1	19
9	Morphological evolution during epitaxial lateral overgrowth of indium phosphide on silicon. Journal of Crystal Growth, 2011, 332, 27-33.	1.5	18
10	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
11	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
12	Advanced Fabrication of Single-Mode and Multi-Wavelength MIR-QCLs. Photonics, 2016, 3, 26.	2.0	16
13	<i>n</i>-type doping and morphology of GaAs nanowires in Aerotaxy. Nanotechnology, 2018, 29, 285601.	2.6	15
14	Realization of an atomically abrupt InP/Si heterojunction via corrugated epitaxial lateral overgrowth. CrystEngComm, 2014, 16, 7889.	2.6	14
15	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
16	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
17	Aerotaxy: gas-phase epitaxy of quasi 1D nanostructures. Nanotechnology, 2021, 32, 025605.	2.6	11
18	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

#	Article	IF	Citations
19	Optical and structural properties of sulfur-doped ELOG InP on Si. Journal of Applied Physics, 2015, 117, .	2.5	5
20	Electron Tomography Reveals the Droplet Covered Surface Structure of Nanowires Grown by Aerotaxy. Small, 2018, 14, e1801285.	10.0	5
21	High quality InP nanopyramidal frusta on Si. CrystEngComm, 2014, 16, 4624-4632.	2.6	4
22	Compositionally graded Ga1âˆ'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
23	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
24	Polycrystalline indium phosphide on silicon using a simple chemical route. Journal of Applied Physics, 2013, 113, .	2.5	3
25	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
26	Polycrystalline indium phosphide on silicon by indium assisted growth in hydride vapor phase epitaxy. Journal of Applied Physics, 2014, 116, 033519.	2.5	2
27	Calculation of Hole Concentrations in Zn Doped GaAs Nanowires. Nanomaterials, 2020, 10, 2524.	4.1	2
28	(110)-Oriented GaAs Devices and Spalling as a Platform for Low-Cost III-V Photovoltaics. , 2021, , .		2
29	(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
30	Hetero-epitaxial indium phosphide on silicon. , 2010, , .		1
31	High quality large area ELOG InP on silicon for photonic integration using conventional optical lithography. , 2014, , .		1
32	Trends in heteroepitaxy of III-Vs on silicon for photonic and photovoltaic applications. Proceedings of SPIE, 2017, , .	0.8	1
33	InP lateral overgrowth technology for silicon photonics. Proceedings of SPIE, 2010, , .	0.8	0
34	Selective area heteroepitaxy of InP nanopyramidal frusta on Si for nanophotonics. , 2012, , .		0
35	Demonstration of a quick process to achieve buried heterostructure QCL leading to high power and wall plug efficiency. , 2014, , .		0
36	(Invited) Monolithic Integration of InP Based Structures on Silicon for Optical Interconnects. ECS Transactions, 2014, 64, 523-531.	0.5	0

#	Article	IF	Citations
37	Alternative approaches in growth of polycrystalline InP on Si. , 2014, , .		0
38	Effects of thermal treatment on radiative properties of HVPE grown InP layers. Solid-State Electronics, 2014, 95, 15-18.	1.4	0
39	Analysis of GaAs Solar Cells Grown on 50 mm Wafers at 700 Â°C by Dynamic Hydride Vapor Phase Epitaxy. , 2019, , .		0
40	GaAs Solar Cell Grown by Dynamic Hydride Vapor Phase Epitaxy Using Nitrogen Carrier Gas. , 2020, , .		0