

# Kirstin Alberi

## List of Publications by Year in descending order

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Version: 2024-02-01

25  
papers

548  
citations

933447

10  
h-index

839539

18  
g-index

25  
all docs

25  
docs citations

25  
times ranked

1089  
citing authors

#	ARTICLE	IF	CITATIONS
1	The 2019 materials by design roadmap. Journal Physics D: Applied Physics, 2019, 52, 013001.	2.8	236
2	Material quality requirements for efficient epitaxial film silicon solar cells. Applied Physics Letters, 2010, 96, 073502.	3.3	43
3	Hot-wire chemical vapor deposition of epitaxial film crystal silicon for photovoltaics. Thin Solid Films, 2011, 519, 4545-4550.	1.8	38
4	Light trapping by a dielectric nanoparticle back reflector in film silicon solar cells. Applied Physics Letters, 2011, 99, 064101.	3.3	34
5	Heteroepitaxial film crystal silicon on Al <sub>2</sub> O <sub>3</sub> : new route to inexpensive crystal silicon photovoltaics. Energy and Environmental Science, 2011, 4, 3346.	30.8	33
6	Amber-green light-emitting diodes using order-disorder Al <sub>x</sub> In <sub>1-x</sub> P heterostructures. Journal of Applied Physics, 2013, 114, .	2.5	30
7	Low-Cost CdTe/Silicon Tandem Solar Cells. IEEE Journal of Photovoltaics, 2017, 7, 1767-1772.	2.5	26
8	Mechanisms controlling the phase and dislocation density in epitaxial silicon films grown from silane below 800°C. Applied Physics Letters, 2010, 96, .	3.3	23
9	Simulated potential for enhanced performance of mechanically stacked hybrid III-V/Si tandem photovoltaic modules using DC-DC converters. Journal of Photonics for Energy, 2017, 7, 1.	1.3	12
10	Composition dependence of Schottky barrier heights and bandgap energies of Ga <sub>N</sub> As <sub>1-x</sub> synthesized by ion implantation and pulsed-laser melting. Journal of Applied Physics, 2008, 104, .	2.5	11
11	Epitaxial Dirac Semimetal Vertical Heterostructures for Advanced Device Architectures. Advanced Functional Materials, 2022, 32, .	14.9	11
12	Tailoring Heterovalent Interface Formation with Light. Scientific Reports, 2017, 7, 8516.	3.3	10
13	Effects of excess carriers on charged defect concentrations in wide bandgap semiconductors. Journal of Applied Physics, 2018, 123, .	2.5	7
14	On the bandgap of hydrogenated nanocrystalline silicon thin films. , 2010, , .		6
15	Dislocation-limited open circuit voltage in film crystal silicon solar cells. Applied Physics Letters, 2012, 101, 123510.	3.3	6
16	Demonstration of GaInP <sub>2</sub> /Si Voltage Matched Tandem Solar Cells. , 2017, , .		4
17	Controlling ZnSe/GaAs interface properties: The role of elemental exposure and photon irradiation during growth initiation. Journal of Applied Physics, 2018, 124, .	2.5	4
18	Spectroscopic determination of the bandgap crossover composition in MBE-grown Al <sub>x</sub> Ga <sub>1-x</sub> As. Japanese Journal of Applied Physics, 2015, 54, 042402.	1.5	4

#	ARTICLE	IF	CITATIONS
19	High Mobility Cd <sub>3</sub> As <sub>2</sub> (112) on GaAs(001) Substrates Grown via Molecular Beam Epitaxy. ACS Applied Electronic Materials, 2022, 4, 729-734.	4.3	4
20	Experimental demonstration of voltage-matched two-terminal tandem minimodules. Journal of Photonics for Energy, 2019, 8, 1.	1.3	3
21	Design and Demonstration of Al <sub>x</sub> In <sub>1-x</sub> P Multiple Quantum Well Light-Emitting Diodes. Journal Physics D: Applied Physics, 0, , .	2.8	2
22	Photovoltaic device characterization with optical second harmonic generation. , 2010, , .		1
23	Photovoltaic-quality silicon epitaxy by hot-wire CVD at glasscompatible temperatures. , 2009, , .		0
24	Epitaxial film silicon solar cells fabricated by hot wire chemical vapor deposition below 750&#x00B0;C. , 2009, , .		0
25	Quantitative order&#x00E6;parameter measurement in lattice&#x00E6;mismatched AlInP using precession electron diffraction. Journal of Microscopy, 2021, 284, 132-141.	1.8	0