

# Anna Marzegalli

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8669544/publications.pdf>

Version: 2024-02-01

32  
papers

562  
citations

758635

12  
h-index

642321

23  
g-index

33  
all docs

33  
docs citations

33  
times ranked

607  
citing authors

#	ARTICLE	IF	CITATIONS
1	Scaling Hetero-Epitaxy from Layers to Three-Dimensional Crystals. <i>Science</i> , 2012, 335, 1330-1334.	6.0	149
2	Unexpected Dominance of Vertical Dislocations in High-Misfit Ge/Si(001) Films and Their Elimination by Deep Substrate Patterning. <i>Advanced Materials</i> , 2013, 25, 4408-4412.	11.1	55
3	In-plane selective area InSb-Al nanowire quantum networks. <i>Communications Physics</i> , 2020, 3, .	2.0	37
4	New Approaches and Understandings in the Growth of Cubic Silicon Carbide. <i>Materials</i> , 2021, 14, 5348.	1.3	34
5	Temperature-Dependent Stability of Polytypes and Stacking Faults in $\text{SiC}$ . <i>Physical Review Applied</i> , 2019, 12, .	1.5	33
6	Photodetection in Hybrid Single-Layer Graphene/Fully Coherent Germanium Island Nanostructures Selectively Grown on Silicon Nanotip Patterns. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 2017-2026.	4.0	32
7	Perfect crystals grown from imperfect interfaces. <i>Scientific Reports</i> , 2013, 3, 2276.	1.6	31
8	Extended defects in 3C-SiC: Stacking faults, threading partial dislocations, and inverted domain boundaries. <i>Acta Materialia</i> , 2021, 213, 116915.	3.8	26
9	3D heteroepitaxy of mismatched semiconductors on silicon. <i>Thin Solid Films</i> , 2014, 557, 42-49.	0.8	18
10	Molecular dynamics simulations of extended defects and their evolution in 3C-SiC by different potentials. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2020, 28, 015002.	0.8	15
11	The origin and nature of killer defects in 3C-SiC for power electronic applications by a multiscale atomistic approach. <i>Journal of Materials Chemistry C</i> , 2020, 8, 8380-8392.	2.7	15
12	Onset of vertical threading dislocations in Si <sub>1-x</sub> Ge <sub>x</sub> /Si (001) at a critical Ge concentration. <i>APL Materials</i> , 2013, 1, .	2.2	14
13	3C-SiC Epitaxy on Deeply Patterned Si(111) Substrates. <i>Materials Science Forum</i> , 0, 858, 151-154.	0.3	11
14	Lattice tilt and strain mapped by X-ray scanning nanodiffraction in compositionally graded SiGe/Si microcrystals. <i>Journal of Applied Crystallography</i> , 2018, 51, 368-385.	1.9	11
15	Exceptional thermal strain reduction by a tilting pillar architecture: Suspended Ge layers on Si (001). <i>Materials and Design</i> , 2017, 116, 144-151.	3.3	9
16	Strain Engineering in Highly Mismatched SiGe/Si Heterostructures. <i>Materials Science in Semiconductor Processing</i> , 2017, 70, 117-122.	1.9	8
17	Misfit-Dislocation Distributions in Heteroepitaxy: From Mesoscale Measurements to Individual Defects and Back. <i>Physical Review Applied</i> , 2018, 10, .	1.5	8
18	Dynamics of crosshatch patterns in heteroepitaxy. <i>Physical Review B</i> , 2019, 100, .	1.1	8

#	ARTICLE	IF	CITATIONS
19	Structure and Stability of Partial Dislocation Complexes in 3C-SiC by Molecular Dynamics Simulations. Materials, 2019, 12, 3027.	1.3	7
20	Lattice bending in three-dimensional Ge microcrystals studied by X-ray nanodiffraction and modelling. Journal of Applied Crystallography, 2016, 49, 976-986.	1.9	6
21	Solving the critical thermal bowing in 3C-SiC/Si(111) by a tilting Si pillar architecture. Journal of Applied Physics, 2018, 123, 185703.	1.1	6
22	Burgers Vector Analysis of Vertical Dislocations in Ge Crystals by Large-Angle Convergent Beam Electron Diffraction. Microscopy and Microanalysis, 2015, 21, 637-645.	0.2	5
23	Nature and Shape of Stacking Faults in 3C-SiC by Molecular Dynamics Simulations. Physica Status Solidi (B): Basic Research, 2021, 258, 2000598.	0.7	5
24	Structure, interface abruptness and strain relaxation in self-assisted grown InAs/GaAs nanowires. Applied Surface Science, 2017, 395, 29-36.	3.1	4
25	Mechanism of stacking fault annihilation in 3C-SiC epitaxially grown on Si(001) by molecular dynamics simulations. CrystEngComm, 2021, 23, 1566-1571.	1.3	4
26	Atomic-scale insights on the formation of ordered arrays of edge dislocations in Ge/Si(001) films via molecular dynamics simulations. Scientific Reports, 2022, 12, 3235.	1.6	4
27	Strained MOSFETs on ordered SiGe dots. Solid-State Electronics, 2011, 65-66, 81-87.	0.8	2
28	Unexpected Dominance of Vertical Dislocations in High-Misfit Ge/Si(001) Films and Their Elimination by Deep Substrate Patterning (Adv. Mater. 32/2013). Advanced Materials, 2013, 25, 4407-4407.	11.1	2
29	Strained MOSFETs on ordered SiGe dots. , 2010, , .		1
30	Evolution and Intersection of Extended Defects and Stacking Faults in 3C-SiC Layers on Si (001) Substrates by Molecular Dynamics Simulations: The Forest Dislocation Case. Physica Status Solidi (B): Basic Research, 2022, 259, .	0.7	1
31	Impact of inversion domain boundaries on the electronic properties of 3C-SiC. Physica Status Solidi (B): Basic Research, 0, , .	0.7	1
32	Stress engineering of boron doped diamond thin films via micro-fabrication. APL Materials, 2021, 9, 061109.	2.2	0