

Lars Rebohle

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6255647/publications.pdf>

Version: 2024-02-01

44
papers

546
citations

687363

13
h-index

677142

22
g-index

53
all docs

53
docs citations

53
times ranked

684
citing authors

#	ARTICLE	IF	CITATIONS
1	Room-temperature short-wavelength infrared Si photodetector. Scientific Reports, 2017, 7, 43688.	3.3	79
2	A review of thermal processing in the subsecond range: semiconductors and beyond. Semiconductor Science and Technology, 2016, 31, 103001.	2.0	70
3	Ultra-doped n-type germanium thin films for sensing in the mid-infrared. Scientific Reports, 2016, 6, 27643.	3.3	64
4	Self-Driven Broadband Photodetectors Based on $\text{MoSe}_2/\text{FePS}_3$ van der Waals n^+p Type-II Heterostructures. ACS Applied Materials & Interfaces, 2022, 14, 11927-11936.	8.0	35
5	n-InAs Nanopyramids Fully Integrated into Silicon. Nano Letters, 2011, 11, 2814-2818.	9.1	23
6	Enhanced Trion Emission in Monolayer MoSe_2 by Constructing a Type-II Van Der Waals Heterostructure. Advanced Functional Materials, 2021, 31, 2104960.	14.9	21
7	Millisecond thermal processing using flash lamps for the advancement of thin layers and functional coatings. Surface and Coatings Technology, 2017, 314, 169-176.	4.8	20
8	Silicon-Based Intermediate-Band Infrared Photodetector Realized by Te Hyperdoping. Advanced Optical Materials, 2021, 9, 2001546.	7.3	19
9	On the insulator-to-metal transition in titanium-implanted silicon. Scientific Reports, 2018, 8, 4164.	3.3	17
10	Strain and Band-Gap Engineering in $\text{Ge}_x\text{Sn}_{1-x}$ Alloys via P Doping. ACS Applied Materials & Interfaces, 2018, 10, 11927-11936.	3.8	17
11	III-V semiconductor nanocrystal formation in silicon nanowires via liquid-phase epitaxy. Nano Research, 2014, 7, 1769-1776.	10.4	15
12	Blacklight sintering of ceramics. Materials Horizons, 2022, 9, 1717-1726.	12.2	15
13	Rare-Earth Implanted MOS Devices for Silicon Photonics. Springer Series in Materials Science, 2010, , .	0.6	14
14	Flash-Enhanced Atomic Layer Deposition: Basics, Opportunities, Review, and Principal Studies on the Flash-Enhanced Growth of Thin Films. ECS Journal of Solid State Science and Technology, 2015, 4, P277-P287.	1.8	13
15	III-V/Si on silicon-on-insulator platform for hybrid nanoelectronics. Journal of Applied Physics, 2014, 115, .	2.5	12
16	CMOS-Compatible Controlled Hyperdoping of Silicon Nanowires. Advanced Materials Interfaces, 2018, 5, 1800101.	3.7	11
17	Flash Lamp Annealing. Springer Series in Materials Science, 2019, , .	0.6	10
18	Phase Selection in MnSi Alloys by Fast Solid-State Reaction with Enhanced Skyrmion Stability. Advanced Functional Materials, 2021, 31, 2009723.	14.9	9

#	ARTICLE	IF	CITATIONS
19	Mid- and far-infrared localized surface plasmon resonances in chalcogen-hyperdoped silicon. <i>Nanoscale</i> , 2022, 14, 2826-2836.	5.6	9
20	Liquid phase epitaxy of binary III-V nanocrystals in thin Si layers triggered by ion implantation and flash lamp annealing. <i>Journal of Applied Physics</i> , 2015, 117, 175307.	2.5	7
21	Superconductivity in single-crystalline aluminum- and gallium-hyperdoped germanium. <i>Physical Review Materials</i> , 2019, 3, .	2.4	7
22	The formation of near surface SiGe layers with combined high-dose ion implantation and flash lamp annealing. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2011, 8, 960-963.	0.8	6
23	Formation of regularly arranged large grain silicon islands by using embedded micro mirrors in the flash crystallization of amorphous silicon. <i>Journal of Applied Physics</i> , 2014, 115, 034301.	2.5	5
24	III-V nanocrystal formation in ion-implanted Ge and Si via liquid phase epitaxy during short-time flash lamp annealing. <i>Materials Science in Semiconductor Processing</i> , 2016, 42, 166-169.	4.0	5
25	Electrical Characterization of Germanium Nanowires Using a Symmetric Hall Bar Configuration: Size and Shape Dependence. <i>Nanomaterials</i> , 2021, 11, 2917.	4.1	5
26	Controlled immobilization of His-tagged proteins for protein-ligand interaction experiments using Ni ²⁺ -NTA layer on glass surfaces. <i>Clinical Hemorheology and Microcirculation</i> , 2016, 61, 523-539.	1.7	4
27	Evaluation of Nanoparticle Inks on Flexible and Stretchable Substrates for Biocompatible Application. , 2018, , .		4
28	The Technology of Flash Lamp Annealing. <i>Springer Series in Materials Science</i> , 2019, , 15-70.	0.6	4
29	Dissolution of donor-vacancy clusters in heavily doped n-type germanium. <i>New Journal of Physics</i> , 2020, 22, 123036.	2.9	4
30	Controlled Silicidation of Silicon Nanowires Using Flash Lamp Annealing. <i>Langmuir</i> , 2021, , .	3.5	4
31	Formation of In _x Ga _{1-x} As nanocrystals in thin Si layers by ion implantation and flash lamp annealing. <i>New Journal of Physics</i> , 2017, 19, 063019.	2.9	3
32	Microstructure and charge trapping in ZrO ₂ - and Si ₃ N ₄ -based superlattice layer systems with Ge nanoparticles. <i>Thin Solid Films</i> , 2018, 645, 124-128.	1.8	3
33	Formation of Thin NiGe Films by Magnetron Sputtering and Flash Lamp Annealing. <i>Nanomaterials</i> , 2020, 10, 648.	4.1	3
34	Local Formation of InAs Nanocrystals in Si by Masked Ion Implantation and Flash Lamp Annealing. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2017, 14, 1700188.	0.8	3
35	B ₂₀ -MnSi films grown on Si(100) substrates with magnetic skyrmion signature. <i>Materials Today Physics</i> , 2021, 21, 100541.	6.0	2
36	Deposition of silicon oxide films on silicon using HelixJet - an atmospheric-pressure plasma jet process below 100°C. <i>Thin Solid Films</i> , 2022, 753, 139257.	1.8	2

#	ARTICLE	IF	CITATIONS
37	Evidence for self-organized formation of logarithmic spirals during explosive crystallization of amorphous Ge:Mn layers. Journal of Applied Physics, 2017, 121, 184901.	2.5	1
38	Visible photoluminescence from Ge ⁺ -ion-implanted SiO _x N _y annealed under hydrostatic pressure. , 2001, 4413, 237.		0
39	Fabrication and evaluation of efficient light emitters comprising nanocluster-rich SiO ₂ layers. , 2004, , .		0
40	<title>Nanocluster-rich silicon dioxide layers: electroluminescence and charge trapping</title>. , 2004, , .		0
41	Sensitization of the Blue-green Electroluminescence by Gadolinium Coupled to Si Nanocluster Embedded in a SiO ₂ Matrix. Medziagotyra, 2013, 19, .	0.2	0
42	Beyond Semiconductors. Springer Series in Materials Science, 2019, , 233-282.	0.6	0
43	Process Management. Springer Series in Materials Science, 2019, , 71-129.	0.6	0
44	Semiconductor Applications. Springer Series in Materials Science, 2019, , 131-232.	0.6	0