Martien den Hertog

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/7555084/publications.pdf

Version: 2024-02-01

72 papers	2,351 citations	218677 26 h-index	214800 47 g-index
75 all docs	75 docs citations	75 times ranked	3133 citing authors

#	Article	IF	Citations
1	Quantum cutting by cooperative energy transfer inYbxY1â^'xPO4:Tb3+. Physical Review B, 2005, 71, .	3.2	537
2	Room-Temperature Photodetection Dynamics of Single GaN Nanowires. Nano Letters, 2012, 12, 172-176.	9.1	139
3	Control of Gold Surface Diffusion on Si Nanowires. Nano Letters, 2008, 8, 1544-1550.	9.1	108
4	Odd electron diffraction patterns in silicon nanowires and silicon thin films explained by microtwins and nanotwins. Journal of Applied Crystallography, 2009, 42, 242-252.	4.5	88
5	Demonstration of a 2â€Ã—â€2 programmable phase plate for electrons. Ultramicroscopy, 2018, 190, 58-65.	1.9	80
6	Correlation of Polarity and Crystal Structure with Optoelectronic and Transport Properties of GaN/AlN/GaN Nanowire Sensors. Nano Letters, 2012, 12, 5691-5696.	9.1	73
7	Ultrafast Room Temperature Single-Photon Source from Nanowire-Quantum Dots. Nano Letters, 2012, 12, 2977-2981.	9.1	70
8	Effect of HCl on the doping and shape control of silicon nanowires. Nanotechnology, 2012, 23, 215702.	2.6	64
9	Mapping Active Dopants in Single Silicon Nanowires Using Off-Axis Electron Holography. Nano Letters, 2009, 9, 3837-3843.	9.1	63
10	Critical condition for growth of silicon nanowires. Journal of Applied Physics, 2007, 102, 094906.	2.5	55
11	UV Photosensing Characteristics of Nanowire-Based GaN/AlN Superlattices. Nano Letters, 2016, 16, 3260-3267.	9.1	53
12	The Importance of the Radial Growth in the Faceting of Silicon Nanowires. Nano Letters, 2010, 10, 2335-2341.	9.1	49
13	Attribution of the 3.45â€‰eV GaN nanowires luminescence to inversion domain boundaries. Applied Physics Letters, 2015, 107, .	3.3	48
14	Abrupt Schottky Junctions in Al/Ge Nanowire Heterostructures. Nano Letters, 2015, 15, 4783-4787.	9.1	47
15	Bias-Controlled Spectral Response in GaN/AlN Single-Nanowire Ultraviolet Photodetectors. Nano Letters, 2017, 17, 4231-4239.	9.1	45
16	The growth of small diameter silicon nanowires to nanotrees. Nanotechnology, 2008, 19, 125608.	2.6	42
17	Residual strain and piezoelectric effects in passivated GaAs/AlGaAs core-shell nanowires. Applied Physics Letters, 2013, 102, .	3.3	42
18	In Situ Transmission Electron Microscopy Analysis of Aluminumâ€“Germanium Nanowire Solid-State Reaction. Nano Letters, 2019, 19, 2897-2904.	9.1	39

#	Article	IF	Citations
19	Ge doping of GaN beyond the Mott transition. Journal Physics D: Applied Physics, 2016, 49, 445301.	2.8	36
20	Alloy inhomogeneity and carrier localization in AlGaN sections and AlGaN/AlN nanodisks in nanowires with 240â€“350â€‰nm emission. Applied Physics Letters, 2014, 105, .	3.3	34
21	Hidden defects in silicon nanowires. Nanotechnology, 2012, 23, 025701.	2.6	33
22	Near-Infrared Intersubband Photodetection in GaN/AlN Nanowires. Nano Letters, 2017, 17, 6954-6960.	9.1	33
23	Effect of Bias on the Response of GaN Axial pâ€“n Junction Single-Nanowire Photodetectors. Nano Letters, 2019, 19, 5506-5514.	9.1	31
24	Quantitative Reconstructions of 3D Chemical Nanostructures in Nanowires. Nano Letters, 2016, 16, 1637-1642.	9.1	30
25	Cathodoluminescence of stacking fault bound excitons for local probing of the exciton diffusion length in single GaN nanowires. Applied Physics Letters, 2014, 104, .	3.3	26
26	Structure and Morphology in Diffusion-Driven Growth of Nanowires: The Case of ZnTe. Nano Letters, 2014, 14, 1877-1883.	9.1	26
27	Effect of doping on the intersubband absorption in Si- and Ge-doped GaN/AlN heterostructures. Nanotechnology, 2017, 28, 405204.	2.6	24
28	Nanometer-Scale Ge-Based Adaptable Transistors Providing Programmable Negative Differential Resistance Enabling Multivalued Logic. ACS Nano, 2021, 15, 18135-18141.	14.6	24
29	Environmental sensitivity of n-i-n and undoped single GaN nanowire photodetectors. Applied Physics Letters, 2013, 102, .	3.3	21
30	Determination of the Optimal Shell Thickness for Self-Catalyzed GaAs/AlGaAs Coreâ€“Shell Nanowires on Silicon. Nano Letters, 2016, 16, 3426-3433.	9.1	21
31	Strong suppression of internal electric field in GaN/AlGaN multi-layer quantum dots in nanowires. Applied Physics Letters, 2011, 99, .	3.3	20
32	Optical properties of single ZnTe nanowires grown at low temperature. Applied Physics Letters, 2013, 103, .	3.3	20
33	Plasmon-Driven Hot Electron Transfer at Atomically Sharp Metalâ€“Semiconductor Nanojunctions. ACS Photonics, 2020, 7, 1642-1648.	6.6	18
34	Nanoscale aluminum plasmonic waveguide with monolithically integrated germanium detector. Applied Physics Letters, 2019, 115, .	3.3	17
35	The morphology of silicon nanowires grown in the presence of trimethylaluminium. Nanotechnology, 2009, 20, 245602.	2.6	16
36	Direct and co-catalytic oxidative aromatization of 1,4-dihydropyridines and related substrates using gold nanoparticles supported on carbon nanotubes. Catalysis Science and Technology, 2016, 6, 6476-6479.	4.1	16

#	Article	IF	Citations
37	Intersubband absorption in Siâ€•and Geâ€doped GaN/AlN heterostructures in selfâ€assembled nanowire and 2D layers. Physica Status Solidi (B): Basic Research, 2017, 254, 1600734.	1.5	16
38	Effect of the nanowire diameter on the linearity of the response of GaN-based heterostructured nanowire photodetectors. Nanotechnology, 2018, 29, 255204.	2.6	15
39	Monolithic Axial and Radial Metalâ€“Semiconductor Nanowire Heterostructures. Nano Letters, 2018, 18, 7692-7697.	9.1	15
40	Highly Transparent Contacts to the 1D Hole Gas in Ultrascaled Ge/Si Core/Shell Nanowires. ACS Nano, 2019, 13, 14145-14151.	14.6	15
41	Gateâ€Tunable Negative Differential Resistance in Nextâ€Generation Ge Nanodevices and their Performance Metrics. Advanced Electronic Materials, 2021, 7, 2001178.	5.1	14
42	Assessment of AlGaN/AlN superlattices on GaN nanowires as active region of electron-pumped ultraviolet sources. Nanotechnology, 2020, 31, 204001.	2.6	14
43	Fabrication of Well-Organized and Densely Packed Si Nanopillars Containing SiGe Nanodots by Using Block Copolymer Templates. Chemistry of Materials, 2008, 20, 6183-6188.	6.7	13
44	Diffusion-driven growth of nanowires by low-temperature molecular beam epitaxy. Journal of Applied Physics, 2016, 119, .	2.5	13
45	Single GaN-Based Nanowires for Photodetection and Sensing Applications. Japanese Journal of Applied Physics, 2013, 52, 11NG01.	1.5	12
46	In-Situ Transmission Electron Microscopy Imaging of Aluminum Diffusion in Germanium Nanowires for the Fabrication of Sub-10 nm Ge Quantum Disks. ACS Applied Nano Materials, 2020, 3, 1891-1899.	5.0	12
47	In situbiasing and off-axis electron holography of a ZnO nanowire. Nanotechnology, 2018, 29, 025710.	2.6	10
48	Tuning Electroluminescence from a Plasmonic Cavity-Coupled Silicon Light Source. Nano Letters, 2018, 18, 7230-7237.	9.1	10
49	Dislocation-free axial InAs-on-GaAs nanowires on silicon. Nanotechnology, 2017, 28, 365602.	2.6	9
50	In Situ Transmission Electron Microscopy Analysis of Copperâ€“Germanium Nanowire Solid-State Reaction. Nano Letters, 2019, 19, 8365-8371.	9.1	8
51	Correlated and in-situ electrical transmission electron microscopy studies and related membrane-chip fabrication. Nanotechnology, 2020, 31, 472001.	2.6	8
52	Growth of IIâ€“VI ZnSe/CdSe nanowires for quantum dot luminescence. Journal of Crystal Growth, 2013, 378, 233-237.	1.5	7
53	The role of surface diffusion in the growth mechanism of III-nitride nanowires and nanotubes. Nanotechnology, 2021, 32, 085606.	2.6	7
54	Silicon nanowires grown in nanoporous alumina matrices on oriented silicon substrates investigated by electron microscopy. Superlattices and Microstructures, 2008, 44, 354-361.	3.1	6

#	Article	IF	Citations
55	Highly uniform zinc blende GaAs nanowires on Si(111) using a controlled chemical oxide template. Nanotechnology, 2017, 28, 255602.	2.6	5
56	Intersubband absorption in GaN nanowire heterostructures at mid-infrared wavelengths. Nanotechnology, 2018, 29, 385201.	2.6	5
57	Alâ€“Geâ€“Al Nanowire Heterostructure: From Singleâ€Hole Quantum Dot to Josephson Effect. Advanced Materials, 2021, 33, e2101989.	21.0	5
58	Regulated Dynamics with Two Monolayer Steps in Vaporâ€“Solidâ€“Solid Growth of Nanowires. ACS Nano, 2022, 16, 4397-4407.	14.6	5
59	Off axis holography of doped and intrinsic silicon nanowires: Interpretation and influence of fields in the vacuum. Journal of Physics: Conference Series, 2010, 209, 012027.	0.4	4
60	Insertion of CdSe quantum dots in ZnSe nanowires: MBE growth and microstructure analysis. Journal of Crystal Growth, 2011, 323, 330-333.	1.5	4
61	Control of the incubation time in the vapor-solid-solid growth of semiconductor nanowires. Applied Physics Letters, 2017, 110, 263107.	3.3	4
62	Design of AlGaN/AlN Dotâ€inâ€aâ€Wire Heterostructures for Electronâ€Pumped UV Emitters. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900714.	1.8	4
63	Reversible Al Propagation in Si_xGe_{1â€“x} Nanowires: Implications for Electrical Contact Formation. ACS Applied Nano Materials, 2020, 3, 10427-10436.	5.0	4
64	Soluble Twoâ€Dimensional Covalent Organometallic Polymers by (Arene)Rutheniumâ€Sulfur Chemistry. Chemistry - A European Journal, 2017, 23, 10969-10973.	3.3	3
65	Correlated Electro-Optical and Structural Study of Electrically Tunable Nanowire Quantum Dot Emitters. Nano Letters, 2020, 20, 314-319.	9.1	3
66	Controlling the shape of a tapered nanowire: lessons from the Burton-Cabrera-Frank model. Nanotechnology, 2020, 31, 274004.	2.6	3
67	Stimulated Raman Scattering in Ge Nanowires. Journal of Physical Chemistry C, 2020, 124, 13872-13877.	3.1	3
68	Gold Catalyzed Silicon Nanowires: Defects in the Wires and Gold on the Wires. Springer Proceedings in Physics, 2008, , 217-220.	0.2	3
69	Probing the light hole/heavy hole switching with correlated magneto-optical spectroscopy and chemical analysis on a single quantum dot. Nanotechnology, 2019, 30, 175301.	2.6	2
70	The onset of tapering in the early stage of growth of a nanowire. Nanotechnology, 2022, 33, 255601.	2.6	2
71	Nano-sheets of two-dimensional polymers with dinuclear (arene)ruthenium nodes, synthesised at a liquid/liquid interface. Nanotechnology, 2021, 32, 355603.	2.6	0
72	Thermally propagated Al contacts on SiGe nanowires characterized by electron beam induced current in a scanning transmission electron microscope. Nanotechnology, 2022, 33, 035712.	2.6	0