# Martien den Hertog

List of Publications by Year
in descending order



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|---|---|---|---|
| 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 | 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 |
| 2 | Regulated Dynamics with Two Monolayer Steps in Vaporâ€“Solidâ€“Solid Growth of Nanowires. ACS Nano, 2022, 16, 4397-4407. | 14.6 | 5 |
| 3 | The onset of tapering in the early stage of growth of a nanowire. Nanotechnology, 2022, 33, 255601. | 2.6 | 2 |
| 4 | Nano-sheets of two-dimensional polymers with dinuclear (arene)ruthenium nodes, synthesised at a liquid/liquid interface. Nanotechnology, 2021, 32, 355603. | 2.6 | 0 |
| 5 | Alâ€“Geâ€“Al Nanowire Heterostructure: From Singleâ€Hole Quantum Dot to Josephson Effect. Advanced Materials, 2021, 33, e2101989. | 21.0 | 5 |
| 6 | Gateâ€Tunable Negative Differential Resistance in Nextâ€Generation Ge Nanodevices and their Performance Metrics. Advanced Electronic Materials, 2021, 7, 2001178. | 5.1 | 14 |
| 7 | The role of surface diffusion in the growth mechanism of III-nitride nanowires and nanotubes. Nanotechnology, 2021, 32, 085606. | 2.6 | 7 |
| 8 | Nanometer-Scale Ge-Based Adaptable Transistors Providing Programmable Negative Differential Resistance Enabling Multivalued Logic. ACS Nano, 2021, 15, 18135-18141. | 14.6 | 24 |
| 9 | 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 |
| 10 | Correlated Electro-Optical and Structural Study of Electrically Tunable Nanowire Quantum Dot Emitters. Nano Letters, 2020, 20, 314-319. | 9.1 | 3 |
| 11 | Reversible Al Propagation in Si<sub><i>x</i></sub>Ge<sub>1â€“<i>x</i></sub> Nanowires: Implications for Electrical Contact Formation. ACS Applied Nano Materials, 2020, 3, 10427-10436. | 5.0 | 4 |
| 12 | Controlling the shape of a tapered nanowire: lessons from the Burton-Cabrera-Frank model. Nanotechnology, 2020, 31, 274004. | 2.6 | 3 |
| 13 | Stimulated Raman Scattering in Ge Nanowires. Journal of Physical Chemistry C, 2020, 124, 13872-13877. | 3.1 | 3 |
| 14 | Plasmon-Driven Hot Electron Transfer at Atomically Sharp Metalâ€“Semiconductor Nanojunctions. ACS Photonics, 2020, 7, 1642-1648. | 6.6 | 18 |
| 15 | Correlated and in-situ electrical transmission electron microscopy studies and related membrane-chip fabrication. Nanotechnology, 2020, 31, 472001. | 2.6 | 8 |
| 16 | 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 |
| 17 | Assessment of AlGaN/AlN superlattices on GaN nanowires as active region of electron-pumped ultraviolet sources. Nanotechnology, 2020, 31, 204001. | 2.6 | 14 |
| 18 | Effect of Bias on the Response of GaN Axial pâ€“n Junction Single-Nanowire Photodetectors. Nano Letters, 2019, 19, 5506-5514. | 9.1 | 31 |

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| --- | --- | --- | --- |
| 19 | In Situ Transmission Electron Microscopy Analysis of Copperâ€"Germanium Nanowire Solid-State Reaction. Nano Letters, 2019, 19, 8365-8371. | 9.1 | 8 |
| 20 | Nanoscale aluminum plasmonic waveguide with monolithically integrated germanium detector. Applied Physics Letters, 2019, 115, . | 3.3 | 17 |
| 21 | 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 |
| 22 | In Situ Transmission Electron Microscopy Analysis of Aluminumâ€"Germanium Nanowire Solid-State Reaction. Nano Letters, 2019, 19, 2897-2904. | 9.1 | 39 |
| 23 | Highly Transparent Contacts to the 1D Hole Gas in Ultrascaled Ge/Si Core/Shell Nanowires. ACS Nano, 2019, 13, 14145-14151. | 14.6 | 15 |
| 24 | Demonstration of a 2â€¯Ã—â€¯2 programmable phase plate for electrons. Ultramicroscopy, 2018, 190, 58-65. | 1.9 | 80 |
| 25 | Effect of the nanowire diameter on the linearity of the response of GaN-based heterostructured nanowire photodetectors. Nanotechnology, 2018, 29, 255204. | 2.6 | 15 |
| 26 | <i>In situ</i>biasing and off-axis electron holography of a ZnO nanowire. Nanotechnology, 2018, 29, 025710. | 2.6 | 10 |
| 27 | Monolithic Axial and Radial Metalâ€"Semiconductor Nanowire Heterostructures. Nano Letters, 2018, 18, 7692-7697. | 9.1 | 15 |
| 28 | Tuning Electroluminescence from a Plasmonic Cavity-Coupled Silicon Light Source. Nano Letters, 2018, 18, 7230-7237. | 9.1 | 10 |
| 29 | Intersubband absorption in GaN nanowire heterostructures at mid-infrared wavelengths. Nanotechnology, 2018, 29, 385201. | 2.6 | 5 |
| 30 | Soluble Twoâ€Dimensional Covalent Organometallic Polymers by (Arene)Rutheniumâ€Sulfur Chemistry. Chemistry - A European Journal, 2017, 23, 10969-10973. | 3.3 | 3 |
| 31 | Bias-Controlled Spectral Response in GaN/AlN Single-Nanowire Ultraviolet Photodetectors. Nano Letters, 2017, 17, 4231-4239. | 9.1 | 45 |
| 32 | 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 |
| 33 | Near-Infrared Intersubband Photodetection in GaN/AlN Nanowires. Nano Letters, 2017, 17, 6954-6960. | 9.1 | 33 |
| 34 | Effect of doping on the intersubband absorption in Si- and Ge-doped GaN/AlN heterostructures. Nanotechnology, 2017, 28, 405204. | 2.6 | 24 |
| 35 | Control of the incubation time in the vapor-solid-solid growth of semiconductor nanowires. Applied Physics Letters, 2017, 110, 263107. | 3.3 | 4 |
| 36 | Dislocation-free axial InAs-on-GaAs nanowires on silicon. Nanotechnology, 2017, 28, 365602. | 2.6 | 9 |

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| --- | --- | --- | --- |
| 37 | Highly uniform zinc blende GaAs nanowires on Si(111) using a controlled chemical oxide template. Nanotechnology, 2017, 28, 255602. | 2.6 | 5 |
| 38 | Diffusion-driven growth of nanowires by low-temperature molecular beam epitaxy. Journal of Applied Physics, 2016, 119, . | 2.5 | 13 |
| 39 | Ge doping of GaN beyond the Mott transition. Journal Physics D: Applied Physics, 2016, 49, 445301. | 2.8 | 36 |
| 40 | 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 |
| 41 | UV Photosensing Characteristics of Nanowire-Based GaN/AlN Superlattices. Nano Letters, 2016, 16, 3260-3267. | 9.1 | 53 |
| 42 | 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 |
| 43 | Quantitative Reconstructions of 3D Chemical Nanostructures in Nanowires. Nano Letters, 2016, 16, 1637-1642. | 9.1 | 30 |
| 44 | Abrupt Schottky Junctions in Al/Ge Nanowire Heterostructures. Nano Letters, 2015, 15, 4783-4787. | 9.1 | 47 |
| 45 | Attribution of the 3.45â€‰eV GaN nanowires luminescence to inversion domain boundaries. Applied Physics Letters, 2015, 107, . | 3.3 | 48 |
| 46 | 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 |
| 47 | 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 |
| 48 | Structure and Morphology in Diffusion-Driven Growth of Nanowires: The Case of ZnTe. Nano Letters, 2014, 14, 1877-1883. | 9.1 | 26 |
| 49 | Residual strain and piezoelectric effects in passivated GaAs/AlGaAs core-shell nanowires. Applied Physics Letters, 2013, 102, . | 3.3 | 42 |
| 50 | Optical properties of single ZnTe nanowires grown at low temperature. Applied Physics Letters, 2013, 103, . | 3.3 | 20 |
| 51 | Growth of IIâ€“VI ZnSe/CdSe nanowires for quantum dot luminescence. Journal of Crystal Growth, 2013, 378, 233-237. | 1.5 | 7 |
| 52 | Environmental sensitivity of <i>n-i-n</i> and undoped single GaN nanowire photodetectors. Applied Physics Letters, 2013, 102, . | 3.3 | 21 |
| 53 | Single GaN-Based Nanowires for Photodetection and Sensing Applications. Japanese Journal of Applied Physics, 2013, 52, 11NG01. | 1.5 | 12 |
| 54 | Effect of HCl on the doping and shape control of silicon nanowires. Nanotechnology, 2012, 23, 215702. | 2.6 | 64 |

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|---|---|---|---|
| 55 | Room-Temperature Photodetection Dynamics of Single GaN Nanowires. Nano Letters, 2012, 12, 172-176. | 9.1 | 139 |
| 56 | 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 |
| 57 | Hidden defects in silicon nanowires. Nanotechnology, 2012, 23, 025701. | 2.6 | 33 |
| 58 | Ultrafast Room Temperature Single-Photon Source from Nanowire-Quantum Dots. Nano Letters, 2012, 12, 2977-2981. | 9.1 | 70 |
| 59 | Insertion of CdSe quantum dots in ZnSe nanowires: MBE growth and microstructure analysis. Journal of Crystal Growth, 2011, 323, 330-333. | 1.5 | 4 |
| 60 | Strong suppression of internal electric field in GaN/AlGaN multi-layer quantum dots in nanowires. Applied Physics Letters, 2011, 99, . | 3.3 | 20 |
| 61 | 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 |
| 62 | The Importance of the Radial Growth in the Faceting of Silicon Nanowires. Nano Letters, 2010, 10, 2335-2341. | 9.1 | 49 |
| 63 | The morphology of silicon nanowires grown in the presence of trimethylaluminium. Nanotechnology, 2009, 20, 245602. | 2.6 | 16 |
| 64 | 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 |
| 65 | Mapping Active Dopants in Single Silicon Nanowires Using Off-Axis Electron Holography. Nano Letters, 2009, 9, 3837-3843. | 9.1 | 63 |
| 66 | 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 |
| 67 | The growth of small diameter silicon nanowires to nanotrees. Nanotechnology, 2008, 19, 125608. | 2.6 | 42 |
| 68 | Control of Gold Surface Diffusion on Si Nanowires. Nano Letters, 2008, 8, 1544-1550. | 9.1 | 108 |
| 69 | 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 |
| 70 | Gold Catalyzed Silicon Nanowires: Defects in the Wires and Gold on the Wires. Springer Proceedings in Physics, 2008, , 217-220. | 0.2 | 3 |
| 71 | Critical condition for growth of silicon nanowires. Journal of Applied Physics, 2007, 102, 094906. | 2.5 | 55 |
| 72 | Quantum cutting by cooperative energy transfer inYbxY1â^'xPO4:Tb3+. Physical Review B, 2005, 71, . | 3.2 | 537 |