

Rob Maaskant

List of Publications by Year in descending order

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| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Fast Analysis of Large Antenna Arrays Using the Characteristic Basis Function Method and the Adaptive Cross Approximation Algorithm. IEEE Transactions on Antennas and Propagation, 2008, 56, 3440-3451. | 5.1 | 175 |
| 2 | Efficient Analysis of Large Aperiodic Antenna Arrays Using the Domain Green's Function Method. IEEE Transactions on Antennas and Propagation, 2014, 62, 1579-1588. | 5.1 | 44 |
| 3 | Design of Maximally Sparse Antenna Arrays in the Presence of Mutual Coupling. IEEE Antennas and Wireless Propagation Letters, 2015, 14, 159-162. | 4.0 | 40 |
| 4 | Synthesis of Maximally Sparse Arrays Using Compressive Sensing and Full-Wave Analysis for Global Earth Coverage Applications. IEEE Transactions on Antennas and Propagation, 2016, 64, 4872-4877. | 5.1 | 35 |
| 5 | A Wideband Contactless and Bondwire-Free MMIC to Waveguide Transition. IEEE Microwave and Wireless Components Letters, 2017, 27, 437-439. | 3.2 | 35 |
| 6 | Analysis of Large Microstrip-Fed Tapered Slot Antenna Arrays by Combining Electrodynamics and Quasi-Static Field Models. IEEE Transactions on Antennas and Propagation, 2011, 59, 1798-1807. | 5.1 | 30 |
| 7 | Efficient Prediction of Array Element Patterns Using Physics-Based Expansions and a Single Far-Field Measurement. IEEE Transactions on Antennas and Propagation, 2012, 60, 3614-3621. | 5.1 | 22 |
| 8 | High-Efficiency and Wideband Aperiodic Array of Uniformly Excited Slotted Waveguide Antennas Designed Through Compressive Sensing. IEEE Transactions on Antennas and Propagation, 2019, 67, 2992-2999. | 5.1 | 22 |
| 9 | A Directly Matched PA-Integrated K -Band Antenna for Efficient mm-Wave High-Power Generation. IEEE Antennas and Wireless Propagation Letters, 2019, 18, 2389-2393. | 4.0 | 17 |
| 10 | The CBFM-Enhanced Jacobi Method for Efficient Finite Antenna Array Analysis. IEEE Antennas and Wireless Propagation Letters, 2017, 16, 2700-2703. | 4.0 | 16 |
| 11 | A Dual-Fed PIFA Antenna Element With Nonsymmetric Impedance Matrix for High-Efficiency Doherty Transmitters: Integrated Design and OTA-Characterization. IEEE Transactions on Antennas and Propagation, 2020, 68, 21-32. | 5.1 | 14 |
| 12 | Multi-Panel Sparse Base Station Design With Physical Antenna Effects in Massive MU-MIMO. IEEE Transactions on Vehicular Technology, 2020, 69, 6500-6510. | 6.3 | 13 |
| 13 | Wideband mm-Wave Transition Between a Coupled Microstrip Line Array and SIW for High-Power Generation MMICs. IEEE Microwave and Wireless Components Letters, 2018, 28, 867-869. | 3.2 | 12 |
| 14 | Per-Antenna Power Distribution of a Zero-Forcing Beamformed ULA in Pure LOS MU-MIMO. IEEE Communications Letters, 2018, 22, 2515-2518. | 4.1 | 11 |
| 15 | Co-Design and Validation Approach for Beam-Steerable Phased Arrays of Active Antenna Elements With Integrated Power Amplifiers. IEEE Transactions on Antennas and Propagation, 2021, 69, 7497-7507. | 5.1 | 10 |
| 16 | A Cavity-Backed Patch Antenna With Distributed Multi-Port Feeding, Enabling Efficient Integration With Doherty Power Amplifier and Band-Pass Filter. IEEE Transactions on Antennas and Propagation, 2021, 69, 4412-4422. | 5.1 | 10 |
| 17 | A Ka-Band Active Integrated Antenna for 5G Applications: Initial Design Flow. , 2018, , . | | 9 |
| 18 | Sparse Automotive MIMO Radar for Super-Resolution Single Snapshot DOA Estimation With Mutual Coupling. IEEE Access, 2021, 9, 146822-146829. | 4.2 | 9 |

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|----|---|-----|-----------|
| 19 | A New Hybrid Chamber for Generating a Spectrum of Oblique Incident Plane Waves at the DUT. IEEE Transactions on Antennas and Propagation, 2021, 69, 6806-6815. | 5.1 | 8 |
| 20 | A mm-Wave Phased-Array Fed Torus Reflector Antenna With $\hat{\Delta}\pm 30\hat{\Delta}^\circ$ Scan Range for Massive-MIMO Base-Station Applications. IEEE Transactions on Antennas and Propagation, 2022, 70, 3398-3410. | 5.1 | 8 |
| 21 | Sparse Array Synthesis Including Mutual Coupling for MU-MIMO Average Capacity Maximization. IEEE Transactions on Antennas and Propagation, 2022, 70, 6617-6626. | 5.1 | 7 |
| 22 | Hybrid OTA Chamber for Multidirectional Testing of Wireless Devices: Plane Wave Spectrum Generator Design and Experimental Demonstration. IEEE Transactions on Antennas and Propagation, 2022, 70, 10974-10987. | 5.1 | 7 |
| 23 | Domain-Decomposition Approach to Krylov Subspace Iteration. IEEE Antennas and Wireless Propagation Letters, 2016, 15, 1414-1417. | 4.0 | 6 |
| 24 | Antenna Mutual Coupling Effects in Highly Integrated Transmitter Arrays. , 2020, , . | | 6 |
| 25 | Uniform Linear Arrays With Optimized Inter-Element Spacing for LOS Massive MIMO. IEEE Communications Letters, 2021, 25, 613-616. | 4.1 | 6 |
| 26 | Characterization and Performance of an Ultra-Wideband Wide-Coverage Multimode MIMO Antenna. IEEE Transactions on Antennas and Propagation, 2019, 67, 5812-5823. | 5.1 | 5 |
| 27 | A 1-D Steerable Beam Slotted Waveguide Antenna Employing Non-Conventional Aperiodic Array Architecture for mm-wave Line-Of-Sight MIMO. , 2019, , . | | 5 |
| 28 | Semi-Analytical Model of the Rician $\langle i \rangle K \langle i \rangle$ Factor. Radio Science, 2020, 55, e2020RS007099. | 1.6 | 5 |
| 29 | Fast Characterization of Mutually Coupled Array Antennas Using Isolated Antenna Far-Field Data. IEEE Transactions on Antennas and Propagation, 2021, 69, 206-218. | 5.1 | 5 |
| 30 | Comparison of CBFM-Enhanced Iterative Methods for MoM-Based Finite Antenna Array Analysis. IEEE Transactions on Antennas and Propagation, 2022, 70, 3538-3548. | 5.1 | 5 |
| 31 | mmWave Metal Bowtie Slot Array Element Integrating Power Amplifier MMIC via On-Chip Probe to Enhance Efficiency and Bandwidth. IEEE Transactions on Antennas and Propagation, 2022, 70, 8110-8121. | 5.1 | 5 |
| 32 | Element pattern prediction in mutually-coupled arrays through isolated antenna characterization. , 2017, , . | | 3 |
| 33 | An E-Band Silicon-IC-to-Waveguide Contactless Transition Incorporating a Low-Loss Spatial Power Combiner. , 2018, , . | | 3 |
| 34 | Aperiodic Switched Array for Line-of-Sight MIMO Backhauling. IEEE Antennas and Wireless Propagation Letters, 2018, 17, 1712-1716. | 4.0 | 3 |
| 35 | Effect of Antenna Array Element Separation on Capacity of MIMO Systems Including Mutual Coupling. , 2019, , . | | 3 |
| 36 | Silicon-Based IC-Waveguide Integration for Compact and High-Efficiency mm-Wave Spatial Power Combiners. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2021, 11, 1115-1121. | 2.5 | 3 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | Toward wide-band low-loss gap-waveguide-integrated grid amplifiers. , 2017, , . | | 2 |
| 38 | Efficient Millimeter-Wave High Power Generation with Spatial Power-Combined Feeding Element. , 2018, , . | | 2 |
| 39 | A Wideband and Low-Loss Spatial Power Combining Module for mm-Wave High-Power Amplifiers. IEEE Access, 2020, 8, 194858-194867. | 4.2 | 2 |
| 40 | Performance Analysis of an Integrated Multi-Channel Power Amplifier Incorporating an IC-to-Waveguide Transition. , 2021, , . | | 2 |
| 41 | On The Outage Performance Of Line-Of-Sight Massive MIMO with a Fixed-Length Uniform Linear Sparse Array. , 2019, , . | | 1 |
| 42 | Performance Comparison of Silicon Substrates for IC-Waveguide Integration based on a Contactless Transition at mm-Wave frequencies. , 2019, , . | | 1 |
| 43 | Array Configuration Effect on the Spatial Correlation of MU-MIMO Channels in NLoS Environments. , 2020, , . | | 1 |
| 44 | High Power mm-Wave Spatial Power Combiner Employing On-Chip Isolation Resistors. , 2020, , . | | 1 |
| 45 | Cell Partitioning Antenna System Performance in Multi-User Scenarios for mmWave Communications. IEEE Access, 2021, 9, 127141-127149. | 4.2 | 1 |
| 46 | Aperiodic isophoric slotted waveguide antenna for point-to-point communications at Ka-band. , 2017, , . | | 0 |
| 47 | Accelerating the CBFM-enhanced jacobi method. , 2017, , . | | 0 |
| 48 | Capacity Gains of $(3 \times 3) \times (3 \times 3)$ MIMO Fixed Links with Planar Aperiodic Sparse Arrays in Pure-LOS Channels. , 2018, , . | | 0 |
| 49 | N-Way Spatial Power Combining in SIW for High Power Generation MMICs – Scalability Bounds. , 2019, , . | | 0 |
| 50 | Characterization and Calibration of the Hybrid OTA Chamber Using a Field Scanner. , 2022, , . | | 0 |
| 51 | The Hybrid Chamber for OTA measurements: Plane Wave Spectrum Quality Vs. Dynamic Range Trade-off. , 2022, , . | | 0 |