

# Adrianus Bernardus Smolders

## List of Publications by Year in descending order

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78  
papers

826  
citations

567281

15  
h-index

526287

27  
g-index

78  
all docs

78  
docs citations

78  
times ranked

826  
citing authors

#	ARTICLE	IF	CITATIONS
1	A Shared Aperture Dual-Frequency Circularly Polarized Microstrip Array Antenna. IEEE Antennas and Wireless Propagation Letters, 2013, 12, 120-123.	4.0	71
2	A Novel 60 GHz Wideband Coupled Half-Mode/Quarter-Mode Substrate Integrated Waveguide Antenna. IEEE Transactions on Antennas and Propagation, 2017, 65, 6915-6926.	5.1	65
3	The Influence of the Probe Connection on mm-Wave Antenna Measurements. IEEE Transactions on Antennas and Propagation, 2015, 63, 3819-3825.	5.1	49
4	A High-Gain Dielectric Resonator Antenna With Plastic-Based Conical Horn for Millimeter-Wave Applications. IEEE Antennas and Wireless Propagation Letters, 2020, 19, 949-953.	4.0	48
5	5G RAN architecture based on analog radio-over-fiber fronthaul over UDWDM-PON and phased array fed reflector antennas. Optics Communications, 2020, 454, 124464.	2.1	39
6	Wireless Receiver Architectures Towards 5G: Where Are We?. IEEE Circuits and Systems Magazine, 2017, 17, 6-16.	2.3	34
7	Optimized rectenna design. Wireless Power Transfer, 2015, 2, 44-50.	1.1	33
8	On-Chip Antenna Integration for Millimeter-Wave Single-Chip FMCW Radar, Providing High Efficiency and Isolation. IEEE Transactions on Antennas and Propagation, 2016, 64, 3281-3291.	5.1	33
9	A Review of Antenna Array Technologies for Point-to-Point and Point-to-Multipoint Wireless Communications at Millimeter-Wave Frequencies. International Journal of Antennas and Propagation, 2021, 2021, 1-18.	1.2	33
10	A Tunable Si <sub>3</sub> N <sub>4</sub> Integrated True Time Delay Circuit for Optically-Controlled K-Band Radio Beamformer in Satellite Communication. Journal of Lightwave Technology, 2016, 34, 4736-4743.	4.6	32
11	Miniaturization of Robust UHF RFID Antennas for Use on Perishable Goods and Human Bodies. IEEE Antennas and Wireless Propagation Letters, 2014, 13, 1321-1324.	4.0	26
12	Building 5G Millimeter-Wave Wireless Infrastructure: Wide-Scan Focal-Plane Arrays With Broadband Optical Beamforming. IEEE Antennas and Propagation Magazine, 2019, 61, 53-62.	1.4	25
13	A Review of Design and Integration Technologies for D-Band Antennas. IEEE Open Journal of Antennas and Propagation, 2021, 2, 746-758.	3.7	24
14	High-Isolation Array Antenna Integration for Single-Chip Millimeter-Wave FMCW Radar. IEEE Transactions on Antennas and Propagation, 2018, 66, 5214-5223.	5.1	19
15	Improved Statistical Model on the Effect of Random Errors in the Phase and Amplitude of Element Excitations on the Array Radiation Pattern. IEEE Transactions on Antennas and Propagation, 2018, 66, 2309-2317.	5.1	18
16	Broadband Material Characterization Method Using a CPW With a Novel Calibration Technique. IEEE Antennas and Wireless Propagation Letters, 2016, 15, 1763-1766.	4.0	15
17	A New Design Method for Frequency- Reconfigurable Antennas Using Multiple Tuning Components. IEEE Transactions on Antennas and Propagation, 2019, 67, 7285-7295.	5.1	15
18	On the Yield of Millimeter-Wave Bond-Wire-Antennas in High Volume Production. IEEE Transactions on Antennas and Propagation, 2013, 61, 4363-4366.	5.1	14

#	ARTICLE	IF	CITATIONS
19	A Millimeter-Wave Tunable Hybrid-Transformer-Based Circular Polarization Duplexer With Sequentially-Rotated Antennas. IEEE Transactions on Microwave Theory and Techniques, 2016, 64, 166-177.	4.6	14
20	Reflector Synthesis for Wide-Scanning Focal Plane Arrays. IEEE Transactions on Antennas and Propagation, 2019, 67, 2305-2319.	5.1	14
21	A Hybrid Integration Strategy for Compact, Broadband, and Highly Efficient Millimeter-Wave On-Chip Antennas. IEEE Antennas and Wireless Propagation Letters, 2019, 18, 2424-2428.	4.0	13
22	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
23	On-Chip Metal Tiling for Improving Grounded mm-Wave Antenna-on-Chip Performance in Standard Low-Cost Packaging. IEEE Transactions on Antennas and Propagation, 2020, 68, 2638-2645.	5.1	12
24	A Design Framework for Beamforming Integrated Circuits Operating at Mm-Wave Frequencies. IEEE Access, 2021, 9, 62232-62240.	4.2	12
25	Frequency Reconfigurable Antenna Controlled by Multi-Reed Switches. IEEE Antennas and Wireless Propagation Letters, 2015, 14, 927-930.	4.0	11
26	Improved Probing Reliability in Antenna-on-Chip Measurements. IEEE Antennas and Wireless Propagation Letters, 2018, 17, 1745-1749.	4.0	10
27	Design of Overlapped Subarrays Based on Aperture Reactive Loading. IEEE Transactions on Antennas and Propagation, 2020, 68, 5322-5333.	5.1	8
28	A mm-Wave Phased-Array Fed Torus Reflector Antenna With $\hat{\pm}30\hat{\circ}$ Scan Range for Massive-MIMO Base-Station Applications. IEEE Transactions on Antennas and Propagation, 2022, 70, 3398-3410.	5.1	8
29	Increasing the EIRP by using FPA-fed reflector antennas. , 2016, , .		7
30	5G Millimeter-Wave NLOS Coverage Using Specular Building Reflections. , 2020, , .		7
31	Uncertainty in Reverberation-Chamber Antenna-Efficiency Measurements in the Presence of a Phantom. IEEE Transactions on Antennas and Propagation, 2020, 68, 4904-4915.	5.1	7
32	The Effect of Noise on Reverberation-Chamber Measurements of Antenna Efficiency. IEEE Transactions on Antennas and Propagation, 2021, 69, 8744-8752.	5.1	7
33	Accurate Gain Measurement Technique for Limited Antenna Separations. IEEE Transactions on Antennas and Propagation, 2021, 69, 6772-6782.	5.1	7
34	Wide-angle scanning reflector configuration for focal plane arrays. , 2016, , .		6
35	Integrated antenna concept for millimeter-wave front-end modules in proven technologies. , 2012, , .		5
36	Focal plane array with a Ka-band Silicon transmitter on chip for VSAT applications. , 2014, , .		5

#	ARTICLE	IF	CITATIONS
37	High-Gain Lens-Horn Antennas for Energy-Efficient 5G Millimeter-Wave Communication Infrastructure. IEEE Transactions on Antennas and Propagation, 2022, 70, 3183-3194.	5.1	5
38	Ultra-high data-rate wireless transfer in a saturated spectrum &#x2014; new paradigms. , 2014, , .		4
39	Extreme Scanning Double Shaped-Reflector Antenna With Multiple Interactions for Focal Plane Array Applications. IEEE Transactions on Antennas and Propagation, 2020, 68, 5686-5690.	5.1	4
40	A Design Concept of Power Efficient, High Gain Antenna System for mm-Waves Base Stations. , 2021, , .		4
41	Study of stacked microstrip phased arrays. Microwave and Optical Technology Letters, 1993, 6, 466-471.	1.4	3
42	An Active Ka-Band Shared-Aperture Antenna With 50 dB Isolation for Satellite Communication. IEEE Antennas and Wireless Propagation Letters, 2017, 16, 2042-2045.	4.0	3
43	Damper-to-damper path loss characterization for Intra-Vehicular Wireless Sensor Networks. , 2017, , .		3
44	High-Gain Planar Array of Reactively Loaded Antennas for Limited Scan Range Applications. Electronics (Switzerland), 2020, 9, 1376.	3.1	3
45	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
46	Wide-Scan Focal Plane Arrays for mmWave Point-to-Multipoint Communications. IEEE Open Journal of Antennas and Propagation, 2022, 3, 112-123.	3.7	3
47	FORMAT: A Reconfigurable Tile-Based Antenna Array System for 5G and 6G Millimeter-Wave Testbeds. IEEE Systems Journal, 2022, 16, 4489-4500.	4.6	3
48	ON THE USE OF METAL GRATINGS TO REDUCE DIFFRACTION FROM A FINITE GROUND PLANE IN CIRCULARLY-POLARIZED MICROSTRIP ARRAYS. Progress in Electromagnetics Research Letters, 2013, 42, 65-78.	0.7	2
49	Wideband focal plane connected array. , 2016, , .		2
50	Reactively loaded arrays based on overlapping sub-arrays with flat-top radiation pattern. , 2017, , .		2
51	Benchmarking a High-End Smartphoneâ€™s Antenna Efficiencies. IEEE Access, 2019, 7, 105680-105686.	4.2	2
52	Statistical Analysis Applied to Simulating and Measuring Circularly-Polarized Millimeter-Wave Antennas [Measurements Corner]. IEEE Antennas and Propagation Magazine, 2019, 61, 98-138.	1.4	2
53	Guest Editorial Antenna-in-Package, Antenna-on-Chip, Antenna-IC Interface: Joint Design and Cointegration. IEEE Antennas and Wireless Propagation Letters, 2019, 18, 2345-2350.	4.0	2
54	Verification of a Contactless Characterization Method for Millimeter-Wave Integrated Antennas. IEEE Transactions on Antennas and Propagation, 2020, 68, 3358-3365.	5.1	2

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55	Planar Reactively Loaded Array Antenna With Flat-Top Radiation Pattern Characteristics. , 2020, , .		2
56	Air-filled Substrate-Integrated Waveguide Technology for Broadband and Highly-Efficient Photonic-Enabled Antenna Systems. , 2020, , .		2
57	A 60-GHz rectenna for monolithic wireless sensor tags. , 2013, , .		1
58	On the Adequacy of the Far-Field Conditions for Pulsed Radiated EM Fields. IEEE Antennas and Wireless Propagation Letters, 2015, 14, 1561-1564.	4.0	1
59	How tough are the front-end requirements for 4G-and-beyond handsets?. , 2017, , .		1
60	On the Phase-Error Tolerance of Virtual Antenna Arrays in MIMO Radars. , 2019, , .		1
61	Performance Comparison of Silicon Substrates for IC-Waveguide Integration based on a Contactless Transition at mm-Wave frequencies. , 2019, , .		1
62	Scan Properties of Slot-Fed Dielectric Resonator Antenna Arrays for 5G Wireless Communications. , 2019, , .		1
63	Cell Partitioning Antenna System Performance in Multi-User Scenarios for mmWave Communications. IEEE Access, 2021, 9, 127141-127149.	4.2	1
64	Sparse virtual array synthesis for MIMO radar imaging systems. IET Microwaves, Antennas and Propagation, 2021, 15, 1458-1472.	1.4	1
65	Accelerating simulations of electromagnetic waves in hot, magnetized fusion plasmas. Plasma Physics and Controlled Fusion, 2021, 63, 035014.	2.1	1
66	Wavelength-dependent continuous delay based on a $3 \times 4$ optical ring resonator for k-band radio beamformer. , 2016, , .		1
67	Outspacing Planar Phased Arrays for Wireless Communications Infrastructure. International Journal of Antennas and Propagation, 2022, 2022, 1-11.	1.2	1
68	Active Adaptive Arrays: The Astron Approach to SKA. International Astronomical Union Colloquium, 2001, 182, 209-212.	0.1	0
69	Micromachined microwave cavity resonator filters for 5G: A feasibility study. , 2015, , .		0
70	Analysis of the polarization properties of dual polarized inverted vee dipole antennas over a ground plane. , 2016, , .		0
71	Correction to "Closed-Form Jones Matrix of Dual-Polarized Inverted-Vee Dipole Antennas over Lossy Ground" [Jan 17 26-35]. IEEE Transactions on Antennas and Propagation, 2017, 65, 6198-6198.	5.1	0
72	Damper-to-damper path loss characterization for intra-vehicular wireless sensor networks. , 2017, , .		0

#	ARTICLE	IF	CITATIONS
73	Recent Progress on the Design of Aperture Arrays for Radio Astronomy. , 2018, , .		0
74	High-Gain Flat-Top Antenna Sub-Arrays for Planar Arrays with Limited Field of View. , 2020, , .		0
75	Corrections to "Design of Overlapped Sub-Arrays Based on Aperture Reactive Loading" IEEE Transactions on Antennas and Propagation, 2021, 69, 3629-3629.	5.1	0
76	Frequency Interpolation of LOFAR Embedded Element Patterns Using Spherical Wave Expansion. International Journal of Antennas and Propagation, 2021, 2021, 1-13.	1.2	0
77	Cost-effective millimeter-wave measurement setup for narrowband path loss and angle-of-arrival measurements: uncertainty analysis and specular building reflection measurements. International Journal of Microwave and Wireless Technologies, 0, , 1-10.	1.9	0
78	A System-Performance-Based Comparison of Sparse Regular and Irregular Antenna Arrays for Millimeter-Wave Multi-User MIMO Base Stations. Electronics (Switzerland), 2022, 11, 335.	3.1	0