

# Yuanxun Ethan Wang

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/1220410/yuanxun-ethan-wang-publications-by-year.pdf>

**Version:** 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

125  
papers

1,549  
citations

18  
h-index

34  
g-index

177  
ext. papers

2,102  
ext. citations

3.4  
avg, IF

4.93  
L-index

#	Paper	IF	Citations
125	Radio Frequency Precession Modulation Based Magnetic Field Sensors. <i>IEEE Access</i> , <b>2022</b> , 1-1	3.5	
124	Sub-6 GHz High FOM Liquid Crystal Phase Shifter for Phased Array Antenna. <i>IEEE Journal of Microwaves</i> , <b>2022</b> , 2, 316-325		1
123	Enhanced Planar Antenna Efficiency Through Magnetic Thin-Films. <i>IEEE Journal on Multiscale and Multiphysics Computational Techniques</i> , <b>2021</b> , 1-1	1.5	1
122	Parametric Downconverter for Mixer-First Receiver Front Ends. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>2021</b> , 69, 2712-2721	4.1	1
121	Non-degenerate parametric mixing and Q-enhancement in ALN Lamb wave resonator. <i>Applied Physics Letters</i> , <b>2021</b> , 118, 254101	3.4	0
120	Ferromagnetic Resonance Enhanced Electrically Small Antennas. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2021</b> , 1-1	4.9	2
119	Efficient ULF Transmission Utilizing Stacked Magnetic Pendulum Array (MPA). <i>IEEE Transactions on Antennas and Propagation</i> , <b>2021</b> , 1-1	4.9	4
118	. <i>IEEE Sensors Journal</i> , <b>2021</b> , 21, 18075-18084	4	1
117	Parametrically enhanced bandpass filters. <i>IET Microwaves, Antennas and Propagation</i> , <b>2021</b> , 15, 229-240	1.6	1
116	Enhancing the soft magnetic properties of FeGa with a non-magnetic underlayer for microwave applications. <i>Applied Physics Letters</i> , <b>2020</b> , 116, 222404	3.4	6
115	Underlayer effect on the soft magnetic, high frequency, and magnetostrictive properties of FeGa thin films. <i>Journal of Applied Physics</i> , <b>2020</b> , 128, 013903	2.5	6
114	Additive Manufacturing with Strontium Hexaferrite-Photoresist Composite. <i>IEEE Transactions on Magnetics</i> , <b>2020</b> , 1-1	2	5
113	. <i>IEEE Journal on Multiscale and Multiphysics Computational Techniques</i> , <b>2020</b> , 5, 5-18	1.5	11
112	. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2020</b> , 68, 3145-3153	4.9	1
111	. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>2020</b> , 68, 4479-4490	4.1	3
110	Lamb Wave Resonator Loaded Non-reciprocal RF Devices <b>2020</b> ,		1
109	High Efficiency Bandwidth VHF Electrically Small Antennas Through Direct Antenna Modulation. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>2020</b> , 68, 5029-5041	4.1	4

108	Frequency conversion through nonlinear mixing in acoustic waves. <i>Journal of Applied Physics</i> , <b>2020</b> , 128, 064105	2.5	4
107	Toward a Spectrally Efficient FSK Direct Antenna Modulation. <i>IEEE Access</i> , <b>2020</b> , 8, 199462-199469	3.5	0
106	High Efficiency Bandwidth Electrically Small Antennas for Compact Wireless Communication Systems <b>2019</b> ,		4
105	3D Finite-Difference Time-Domain (FDTD) Modeling of Nonlinear RF Thin Film Magnetic Devices <b>2019</b> ,		1
104	Magnetic Pendulum Arrays for Efficient ULF Transmission. <i>Scientific Reports</i> , <b>2019</b> , 9, 13220	4.9	9
103	Monolithically Integrated Parametric Mixers with Time-varying Transmission Lines (TVTL) <b>2019</b> ,		1
102	Design and Analysis of a 94-GHz CMOS Down-Conversion Mixer With CCPT-RL-Based IF Load. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , <b>2019</b> , 66, 3148-3161	3.9	12
101	Coupling Electromagnetic Waves to Spin Waves: A Physics-Based Nonlinear Circuit Model for Frequency-Selective Limiters. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>2019</b> , 67, 3221-3229	4.1	14
100	Adaptive Communications with Swarm Aperture <b>2019</b> ,		3
99	Adaptive Equalization Super-Resolution Time Delay Estimation with High Accuracy and Low Complexity <b>2019</b> ,		1
98	Enabling High Efficiency Bandwidth Electrically Small Antennas through Direct Antenna Modulation <b>2019</b> ,		4
97	Experimental demonstration and operating principles of a multiferroic antenna. <i>Journal of Applied Physics</i> , <b>2019</b> , 126, 224104	2.5	9
96	Full-Duplex RF Front Ends : From Antennas and Circulators to Leakage Cancellation. <i>IEEE Microwave Magazine</i> , <b>2019</b> , 20, 44-55	1.2	16
95	Millimeter-wave to microwave MIMO relays (M4R) for 5G building penetration communications <b>2018</b> ,		6
94	Indented Antenna Arrays for High Isolation: The Growing Interest in Simultaneous-Transmit-and-Receive-Based Full-Duplex Communication Systems. <i>IEEE Antennas and Propagation Magazine</i> , <b>2018</b> , 60, 72-80	1.7	3
93	\$X\$ -band DCDC Power Converter for High-Speed Bit-Stream Modulation. <i>IEEE Microwave and Wireless Components Letters</i> , <b>2018</b> , 28, 46-48	2.6	
92	Directly modulated spinning magnet arrays for ULF communications <b>2018</b> ,		10
91	Integrated time-varying electromagnetic devices for ultra-wide band nonreciprocity <b>2018</b> ,		8

90	On Time-Modulation-Enabled Nonreciprocity. <i>IEEE Antennas and Wireless Propagation Letters</i> , <b>2018</b> , 17, 1973-1977	3.8	3
89	. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>2018</b> , 66, 2683-2696	4.1	12
88	Magnetic Pendulum Arrays for ULF Transmission <b>2018</b> ,		5
87	Multipath Mitigation Using Weight Suppression for Equalization in Indoor Positioning Systems <b>2018</b> ,		2
86	High Bandwidth Electrically Small Antennas Through BFSK Direct Antenna Modulation <b>2018</b> ,		1
85	Multiphysics Time-Domain Modeling of Nonlinear Permeability in Thin-film Magnetic Material <b>2018</b> ,		1
84	Ultra-Wide Band Non-reciprocity through Sequentially-Switched Delay Lines. <i>Scientific Reports</i> , <b>2017</b> , 7, 40014	4.9	52
83	Active Noise Filtering for $S$ -Band GaN Transmitters With Bitstream Modulations. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>2017</b> , 65, 1372-1380	4.1	1
82	Frequency translational RF receiver with time varying transmission lines (TVTL) <b>2017</b> ,		4
81	Frequency shift keying for direct antenna modulation (DAM) with electrically small antenna <b>2017</b> ,		3
80	Tunable RF bandpass filter for interference suppression in software defined radios <b>2017</b> ,		3
79	Going beyond Chu harrington limit: ULF radiation with a spinning magnet array <b>2017</b> ,		10
78	A nonreciprocal, frequency-tunable notch amplifier based on Distributedly Modulated Capacitors (DMC) <b>2016</b> ,		3
77	Broadband Parametric Circulator with Balanced Monolithic Integrated Distributedly Modulated Capacitors (DMC) <b>2016</b> ,		19
76	An $S$ -Band Pulsed Load Modulation Transmitter With Multilevel Envelope DeltaSigma Modulations. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>2016</b> , 64, 3643-3653	4.1	3
75	3D ADI-FDTD modeling of platform reduction with thin film ferromagnetic material <b>2016</b> ,		9
74	Bulk Acoustic Wave-Mediated Multiferroic Antennas: Architecture and Performance Bound. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2015</b> , 63, 3335-3344	4.9	73
73	A pulsed load modulation (PLM) power amplifier with 3-level envelope delta-sigma modulation (EDSM) <b>2015</b> ,		2

72	FDTD analysis of platform effect reduction with thin film ferrite <b>2015,</b>		1
71	Transmit-receive (T/R) isolation enhancement with an indented antenna array <b>2015,</b>		4
70	Indented antenna array for full-duplex repeater <b>2015,</b>		1
69	Indented quasi-Yagi antenna array for high-isolation full-duplex radios <b>2015,</b>		2
68	Direct Antenna Modulation (DAM) for Enhanced Capacity Performance of Near-Field Communication (NFC) Link. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , <b>2014</b> , 61, 902-910 <sup>3-9</sup>		18
67	Nonreciprocal Components With Distributedly Modulated Capacitors. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>2014</b> , 62, 2260-2272	4-1	143
66	Time-varying transmission lines (TVTL) - A new pathway to non-reciprocal and intelligent RF front-ends <b>2014,</b>		8
65	A modified QPSK modulation technique for direct antenna modulation (DAM) systems <b>2014,</b>		8
64	Parametric conversion with distributedly modulated capacitors (DMC) for low-noise and non-reciprocal RF front-ends <b>2013,</b>		12
63	Link Budget and Capacity Performance of Inductively Coupled Resonant Loops. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2012</b> , 60, 2453-2461	4-9	49
62	Direct Antenna Modulation scheme for enhanced capacity performance of near-field communication link <b>2012,</b>		3
61	Analysis and experimental results for an inductively coupled near-field power transmission system <b>2012,</b>		1
60	Impact of receiver coil misalignment on near-field communication system performance <b>2012,</b>		1
59	A direct antenna modulation (DAM) transmitter with a switched electrically small antenna <b>2010,</b>		17
58	High Efficiency WCDMA Power Amplifier With Pulsed Load Modulation (PLM). <i>IEEE Journal of Solid-State Circuits</i> , <b>2010</b> , 45, 2030-2037	5-5	18
57	A high efficiency WCDMA power amplifier with Pulsed Load Modulation (PLM) <b>2010,</b>		4
56	A Pulsed Load Modulation (PLM) Power Amplifier with 0.35 $\mu$ m pHEMT Technology <b>2009,</b>		1
55	Dual-band isotropic radiation patterns from a printed electrically small loop-loaded dipole antenna. <i>Digest / IEEE Antennas and Propagation Society International Symposium</i> , <b>2009,</b>		2

54	Two-Dimensional Planar Array for Digital Beamforming and Direction-of-Arrival Estimations. <i>IEEE Transactions on Vehicular Technology</i> , <b>2009</b> , 58, 3137-3144	6.8	5
53	The folded dipole perspective of electrical small spherical helix antennas <b>2008</b> ,		1
52	Mode-Based Information Channels in Closely Coupled Dipole Pairs. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2008</b> , 56, 3804-3811	4.9	34
51	Pulsed Load Modulation (PLM) Technique for Efficient Power Amplification. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , <b>2008</b> , 55, 1011-1015	3.5	13
50	Capacity performance of an inductively coupled near field communication system <b>2008</b> ,		42
49	A "Zoom-in" Scanning Array for Wireless Communications <b>2007</b> ,		4
48	A planar multipolar antenna for MIMO applications <b>2007</b> ,		6
47	A Polar Delta-Sigma Modulation (PDSM) Scheme for High Efficiency Wireless Transmitters. <i>IEEE MTT-S International Microwave Symposium Digest IEEE MTT-S International Microwave Symposium</i> , <b>2007</b> ,		13
46	Wideband Pulse Transmission from Switched Electrically Small Antennas <b>2007</b> ,		4
45	On the limit of wireless communication capacity from polarization diversity <b>2006</b> ,		1
44	Theory of Switched RF Resonators. <i>IEEE Transactions on Circuits and Systems Part 1: Regular Papers</i> , <b>2006</b> , 53, 2521-2528		41
43	A $\text{\$Ka}$ -Band FMCW Radar Front-End With Adaptive Leakage Cancellation. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>2006</b> , 54, 4041-4048	4.1	99
42	A UWB Pulse Transmission Scheme - Switched Resonant Antenna <b>2006</b> ,		1
41	Power level-dependent dual-operating mode LDMOS power amplifier for CDMA wireless base-station applications. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>2005</b> , 53, 739-746	4.1	11
40	A full duplex capable retrodirective array system for high-speed beam tracking and pointing applications. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>2004</b> , 52, 1479-1489	4.1	33
39	A compact digital beamforming SMILE array for mobile communications. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>2004</b> , 52, 2732-2738	4.1	28
38	A practical scheme for envelope delta-sigma modulated (EDSM) microwave power amplifier. <i>Microwave and Optical Technology Letters</i> , <b>2004</b> , 43, 491-495	1.2	7
37	A frequency-controlled active phased array. <i>IEEE Microwave and Wireless Components Letters</i> , <b>2004</b> , 14, 115-117	2.6	16

36	A frequency-controlled beam-steering array with mixing frequency compensation for multichannel applications. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2004</b> , 52, 1039-1048	4.9	8
35	Smart antennas based on spatial multiplexing of local elements (SMILE) for mutual coupling reduction. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2004</b> , 52, 106-114	4.9	32
34	Digital wireless sensor server using an adaptive smart-antenna/retrodirective array. <i>IEEE Transactions on Vehicular Technology</i> , <b>2003</b> , 52, 1181-1188	6.8	14
33	Integrated antenna with direct conversion circuitry for broad-band millimeter-wave communications. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>2003</b> , 51, 1482-1488	4.1	15
32	A high-speed adaptive antenna array with simultaneous multibeam-forming capability. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>2003</b> , 51, 2483-2494	4.1	23
31	An equivalence principle-based plane wave excitation in time/envelope-domain finite-element analysis. <i>IEEE Antennas and Wireless Propagation Letters</i> , <b>2003</b> , 2, 337-340	3.8	4
30	An unconditionally stable extended (USE) finite-element time-domain solution of active nonlinear microwave circuits using perfectly matched layers. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>2002</b> , 50, 2226-2232	4.1	41
29	. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>2002</b> , 50, 3059-3063	4.1	7
28	A smart antenna receiver array using a single RF channel and digital beamforming. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>2002</b> , 50, 3052-3058	4.1	58
27	Efficient analysis of microwave passive structures using 3-D envelope-finite element (EVFE). <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>2002</b> , 50, 2721-2727	4.1	6
26	A new circuit topology for continuous group delay synthesis. <i>IEEE Microwave and Wireless Components Letters</i> , <b>2002</b> , 12, 85-87	2.6	2
25	Efficient radar signature prediction using a frequency-aspect interpolation technique based on adaptive feature extraction. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2002</b> , 50, 122-131	4.9	8
24	A novel smart antenna system implementation for broad-band wireless communications. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2002</b> , 50, 600-606	4.9	40
23	Envelope-finite-element (EVFE) technique - a more efficient time-domain scheme. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>2001</b> , 49, 2241-2247	4.1	13
22	A frequency-aspect extrapolation algorithm for ISAR image simulation based on two-dimensional ESPRIT. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , <b>2000</b> , 38, 1743-1748	8.1	15
21	A model-based angular extrapolation technique for iterative method-of-moments solvers. <i>Microwave and Optical Technology Letters</i> , <b>1999</b> , 20, 229-233	1.2	3
20	Multimode parameter extraction for multiconductor transmission lines via single-pass FDTD and signal-processing techniques. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>1998</b> , 46, 89-96	4.1	6
19	. <i>IEEE Transactions on Aerospace and Electronic Systems</i> , <b>1998</b> , 34, 670-677	3.7	156

18	Extraction of higher-order modes in open microstrip lines via FDTD and joint time-frequency analysis. <i>Microwave and Optical Technology Letters</i> , <b>1996</b> , 13, 319-321	1.2	2
17	A broadband beamformer for millimeter-wave systems using sub-band sampling		3
16	A radar target transceiver using a full duplex capable retrodirective array system		3
15	Direct antenna modulation - a promise for ultra-wideband (UWB) transmitting		4
14	A self-calibration antenna array system with moving apertures		1
13	An improved Kahn transmitter architecture based on delta-sigma modulation		4
12	A 60 GHz integrated antenna array for high-speed digital beamforming applications		3
11	A high-speed adaptive antenna array with simultaneous multiple-beamforming capability		1
10	A single RF channel smart antenna receiver array with digital beamforming for WLAN application		1
9	A digital leakage cancellation scheme for monostatic FMCW radar		5
8	High performance SMILE arrays through an energy efficient multiplexer		1
7	A novel planar array smart antenna system with hybrid analog-digital beamforming		9
6	Millimeter wave direct quadrature converter integrated with antenna for broad-band wireless communications		3
5	Integrated adaptive beamforming antennas for wireless communications		1
4	A novel K-band frequency-controlled beam-steering quasi-Yagi array with mixing frequency compensation		4
3	A frequency autonomous retrodirective array transponder		6
2	A smart antenna receiver array using a single RF channel and digital beamforming		6
1	A class-S RF amplifier architecture with envelope delta-sigma modulation		13



