

# Jordi Mateu

## List of Publications by Year in descending order

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papers

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471509

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94  
docs citations

94  
times ranked

756  
citing authors

#	ARTICLE	IF	CITATIONS
1	Quantitative Permittivity Measurements of Nanoliter Liquid Volumes in Microfluidic Channels to 40 GHz. IEEE Transactions on Instrumentation and Measurement, 2010, 59, 3279-3288.	4.7	140
2	Analysis and Simulation of the Effects of Distributed Nonlinearities in Microwave Superconducting Devices. IEEE Transactions on Applied Superconductivity, 2005, 15, 26-39.	1.7	51
3	Design of Ultra-Wideband Substrate Integrated Waveguide (SIW) Filters in Zigzag Topology. IEEE Microwave and Wireless Components Letters, 2009, 19, 281-283.	3.2	49
4	Passive Intermodulation Due to Self-Heating in Printed Transmission Lines. IEEE Transactions on Microwave Theory and Techniques, 2011, 59, 311-322.	4.6	45
5	A Compact Variable-Temperature Broadband Series-Resistor Calibration. IEEE Transactions on Microwave Theory and Techniques, 2011, 59, 188-195.	4.6	35
6	Electro-thermo-mechanical model for bulk acoustic wave resonators. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2013, 60, 2389-2403.	3.0	35
7	Miniaturization of Superconducting Filters Using Hilbert Fractal Curves. IEEE Transactions on Applied Superconductivity, 2005, 15, 3841-3846.	1.7	31
8	Analysis and Simulation of distributed nonlinearities in ferroelectrics and superconductors for microwave applications. IEEE Transactions on Microwave Theory and Techniques, 2006, 54, 1154-1160.	4.6	31
9	Broadband Permittivity Measurements of Liquid and Biological Samples using Microfluidic Channels. , 2006, , .		30
10	Nonlinear simulation and characterization of devices with HTS transmission lines using harmonic balance algorithms. IEEE Transactions on Applied Superconductivity, 2001, 11, 1396-1399.	1.7	29
11	Nonlinear Distributed Model for Bulk Acoustic Wave Resonators. IEEE Transactions on Microwave Theory and Techniques, 2009, 57, 3019-3029.	4.6	29
12	Broadband dielectric spectroscopy of Ruddlesden-Popper $\text{Sr}_{n+1}\text{Ti}_n\text{O}_{3n+1}$ ( $n=1,2,3$ ) thin films. Applied Physics Letters, 2009, 94, 042908.	3.3	27
13	Mechanical Tuning of Substrate Integrated Waveguide Resonators. IEEE Microwave and Wireless Components Letters, 2012, 22, 447-449.	3.2	25
14	A Multistate Single-Connection Calibration for Microwave Microfluidics. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 1099-1107.	4.6	24
15	Broadband Permittivity of Liquids Extracted from Transmission Line Measurements of Microfluidic Channels. IEEE MTT-S International Microwave Symposium Digest IEEE MTT-S International Microwave Symposium, 2007, , .	0.0	23
16	Frequency Tuning and Spurious Signal Generation at Microwave Frequencies in Ferroelectric $\text{SrTiO}_3$ Thin-Film Transmission Lines. IEEE Transactions on Microwave Theory and Techniques, 2007, 55, 391-396.	4.6	20
17	Three-Element Filtering Antenna Array Designed by the Equivalent Circuit Approach. IEEE Transactions on Antennas and Propagation, 2016, 64, 3831-3839.	5.1	20
18	Mechanical Tuning of Substrate Integrated Waveguide Filters. IEEE Transactions on Microwave Theory and Techniques, 2015, 63, 3939-3946.	4.6	18

#	ARTICLE	IF	CITATIONS
19	Third-Order Intermodulation Distortion and Harmonic Generation in Mismatched Weakly Nonlinear Transmission Lines. IEEE Transactions on Microwave Theory and Techniques, 2009, 57, 10-18.	4.6	17
20	Unified Description of Nonlinear Effects in High Temperature Superconductor Microwave Devices. Journal of Superconductivity and Novel Magnetism, 2007, 19, 531-540.	1.8	16
21	Intermodulation Distortion in Coupled-Resonator Filters With Nonuniformly Distributed Nonlinear Properties—Use in HTS IMD Compensation. IEEE Transactions on Microwave Theory and Techniques, 2007, 55, 616-624.	4.6	15
22	Modeling Superconducting Transmission Line Bends and Their Impact on Nonlinear Effects. IEEE Transactions on Microwave Theory and Techniques, 2007, 55, 822-828.	4.6	15
23	Nonlinear analysis of disk resonators. Application to material characterization and filter design. IEEE Transactions on Applied Superconductivity, 2001, 11, 135-138.	1.7	13
24	First-Order Elastic Nonlinearities of Bulk Acoustic Wave Resonators. IEEE Transactions on Microwave Theory and Techniques, 2011, 59, 1206-1213.	4.6	13
25	Nonlinear Distortion in a 8-Pole Quasi-Elliptic Bandpass HTS Filter for CDMA System. IEEE Transactions on Applied Superconductivity, 2005, 15, 992-995.	1.7	12
26	Broadband Characterization of Multilayer Dielectric Thin-Films. IEEE MTT-S International Microwave Symposium Digest IEEE MTT-S International Microwave Symposium, 2007, , .	0.0	12
27	Nonlinear distributed model for IMD prediction in BAW resonators. , 2008, , .		12
28	Nonlinear Effects of SiO <sub>2</sub> Layers in Bulk Acoustic Wave Resonators. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 1773-1779.	4.6	12
29	Prediction of nonlinear distortion in HTS filters for CDMA communication systems. IEEE Transactions on Applied Superconductivity, 2003, 13, 328-331.	1.7	11
30	Nonlinear performance characterization in an eight-pole quasi-elliptic bandpass filter. Superconductor Science and Technology, 2004, 17, S359-S362.	3.5	11
31	Acoustic Wave Transversal Filter for 5G N77 Band. IEEE Transactions on Microwave Theory and Techniques, 2021, 69, 4476-4488.	4.6	11
32	A general approach for the calculation of intermodulation distortion in cavities with superconducting endplates. Applied Physics Letters, 2003, 82, 97-99.	3.3	10
33	Three-Port Frequency-Selective Absorptive Limiter. IEEE Microwave and Wireless Components Letters, 2017, 27, 479-481.	3.2	10
34	Title is missing!. Journal of Superconductivity and Novel Magnetism, 2003, 16, 873-880.	0.5	9
35	Compact duplexer with miniaturized dual loop resonator. , 2005, , .		9
36	Third order intermodulation distortion in Film Bulk Acoustic Resonators at resonance and antiresonance. , 2008, , .		9

#	ARTICLE	IF	CITATIONS
37	Absorptive Limiter for Frequency-Selective Circuits. IEEE Microwave and Wireless Components Letters, 2014, 24, 415-417.	3.2	9
38	General electromagnetic simulation tool to predict the microwave nonlinear response of planar, arbitrarily-shaped HTS structures. IEEE Transactions on Applied Superconductivity, 2001, 11, 399-402.	1.7	8
39	Substrate integrated waveguide predistorted filter at 20 GHz. IET Microwaves, Antennas and Propagation, 2011, 5, 928.	1.4	8
40	Nonlinear Model of Coupled Superconducting Lines. IEEE Transactions on Applied Superconductivity, 2005, 15, 976-979.	1.7	7
41	Measurements and Analysis of Microwave Nonlinearities in Ferroelectric Thin Film Transmission Lines. , 2006, , .		7
42	Frequency dependence of the nonlinear response in YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-x</sub> transmission lines. Applied Physics Letters, 2007, 90, 012512.	3.3	7
43	Synthesis of 4th order lossy filters with uniform Q distribution. , 2010, , .		6
44	A lateral modes model for BAW resonators. , 2014, , .		6
45	Harmonic Balance Algorithms for the Nonlinear Simulation of HTS Devices. Journal of Superconductivity and Novel Magnetism, 2001, 14, 57-64.	0.5	5
46	HTS nonlinearities in microwave disk resonators. Physica C: Superconductivity and Its Applications, 2002, 372-376, 566-570.	1.2	4
47	Comparison of lossy filters and predistorted filters using novel software. , 2010, , .		4
48	Superconducting Multiplexer Filter Bank for a Frequency-Selective Power Limiter. IEEE Transactions on Applied Superconductivity, 2011, 21, 542-546.	1.7	4
49	Analysis of Border Ring Modes on SMR-BAW Resonators. , 2019, , .		4
50	Third-Harmonic and Intermodulation Distortion in Bulk Acoustic-Wave Resonators. IEEE Transactions on Microwave Theory and Techniques, 2020, 68, 1304-1311.	4.6	4
51	Hilbert fractal curves for HTS miniaturized filters. , 0, , .		3
52	Robust passive shaping network for impulse radio and UWB signal generator. , 2005, , .		3
53	General equations for the induced phase shift in resonant electrooptic modulators. IEEE Photonics Technology Letters, 2005, 17, 330-332.	2.5	3
54	Nonlinear Response of Combined Superconductor/Ferroelectric Devices: First Experimental Step. IEEE Transactions on Applied Superconductivity, 2007, 17, 942-945.	1.7	3

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55	Equivalent circuits of planar filtering antennas fed by apertures. , 2014, , .		3
56	How to extract distributed circuit parameters from the scattering parameters of a transmission line. , 2017, , .		3
57	Fast Procedure for the Nonlinear Analysis of BAW Resonators. , 2018, , .		3
58	The Input-Output Equivalent Sources Method for Fast Simulations of Distributed Nonlinearities in Bulk Acoustic Wave Resonators and Filters. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2021, 68, 1907-1918.	3.0	3
59	Barcelona Coastal Monitoring with the "Pat-a Vela", a Traditional Sailboat Turned into an Oceanographic Platform. Journal of Marine Science and Engineering, 2022, 10, 591.	2.6	3
60	Correction to "Nonlinear analysis of disk resonators. application to material characterization and filter design". IEEE Transactions on Applied Superconductivity, 2001, 11, 4148-4148.	1.7	2
61	Reduced microwave losses of YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-x</sub> thin films on electro-optic LiNbO <sub>3</sub> crystals. Journal of Applied Physics, 2002, 92, 6346-6348.	2.5	2
62	Harmonic balance algorithm to model nonlinear effects in HTS filters subject to CDMA signals. , 0, , .		2
63	Estimating Respiratory Pattern Variability by Symbolic Dynamics. Methods of Information in Medicine, 2004, 43, 22-25.	1.2	2
64	Comparison between nonlinear measurements in patterned and unpatterned thin films. Superconductor Science and Technology, 2004, 17, 876-880.	3.5	2
65	Wideband Nonlinear Response of High-Temperature Superconducting Thin Films From Transmission-Line Measurements. IEEE Transactions on Microwave Theory and Techniques, 2007, 55, 1425-1430.	4.6	2
66	Measurement of the Microwave Nonlinear Response of Combined Ferroelectric-Superconductor Transmission Lines. IEEE Transactions on Applied Superconductivity, 2009, 19, 940-943.	1.7	2
67	Quantitative permittivity measurements of nanoliter fluid volumes from 50 MHz to 40 GHz with microfluidic channels. , 2010, , .		2
68	A Large-Signal Model of Ferroelectric Thin-Film Transmission Lines. IEEE Transactions on Microwave Theory and Techniques, 2011, 59, 3059-3067.	4.6	2
69	Sub-Nanosecond Tuning of Microwave Resonators Fabricated on Ruddlesden-Popper Dielectric Thin Films. Advanced Materials Technologies, 2018, 3, 1800090.	5.8	2
70	An Equivalent Model for Lateral Modes on the H <sub>2</sub> Response of Bulk Acoustic Wave Resonators. , 2020, , .		2
71	Fast simulation method of Distributed Nonlinearities in Surface Acoustic Wave Resonators. , 2020, , .		2
72	Towards a N77 Electroacoustic Filter Using Thin Films of Crystalline Y-cut Lithium Niobate. , 2021, , .		2

#	ARTICLE	IF	CITATIONS
73	Distributed Nonlinear Model and Fast Analysis for In-Band IMD3 Prediction of Surface Acoustic Wave Resonators. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2022, 69, 2190-2205.	3.0	2
74	Nonlinear RF spurious in a cylindrical cavity with superconducting endplates. Physica C: Superconductivity and Its Applications, 2002, 372-376, 679-682.	1.2	1
75	Analysis of dielectric-loaded cavities for characterization of the nonlinear properties of high temperature superconductors. IEEE Transactions on Applied Superconductivity, 2003, 13, 332-335.	1.7	1
76	Ultra-wideband Testbed For Reduced Data-rates and Location. , 0, , .		1
77	Detuning and Saturation of Superconducting Devices: Formulation and Measurements. IEEE MTT-S International Microwave Symposium Digest IEEE MTT-S International Microwave Symposium, 2007, , .	0.0	1
78	UWB receiver based on microwave filter-bank. , 2010, , .		1
79	Modeling of Self-Heating Mechanism in the Design of Superconducting Limiters. IEEE Transactions on Applied Superconductivity, 2011, 21, 547-550.	1.7	1
80	A consistent methodology to characterize BAW resonators. , 2012, , .		1
81	New Technique to Cancel IMD3 in Electroacoustic Filters. , 2018, , .		1
82	Feed-Forward Technique to Measure the Reflection Coefficient Under CW High-Power Signals. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 4627-4633.	4.6	1
83	Role of SiO <sub>2</sub> Layers in Third-Order Nonlinear Effects of Temperature Compensated BAW Resonators. , 2019, , .		1
84	Tone injection-based cancellation technique for nonlinear distortion reduction of modulated signals in BAW resonators. Microwave and Optical Technology Letters, 2021, 63, 781-786.	1.4	1
85	Superconducting Filters and Passive Components. , 0, , .		1
86	Nonlinear Performance on Acoustic Transversal Filters. , 2020, , .		1
87	Epitaxial Growth and High-Frequency Properties of YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7</sub> Electrodes on LiNbO <sub>3</sub> . Materials Science Forum, 2003, 426-432, 3543-3550.	0.3	0
88	Performance Projection of Electro-Optical Modulators for Radio-Over-Fiber in 2 GHz Cryogenic Front-End Receivers. IEEE Transactions on Applied Superconductivity, 2005, 15, 924-927.	1.7	0
89	Nonlinear effects in thin-film ferroelectric transmission lines at microwave frequencies. , 2008, , .		0
90	Performance of BAW resonators at cryogenic temperatures. , 2013, , .		0

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91	Novel formulation of coefficients of low-pass prototype filter for the design of four-element planar filtering antenna array. , 2015, , .		0
92	Comprehensive Circuit Model of Autolimiting Superconductor Devices. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-4.	1.7	0
93	Out of Band Improved Performance Into a Measured 5G N77 Band Transversal Filter. , 2021, , .		0
94	Method to Measure Reflection Coefficient Under CW High-Power Signals in SAW Resonators. , 2021, , .		0