

# Paris P Velez

## List of Publications by Year in descending order

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94  
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218677

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docs citations

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times ranked

966  
citing authors

#	ARTICLE	IF	CITATIONS
1	Embroidered Textile Frequency-Splitting Sensor Based on Stepped-Impedance Resonators. IEEE Sensors Journal, 2022, 22, 8596-8603.	4.7	13
2	Frequency-Variation Sensors for Permittivity Measurements Based on Dumbbell-Shaped Defect Ground Structures (DB-DGS): Analytical Method and Sensitivity Analysis. IEEE Sensors Journal, 2022, 22, 9378-9386.	4.7	24
3	On the Capacitance of Slotted Metamaterial Resonators for Frequency-Variation Permittivity Sensing. , 2022, , .		0
4	Characterization of the Denaturation of Bovine Serum Albumin (BSA) Protein by Means of a Differential-Mode Microwave Microfluidic Sensor Based on Slot Resonators. IEEE Sensors Journal, 2022, 22, 14075-14083.	4.7	7
5	Circuit Analysis of a Coplanar Waveguide (CPW) Terminated With a Step-Impedance Resonator (SIR) for Highly Sensitive One-Port Permittivity Sensing. IEEE Access, 2022, 10, 62597-62612.	4.2	21
6	On the Sensitivity of Reflective-Mode Phase-Variation Sensors Based on Open-Ended Stepped-Impedance Transmission Lines: Theoretical Analysis and Experimental Validation. IEEE Transactions on Microwave Theory and Techniques, 2021, 69, 308-324.	4.6	52
7	Highly Sensitive Phase Variation Sensors Based on Step-Impedance Coplanar Waveguide (CPW) Transmission Lines. IEEE Sensors Journal, 2021, 21, 2864-2872.	4.7	36
8	Highly Sensitive Reflective-Mode Phase-Variation Permittivity Sensor Based on a Coplanar Waveguide Terminated With an Open Complementary Split Ring Resonator (OCSRR). IEEE Access, 2021, 9, 27928-27944.	4.2	42
9	Capacitively-Loaded Slow-Wave Transmission Lines for Sensitivity Improvement in Phase-Variation Permittivity Sensors. , 2021, , .		20
10	Planar Phase-Variation Microwave Sensors for Material Characterization: A Review and Comparison of Various Approaches. Sensors, 2021, 21, 1542.	3.8	20
11	Phase-Variation Microwave Sensor for Permittivity Measurements Based on a High-Impedance Half-Wavelength Transmission Line. IEEE Sensors Journal, 2021, 21, 10647-10656.	4.7	33
12	Parametric Analysis of the Edge Capacitance of Uniform Slots and Application to Frequency-Variation Permittivity Sensors. Applied Sciences (Switzerland), 2021, 11, 7000.	2.5	13
13	Highly Sensitive Phase-Variation Dielectric Constant Sensor Based on a Capacitively-Loaded Slow-Wave Transmission Line. IEEE Transactions on Circuits and Systems I: Regular Papers, 2021, 68, 2787-2799.	5.4	54
14	Single-Frequency Amplitude-Modulation Sensor for Dielectric Characterization of Solids and Microfluidics. IEEE Sensors Journal, 2021, 21, 12189-12201.	4.7	61
15	Highly Sensitive Defect Detectors and Comparators Exploiting Port Imbalance in Rat-Race Couplers Loaded With Step-Impedance Open-Ended Transmission Lines. IEEE Sensors Journal, 2021, 21, 26731-26745.	4.7	14
16	On the Modeling of Microstrip Lines Loaded With Dumbbell Defect-Ground-Structure (DB-DGS) and Folded DB-DGS Resonators. IEEE Access, 2021, 9, 150878-150888.	4.2	13
17	A Microwave Microfluidic Reflective-Mode Phase-Variation Sensor. , 2021, , .		5
18	Discussion and Analysis of Dumbbell Defect-Ground-Structure (DB-DGS) Resonators for Sensing Applications from a Circuit Theory Perspective. Sensors, 2021, 21, 8334.	3.8	5

#	ARTICLE	IF	CITATIONS
19	Differential Sensor Based on Electroinductive Wave Transmission Lines for Dielectric Constant Measurements and Defect Detection. IEEE Transactions on Antennas and Propagation, 2020, 68, 1876-1886.	5.1	58
20	An Analytical Method to Implement High-Sensitivity Transmission Line Differential Sensors for Dielectric Constant Measurements. IEEE Sensors Journal, 2020, 20, 178-184.	4.7	58
21	Differential-Mode to Common-Mode Conversion Detector Based on Rat-Race Hybrid Couplers: Analysis and Application to Differential Sensors and Comparators. IEEE Transactions on Microwave Theory and Techniques, 2020, 68, 1312-1325.	4.6	45
22	Highly Sensitive Reflective-Mode Defect Detectors and Dielectric Constant Sensors Based on Open-Ended Stepped-Impedance Transmission Lines. Sensors, 2020, 20, 6236.	3.8	24
23	Step Impedance Resonator (SIR) Loaded with Complementary Split Ring Resonator (CSRR): Modeling, Analysis and Applications. , 2020, , .		7
24	A Reflective-Mode Phase-Variation Displacement Sensor. IEEE Access, 2020, 8, 189565-189575.	4.2	34
25	Open-Ended-Line Reflective-Mode Phase-Variation Sensors for Dielectric Constant Measurements. , 2020, , .		5
26	Characterization of electrolyte content in urine samples through a differential microfluidic sensor based on dumbbell-shaped defected ground structures. International Journal of Microwave and Wireless Technologies, 2020, 12, 817-824.	1.9	15
27	Microfluidic reflective-mode differential sensor based on open split ring resonators (OSRRs). International Journal of Microwave and Wireless Technologies, 2020, 12, 588-597.	1.9	30
28	Microwave Sensors Based on Resonant Elements. Sensors, 2020, 20, 3375.	3.8	19
29	Branch Line Couplers With Small Size and Harmonic Suppression Based on Non-Periodic Step Impedance Shunt Stub (SISS) Loaded Lines. IEEE Access, 2020, 8, 67310-67320.	4.2	23
30	Planar Microwave Resonant Sensors: A Review and Recent Developments. Applied Sciences (Switzerland), 2020, 10, 2615.	2.5	67
31	Permittivity Sensor Based on a Slow-Wave Artificial Transmission Line. , 2020, , .		0
32	Differential Microfluidic Sensors based on Electroinductive-Wave (EIW) Transmission Lines. , 2020, , .		0
33	Signal Balancing in Unbalanced Transmission Lines. IEEE Transactions on Microwave Theory and Techniques, 2019, 67, 3339-3349.	4.6	6
34	Miniaturised and harmonic-suppressed rat-race couplers based on slow-wave transmission lines. IET Microwaves, Antennas and Propagation, 2019, 13, 1293-1299.	1.4	15
35	Differential Microfluidic Sensors Based on Dumbbell-Shaped Defect Ground Structures in Microstrip Technology: Analysis, Optimization, and Applications. Sensors, 2019, 19, 3189.	3.8	46
36	Differential Sensing Based on Quasi-Microstrip Mode to Slot-Mode Conversion. IEEE Microwave and Wireless Components Letters, 2019, 29, 690-692.	3.2	22

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37	Reactively-loaded non-periodic slow-wave artificial transmission lines for stop band bandwidth enhancement: application to power splitters. International Journal of Microwave and Wireless Technologies, 2019, 11, 475-481.	1.9	6
38	On the Sensitivity of Microwave Sensors based on Slot Resonators and Frequency Variation. , 2019, , .		4
39	Reactively-Loaded EBG Transmission Lines with Periodicity Truncation for Improvement of the Stop Band Performance. , 2019, , .		0
40	Microstrip Lines Loaded with Metamaterial-Inspired Resonators for Microwave Sensors/Comparators with Optimized Sensitivity. , 2019, , .		3
41	Electrolyte Concentration Measurements in DI Water with 0.125 g/L Resolution by means of CSRR-Based Structures. , 2019, , .		7
42	Split Ring Resonator-Based Microwave Fluidic Sensors for Electrolyte Concentration Measurements. IEEE Sensors Journal, 2019, 19, 2562-2569.	4.7	146
43	Compact coplanar waveguide power splitter with filtering capability based on slow-wave structures. Microwave and Optical Technology Letters, 2019, 61, 1143-1148.	1.4	4
44	Compact Wideband Balanced Bandpass Filters With Very Broad Common-Mode and Differential-Mode Stopbands. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 737-750.	4.6	27
45	Slow-wave coplanar waveguides based on inductive and capacitive loading and application to compact and harmonic suppressed power splitters. International Journal of Microwave and Wireless Technologies, 2018, 10, 530-537.	1.9	10
46	Compact power splitter with harmonic suppression based on inductively loaded slow-wave transmission lines. Microwave and Optical Technology Letters, 2018, 60, 1464-1468.	1.4	9
47	Application of metamaterial concepts to sensors and chipless RFID. Journal of Physics: Conference Series, 2018, 963, 012012.	0.4	2
48	Solute Concentration Measurements in Diluted Solutions by Means of Split Ring Resonators. , 2018, , .		13
49	Measuring Glucose Content in Aqueous Solutions by means of Split Ring Resonator (SRR) Loaded Transmission Lines. , 2018, , .		1
50	Slow-Wave Artificial Transmission Lines based on Stepped Impedance Shunt Stub (SISS) Loading: Analysis and Stopband Bandwidth Enhancement. , 2018, , .		3
51	Analytical Method to Estimate the Complex Permittivity of Oil Samples. Sensors, 2018, 18, 984.	3.8	131
52	Highly-Sensitive Microwave Sensors Based on Open Complementary Split Ring Resonators (OCSRRs) for Dielectric Characterization and Solute Concentration Measurement in Liquids. IEEE Access, 2018, 6, 48324-48338.	4.2	149
53	Design of Capacitively Loaded Coupled-Line Bandpass Filters With Compact Size and Spurious Suppression. IEEE Transactions on Microwave Theory and Techniques, 2017, 65, 1235-1248.	4.6	38
54	EBG-based transmission lines with slow-wave characteristics and application to miniaturization of microwave components. Applied Physics A: Materials Science and Processing, 2017, 123, 1.	2.3	14

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55	The Beauty of Symmetry: Common-Mode Rejection Filters for High-Speed Interconnects and Band Microwave Circuits. IEEE Microwave Magazine, 2017, 18, 42-55.	0.8	24
56	Size reduction and harmonic suppression in branch line couplers implemented by means of capacitively loaded slow-wave transmission lines. Microwave and Optical Technology Letters, 2017, 59, 2822-2830.	1.4	17
57	Application of electromagnetic bandgaps based on capacitively-loaded lines to the reduction of size and suppression of harmonic bands in microwave devices. , 2017, , .		5
58	Optimized wideband differential-mode bandpass filters with broad stopband and common-mode suppression based on multi-section stepped impedance resonators and interdigital capacitors. , 2017, , .		4
59	Microwave Microfluidic Sensor Based on a Microstrip Splitter/Combiner Configuration and Split Ring Resonators (SRRs) for Dielectric Characterization of Liquids. IEEE Sensors Journal, 2017, 17, 6589-6598.	4.7	275
60	Modeling and analysis of pairs of open complementary split ring resonators (OCSRRs) for differential permittivity sensing. , 2017, , .		17
61	Estimation of the complex permittivity of liquids by means of complementary split ring resonator (CSRR) loaded transmission lines. , 2017, , .		29
62	High miniaturization potential of slow-wave transmission lines based on simultaneous inductor and capacitor loading. , 2017, , .		10
63	A Review of Sensing Strategies for Microwave Sensors Based on Metamaterial-Inspired Resonators: Dielectric Characterization, Displacement, and Angular Velocity Measurements for Health Diagnosis, Telecommunication, and Space Applications. International Journal of Antennas and Propagation, 2017, 2017, 1-13.	1.2	35
64	Configurations of Splitter/Combiner Microstrip Sections Loaded with Stepped Impedance Resonators (SIRs) for Sensing Applications. Sensors, 2016, 16, 2195.	3.8	44
65	Enhancing common-mode suppression in microstrip differential lines by means of chirped and multi-tuned electromagnetic bandgaps. Microwave and Optical Technology Letters, 2016, 58, 328-332.	1.4	9
66	Reactively-loaded EBG-based transmission lines and application to power splitters. , 2016, , .		3
67	Recent advances in the design of compact microwave components based on reactively-loaded transmission lines. , 2016, , .		0
68	Slow-wave inductively-loaded electromagnetic bandgap (EBG) coplanar waveguide (CPW) transmission lines and application to compact power dividers. , 2016, , .		16
69	Size reduction and spurious suppression in microstrip coupled line bandpass filters by means of capacitive electromagnetic bandgaps. , 2016, , .		15
70	Automated design of balanced wideband bandpass filters based on mirrored stepped impedance resonators (SIRs) and interdigital capacitors. International Journal of Microwave and Wireless Technologies, 2016, 8, 731-740.	1.9	7
71	Splitter/Combiner Microstrip Sections Loaded With Pairs of Complementary Split Ring Resonators (CSRRs): Modeling and Optimization for Differential Sensing Applications. IEEE Transactions on Microwave Theory and Techniques, 2016, 64, 4362-4370.	4.6	149
72	Slow wave EBG-based transmission lines and applications. , 2016, , .		0

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73	Dual-Band Balanced Bandpass Filter With Common-Mode Suppression Based on Electrically Small Planar Resonators. IEEE Microwave and Wireless Components Letters, 2016, 26, 16-18.	3.2	19
74	Unattended Design of Wideband Planar Filters Using a Two-Step Aggressive Space Mapping (ASM) Optimization Algorithm. Springer Proceedings in Mathematics and Statistics, 2016, , 135-159.	0.2	0
75	Differential microstrip lines with wideband common-mode rejection based on chirped-EBGs. , 2015, , .		0
76	Application of aggressive space mapping (ASM) to the automated design of differential-mode wideband bandpass filters with common-mode suppression. , 2015, , .		1
77	Automated Design of Common-Mode Suppressed Balanced Wideband Bandpass Filters by Means of Aggressive Space Mapping. IEEE Transactions on Microwave Theory and Techniques, 2015, 63, 3896-3908.	4.6	40
78	Ultra-Compact (80 $\mu\text{m}$ ) T-junction (Notation="TeX">{\hbar}) (UWB) Bandpass Filters With Common-Mode Noise Suppression. IEEE Transactions on Microwave Theory and Techniques, 2015, 63, 1272-1280.	4.6	30
79	Design of differential-mode wideband bandpass filters with wide stop band and common-mode suppression by means of multisection mirrored stepped impedance resonators (SIRs). , 2015, , .		8
80	Transmission line metamaterials based on pairs of coupled split ring resonators (SRRs) and complementary split ring resonators (CSRR): A comparison to the light of the lumped element equivalent circuits. , 2015, , .		7
81	Differential Microstrip Lines With Common-Mode Suppression Based on Electromagnetic Band-Gaps (EBGs). IEEE Antennas and Wireless Propagation Letters, 2015, 14, 40-43.	4.0	25
82	Ultra-wideband (UWB) balanced bandpass filters with wide stop band and intrinsic common-mode rejection based on embedded capacitive electromagnetic bandgaps (EBG). , 2014, , .		2
83	Common-mode suppressed differential bandpass filter based on open complementary split ring resonators fabricated in microstrip technology without ground plane etching. Microwave and Optical Technology Letters, 2014, 56, 910-916.	1.4	8
84	Compact Dual-Band Differential Power Splitter With Common-Mode Suppression and Filtering Capability Based on Differential-Mode Composite Right/Left-Handed Transmission-Line Metamaterials. IEEE Antennas and Wireless Propagation Letters, 2014, 13, 536-539.	4.0	14
85	Common-mode suppressed differential transmission lines based on periodic structures. , 2014, , .		2
86	Applications of electromagnetic band gaps (EBGs) in microstrip and balanced microstrip lines. , 2014, , .		2
87	Dual and broadband power dividers at microwave frequencies based on composite right/left handed (CRLH) lattice networks. Photonics and Nanostructures - Fundamentals and Applications, 2014, 12, 269-278.	2.0	1
88	Differential bandpass filters with common-mode suppression based on stepped impedance resonators (SIRs). , 2013, , .		12
89	Differential dual-band impedance inverter with common mode suppression based on composite right/left handed (CRLH) transmission lines. , 2013, , .		0
90	Differential Bandpass Filter With Common-Mode Suppression Based on Open Split Ring Resonators and Open Complementary Split Ring Resonators. IEEE Microwave and Wireless Components Letters, 2013, 23, 22-24.	3.2	62

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91	Broadband Microstrip Bandpass Filter Based on Open Complementary Split Ring Resonators. International Journal of Antennas and Propagation, 2012, 2012, 1-6.	1.2	8
92	Compact power dividers with filtering capability for ground penetrating radar applications. Microwave and Optical Technology Letters, 2012, 54, 608-611.	1.4	15
93	High-order coplanar waveguide (CPW) filters implemented by means of open split ring resonators (OSRRs) and open complementary split ring resonators (OCSRRs). Metamaterials, 2011, 5, 51-55.	2.2	7
94	Recent Advances in Metamaterial Transmission Lines Based on Split Rings. Proceedings of the IEEE, 2011, 99, 1701-1710.	21.3	29