

Yu-Chi Chang

List of Publications by Year in descending order

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120
papers

1,599
citations

331670

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120
all docs

120
docs citations

120
times ranked

1229
citing authors

#	ARTICLE	IF	CITATIONS
1	A novel compact ring dual-mode filter with adjustable second-passband for dual-band applications. IEEE Microwave and Wireless Components Letters, 2006, 16, 360-362.	3.2	116
2	A novel cross-shape DGS applied to design ultra-wide stopband low-pass filters. IEEE Microwave and Wireless Components Letters, 2006, 16, 252-254.	3.2	99
3	Planar Ultra-Wideband Bandpass Filter Using Edge Coupled Microstrip Lines and Stepped Impedance Open Stub. IEEE Microwave and Wireless Components Letters, 2007, 17, 649-651.	3.2	88
4	Wilkinson Power Divider Using Microstrip EBG Cells for the Suppression of Harmonics. IEEE Microwave and Wireless Components Letters, 2007, 17, 700-702.	3.2	88
5	Miniature Dual-Band Filter Using Quarter Wavelength Stepped Impedance Resonators. IEEE Microwave and Wireless Components Letters, 2008, 18, 88-90.	3.2	60
6	An analytic three-terminal band-to-band tunneling model on GIDL in MOSFET. IEEE Transactions on Electron Devices, 2001, 48, 1400-1405.	3.0	50
7	Liquid Phase Chemical-Enhanced Oxidation for GaAs Operated Near Room Temperature. Japanese Journal of Applied Physics, 1998, 37, L67-L70.	1.5	48
8	A Compact Quadrature Hybrid Based on High-Pass and Low-Pass Lumped Elements. IEEE Microwave and Wireless Components Letters, 2007, 17, 595-597.	3.2	44
9	A GaAs MOSFET with a liquid phase oxidized gate. IEEE Electron Device Letters, 1999, 20, 18-20.	3.9	43
10	Biodegradable Materials for Organic Field-Effect Transistors on a Paper Substrate. IEEE Electron Device Letters, 2019, 40, 236-239.	3.9	41
11	Fast response time alcohol gas sensor using nanocrystalline F-doped SnO ₂ films derived via sol-gel method. Bulletin of Materials Science, 2013, 36, 521-533.	1.7	40
12	The Effect of Solvents on the Performance of CH ₃ NH ₃ PbI ₃ Perovskite Solar Cells. Energies, 2017, 10, 599.	3.1	40
13	Highly Uniform Resistive Switching Properties of Solution-Processed Silver-Embedded Gelatin Thin Film. Small, 2018, 14, e1703888.	10.0	39
14	A 12-36GHz PHEMT MMIC balanced frequency tripler. IEEE Microwave and Wireless Components Letters, 2006, 16, 19-21.	3.2	34
15	Improved Light-Output Power of GaN LEDs by Selective Region Activation. IEEE Photonics Technology Letters, 2004, 16, 1444-1446.	2.5	29
16	A 23-37 GHz Miniature MMIC Subharmonic Mixer. IEEE Microwave and Wireless Components Letters, 2007, 17, 679-681.	3.2	27
17	AlGaIn/GaN MOSHEMTs With Liquid-Phase-Deposited TiO_2 as Gate Dielectric. IEEE Transactions on Electron Devices, 2009, 56, 2911-2916.	3.0	27
18	A 3-dB Quadrature Coupler Using Broadside-Coupled Coplanar Waveguides. IEEE Microwave and Wireless Components Letters, 2008, 18, 191-193.	3.2	24

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19	InGaP/InGaAs metal-oxide-semiconductor pseudomorphic high-electron-mobility transistor with a liquid-phase-oxidized InGaP as gate dielectric. IEEE Electron Device Letters, 2005, 26, 864-866.	3.9	23
20	A Compact Ka-Band Planar Three-Way Power Divider. IEEE Microwave and Wireless Components Letters, 2007, 17, 840-842.	3.2	23
21	A 9.1-10.7 GHz 10-W, 40-dB Gain Four-Stage PHEMT MMIC Power Amplifier. IEEE Microwave and Wireless Components Letters, 2007, 17, 151-153.	3.2	22
22	Improvement of Impact Ionization Effect and Subthreshold Current in InAlAs/InGaAs Metal-Oxide-Semiconductor Metamorphic HEMT With a Liquid-Phase Oxidized InAlAs as Gate Insulator. IEEE Transactions on Electron Devices, 2007, 54, 418-424.	3.0	22
23	The microstructure investigation of flip-chip laser diode bonding on silicon substrate by using indium-gold solder. IEEE Transactions on Components and Packaging Technologies, 2003, 26, 635-641.	1.3	20
24	A 10-40 GHz Broadband Subharmonic Monolithic Mixer in 0.18 μm CMOS Technology. IEEE Microwave and Wireless Components Letters, 2009, 19, 95-97.	3.2	20
25	Effects of Short-Term DC-Bias-Induced Stress on n-GaN/AlGaIn/GaN MOSHEMTs With Liquid-Phase-Deposited Al_2O_3 as a Gate Dielectric. IEEE Transactions on Electron Devices, 2010, 57, 2978-2987.	3.0	20
26	AlGaIn/GaN Metal-Oxide-Semiconductor High-Electron Mobility Transistor With Liquid-Phase-Deposited Barium-Doped TiO_2 as a Gate Dielectric. IEEE Transactions on Electron Devices, 2012, 59, 121-127.	3.0	20
27	A Compact 6.5-W PHEMT MMIC Power Amplifier for Ku-Band Applications. IEEE Microwave and Wireless Components Letters, 2007, 17, 154-156.	3.2	19
28	High-Performance Pentacene-Based Thin-Film Transistors and Inverters With Solution-Processed Barium Titanate Insulators. IEEE Transactions on Electron Devices, 2012, 59, 477-484.	3.0	19
29	High-Isolation Millimeter-Wave Subharmonic Monolithic Mixer With Modified Quasi-Circulator. IEEE Transactions on Microwave Theory and Techniques, 2013, 61, 1140-1149.	4.6	19
30	Multilayered Barium Titanate Thin Films by Sol-Gel Method for Nonvolatile Memory Application. IEEE Transactions on Electron Devices, 2014, 61, 4090-4097.	3.0	19
31	Interconversion of complementary resistive switching from graphene oxide based bipolar multilevel resistive switching device. Applied Physics Letters, 2020, 117, .	3.3	19
32	Ion-modulated electrical conduction in polyaniline-based field-effect transistors. Applied Physics Letters, 2008, 92, .	3.3	17
33	Bipolar Resistive Switching Behavior in Sol-Gel MgTiNiO _x Memory Device. IEEE Journal of the Electron Devices Society, 2016, 4, 321-327.	2.1	17
34	Simple method for a K-band SIW filter with dual-mode quasi-elliptic function response. Microwave and Optical Technology Letters, 2007, 49, 1246-1249.	1.4	16
35	Compact Doubler With Simple Harmonic Suppression and Gain-Compensation Functions. IEEE Microwave and Wireless Components Letters, 2011, 21, 371-373.	3.2	15
36	Wideband and low-loss triangular patch dual-mode bandpass filter using quasi-fork recessed tapped I/O. Microwave and Optical Technology Letters, 2004, 43, 99-101.	1.4	13

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37	Investigation of Various Active Layers for Their Performance on Organic Solar Cells. <i>Materials</i> , 2016, 9, 667.	2.9	13
38	Bipolar Resistive Switching Characteristics in Flexible Pt/MZT/Al Memory and Ni/NbO ₂ /Ni Selector Structure. <i>IEEE Journal of the Electron Devices Society</i> , 2018, 6, 518-524.	2.1	13
39	GaAs MOSFETs fabrication with a selective liquid phase oxidized gate. <i>IEEE Transactions on Electron Devices</i> , 2001, 48, 634-637.	3.0	12
40	A Variable Conversion Gain Star Mixer for Ka-Band Applications. <i>IEEE Microwave and Wireless Components Letters</i> , 2007, 17, 802-804.	3.2	12
41	A fully matched high linearity 2-W PHEMT MMIC power amplifier for 3.5 GHz applications. <i>IEEE Microwave and Wireless Components Letters</i> , 2005, 15, 667-669.	3.2	11
42	Effects of Ni in Strontium Titanate Nickelate Thin Films for Flexible Nonvolatile Memory Applications. <i>IEEE Transactions on Electron Devices</i> , 2017, 64, 2001-2007.	3.0	10
43	Effect of bismuth addition on sintering behavior and microwave dielectric properties of zinc titanate ceramics. <i>Journal of Electronic Materials</i> , 2005, 34, 119-124.	2.2	9
44	Performance improvement in transparent organic thin-film transistors with indium tin oxide/fullerene source/drain contact. <i>Applied Physics Letters</i> , 2009, 95, .	3.3	9
45	Combined Implications of UV/O ₃ Interface Modulation with HfSiOX Surface Passivation on AlGaIn/GaN MOS-HEMT. <i>Crystals</i> , 2021, 11, 136.	2.2	9
46	A planarized shallow-trench-isolation for GaAs devices fabrication using liquid phase chemical enhanced oxidation process. <i>IEEE Electron Device Letters</i> , 2002, 23, 237-239.	3.9	8
47	Noise Characteristics of InGaP-Gated PHEMTs Under High Current and Thermal Accelerated Stresses. <i>IEEE Transactions on Electron Devices</i> , 2005, 52, 1706-1712.	3.0	8
48	A single-supply Ku-band 1-W power amplifier MMIC with compact self-bias PHEMTs. <i>IEEE Microwave and Wireless Components Letters</i> , 2006, 16, 330-332.	3.2	8
49	An Ultra-Broadband Doubly Balanced Monolithic Ring Mixer for Ku- to Ka-band Applications. <i>IEEE Microwave and Wireless Components Letters</i> , 2007, 17, 733-735.	3.2	8
50	A Low Supply Voltage VCO Implemented by a Single Common-Source 90 nm CMOS Transistor. <i>IEEE Microwave and Wireless Components Letters</i> , 2007, 17, 64-66.	3.2	8
51	A DC model for asymmetric trapezoidal gate MOSFET's in strong inversion. <i>IEEE Transactions on Electron Devices</i> , 1998, 45, 1459-1467.	3.0	7
52	AlGaAs/InGaAs metal-oxide-semiconductor pseudomorphic high-electron-mobility transistor with low temperature liquid phase deposited Al ₂ O ₃ gate insulator. <i>Journal of Applied Physics</i> , 2008, 104, .	2.5	7
53	A Novel Post-Linearization Technique for Fully Integrated 5.5 GHz High-Linearity LNA. , 2009, , .		7
54	InGaIn/GaN Vertical Light-Emitting Diodes With Diamondlike Carbon/Titanium Heat-Spreading Layers. <i>IEEE Electron Device Letters</i> , 2013, 34, 1029-1031.	3.9	7

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55	Investigation of Inverted Perovskite Solar Cells for Viscosity of PEDOT:PSS Solution. Crystals, 2018, 8, 358.	2.2	7
56	A Low Program Voltage Enabled Flash like AlGaIn/GaN Stack Layered MIS-HEMTs Using Trap Assisted Technique. ECS Journal of Solid State Science and Technology, 2021, 10, 055019.	1.8	7
57	Impact of the Barrier Layer on the High Thermal and Mechanical Stability of a Flexible Resistive Memory in a Neural Network Application. ACS Applied Electronic Materials, 2022, 4, 1072-1081.	4.3	7
58	Liquid phase oxidation on InGaP and its application to InGaP/GaAs HBTs surface passivation. , 0, , .		6
59	Near-Room-Temperature Selective Oxidation on InAlAs and Application to In _{0.52} Al _{0.48} As [~] In _{0.53} Ga _{0.47} As Metamorphic HEMTs. Journal of the Electrochemical Society, 2007, 154, H957.	2.9	6
60	Magnesium Zirconate Titanate Thin Films Used as an NO ₂ Sensing Layer for Gas Sensor Applications Developed Using a Solâ€“Gel Method. Sensors, 2021, 21, 2825.	3.8	6
61	Ultra Low Power 3D-Embedded Convolutional Neural Network Cube Based on $\hat{\pm}$ -IGZO Nanosheet and Bi-Layer Resistive Memory. , 2021, , .		6
62	InGaP/InGaAs/GaAs metal-oxide-semiconductor pseudomorphic high electron mobility transistor with a liquid phase oxidized InGaP gate. , 0, , .		5
63	A Ka-band Monolithic Doubly-Balanced Mixer. , 2006, , .		5
64	Influence of inserting a thin fullerene layer on pentacene organic thin-film transistor. Applied Physics Letters, 2012, 100, 113306.	3.3	5
65	Resistive Switching Behavior of Magnesium Zirconia Nickel Nanorods. Materials, 2020, 13, 2755.	2.9	5
66	Performance Enhancement in N ₂ Plasma Modified AlGaIn/AlN/GaN MOS-HEMT Using HfAlOX Gate Dielectric with $\hat{\Gamma}$ -Shaped Gate Engineering. Materials, 2021, 14, 1534.	2.9	5
67	DC performance improvement of nanochannel AlGaIn/AlN/GaN HEMTs with reduced OFF-state leakage current by post-gate annealing modulation. Semiconductor Science and Technology, 2021, 36, 095003.	2.0	5
68	Effect of Alkaline Earth Metal on AZrOx (A = Mg, Sr, Ba) Memory Application. Gels, 2022, 8, 20.	4.5	5
69	ZnSnO _y /ZnSnO _x Bilayer Transparent Memristive Synaptic Device for Neuromorphic Computing. IEEE Electron Device Letters, 2022, 43, 1211-1214.	3.9	5
70	Fabrication of depletion-mode GaAs MOSFET with a selective oxidation process by using metal as the mask. IEEE Electron Device Letters, 2001, 22, 2-4.	3.9	4
71	DC pulse hot-carrier-stress effects on gate-induced drain leakage current in n-channel MOSFETs. IEEE Transactions on Electron Devices, 2001, 48, 2746-2753.	3.0	4
72	A Novel Doubly-Balanced Folded Mixer for Low Supply Voltage and Direct Up-Conversion System. , 2006, , .		4

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73	A Compact Ka-Band Doubly Balanced Sub-harmonic Mixer. , 2007, , .		4
74	Barium Zirconate Nickelate as the Gate Dielectric for Low-Leakage Current Organic Transistors. IEEE Transactions on Electron Devices, 2018, 65, 680-686.	3.0	4
75	Significance of Multivalley and Nonparabolic Band Structure for GeSn TFET Simulation. IEEE Transactions on Electron Devices, 2018, 65, 4709-4715.	3.0	4
76	Light Induced RESET Phenomenon in Invisible Memristor for Photo Sensing. IEEE Electron Device Letters, 2022, 43, 1069-1072.	3.9	4
77	Suppression of the burn-in effect in InGaP/GaAs heterojunction bipolar transistors by constant period of voltage stress. Journal of Applied Physics, 2004, 95, 2079-2083.	2.5	3
78	A Ka Band Balanced Third LO-Harmonic Mixer Using a Lumped-Elements Quadrature Hybrid. IEEE Microwave and Wireless Components Letters, 2008, 18, 404-406.	3.2	3
79	Comprehensive Study of InAlAs/InGaAs Metamorphic High Electron Mobility Transistor with Oxidized InAlAs Gate. Journal of the Electrochemical Society, 2009, 156, H925.	2.9	3
80	Liquid-phase-deposited high dielectric zirconium oxide for metal-oxide-semiconductor high electron mobility transistors. Vacuum, 2015, 118, 142-146.	3.5	3
81	Effects of inelastic scattering on interband tunneling in GaSb/AlSb/InAs/GaSb/AlSb/InAs broken-gap interband tunneling structures. IEEE Transactions on Electron Devices, 1998, 45, 1213-1218.	3.0	2
82	Heat generation approximation in modulation-doped field-effect transistors by the energy relaxation between carriers and phonons. Journal of Applied Physics, 2000, 88, 2553-2559.	2.5	2
83	A Ku/K-band PHEMT Diode Single-balanced Mixer. , 2006, , .		2
84	Series resonant converter with series-parallel transformers for high input voltage applications. , 2011, , .		2
85	Ka to M band MMIC frequency tripler by using miniaturization broadband band-pass filter. , 2015, , .		2
86	Design of Dual-Band Transparent Antenna by Using Nano-Structured Thin Film Coating Technology. , 2018, , .		2
87	Barium Titanate Nickelate Nanostructured Materials Prepared by Solution Process for Resistive Random Access Memory Application. Journal of Electronic Materials, 2021, 50, 2083-2089.	2.2	2
88	High efficiency transparent digital television antenna based on nano-structured thin film coating technology. , 2017, , .		2
89	Orientation Dependence of Interface Inversion Asymmetry Effect on InGaAs/InP Quantum Wells. Physica Status Solidi (B): Basic Research, 2002, 231, 423-436.	1.5	1
90	A 3.5GHz 2W MMIC power amplifier using AlGaAs/InGaAs/GaAs PHEMTs. , 0, , .		1

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91	InGaP PHEMT with a Liquid Phase Oxidized InGaP as Gate Dielectric. , 0, , .		1
92	An Analytical Model and Measurement on the InAlAs/InGaAs High-Electron-Mobility Transistor with Oxidized InAlAs Gate. Indium Phosphide and Related Materials Conference (IPRM), IEEE International Conference on, 2007, , .	0.0	1
93	Minimized closed-loop high-selectivity dual-band filters using trisection stepped-impedance resonators. Microwave and Optical Technology Letters, 2007, 49, 219-221.	1.4	1
94	A Speed-Improved Architecture for CMOS Programmable Divider. , 2009, , .		1
95	Compact and Broadband Millimeter-Wave Mixer Based on the New Phase Relationship. , 2009, , .		1
96	Active Layer Thickness Effects on the On-State Current and Pulse Measurement at Room Temperature on Deposited Zinc Oxide Thin-Film Transistors. Journal of Electronic Materials, 2012, 41, 2362-2368.	2.2	1
97	Bipolar resistive switching behavior with high on/off ratio of transparent mgtniox films. , 2014, , .		1
98	Effects of Average Power-Handling Capability on DC-Sputtering Aluminum Nitride Thin Film on Ceramic Substrate. , 2018, , .		1
99	Planarized Trench Isolation of $\text{In}_{0.52}\text{Al}_{0.48}\text{As}/\text{In}_{0.8}\text{Ga}_{0.2}\text{As}$ Metamorphic High-Electron-Mobility Transistor by Liquid Phase Chemical Enhanced Oxidation. IEEE Journal of the Electron Devices Society. 2021, 9, 271-277.	2.1	1
100	Inverted-Type InAlAs/InAs High-Electron-Mobility Transistor with Liquid Phase Oxidized InAlAs as Gate Insulator. Materials, 2021, 14, 970.	2.9	1
101	Depletion-mode GaAs MOSFET with a low temperature selective grown oxide gate. , 0, , .		0
102	Reliability issues on the novel surface acoustic wave notch filter. , 0, , .		0
103	The interface microstructure on the reliability of flip-chip laser diode bonding. , 0, , .		0
104	Factor considerations on the novel surface acoustic wave devices by using piezoelectric materials. , 0, , .		0
105	Liquid phase oxidation on GaAs-based materials and the applications. , 0, , .		0
106	InAlAs/InGaAs Metamorphic High Electron Mobility Transistor with a Liquid Phase Oxidized InAlAs as Gate Dielectric. , 0, , .		0
107	Liquid Phase Oxidation on GaAs-based Transistor Applications. , 2006, , .		0
108	Subthreshold Characteristics and High-Frequency Performance in InAlAs/InGaAs MHEMT with a Liquid Phase Oxidized InAlAs Gate. , 2006, , .		0

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109	Liquid-Phase Deposited TiO ₂ Thin Films on GaN. , 2007, , .		0
110	InGaP/InGaAs MOS-PHEMT with A Liquid Phase Oxidized InGaP Gate Insulator. , 2007, , .		0
111	Package-induced cross-coupling effect on amplifier harmonic suppression. Microwave and Optical Technology Letters, 2007, 49, 332-336.	1.4	0
112	Liquid phase oxidation of InGaAs and its application to InAlAs/InGaAs MOS-MHEMT without gate recess. , 2008, , .		0
113	The comprehensive study of liquid phase oxidation on GaAs-based transistor applications. , 2008, , .		0
114	Integrated Ka-Band Transceiver MMIC Chips. , 2009, , .		0
115	Investigation of SiO ₂ on AlGaAs prepared by liquid phase deposition. , 2010, , .		0
116	Electrochemical formation of gold nanodendrites by the additive toluene solvent. , 2011, , .		0
117	Sol-gel barium titanate-based RRAM by inserting graphene oxide interlayer. , 2012, , .		0
118	A CMOS doubly balanced monolithic ring mixer with an advanced IF extraction. , 2012, , .		0
119	Enhancement of Light Harvesting for Organic Solar Cells via Halogenated (Sub-)Phthalocyanines and Fullerene. , 2019, , .		0
120	Positive Shifting of VTH with Enhanced DC Performance in AlGaIn/GaN Schottky-Gate HEMT through Optimized UV/O ₃ Treated Gate/Interface and Thermal Engineering. ECS Journal of Solid State Science and Technology, 0, , .	1.8	0