

# Huang-Jen Chiu

## List of Publications by Year in descending order

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154  
papers

2,189  
citations

304368

22  
h-index

276539

41  
g-index

155  
all docs

155  
docs citations

155  
times ranked

1630  
citing authors

#	ARTICLE	IF	CITATIONS
1	A High-Efficiency Dimmable LED Driver for Low-Power Lighting Applications. IEEE Transactions on Industrial Electronics, 2010, 57, 735-743.	5.2	386
2	LED Backlight Driving System for Large-Scale LCD Panels. IEEE Transactions on Industrial Electronics, 2007, 54, 2751-2760.	5.2	214
3	Design and Implementation of RGB LED Drivers for LCD Backlight Modules. IEEE Transactions on Industrial Electronics, 2009, 56, 4862-4871.	5.2	97
4	High-Efficiency Wireless Power Transfer System for Electric Vehicle Applications. IEEE Transactions on Circuits and Systems II: Express Briefs, 2017, 64, 942-946.	2.2	85
5	An improved single-stage Flyback PFC converter for high-luminance lighting LED lamps. International Journal of Circuit Theory and Applications, 2008, 36, 205-210.	1.3	51
6	A Novel Hybrid Mode Control for a Phase-Shift Full-Bridge Converter Featuring High Efficiency Over a Full-Load Range. IEEE Transactions on Power Electronics, 2019, 34, 2794-2804.	5.4	47
7	High-Efficiency Digital-Controlled Interleaved Power Converter for High-Power PEM Fuel-Cell Applications. IEEE Transactions on Industrial Electronics, 2013, 60, 773-780.	5.2	43
8	Quarter-Turn Transformer Design and Optimization for High Power Density 1-MHz <i>LLC</i> Resonant Converter. IEEE Transactions on Industrial Electronics, 2020, 67, 1580-1591.	5.2	42
9	LED Backlight Driver Circuit With Dual-Mode Dimming Control and Current-Balancing Design. IEEE Transactions on Industrial Electronics, 2014, 61, 4632-4639.	5.2	41
10	A DC/DC converter topology for renewable energy systems. International Journal of Circuit Theory and Applications, 2009, 37, 485-495.	1.3	37
11	Design of an RGB LED Backlight Circuit for Liquid Crystal Display Panels. IEEE Transactions on Industrial Electronics, 2009, 56, 2793-2795.	5.2	37
12	Current-Input OTRA Schmitt trigger with dual hysteresis modes. International Journal of Circuit Theory and Applications, 2010, 38, 739-746.	1.3	36
13	Design and Implementation of a Photovoltaic High-Intensity-Discharge Street Lighting System. IEEE Transactions on Power Electronics, 2011, 26, 3464-3471.	5.4	35
14	Analysis and Design of a Photovoltaic System DC Connected to the Utility With a Power Factor Corrector. IEEE Transactions on Industrial Electronics, 2009, 56, 4354-4362.	5.2	33
15	A Simple Inverter for Arc-Welding Machines With Current Doubler Rectifier. IEEE Transactions on Industrial Electronics, 2011, 58, 5278-5281.	5.2	31
16	A Modular Self-Controlled Photovoltaic Charger With InterIntegrated Circuit ( ) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 142 Td (\$\hbox{}^{\wedge}\$)	3.7	29
17	A Dual-Mode Controller for the Boost PFC Converter. IEEE Transactions on Industrial Electronics, 2011, 58, 369-372.	5.2	28
18	Efficiency optimisation of ZVS isolated bidirectional DAB converters. IET Power Electronics, 2018, 11, 1499-1506.	1.5	26

#	ARTICLE	IF	CITATIONS
19	Dynamic Wireless Power Transfer for Logistic Robots. <i>Energies</i> , 2018, 11, 527.	1.6	26
20	Design considerations of an SEPIC PFC converter for driving multiple lighting LED lamps. <i>International Journal of Circuit Theory and Applications</i> , 2009, 37, 928-940.	1.3	25
21	Analysis and Design of a Push-Pull Quasi-Resonant Boost Power Factor Corrector. <i>IEEE Transactions on Power Electronics</i> , 2013, 28, 347-356.	5.4	24
22	Single-Stage Voltage Source Charge-Pump Electronic Ballast With Switched-Capacitor Dimmer for Multiple Fluorescent Lamps. <i>IEEE Transactions on Industrial Electronics</i> , 2007, 54, 2915-2918.	5.2	22
23	A fuzzy control maximum power point tracking photovoltaic system. , 2011, , .		22
24	A battery charger with maximum power point tracking function for low-power photovoltaic system applications. <i>International Journal of Circuit Theory and Applications</i> , 2011, 39, 241-256.	1.3	22
25	Novel Modulation of Isolated Bidirectional DC-DC Converter for Energy Storage Systems. <i>IEEE Transactions on Power Electronics</i> , 2019, 34, 1266-1275.	5.4	21
26	On evaluating the current distortion of the single-phase switch-mode rectifiers with current slope maps. <i>IEEE Transactions on Industrial Electronics</i> , 2002, 49, 1128-1137.	5.2	20
27	A DSP-based single-stage maximum power point tracking PV inverter. , 2010, , .		20
28	A Single-Stage SEPIC PFC Converter for Multiple Lighting LED Lamps. , 2008, , .		19
29	A single-stage LED lamp driver with low DC bus voltage for general lighting applications. <i>International Journal of Circuit Theory and Applications</i> , 2011, 39, 1161-1175.	1.3	19
30	DSP-Based Interleaved Buck Power Factor Corrector With Adaptive Slope Compensation. <i>IEEE Transactions on Industrial Electronics</i> , 2015, 62, 4665-4677.	5.2	19
31	Analysis and Implementation of a High Voltage Gain 1 MHz Bidirectional DC-DC Converter. <i>IEEE Transactions on Industrial Electronics</i> , 2020, 67, 1415-1424.	5.2	18
32	Design and implementation of a high-efficiency bidirectional DC-DC Converter for DC microgrid system applications. <i>International Journal of Circuit Theory and Applications</i> , 2014, 42, 1139-1153.	1.3	17
33	A novel low-loss control strategy for bidirectional DC-DC converter. <i>International Journal of Circuit Theory and Applications</i> , 2017, 45, 1801-1813.	1.3	17
34	Design and Implementation of a Planar Transformer With Fractional Turns for High Power Density LLC Resonant Converters. <i>IEEE Transactions on Power Electronics</i> , 2021, 36, 5191-5203.	5.4	17
35	Hybrid Switched-Inductor Buck PFC Converter for High-Efficiency LED Drivers. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , 2018, 65, 1069-1073.	2.2	16
36	A single-stage phase-shifted full-bridge AC/DC converter with variable frequency control. <i>International Journal of Circuit Theory and Applications</i> , 2010, 38, 867-879.	1.3	15

#	ARTICLE	IF	CITATIONS
37	Study on an interleaved buck power factor corrector with gallium nitride field effect transistor and integrated inductor. IET Power Electronics, 2014, 7, 2506-2516.	1.5	14
38	Dimmable light-emitting diode driver with cascaded current regulator and voltage source. IET Power Electronics, 2015, 8, 1305-1311.	1.5	14
39	Design and implementation of 1 MHz active-clamped resonant flyback converter. , 2017, , .		14
40	Design of wide input voltage range high step-up DC-DC converter based on secondary-side resonant tank full bridge LLC. , 2018, , .		14
41	A novel energy-retaining inverter for AC arc welding machines. International Journal of Circuit Theory and Applications, 2012, 40, 107-126.	1.3	13
42	Light-emitting diode driver with a combined energy transfer inductor for current balancing control. IET Power Electronics, 2015, 8, 1834-1843.	1.5	13
43	Design and implementation of a high-efficiency LiFePO <sub>4</sub> battery charger for electric vehicle applications. International Journal of Circuit Theory and Applications, 2014, 42, 759-768.	1.3	12
44	One cycle controlled grid-tied differential boost inverter. IET Power Electronics, 2016, 9, 2216-2222.	1.5	12
45	A study and implementation of three-level boost converter with MPPT for PV application. , 2017, , .		12
46	Current Imbalance Elimination for a Three-Phase Three-Switch PFC Converter. IEEE Transactions on Power Electronics, 2008, 23, 1020-1022.	5.4	11
47	High-efficiency battery charger with cascode output design. IET Power Electronics, 2014, 7, 1725-1735.	1.5	11
48	A cost-effective PWM dimming method for LED lighting applications. International Journal of Circuit Theory and Applications, 2015, 43, 307-317.	1.3	11
49	Study on LCC-C Wireless Power Transfer. , 2017, , .		11
50	High-Efficiency Isolated Photovoltaic Microinverter Using Wide-Band Gap Switches for Standalone and Grid-Tied Applications. Energies, 2018, 11, 569.	1.6	11
51	Dual hysteresis loops for a high-performance four-switch boost rectifier. IEEE Transactions on Industrial Electronics, 2000, 47, 1174-1176.	5.2	10
52	Automatic EMI Measurement and Filter Design System for Telecom Power Supplies. IEEE Transactions on Instrumentation and Measurement, 2007, 56, 2254-2261.	2.4	10
53	Analysis and design of a two-transformer active-clamping forward converter with parallel-connected current doubler rectifiers. International Journal of Circuit Theory and Applications, 2011, 39, 501-514.	1.3	10
54	High-efficiency LED driver for street light applications. , 2012, , .		10

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55	Zero-voltage switching current-fed flyback converter for power factor correction application. IET Power Electronics, 2013, 6, 1971-1978.	1.5	10
56	A DSP based digital control strategy for ZVS bidirectional Buck+Boost converter. , 2018, , .		10
57	A single-stage high power-factor bridgeless AC-LED driver for lighting applications. International Journal of Circuit Theory and Applications, 2014, 42, 96-109.	1.3	9
58	A module-integrated isolated solar micro-inverter without electrolytic capacitors. International Journal of Circuit Theory and Applications, 2014, 42, 572-583.	1.3	9
59	Modified current-fed full-bridge isolated power factor correction converter with low-voltage stress. IET Power Electronics, 2014, 7, 861-867.	1.5	9
60	A DSP-based differential boost inverter with maximum power point tracking. , 2015, , .		9
61	Modular battery balancing circuit based on bidirectional flyback converter. , 2016, , .		9
62	A single-stage high efficiency high power factor LED driver. , 2009, , .		8
63	Adaptive on-time control with adjustable virtual ripple and offset cancellation for buck converter. IET Power Electronics, 2015, 8, 2418-2428.	1.5	8
64	Study and implementation of an improved power factor alternating-current light emitting diode driver. IET Power Electronics, 2015, 8, 1156-1163.	1.5	8
65	A High voltage-gain boost converter with coupled-inductor. Journal of the Chinese Institute of Engineers, Transactions of the Chinese Institute of Engineers, Series A/Chung-kuo Kung Ch'eng Hsueh K'an, 2018, 41, 1-7.	0.6	8
66	Design and Implementation of a High Power Density Active-Clamped Flyback Converter. , 2018, , .		8
67	Switched-capacitor charge equalization circuit for series-connected batteries. , 2016, , .		7
68	High efficiency and low input current distortion Totem-Pole Bridgeless PFC. , 2016, , .		7
69	Analysis and Implementation of a New Non-isolated High-Voltage-Gain Boost Converter. , 2019, , .		7
70	Implementation of a single-stage quasi Z-source AC-DC Power Factor Correction converter. , 2012, , .		6
71	Improved one-cycle controlled buck converter using Type-III compensator. , 2016, , .		6
72	Equivalent Circuit Approach for Output Characteristic Design of Capacitive Power Transfer. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 2513-2517.	2.2	6

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73	Accurate power-loss estimation for continuous-current-conduction-mode synchronous Buck converters. , 2012, , .		5
74	Single-stage high power-factor bridgeless AC-LED driver for lighting applications. , 2012, , .		5
75	A new digital control method for a voltage source inverter to compensate for imbalance of output voltage. International Journal of Circuit Theory and Applications, 2013, 41, 879-888.	1.3	5
76	Single-stage interleaved active-clamping forward converter employing two transformers. , 2013, , .		5
77	DSP based digital control techniques for Interleaved Boost PFC converter. , 2017, , .		5
78	Performance Comparison of Primary Side PFM and Secondary Side PWM for SS Wireless Power Transfer CC/CV Control Strategy. , 2018, , .		5
79	Design and Implementation of a Control Method for GaN-Based Totem-Pole Boost-Type PFC Rectifier in Energy Storage Systems. Energies, 2020, 13, 6297.	1.6	5
80	Study and implementation of a two-phase interleaved bridgeless buck power factor corrector. , 2013, , .		4
81	Efficiency improvement in adjustable deadtime of LLC resonant converters. , 2014, , .		4
82	Study and implementation of a 15â€W driver for piezoelectric actuators. International Journal of Circuit Theory and Applications, 2017, 45, 439-454.	1.3	4
83	Simple fourâ€quadrant gridâ€tie control scheme with unity power factor rectifier mode for singleâ€phase DC/AC converters. IET Renewable Power Generation, 2017, 11, 1483-1493.	1.7	4
84	Design and Implementation of a Novel Three Phase Interleaved Integrated Coupling Inductor. , 2018, , .		4
85	Single Phase AC-AC Solid State Transformer based on Single Conversion Stage. , 2019, , .		4
86	A Novel Three-Phase Six-Switch PFC Rectifier with Zero-Voltage-Switching and Zero-Current-Switching Features. Energies, 2019, 12, 1119.	1.6	4
87	A PWM Switch Model of Isolated Battery Charger in Constant-Current Mode. IEEE Transactions on Industry Applications, 2019, 55, 2942-2951.	3.3	4
88	Research on Symmetrical LLC Converter Applied to DC Transformer. , 2019, , .		4
89	Stacked Buck Converter: Current Ripple Elimination Effect and Transient Response. Energies, 2021, 14, 64.	1.6	4
90	Criteria for setting the reference DC voltage of an active power line conditioner. , 0, , .		3

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91	Analysis and design of a push-pull DCM boost power factor corrector. International Journal of Circuit Theory and Applications, 2013, 41, 410-423.	1.3	3
92	Study on an interleaved buck power factor corrector with GaNFET and integrated inductor. , 2013, , .		3
93	Isolated dual boost bridgeless power factor correction AC-DC converter. , 2013, , .		3
94	Circuit component parameters design for dual-switch flyback converter. , 2014, , .		3
95	Design and implementation of a contactless power charger for robot applications. International Journal of Circuit Theory and Applications, 2014, 42, 584-604.	1.3	3
96	A high-performance bidirectional DC-DC converter for DC micro-grid system application. , 2014, , .		3
97	A new digital control strategy of boost PFC at high-line light-load condition. , 2016, , .		3
98	High step-up voltage-doubling DC-DC converter with coupled inductors. , 2016, , .		3
99	A novel active-clamp zero-voltage-switching buck-boost converter. International Journal of Circuit Theory and Applications, 2018, 46, 868-881.	1.3	3
100	Analysis and Design of a Novel High Step-Down DC-DC Converter for Battery Applications. , 2018, , .		3
101	A Bilateral Zero-Voltage Switching Bidirectional DC-DC Converter with Low Switching Noise. Energies, 2018, 11, 2618.	1.6	3
102	Design of Bidirectional DC-DC Converter for Energy Storage System in High Power Application. , 2019, , .		3
103	Design and Implementation of Solar OLED Lighting Driver Circuit with Frequency Modulation Control. Energies, 2020, 13, 5608.	1.6	3
104	Enhanced Time Average Model of Three Phase Voltage Source Converter Taking Dead-Time Distortion Effect Into Account. IEEE Access, 2021, 9, 23648-23659.	2.6	3
105	Integrated Magnetics Design for a Full-Bridge Phase-Shifted Converter. Energies, 2021, 14, 183.	1.6	3
106	A software-based CM and DM measurement system for the conducted EMI. , 0, , .		2
107	Transadmittance control for eliminating the temperature effect of piezoelectric transformer in the CCFL backlight module. International Journal of Circuit Theory and Applications, 2008, 36, 939-952.	1.3	2
108	Current and white-balance controls of an RGB LED backlight power supply system. , 2008, , .		2

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109	A high-input-voltage backlight module driver for multi-lamp LCD panels. International Journal of Circuit Theory and Applications, 2011, 39, 533-542.	1.3	2
110	A module-integrated isolated solar micro-inverter without electrolytic capacitors. , 2012, , .		2
111	Single-stage quasi z-source flyback Power Factor Correction converter. , 2012, , .		2
112	A DSP-based grid-tied solar cascode-micro-inverter. , 2013, , .		2
113	High-voltage power amplifier for flexible paper speaker applications. International Journal of Circuit Theory and Applications, 2014, 42, 165-172.	1.3	2
114	LED driver with a combined energy transfer inductor for current balancing. , 2014, , .		2
115	An active-clamping ZVS flyback converter with integrated transformer. , 2014, , .		2
116	High voltage-gain interleaved boost DC-DC converter discarded electrolytic capacitor. , 2014, , .		2
117	A cascode-circuit configuration for grid-tied solar micro-inverters. Journal of the Chinese Institute of Engineers, Transactions of the Chinese Institute of Engineers, Series A/Chung-kuo Kung Ch'eng Hsueh K'uan, 2015, 38, 1067-1079.	0.6	2
118	High power density asymmetrical full-bridge soft-switching inverter. , 2015, , .		2
119	High power density and high efficiency inverter with ripple decoupler circuit. , 2016, , .		2
120	High step-up forward-flyback converter with parallel output. , 2016, , .		2
121	Study and Implementation of a Single-Phase Diode-Clamped Five-Level Inverter with Auto Equalization. , 2018, , .		2
122	High Resolution Dynamic $R_{DS(on)}$ Measurement of GaNFET using Active $V_{DS(on)}$ Measurement Clamp Circuit. , 2019, , .		2
123	Resonant Network Transformation and Implementation of a Compacted Four-Plate Capacitive Power Transfer. , 2019, , .		2
124	Analysis and design of a push-pull DCM boost power factor corrector. , 2010, , .		1
125	Active shunt current shaping scheme for multiple paralleled DC-DC converters. International Journal of Circuit Theory and Applications, 2012, 40, 595-606.	1.3	1
126	Isolated quasi z-source bridgeless power factor correction with coupled inductor. , 2013, , .		1



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127	LED backlight driver circuit with dual-mode dimming control and current-balancing design. , 2014, , .		1
128	Ripple-based adaptive constant on-time control with adjustable virtual ripple for buck converter. , 2014, , .		1
129	Accurate power-loss estimation for synchronous buck converters. Journal of the Chinese Institute of Engineers, Transactions of the Chinese Institute of Engineers, Series A/Chung-kuo Kung Ch'eng Hsueh K'an, 2015, 38, 247-259.	0.6	1
130	Highly efficient isolated solar micro-inverter. , 2016, , .		1
131	Study and implementation of an interleaved buck converter with asymmetric phase-shift control. , 2016, , .		1
132	Systematic analysis and design of dual-switch Flyback converter. Journal of the Chinese Institute of Engineers, Transactions of the Chinese Institute of Engineers, Series A/Chung-kuo Kung Ch'eng Hsueh K'an, 2016, 39, 159-168.	0.6	1
133	Design and implementation of high efficiency low-profile bidirectional dc-dc converter. , 2017, , .		1
134	A zero-voltage-switched three-phase interleaved buck converter. International Journal of Electronics, 2018, 105, 572-585.	0.9	1
135	A PWM switch model of isolated full-bridge converter. , 2018, , .		1
136	An interleaved buck converter with asymmetric phase-shift control. EPE Journal (European Power Electronics Journal), 2017, 10, 1-10.	0.7	1
137	Charge Equalization on Series-Connected Battery Modules by Digital Controller. , 2019, , .		1
138	Design and development of a fractional-turn transformer for high power density LLC resonant converters. , 2021, , .		1
139	An Investigation of Zero-Voltage-Switching Condition in a High-Voltage-Gain Bidirectional DC-DC Converter. Electronics (Switzerland), 2021, 10, 1940.	1.8	1
140	A single-stage soft-switching flyback converter for power-factor-correction applications. , 2009, , .		0
141	Analysis and design of a push-pull quasi-resonant boost power factor corrector. , 2010, , .		0
142	Circuit design and performance evaluation of high-voltage power amplifier for flexible paper speaker applications. , 2012, , .		0
143	Study and implementation of a SEPIC LED driver with adjustable output voltage. , 2014, , .		0
144	Study and implementation of a 15-W power amplifier for piezoelectric actuator. , 2014, , .		0

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145	Analysis and design of a push-pull single-stage flyback power factor corrector. , 2014, , .		0
146	Design and implementation of digital controlled boost PFC converter under boundary conduction mode. , 2017, , .		0
147	Digitally controlled bidirectional testing platform for high power battery charger systems. , 2017, , .		0
148	A technique to track maximum power-point of grid-connected single-stage inverter photovoltaic system. , 2017, , .		0
149	Dual Active Bridge Synchronous Rectified Step-Down Converter. , 2018, , .		0
150	Wide-range dimmable LED lighting based on <i>QL-SEPIC</i> converter. EPE Journal (European Power) Tj ETQq0 0 Q.rgBT /Overlock 10 T		0
151	Efficiency Optimization for Single-Phase Voltage-Sourced Inverter with ZVS-CV. , 2019, , .		0
152	Design of Three Phase Wye-Delta LLC Converter with Time Domain Analysis. , 2019, , .		0
153	Design and Implementation of a Single Phase Inverter in Residential Storage System. , 2022, , .		0
154	1.5-MHz High-Performance 380-V/12-V LLC Resonant Converter. , 2022, , .		0