Gyu-Hyeong Cho

List of Publications by Year in descending order

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127 papers	2,952 citations	26 h-index	214800 47 g-index
128	128	128	2414
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	General Unified Analyses of Two-Capacitor Inductive Power Transfer Systems: Equivalence of Current-Source SS and SP Compensations. IEEE Transactions on Power Electronics, 2015, 30, 6030-6045.	7.9	258
2	A Single-Inductor Switching DC–DC Converter With Five Outputs and Ordered Power-Distributive Control. IEEE Journal of Solid-State Circuits, 2007, 42, 2706-2714.	5.4	177
3	A 40 mV Transformer-Reuse Self-Startup Boost Converter With MPPT Control for Thermoelectric Energy Harvesting. IEEE Journal of Solid-State Circuits, 2012, 47, 3055-3067.	5.4	175
4	Impact of contact pressure on output voltage of triboelectric nanogenerator based on deformation of interfacial structures. Nano Energy, 2015, 17, 63-71.	16.0	126
5	Uniform Power I-Type Inductive Power Transfer System With <italic>DQ</italic> -Power Supply Rails for On-Line Electric Vehicles. IEEE Transactions on Power Electronics, 2015, 30, 6446-6455.	7.9	121
6	Characterization of novel Inductive Power Transfer Systems for On-Line Electric Vehicles. , 2011, , .		98
7	A zero-voltage and zero-current switching full bridge DC-DC converter with transformer isolation. IEEE Transactions on Power Electronics, 2001, 16, 573-580.	7.9	94
8	A Single-Inductor Step-Up DC-DC Switching Converter With Bipolar Outputs for Active Matrix OLED Mobile Display Panels. IEEE Journal of Solid-State Circuits, 2009, 44, 509-524.	5.4	88
9	Resonant Regulating Rectifiers (3R) Operating for 6.78 MHz Resonant Wireless Power Transfer (RWPT). IEEE Journal of Solid-State Circuits, 2013, 48, 2989-3001.	5.4	87
10	High-Gain Wide-Bandwidth Capacitor-Less Low-Dropout Regulator (LDO) for Mobile Applications Utilizing Frequency Response of Multiple Feedback Loops. IEEE Transactions on Circuits and Systems I: Regular Papers, 2016, 63, 46-57.	5.4	76
11	A 2 W CMOS Hybrid Switching Amplitude Modulator for EDGE Polar Transmitters. IEEE Journal of Solid-State Circuits, 2007, 42, 2666-2676.	5.4	75
12	Load-Independent Control of Switching DC-DC Converters With Freewheeling Current Feedback. IEEE Journal of Solid-State Circuits, 2008, 43, 2798-2808.	5.4	55
13	Modeling and analysis of static and dynamic characteristics for buck-type three-phase PWM rectifier by circuit DQ transformation. IEEE Transactions on Power Electronics, 1998, 13, 323-336.	7.9	47
14	Gyrator-Based Analysis of Resonant Circuits in Inductive Power Transfer Systems. IEEE Transactions on Power Electronics, 2015, , 1-1.	7.9	44
15	One-chip electronic detection of DNA hybridization using precision impedance-based CMOS array sensor. Biosensors and Bioelectronics, 2010, 26, 1373-1379.	10.1	43
16	A 14-b linear capacitor self-trimming pipelined ADC. IEEE Journal of Solid-State Circuits, 2004, 39, 2046-2051.	5.4	40
17	23.5 An energy pile-up resonance circuit extracting maximum 422% energy from piezoelectric material in a dual-source energy-harvesting interface., 2014,,.		38
18	PSR Enhancement Through Super Gain Boosting and Differential Feed-Forward Noise Cancellation in a 65-nm CMOS LDO Regulator. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2014, 22, 2181-2191.	3.1	37

#	Article	IF	CITATIONS
19	A Piecewise Linear 10 Bit DAC Architecture With Drain Current Modulation for Compact LCD Driver ICs. IEEE Journal of Solid-State Circuits, 2009, 44, 3659-3675.	5.4	36
20	A DC–DC Converter for a Fully Integrated PID Compensator With a Single Capacitor. IEEE Transactions on Circuits and Systems II: Express Briefs, 2014, 61, 629-633.	3.0	36
21	A Hybrid AMOLED Driver IC for Real-Time TFT Nonuniformity Compensation. IEEE Journal of Solid-State Circuits, 2016, 51, 966-978.	5.4	35
22	A Hybrid Structure Dual-Path Step-Down Converter With 96.2% Peak Efficiency Using 250-m\$Omega\$ Large-DCR Inductor. IEEE Journal of Solid-State Circuits, 2019, 54, 959-967.	5.4	35
23	Self-sustainable wind speed sensor system with omni-directional wind based triboelectric generator. Nano Energy, 2019, 55, 115-122.	16.0	35
24	A 10-Bit Column-Driver IC With Parasitic-Insensitive Iterative Charge-Sharing Based Capacitor-String Interpolation for Mobile Active-Matrix LCDs. IEEE Journal of Solid-State Circuits, 2014, 49, 766-782.	5.4	32
25	A series-parallel compensated uninterruptible power supply with sinusoidal input current and sinusoidal output voltage. , 0, , .		31
26	Double Pile-Up Resonance Energy Harvesting Circuit for Piezoelectric and Thermoelectric Materials. IEEE Journal of Solid-State Circuits, 2018, 53, 1049-1060.	5.4	31
27	High-Efficiency Hybrid Dual-Path Step-Up DC–DC Converter With Continuous Output-Current Delivery for Low Output Voltage Ripple. IEEE Transactions on Power Electronics, 2020, 35, 6025-6038.	7.9	31
28	A Noise-Immune High-Speed Readout Circuit for In-Cell Touch Screen Panels. IEEE Transactions on Circuits and Systems I: Regular Papers, 2013, 60, 1800-1809.	5.4	28
29	A Synchronous Multioutput Step-Up/Down DC–DC Converter With Return Current Control. IEEE Transactions on Circuits and Systems II: Express Briefs, 2009, 56, 210-214.	3.0	26
30	A CMOS label-free DNA sensor using electrostatic induction of molecular charges. Biosensors and Bioelectronics, 2012, 31, 343-348.	10.1	26
31	A 95.2% efficiency dual-path DC-DC step-up converter with continuous output current delivery and low voltage ripple. , 2018, , .		26
32	Active EMF cancellation method for I-type pickup of On-Line Electric Vehicles. , 2011, , .		24
33	Accurate Dead-Time Control for Synchronous Buck Converter With Fast Error Sensing Circuits. IEEE Transactions on Circuits and Systems I: Regular Papers, 2013, 60, 3080-3089.	5.4	24
34	10.4A hybrid inductor-based flying-capacitor-assisted step-up/step-down DC-DC converter with 96.56% efficiency. , 2017, , .		24
35	An Asynchronous Sampling-Based 128 \$imes\$ 128 Direct Photon-Counting X-Ray Image Detector with Multi-Energy Discrimination and High Spatial Resolution. IEEE Journal of Solid-State Circuits, 2013, 48, 541-558.	5.4	23
36	An integrated CMOS DC-DC converter for battery-operated systems. , 0, , .		22

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37	Static and dynamic analyses of three-phase rectifier with LC input filter by laplace phasor transformation. , 2012, , .		22
38	An Error-Based Controlled Single-Inductor 10-Output DC-DC Buck Converter With High Efficiency Under Light Load Using Adaptive Pulse Modulation. IEEE Journal of Solid-State Circuits, 2015, 50, 2825-2838.	5.4	22
39	Class D audio power amplifier with fine hysteresis control. Electronics Letters, 2002, 38, 1302.	1.0	20
40	Transformer Coupled Recycle Snubber for High-Efficiency Offline Isolated LED Driver With On-Chip Primary-Side Power Regulation. IEEE Transactions on Industrial Electronics, 2014, 61, 6710-6719.	7.9	20
41	One-Chip Class-E Inverter Controller for Driving a Magnetron. IEEE Transactions on Industrial Electronics, 2009, 56, 400-407.	7.9	19
42	Pâ€134: A Highâ€SNR Areaâ€Efficient Readout Circuit using a Deltaâ€Integration Method for Capacitive Touch Screen Panels. Digest of Technical Papers SID International Symposium, 2012, 43, 1570-1573.	0.3	19
43	New current source inverters with DC-side commutation and load-side energy recovery circuit. IEEE Transactions on Industry Applications, 1991, 27, 52-62.	4.9	18
44	Novel constant frequency PWM DC/DC converter with zero voltage switching for both primary switches and secondary rectifying diodes. IEEE Transactions on Industrial Electronics, 1992, 39, 444-452.	7.9	18
45	Inverting Buck-Boost DC-DC Converter for Mobile AMOLED Display Using Real-Time Self-Tuned Minimum Power-Loss Tracking (MPLT) Scheme With Lossless Soft-Switching for Discontinuous Conduction Mode. IEEE Journal of Solid-State Circuits, 2015, 50, 2380-2393.	5.4	18
46	A Pseudo Single-Stage Amplifier With an Adaptively Varied Medium Impedance Node for Ultra-High Slew Rate and Wide-Range Capacitive-Load Drivability. IEEE Transactions on Circuits and Systems I: Regular Papers, 2016, 63, 1567-1578.	5.4	17
47	A unity power factor electronic ballast for fluorescent lamp having improved valley fill and valley boost converter. , 0, , .		16
48	A new high-efficiency and super-fidelity analog audio amplifier with the aid of digital switching amplifier: class K amplifier. , 0 , , .		16
49	Voltage-Boosted Current-Mode Wireless Power Receiver for Directly Charging a Low-Voltage Battery in Implantable Medical Systems. IEEE Transactions on Industrial Electronics, 2019, 66, 8860-8865.	7.9	16
50	Zero-voltage and zero-current switching full bridge DC-DC converter for arc welding machines. Electronics Letters, 1999, 35, 1043.	1.0	15
51	Envelope Modulator for 1.5W 10MHz LTE PA without AC Coupling Capacitor achieving 86.5% Peak Efficiency. IEEE Transactions on Power Electronics, 2016, , 1-1.	7.9	15
52	Sine-Reference Band (SRB)-Controlled Average Current Technique for Phase-Cut Dimmable AC–DC Buck LED Lighting Driver Without Electrolytic Capacitor. IEEE Transactions on Power Electronics, 2018, 33, 6994-7009.	7.9	15
53	2-Phase 3-Level ETSM With Mismatch-Free Duty Cycles Achieving 88.6% Peak Efficiency for a 20-MHz LTE RF Power Amplifier. IEEE Transactions on Power Electronics, 2018, 33, 2815-2819.	7.9	15
54	A Noninverting Buck–Boost Converter With State-Based Current Control for Li-ion Battery Management in Mobile Applications. IEEE Transactions on Industrial Electronics, 2019, 66, 9623-9627.	7.9	15

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55	A Time-Interleaved Resonant Voltage Mode Wireless Power Receiver With Delay-Based Tracking Loops for Implantable Medical Devices. IEEE Journal of Solid-State Circuits, 2020, 55, 1374-1385.	5.4	15
56	Fully Integrated Digitally Assisted Low-Dropout Regulator for a NAND Flash Memory System. IEEE Transactions on Power Electronics, 2018, 33, 388-406.	7.9	14
57	A High-Speed Current-Mode Data Driver With Push-Pull Transient Current Feedforward for Full-HD AMOLED Displays. IEEE Journal of Solid-State Circuits, 2010, 45, 1881-1895.	5.4	13
58	Analog-digital switching mixed mode low ripple-high efficiency Li-ion battery charger. , 0, , .		12
59	Voltage-Clamped Class-E Inverter With Harmonic Tuning Network for Magnetron Drive. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 2006, 53, 1456-1460.	2.2	12
60	56.4: A Cascaded-Dividing Current DAC with Fine Pitch for High-Resolution AMOLED Display Drivers. Digest of Technical Papers SID International Symposium, 2007, 38, 1644-1646.	0.3	12
61	Omni-directional inductive power transfer system for mobile robots using evenly displaced multiple pick-ups., 2012,,.		11
62	Dual Receiver Coils Wireless Power Transfer System With Interleaving Switching. IEEE Transactions on Power Electronics, 2018, 33, 10016-10020.	7.9	11
63	A 97% high-efficiency $6\hat{l}^{1}\!\!/\!\!4$ s fast-recovery-time buck-based step-up/down converter with embedded 1/2 and 3/2 charge-pumps for li-lon battery management. , 2018, , .		11
64	Thermal-Variation Insensitive Force-Touch Sensing System Using Transparent Piezoelectric Thin-Film. IEEE Sensors Journal, 2018, 18, 5863-5875.	4.7	11
65	P-45: A Fast Driving Circuit for AMOLED Displays Using Current Feedback. Digest of Technical Papers SID International Symposium, 2006, 37, 363.	0.3	10
66	An autonomous CMOS hysteretic sensor for the detection of desorption-free DNA hybridization. Biosensors and Bioelectronics, 2011, 26, 4591-4595.	10.1	10
67	Zero\$^{m th}\$-Order Control of Boost DC-DC Converter With Transient Enhancement Scheme. IEEE Journal of Solid-State Circuits, 2013, 48, 760-773.	5.4	10
68	50.2: A Realâ€time TFT Compensation through Power Line Current Sensing for Highâ€resolution AMOLED Displays. Digest of Technical Papers SID International Symposium, 2014, 45, 724-727.	0.3	10
69	Issues of single-inductor multiple-output DC-DC converters. , 2015, , .		10
70	A 500-MHz Bandwidth 7.5-mV _{pp} Ripple Power-Amplifier Supply Modulator for RF Polar Transmitters. IEEE Journal of Solid-State Circuits, 2018, 53, 1653-1665.	5.4	10
71	SiC-Based 4 MHz 10 kW ZVS Inverter With Fast Resonance Frequency Tracking Control for High-Density Plasma Generators. IEEE Transactions on Power Electronics, 2020, 35, 3266-3275.	7.9	10
72	A 0.791 mm\$^{2}\$ On-Chip Self-Aligned Comparator Controller for Boost DC-DC Converter Using Switching Noise Robust Charge-Pump. IEEE Journal of Solid-State Circuits, 2014, 49, 502-512.	5.4	9

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73	High-Resolution Synthesized Magnetic Field Focusing for RF Barcode Applications. IEEE Transactions on Industrial Electronics, 2018, 65, 597-607.	7.9	9
74	An Area and Power Efficient Interpolation Scheme Using Variable Current Control for 10-Bit Data Drivers in Mobile Active-Matrix LCDs. IEEE Transactions on Consumer Electronics, 2019, 65, 253-262.	3.6	9
75	A new soft recovery PWM quasi-resonant converter with a folding snubber network. IEEE Transactions on Industrial Electronics, 2002, 49, 456-461.	7.9	8
76	P-40: A Novel Data Driving Method and Circuits for AMOLED Displays. Digest of Technical Papers SID International Symposium, 2006, 37, 343.	0.3	8
77	Mixed Mode Excitation and Low Cost Control IC for Electronic Ballast. IEEE Transactions on Power Electronics, 2007, 22, 871-880.	7.9	8
78	Transient Charge Feedforward Driver for High-Speed Current-Mode Data Driving in Active-Matrix OLED Displays. IEEE Transactions on Circuits and Systems I: Regular Papers, 2010, 57, 539-547.	5.4	8
79	A Compact-Sized 9-Bit Switched-Current DAC for AMOLED Mobile Display Drivers. IEEE Transactions on Circuits and Systems II: Express Briefs, 2011, 58, 887-891.	3.0	8
80	A 10.1―183- \$mu ext{W}\$ /electrode, 0.73-mm2/sensor High-SNR 3-D Hover Sensor Based on Enhanced Signal Refining and Fine Error Calibrating Techniques. IEEE Journal of Solid-State Circuits, 2018, 53, 1079-1088.	5.4	8
81	High power factor correction circuit using valley charge-pumping for low cost electronic ballasts. , 0, , .		7
82	P-42: A 10 bit Gray Scale Digital-to-Analog Converter with an Interpolating Buffer Amplifier for AMLCD Column Drivers. Digest of Technical Papers SID International Symposium, 2007, 38, 346-349.	0.3	7
83	Design considerations of channel buffer amplifiers for low-power area-efficient column drivers in active-matrix LCDs. IEEE Transactions on Consumer Electronics, 2008, 54, 648-656.	3.6	7
84	Improved Transient Current Feedforward Output Buffer for Fast and Compact Active-Matrix OLED Column Drivers. IEEE Transactions on Circuits and Systems II: Express Briefs, 2009, 56, 560-564.	3.0	7
85	High Area-Efficient DC-DC Converter With High Reliability Using Time-Mode Miller Compensation (TMMC). IEEE Journal of Solid-State Circuits, 2013, 48, 2457-2468.	5.4	7
86	Low-loss quasi-parallel resonant DC link inverter with advanced PWM capability. International Journal of Electronics, 1996, 81, 219-234.	1.4	6
87	A control IC for electronic ballast with mixed-mode excitation. , 0, , .		6
88	Power-efficient series-charge parallel-discharge charge pump circuit for LED drive. Power Electronics Specialist Conference (PESC), IEEE, 2008, , .	0.0	6
89	A Direct Fast Feedback Current Driver Using an Inverting Amplifier for High-Quality AMOLED Displays. IEEE Transactions on Circuits and Systems II: Express Briefs, 2012, 59, 414-418.	3.0	6
90	Regenerative signal amplifying gate driver of self-excited electronic ballast for high pressure sodium (HPS) lamp. , 0, , .		5

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91	ZVZCS Full-Bridge PWM DC/DC Converter using a Novel LCD Energy-Recovery Snubber., 0,,.		5
92	A 4-W Master–Slave Switching Amplitude Modulator for Class-E1 EDGE Polar Transmitters. IEEE Transactions on Circuits and Systems II: Express Briefs, 2008, 55, 484-488.	3.0	5
93	A High-Performance Fast Switching Charge Dump Assisted Class-\$K^{ast}\$ Audio Amplifier. IEEE Transactions on Circuits and Systems I: Regular Papers, 2010, 57, 1122-1133.	5.4	5
94	Design method for area-efficient and uniform channel DACs. IEEE Transactions on Consumer Electronics, 2010, 56, 271-279.	3.6	5
95	Efficiency enhanced Single-Inductor Boost-Inverting Flyback converter with Dual Hybrid Energy transfer media and a Bifurcation Free Comparator. , 2010, , .		5
96	Low-ripple hysteretic-controlled monolithic buck converter with adapted switching frequency for large step-down ratio applications. , 2011 , , .		5
97	Fast switching gate driver for self resonant inverters applicable to electronic ballasts. Electronics Letters, 1998, 34, 826.	1.0	4
98	A Gray-Level Dependent Pre-Emphasis Column Driver With Fast Settling for Active-Matrix LCD Applications. IEEE Transactions on Circuits and Systems II: Express Briefs, 2007, 54, 1057-1061.	3.0	4
99	A High IIP2 Direct-Conversion Receiver Using Even-Harmonic Reduction Technique for Cellular CDMA/PCS/GPS Applications. IEEE Transactions on Circuits and Systems I: Regular Papers, 2008, 55, 2934-2943.	5.4	4
100	A fully integrated wide-band PID controller with capacitor-less compensation for step-down DC-DC converter. , $2011, \ldots$		4
101	26.2: Distinguished Student Paper: A 10-bit Compact Current DAC Architecture for Large-Size AMOLED Displays. Digest of Technical Papers SID International Symposium, 2011, 42, 334-337.	0.3	4
102	Auto-Scaling Overdrive Method Using Adaptive Charge Amplification for PRAM Write Performance Enhancement. IEEE Transactions on Circuits and Systems I: Regular Papers, 2014, 61, 3165-3174.	5.4	4
103	Switched inductor capacitor buck converter with >85% power efficiency in 100uA-to-300mA loads using a bang-bang zero-current detector. , 2018, , .		4
104	A CMOS Variable Gain Amplifier with Wide Dynamic Range and Accurate dB-Linear Characteristic. , 2006, , .		3
105	58.3: Area and Power Efficient 10-bit Column Driver with Interpolating DAC and Push-Pull Amplifier for AMLCDs. Digest of Technical Papers SID International Symposium, 2008, 39, 889.	0.3	3
106	27.4: A 10â€Bit Serial Integrationâ€Type DAC Architecture for AMLCD Column Drivers. Digest of Technical Papers SID International Symposium, 2009, 40, 379-382.	0.3	3
107	27.2: A Buffer Amplifier with Embodied 4-Bit Interpolation for 10-Bit AMLCD Column Drivers. Digest of Technical Papers SID International Symposium, 2009, 40, 371.	0.3	3
108	Dual-Input Dual-Output energy harvesting DC-DC boost converter for Wireless Body Area Network. , 2011, , .		3

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109	A Double Zeros Compensated Direct Fast Feedback Current Driver for Medium to Large AMOLED Displays. IEEE Transactions on Circuits and Systems I: Regular Papers, 2012, 59, 2197-2209.	5.4	3
110	A Single-Inductor–Multiple-Output (SIMO) 0.8-V/1.8-V/12-V Step-Up/Down Converter With Low-Quiescent Current for Implantable Electroceutical SoCs. IEEE Solid-State Circuits Letters, 2021, 4, 182-185.	2.0	3
111	Low loss and high speed IGBT gate driver using the reverse current limiting technique of diode recovery for a hard switching inverter. International Journal of Electronics, 1996, 81, 321-336.	1.4	2
112	A Dual Loop Feedback Audio Amplifter Using Self-oscillating Delta Modulation. , 1997, , .		2
113	A primary-side-assisted zero-voltage and zero-current switching DC-DC converter. International Journal of Electronics, 2002, 89, 77-89.	1.4	2
114	P-38: Low-Power High-Slew-Rate CMOS Buffer Amplifier for Flat Panel Display Drivers. Digest of Technical Papers SID International Symposium, 2006, 37, 336.	0.3	2
115	Hybrid switching amplifier using a novel two-quadrant wideband buffer for dynamic power supply applications. Power Electronics Specialist Conference (PESC), IEEE, 2008, , .	0.0	2
116	60.2: Low-Power Consumptive Luminance Compensation for a Digital Driving AMOLED Display using a Multiple Output Boost Converter. Digest of Technical Papers SID International Symposium, 2010, 41, 898.	0.3	2
117	Hybrid driver IC for real-time TFT non-uniformity compensation of ultra high-definition AMOLED display. , 2015, , .		2
118	An Accurate and Practical Core Loss Analysis for Compact High Step-Up Converters. IEEE Transactions on Power Electronics, 2019, 34, 8368-8376.	7.9	2
119	Electronic ballast with modified valley fill and charge pump capacitor for prolonged filaments preheating and power factor correction., 0,,.		1
120	6.1: A Size Efficient 10b DAC with Multi-path Current Interpolation and Weighted Tranconductors for the AMLCD Displays. Digest of Technical Papers SID International Symposium, 2010, 41, 54.	0.3	1
121	48.2: A Novel Current-Mode Driving Technique for Real-Time Image Compensation in AMOLED Displays. Digest of Technical Papers SID International Symposium, 2012, 43, 647-650.	0.3	1
122	Emulated multi-path PID compensator for buck converters with large step-down ratio. , 2012, , .		1
123	A gamma-type current-mode digital-to-analog converter for active-matrix organic light-emitting diode display drivers. Journal of Information Display, 2014, 15, 163-167.	4.0	1
124	An 83% peak efficiency and 1.07W/mm ² power density Single Inductor 4-Output DC-DC converter with Bang-Bang Zero th -Order Control. , 2014, , .		1
125	P-43: A Multi-Chip Reference Current Generating Circuit for Current-Mode Column Driver ICs. Digest of Technical Papers SID International Symposium, 2007, 38, 350-352.	0.3	0
126	6.2: A 10 Bits Modified VCC Interpolation and DVO Correction by Drain Current Injection. Digest of Technical Papers SID International Symposium, 2010, 41, 58.	0.3	0

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127	35.3: A 10-bit Linear R-string DAC Architecture for Mobile Full-HD AMOLED Driver ICs. Digest of Technical Papers SID International Symposium, 2013, 44, 469-472.	0.3	0