William S Wong

List of Publications by Year
in descending order

100 papers	3,444 citations	218677 26 h-index	138484 58 g-index
100 all docs	100 docs citations	100 times ranked	3442 citing authors

#	Article	IF	Citations
1	The Use of Greenâ€Solvent Processable Molecules with Large Dipole Moments in the Electron Extraction Layer of Inverted Organic Solar Cells as a Universal Route for Enhancing Stability. Advanced Sustainable Systems, 2022, 6, 2100078.	5.3	7
2	Effects of Fluid Behavior on the Electrical Characteristics of Inkjet-Printed Thin-Film Transistors. ACS Applied Electronic Materials, 2022, 4, 614-621.	4.3	3
3	Energy-Efficient Full-Swing Logic Circuits With Unipolar TFTs on Flexible Substrates. IEEE Journal of Solid-State Circuits, 2021, 56, 1949-1958.	5.4	6
4	Enhanced Surface-Emitting Vertical InGaN Light-Emitting Diodes by Self-Aligned Sidewall Electrodes and Optical Cavity Length Modulation. ACS Applied Electronic Materials, 2021, 3, 882-889.	4.3	1
5	Sensitive, Stretchable, and Sustainable Conductive Cellulose Nanocrystal Composite for Human Motion Detection. ACS Sustainable Chemistry and Engineering, 2021, 9, 17351-17361.	6.7	16
6	CMOS-Like Logic Circuits With Unipolar Thin-Film Transistors on Flexible Substrate. IEEE Transactions on Electron Devices, 2020, 67, 512-517.	3.0	4
7	Three-dimensional radial-junction ZnO nanowire/a-Si:H coreâ€“shell infrared photodiodes. Nanotechnology, 2020, 31, 35LT01.	2.6	2
8	Thermal and optical properties of high-density GaN micro-LED arrays on flexible substrates. Nano Energy, 2020, 73, 104724.	16.0	33
9	Size-dependent optoelectrical properties of 365 nm ultraviolet light-emitting diodes. Nanotechnology, 2019, 30, 504001.	2.6	14
10	Optically invariant InGaN nanowire light-emitting diodes on flexible substrates under mechanical manipulation. Npj Flexible Electronics, 2019, 3, .	10.7	18
11	Integration of GaN light-emitting diodes with a-Si:H thin-film transistors for flexible displays. Nanotechnology, 2019, 30, 324003.	2.6	18
12	A 6-TFT Charge-Transfer Self-Compensating Pixel Circuit for Flexible Displays. IEEE Journal of the Electron Devices Society, 2019, 7, 792-800.	2.1	12
13	TFT Adder Design on Flexible Substrate. , 2019, , .		1
14	Inkjet Printed Assembly and Electrical Characteristics of Thin-Film Transistors with Hybrid MoS2-P3HT Semiconductor Layers. , 2019, , .		0
15	Effect of dual-dielectric hydrogen-diffusion barrier layers on the performance of low-temperature processed transparent InGaZnO thin-film transistors. Applied Physics Letters, 2018, 112, .	3.3	11
16	Operation and Control of Flexible Display Pixel Circuits Under Mechanical Bending. , 2018, , .		4
17	Effect of Mechanical Strain on Hydrogenated Amorphous Silicon Thin-Film Transistors and Compensation Circuits on Flexible Substrates. IEEE Transactions on Electron Devices, 2017, 64, 2016-2021.	3.0	26
18	Hybrid ZnO Coreâ€“a-Si:H Shell Infrared Photodetectors Integrated With Thin-Film Transistors. IEEE Electron Device Letters, 2017, 38, 1688-1691.	3.9	2

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19	Al-doped ZnO/Ag-nanowire Composite Electrodes for Flexible 3-Dimensional Nanowire Solar Cells. Scientific Reports, 2017, 7, 8916.	3.3	17
20	Infrared optical absorption from hybrid 3-D a-Si:H/ZnO nanowire structures. Journal of Applied Physics, 2017, 122, 013102.	2.5	2
21	Effect of Charge Retention of Non-Volatile Memory TFTs Under Multiple Read Cycles. IEEE Journal of the Electron Devices Society, 2017, 5, 266-270.	2.1	1
22	‹b›Optical and Electrical Characteristics of Hybrid ZnO Nanowire/aâ€Si:H Solar Cells on Flexible Substrates under Mechanical Bending‹/b›. Small, 2016, 12, 2554-2558.	10.0	9
23	Adjustable optical response of amorphous silicon nanowires integrated with thin films. Nanotechnology, 2016, 27, 145703.	2.6	12
24	Low-Power Bootstrapped Rail-to-Rail Logic Gates for Thin-Film Applications. Journal of Display Technology, 2016, 12, 1539-1546.	1.2	12
25	Transistor Sizing for Bias-Stress Instability Compensation in Inkjet-Printed Organic Complementary Inverters. IEEE Electron Device Letters, 2016, 37, 1438-1441.	3.9	4
26	Multilayer MoS2 Thin-film Transistors Employing Silicon Nitride and Silicon Oxide Dielectric Layers. IEEE Electron Device Letters, 2016, , 1-1.	3.9	7
27	Hybrid ZnO nanowire/a-Si:H thin-film radial junction solar cells using nanoparticle front contacts. Applied Physics Letters, 2015, 107, .	3.3	11
28	Electrical dependence on the chemical composition of the gate dielectric in indium gallium zinc oxide thin-film transistors. Applied Physics Letters, 2015, 107, 023501.	3.3	11
29	Selective wet-etch processing of optically transparent flexible InGaZnO thin-film transistors. Applied Physics Letters, 2015, 107, .	3.3	14
30	Paper No P24: Effect of Mechanical Strain on Charge-Transfer VT -Shift Compensation Circuits for Flexible AMOLED Displays. Digest of Technical Papers SID International Symposium, 2015, 46, 91-91.	0.3	0
31	Low dose radiation effects on a-Si:H TFTs. , 2015, , .		1
32	Optically Transparent Flexible IGZO TFTs Fabricated with a Selective Wet-Etch Process. ECS Transactions, 2015, 66, 233-239.	0.5	1
33	Study of deposition temperature on high crystallinity nanocrystalline silicon thin films with in-situ hydrogen plasma-passivated grains. Thin Solid Films, 2015, 597, 151-157.	1.8	10
34	Pâ€44: Masterâ€Slave Pixel Concept Used for Improved Sensorâ€Display Array Circuits on Flexible Substrates. Digest of Technical Papers SID International Symposium, 2014, 45, 1138-1140.	0.3	0
35	Heterogeneously integrated nanowires and thin films for flexible electronics. , 2014, , .		0
36	Hybrid Sensor and Display Pixel Circuits for Mobile Near-to-Eye Applications. Journal of Display Technology, 2014, 10, 574-581.	1.2	0

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37	Zinc oxide nanowire arrays for silicon core/shell solar cells. Optics Express, 2014, 22, A622.	3.4	16
38	Enhanced Dark Current Suppression of Amorphous Selenium Detector With Use of IGZO Hole Blocking Layer. IEEE Transactions on Electron Devices, 2014, 61, 3355-3357.	3.0	15
39	A novel voltage-programmed pixel circuit with V<inf>T</inf>-shift compensation for AMOLED displays. , 2013, , .		1
40	A Novel Voltage-Programmed Pixel Circuit Utilizing V_{T}-Dependent Charge-Transfer to Improve Stability of AMOLED Display. Journal of Display Technology, 2013, 9, 957-964.	1.2	11
41	(Invited) Materials, Processing, and Characterization for Printed Flexible Electronics. ECS Transactions, 2013, 50, 249-255.	0.5	0
42	Effects of mechanical strain on amorphous silicon thin-film transistor electrical stability. Applied Physics Letters, 2013, 102, 233509.	3.3	28
43	Paper No 14.4: Modeling and Characterization of a-Si:H-Based Hybrid Sensor and Display Pixel Array Circuits. Digest of Technical Papers SID International Symposium, 2013, 44, 240-242.	0.3	0
44	21.4L: Lateâ€News Paper: Recent Developments of Carbon Nanotube Enabled Vertical Organic Light Emitting Transistors for OLED Displays. Digest of Technical Papers SID International Symposium, 2013, 44, 251-253.	0.3	7
45	A novel 4-TFT pixel circuit with threshold voltage compensation for AMOLED displays. , 2012, , .		1
46	Blue-Light-Sensitive Phototransistor for Indirect X-Ray Image Sensors. IEEE Electron Device Letters, 2012, 33, 567-569.	3.9	18
47	Materials, processing, and characterization for flexible electronics. , 2011, , .		0
48	Hybrid Si Nanowire/Amorphous Silicon FETs for Large-Area Image Sensor Arrays. Nano Letters, 2011, 11, 2214-2218.	9.1	44
49	Materials, Processing, and Testing of Flexible Image Sensor Arrays. IEEE Design and Test of Computers, 2011, 28, 16-23.	1.0	7
50	Amorphous silicon thin film transistor image sensors. Philosophical Magazine, 2009, 89, 2687-2697.	1.6	5
51	Characterization of Charge Collection in Photodiodes under Mechanical Strain: Comparison between Organic Bulk Heterojunction and Amorphous Silicon. Advanced Materials, 2009, 21, 1855-1859.	21.0	31
52	Lowâ€temperature amorphous silicon pâ€“iâ€“n photodiodes. Physica Status Solidi (B): Basic Research, 2009, 246, 1854-1857.	1.5	9
53	Defect Identification in Large Area Electronic Backplanes. Journal of Display Technology, 2009, 5, 27-33.	1.2	19
54	Curved electronic pixel arrays using a cut and bend approach. Journal of Applied Physics, 2009, 105, 104504.	2.5	26

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55	Analytic Model for Diffuse Reflectivity of Silicon Nanowire Mats. Nano Letters, 2009, 9, 3494-3497.	9.1	74
56	Materials and Novel Patterning Methods for Flexible Electronics. Kluwer International Series in Electronic Materials: Science and Technology, 2009, , 143-181.	0.5	43
57	Reflectivity of disordered silicon nanowires. Applied Physics Letters, 2008, 93, .	3.3	67
58	Flexible image sensor array with bulk heterojunction organic photodiode. Applied Physics Letters, 2008, 92, .	3.3	305
59	Low-temperature synthesis of Si nanowires using multizone chemical vapor deposition methods. Applied Physics Letters, 2008, 93, .	3.3	13
60	Characterization of flexible image sensor arrays with bulk heterojunction organic photodiodes. , 2008, , .		0
61	Low temperature a-Si:H photodiodes and flexible image sensor arrays patterned by digital lithography. Applied Physics Letters, 2007, 91, .	3.3	47
62	Flexible a-Si:H-based Image Sensors Fabricated by Digital Lithography. Materials Research Society Symposia Proceedings, 2007, 989, 3.	0.1	3
63	Digital lithographic processing for large-area electronics. Journal of the Society for Information Display, 2007, 15, 463.	2.1	4
64	Digital lithography for large-area electronics on flexible substrates. Journal of Non-Crystalline Solids, 2006, 352, 1981-1985.	3.1	26
65	Jet printing flexible displays. Materials Today, 2006, 9, 32-37.	14.2	198
66	Thin-film Transistor Fabrication by Digital Lithography. , 2006, , 271-293.		2
67	Fine-feature patterning of self-aligned polymeric thin-film transistors fabricated by digital lithography and electroplating. Applied Physics Letters, 2006, 89, 142118.	3.3	10
68	Printed Organic Electronics. , 2005, , 219-243.		1
69	Polymer Thin-Film Transistor Arrays Patterned by Stamping. Advanced Functional Materials, 2005, 15, 1105-1110.	14.9	15
70	Printed active-matrix TFT arrays for x-ray imaging (Invited Paper). , 2005, , .		7
71	Printing Methods and Materials for Large-Area Electronic Devices. Proceedings of the IEEE, 2005, 93, 1491-1499.	21.3	59
72	All jet-printed polymer thin-film transistor active-matrix backplanes. Applied Physics Letters, 2004, 85, 3304-3306.	3.3	261

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73	Digital-lithographic processing for thin-film transistor array fabrication. Journal of Non-Crystalline Solids, 2004, 338-340, 710-714.	3.1	8
74	Fabrication of Arrays of Organic Polymeric Thin-Film Transistors Using Self-Aligned Microfluidic Channels. Advanced Materials, 2003, 15, 1903-1907.	21.0	16
75	Additive jet printing of polymer thin-film transistors. Applied Physics Letters, 2003, 83, 2070-2072.	3.3	175
76	Hydrogenated amorphous silicon thin-film transistor arrays fabricated by digital lithography. IEEE Electron Device Letters, 2003, 24, 577-579.	3.9	48
77	Organic polymeric thin-film transistors fabricated by selective dewetting. Applied Physics Letters, 2002, 81, 4260-4262.	3.3	80
78	Amorphous silicon thin-film transistors and arrays fabricated by jet printing. Applied Physics Letters, 2002, 80, 610-612.	3.3	50
79	Continuous-wave InGaN laser diodes on copper and diamond substrates. Journal of Materials Research, 2002, 17, 890-894.	2.6	3
80	Jet-printed fabrication of a-Si:H thin-film transistors and arrays. Journal of Non-Crystalline Solids, 2002, 299-302, 1335-1339.	3.1	9
81	CW InGaN multiple-quantum-well laser diodes on copper and diamond substrates by laser lift-off. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2002, 93, 68-72.	3.5	3
82	Continuous-wave operation of InGaN multiple-quantum-well laser diodes on copper substrates obtained by laser liftoff. IEEE Journal of Selected Topics in Quantum Electronics, 2001, 7, 188-191.	2.9	13
83	Integration of InGaN-based Optoelectronics with Dissimilar Substrates by Wafer Bonding and Laser Lift-off. Materials Research Society Symposia Proceedings, 2001, 681, 1.	0.1	1
84	Kinetics of the Pd/In thin-film bilayer reaction: Implications for transient-liquid-phase wafer bonding. Journal of Electronic Materials, 2001, 30, 1471-1475.	2.2	19
85	Continuous-wave InGaN multiple-quantum-well laser diodes on copper substrates. Applied Physics Letters, 2001, 78, 1198-1200.	3.3	57
86	Performance characteristics of cw InGaN multiple-quantum-well laser diodes. Materials Research Society Symposia Proceedings, 2000, 639, 1061.	0.1	1
87	Integration of InxGa1â^'xN Laser Diodes with Dissimilar Substrates by Laser Lift-off. Materials Research Society Symposia Proceedings, 2000, 639, 1221.	0.1	0
88	The Integration of InxGa1-xN Multiple-Quantum-Well Laser Diodes with Copper Substrates by Laser Lift-Off. Japanese Journal of Applied Physics, 2000, 39, L1203-L1205.	1.5	16
89	Performance and degradation of continuous-wave InGaN multiple-quantum-well laser diodes on epitaxially laterally overgrown GaN substrates. Applied Physics Letters, 2000, 77, 1931-1933.	3.3	38
90	InxGa1â^'xN light emitting diodes on Si substrates fabricated by Pdâ€“In metal bonding and laser lift-off. Applied Physics Letters, 2000, 77, 2822-2824.	3.3	178

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91	Structural and chemical characterization of free-standing GaN films separated from sapphire substrates by laser lift-off. Applied Physics Letters, 2000, 77, 1819.	3.3	53
92	Local structures of free-standing AlxGa1â˜'xN thin films studied by extended x-ray absorption fine structure. Applied Physics Letters, 1999, 75, 4097-4099.	3.3	18
93	Reduction of the energy gap pressure coefficient of GaN due to the constraining presence of the sapphire substrate. Journal of Applied Physics, 1999, 85, 2385-2389.	2.5	87
94	Integration of GaN thin films with dissimilar substrate materials by Pd-In metal bonding and laser lift-off. Journal of Electronic Materials, 1999, 28, 1409-1413.	2.2	54
95	Structural and optical quality of GaN/metal/Si heterostructures fabricated by excimer laser lift-off. Applied Physics Letters, 1999, 75, 1887-1889.	3.3	57
96	Fabrication of thin-film InGaN light-emitting diode membranes by laser lift-off. Applied Physics Letters, 1999, 75, 1360-1362.	3.3	326
97	The influence of the sapphire substrate on the temperature dependence of the GaN bandgap. Materials Research Society Symposia Proceedings, 1999, 572, 289.	0.1	3
98	Control of the structure and surface morphology of gallium nitride and aluminum nitride thin films by nitrogen background pressure in pulsed laser deposition. Journal of Electronic Materials, 1998, 27, 215-221.	2.2	15
99	Damage-free separation of GaN thin films from sapphire substrates. Applied Physics Letters, 1998, 72, 599-601.	3.3	410
100	Thermal annealing characteristics of Si and Mgâ€implanted GaN thin films. Applied Physics Letters, 1996, 68, 2702-2704.	3.3	43