

# William S Wong

## List of Publications by Year in descending order

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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	Damage-free separation of GaN thin films from sapphire substrates. Applied Physics Letters, 1998, 72, 599-601.	3.3	410
2	Fabrication of thin-film InGaN light-emitting diode membranes by laser lift-off. Applied Physics Letters, 1999, 75, 1360-1362.	3.3	326
3	Flexible image sensor array with bulk heterojunction organic photodiode. Applied Physics Letters, 2008, 92, .	3.3	305
4	All jet-printed polymer thin-film transistor active-matrix backplanes. Applied Physics Letters, 2004, 85, 3304-3306.	3.3	261
5	Jet printing flexible displays. Materials Today, 2006, 9, 32-37.	14.2	198
6	In <sub>x</sub> Ga <sub>1-x</sub> N light emitting diodes on Si substrates fabricated by Pd-In metal bonding and laser lift-off. Applied Physics Letters, 2000, 77, 2822-2824.	3.3	178
7	Additive jet printing of polymer thin-film transistors. Applied Physics Letters, 2003, 83, 2070-2072.	3.3	175
8	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
9	Organic polymeric thin-film transistors fabricated by selective dewetting. Applied Physics Letters, 2002, 81, 4260-4262.	3.3	80
10	Analytic Model for Diffuse Reflectivity of Silicon Nanowire Mats. Nano Letters, 2009, 9, 3494-3497.	9.1	74
11	Reflectivity of disordered silicon nanowires. Applied Physics Letters, 2008, 93, .	3.3	67
12	Printing Methods and Materials for Large-Area Electronic Devices. Proceedings of the IEEE, 2005, 93, 1491-1499.	21.3	59
13	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
14	Continuous-wave InGaN multiple-quantum-well laser diodes on copper substrates. Applied Physics Letters, 2001, 78, 1198-1200.	3.3	57
15	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
16	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
17	Amorphous silicon thin-film transistors and arrays fabricated by jet printing. Applied Physics Letters, 2002, 80, 610-612.	3.3	50
18	Hydrogenated amorphous silicon thin-film transistor arrays fabricated by digital lithography. IEEE Electron Device Letters, 2003, 24, 577-579.	3.9	48

#	ARTICLE	IF	CITATIONS
19	Low temperature a-Si:H photodiodes and flexible image sensor arrays patterned by digital lithography. Applied Physics Letters, 2007, 91, .	3.3	47
20	Hybrid Si Nanowire/Amorphous Silicon FETs for Large-Area Image Sensor Arrays. Nano Letters, 2011, 11, 2214-2218.	9.1	44
21	Thermal annealing characteristics of Si and Mg-implanted GaN thin films. Applied Physics Letters, 1996, 68, 2702-2704.	3.3	43
22	Materials and Novel Patterning Methods for Flexible Electronics. Kluwer International Series in Electronic Materials: Science and Technology, 2009, , 143-181.	0.5	43
23	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
24	Thermal and optical properties of high-density GaN micro-LED arrays on flexible substrates. Nano Energy, 2020, 73, 104724.	16.0	33
25	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
26	Effects of mechanical strain on amorphous silicon thin-film transistor electrical stability. Applied Physics Letters, 2013, 102, 233509.	3.3	28
27	Digital lithography for large-area electronics on flexible substrates. Journal of Non-Crystalline Solids, 2006, 352, 1981-1985.	3.1	26
28	Curved electronic pixel arrays using a cut and bend approach. Journal of Applied Physics, 2009, 105, 104504.	2.5	26
29	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
30	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
31	Defect Identification in Large Area Electronic Backplanes. Journal of Display Technology, 2009, 5, 27-33.	1.2	19
32	Local structures of free-standing Al <sub>x</sub> Ga <sub>1-x</sub> N thin films studied by extended x-ray absorption fine structure. Applied Physics Letters, 1999, 75, 4097-4099.	3.3	18
33	Blue-Light-Sensitive Phototransistor for Indirect X-Ray Image Sensors. IEEE Electron Device Letters, 2012, 33, 567-569.	3.9	18
34	Optically invariant InGaN nanowire light-emitting diodes on flexible substrates under mechanical manipulation. Npj Flexible Electronics, 2019, 3, .	10.7	18
35	Integration of GaN light-emitting diodes with a-Si:H thin-film transistors for flexible displays. Nanotechnology, 2019, 30, 324003.	2.6	18
36	Al-doped ZnO/Ag-nanowire Composite Electrodes for Flexible 3-Dimensional Nanowire Solar Cells. Scientific Reports, 2017, 7, 8916.	3.3	17

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37	The Integration of In <sub>x</sub> Ga <sub>1-x</sub> N Multiple-Quantum-Well Laser Diodes with Copper Substrates by Laser Lift-Off. Japanese Journal of Applied Physics, 2000, 39, L1203-L1205.	1.5	16
38	Fabrication of Arrays of Organic Polymeric Thin-Film Transistors Using Self-Aligned Microfluidic Channels. Advanced Materials, 2003, 15, 1903-1907.	21.0	16
39	Zinc oxide nanowire arrays for silicon core/shell solar cells. Optics Express, 2014, 22, A622.	3.4	16
40	Sensitive, Stretchable, and Sustainable Conductive Cellulose Nanocrystal Composite for Human Motion Detection. ACS Sustainable Chemistry and Engineering, 2021, 9, 17351-17361.	6.7	16
41	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
42	Polymer Thin-Film Transistor Arrays Patterned by Stamping. Advanced Functional Materials, 2005, 15, 1105-1110.	14.9	15
43	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
44	Selective wet-etch processing of optically transparent flexible InGaZnO thin-film transistors. Applied Physics Letters, 2015, 107, .	3.3	14
45	Size-dependent optoelectrical properties of 365 nm ultraviolet light-emitting diodes. Nanotechnology, 2019, 30, 504001.	2.6	14
46	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
47	Low-temperature synthesis of Si nanowires using multizone chemical vapor deposition methods. Applied Physics Letters, 2008, 93, .	3.3	13
48	Adjustable optical response of amorphous silicon nanowires integrated with thin films. Nanotechnology, 2016, 27, 145703.	2.6	12
49	Low-Power Bootstrapped Rail-to-Rail Logic Gates for Thin-Film Applications. Journal of Display Technology, 2016, 12, 1539-1546.	1.2	12
50	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
51	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
52	Hybrid ZnO nanowire/a-Si:H thin-film radial junction solar cells using nanoparticle front contacts. Applied Physics Letters, 2015, 107, .	3.3	11
53	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
54	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

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55	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
56	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
57	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
58	Low-temperature amorphous silicon $\mu$ CVD photodiodes. Physica Status Solidi (B): Basic Research, 2009, 246, 1854-1857.	1.5	9
59	Optical and Electrical Characteristics of Hybrid ZnO Nanowire/a-Si:H Solar Cells on Flexible Substrates under Mechanical Bending. Small, 2016, 12, 2554-2558.	10.0	9
60	Digital-lithographic processing for thin-film transistor array fabrication. Journal of Non-Crystalline Solids, 2004, 338-340, 710-714.	3.1	8
61	Printed active-matrix TFT arrays for x-ray imaging (Invited Paper)., 2005, , .		7
62	Materials, Processing, and Testing of Flexible Image Sensor Arrays. IEEE Design and Test of Computers, 2011, 28, 16-23.	1.0	7
63	21.4L: Late 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
64	Multilayer MoS <sub>2</sub> Thin-film Transistors Employing Silicon Nitride and Silicon Oxide Dielectric Layers. IEEE Electron Device Letters, 2016, , 1-1.	3.9	7
65	The Use of Green 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
66	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
67	Amorphous silicon thin film transistor image sensors. Philosophical Magazine, 2009, 89, 2687-2697.	1.6	5
68	Digital lithographic processing for large-area electronics. Journal of the Society for Information Display, 2007, 15, 463.	2.1	4
69	Transistor Sizing for Bias-Stress Instability Compensation in Inkjet-Printed Organic Complementary Inverters. IEEE Electron Device Letters, 2016, 37, 1438-1441.	3.9	4
70	Operation and Control of Flexible Display Pixel Circuits Under Mechanical Bending., 2018, , .		4
71	CMOS-Like Logic Circuits With Unipolar Thin-Film Transistors on Flexible Substrate. IEEE Transactions on Electron Devices, 2020, 67, 512-517.	3.0	4
72	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

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73	Continuous-wave InGaN laser diodes on copper and diamond substrates. Journal of Materials Research, 2002, 17, 890-894.	2.6	3
74	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
75	Flexible a-Si:H-based Image Sensors Fabricated by Digital Lithography. Materials Research Society Symposia Proceedings, 2007, 989, 3.	0.1	3
76	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
77	Thin-film Transistor Fabrication by Digital Lithography. , 2006, , 271-293.		2
78	Hybrid ZnO Core/a-Si:H Shell Infrared Photodetectors Integrated With Thin-Film Transistors. IEEE Electron Device Letters, 2017, 38, 1688-1691.	3.9	2
79	Infrared optical absorption from hybrid 3-D a-Si:H/ZnO nanowire structures. Journal of Applied Physics, 2017, 122, 013102.	2.5	2
80	Three-dimensional radial-junction ZnO nanowire/a-Si:H core-shell infrared photodiodes. Nanotechnology, 2020, 31, 35LT01.	2.6	2
81	Performance characteristics of cw InGaN multiple-quantum-well laser diodes. Materials Research Society Symposia Proceedings, 2000, 639, 1061.	0.1	1
82	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
83	Printed Organic Electronics. , 2005, , 219-243.		1
84	A novel 4-TFT pixel circuit with threshold voltage compensation for AMOLED displays. , 2012, , .		1
85	A novel voltage-programmed pixel circuit with $V_{th}$ -shift compensation for AMOLED displays. , 2013, , .		1
86	Low dose radiation effects on a-Si:H TFTs. , 2015, , .		1
87	Optically Transparent Flexible IGZO TFTs Fabricated with a Selective Wet-Etch Process. ECS Transactions, 2015, 66, 233-239.	0.5	1
88	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
89	TFT Adder Design on Flexible Substrate. , 2019, , .		1
90	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

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91	Integration of InxGal <sup>x</sup> N Laser Diodes with Dissimilar Substrates by Laser Lift-off. Materials Research Society Symposia Proceedings, 2000, 639, 1221.	0.1	0
92	Characterization of flexible image sensor arrays with bulk heterojunction organic photodiodes. , 2008, , .		0
93	Materials, processing, and characterization for flexible electronics. , 2011, , .		0
94	(Invited) Materials, Processing, and Characterization for Printed Flexible Electronics. ECS Transactions, 2013, 50, 249-255.	0.5	0
95	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
96	Paper No 44: Master-Slave Pixel Concept Used for Improved Sensor-Display Array Circuits on Flexible Substrates. Digest of Technical Papers SID International Symposium, 2014, 45, 1138-1140.	0.3	0
97	Heterogeneously integrated nanowires and thin films for flexible electronics. , 2014, , .		0
98	Hybrid Sensor and Display Pixel Circuits for Mobile Near-to-Eye Applications. Journal of Display Technology, 2014, 10, 574-581.	1.2	0
99	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
100	Inkjet Printed Assembly and Electrical Characteristics of Thin-Film Transistors with Hybrid MoS <sub>2</sub> -P3HT Semiconductor Layers. , 2019, , .		0