Kenji Nomura

List of Publications by Year
in descending order

99 papers	20,372 citations	38660 50 h-index	37111 96 g-index
101 all docs	101 docs citations	101 times ranked	10500 citing authors

#	Article	IF	Citations
1	Voltage Transfer Characteristics of CMOS-Like Inverters for Ambipolar SnO Thin-Film Transistors. IEEE Electron Device Letters, 2022, 43, 52-55.	2.2	8
2	Vacuum-Free Liquid-Metal-Printed 2D Indiumâ€“Tin Oxide Thin-Film Transistor for Oxide Inverters. ACS Nano, 2022, 16, 3280-3289.	7.3	34
3	Reconfigurable Artificial Synapses with Excitatory and Inhibitory Response Enabled by an Ambipolar Oxide Thin-Film Transistor. ACS Applied Materials & Interfaces, 2022, 14, 22252-22262.	4.0	9
4	8â€3: Invited Paper: Backâ€Channel Defect Termination for pâ€Channel Oxideâ€TFTs. Digest of Technical Papers SID International Symposium, 2021, 52, 85-88.	0.1	1
5	Recent progress of oxide-TFT-based inverter technology. Journal of Information Display, 2021, 22, 211-229.	2.1	24
6	Low-Temperature Solution-Processed n-Channel SnO₂ Thin-Film Transistors and High-Gain Zero-V_{GS}-Load Inverter. ACS Applied Electronic Materials, 2021, 3, 4943-4949.	2.0	13
7	Artificial Synapse Based on a 2D-SnO₂ Memtransistor with Dynamically Tunable Analog Switching for Neuromorphic Computing. ACS Applied Materials & Interfaces, 2021, 13, 52822-52832.	4.0	47
8	Atomically Thin Tin Monoxide-Based p-Channel Thin-Film Transistor and a Low-Power Complementary Inverter. ACS Applied Materials & Interfaces, 2021, , .	4.0	14
9	Resistive switching memory effects in p-type hydrogen-treated CuO nanowire. Applied Physics Letters, 2020, 117, .	1.5	10
10	Pâ€2: Hydrogenated SnO for pâ€channel oxide Thin Film Transistor. Digest of Technical Papers SID International Symposium, 2020, 51, 1315-1318.	0.1	0
11	Back-Channel Defect Termination by Sulfur for p-Channel Cu₂O Thin-Film Transistors. ACS Applied Materials & Interfaces, 2020, 12, 51581-51588.	4.0	23
12	Switching Mechanism behind the Device Operation Mode in SnOâ€TFT. Advanced Electronic Materials, 2020, 6, 2000742.	2.6	21
13	Threshold switching of non-stoichiometric CuO nanowire for selector application. Applied Physics Letters, 2020, 116, .	1.5	22
14	Frequency- and Power-Dependent Photoresponse of a Perovskite Photodetector Down to the Single-Photon Level. Nano Letters, 2020, 20, 2144-2151.	4.5	20
15	Hydrogen-Defect Termination in SnO for p-Channel TFTs. ACS Applied Electronic Materials, 2020, 2, 1162-1168.	2.0	36
16	Electronic Defects in Amorphous Oxide Semiconductors: A Review. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1800372.	0.8	179
17	Effects of High-Temperature Annealing on Operation Characteristics of a-In-Ga-Zn-O TFTs. Journal of Display Technology, 2014, 10, 979-983.	1.3	21
18	Roles of Hydrogen in Amorphous Oxide Semiconductor In-Ga-Zn-O: Comparison of Conventional and Ultra-High-Vacuum Sputtering. ECS Journal of Solid State Science and Technology, 2014, 3, Q3085-Q3090.	0.9	50

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19	Examination of the ambient effects on the stability of amorphous indium-gallium-zinc oxide thin film transistors using a laser-glass-sealing technology. Applied Physics Letters, 2014, 105, .	1.5	16
20	Surface reactivity and oxygen migration in amorphous indium-gallium-zinc oxide films annealed in humid atmosphere. Applied Physics Letters, 2013, 103, 201904.	1.5	28
21	P.3: 3â€Ð Stacked Complementary TFT Devices using nâ€type Î±â€IGZO and pâ€type F8T2 TFTs â€" Operation Confirmation of NOT and NAND Logic Circuits â€". Digest of Technical Papers SID International Symposium, 2013, 44, 995-998.	0.1	1
22	Hydrogen passivation of electron trap in amorphous In-Ga-Zn-O thin-film transistors. Applied Physics Letters, 2013, 103, .	1.5	112
23	Maximum applied voltage detector using amorphous Inâ€"Gaâ€"Znâ€"O thin-film transistor exposed to ozone annealing. Solid-State Electronics, 2012, 75, 74-76.	0.8	7
24	Light Irradiation History Sensor Using Amorphous In-Ga-Zn-O Thin-Film Transistor Exposed to Ozone Annealing. IEEE Electron Device Letters, 2012, 33, 384-386.	2.2	9
25	Operation model with carrier-density dependent mobility for amorphous Inâ€"Gaâ€"Znâ€"O thin-film transistors. Thin Solid Films, 2012, 520, 3791-3795.	0.8	15
26	Effects of low-temperature ozone annealing on operation characteristics of amorphous Inâ€"Gaâ€"Znâ€"O thin-film transistors. Thin Solid Films, 2012, 520, 3787-3790.	0.8	36
27	Photovoltaic properties of n-type amorphous Inâ€"Gaâ€"Znâ€"O and p-type single crystal Si heterojunction solar cells: Effects of Ga content. Thin Solid Films, 2012, 520, 3808-3812.	0.8	20
28	Stability and high-frequency operation of amorphous Inâ€"Gaâ€"Znâ€"O thin-film transistors with various passivation layers. Thin Solid Films, 2012, 520, 3778-3782.	0.8	78
29	Amorphous Inâ€"Gaâ€"Znâ€"O Dual-Gate TFTs: Currentâ€"Voltage Characteristics and Electrical Stress Instabilities. IEEE Transactions on Electron Devices, 2012, 59, 1928-1935.	1.6	53
30	Unusually Large Enhancement of Thermopower in an Electric Field Induced Twoâ€Ðimensional Electron Gas. Advanced Materials, 2012, 24, 740-744.	11.1	83
31	Simple Analytical Model of On Operation of Amorphous Inâ€"Gaâ€"Znâ€"O Thin-Film Transistors. IEEE Transactions on Electron Devices, 2011, 58, 3463-3471.	1.6	56
32	Solid-phase epitaxial growth of (111)-oriented Si film on InGaO3(ZnO)5 buffer layer. Journal of Materials Science: Materials in Electronics, 2011, 22, 920-923.	1.1	0
33	Excimer laser crystallization of InGaZnO4 on SiO2 substrate. Journal of Materials Science: Materials in Electronics, 2011, 22, 1694-1696.	1.1	9
34	Ambipolar Oxide Thinâ€Film Transistor. Advanced Materials, 2011, 23, 3431-3434.	11.1	236
35	Diffusion-Limited a-IGZO/Pt Schottky Junction Fabricated at 200 $^{circ}hbox{C}$ on a Flexible Substrate. IEEE Electron Device Letters, 2011, 32, 1695-1697.	2.2	89
36	Electronic Structure and Photovoltaic Properties of n-Type Amorphous In-Ga-Zn-O and p-Type Single Crystal Si Heterojunctions. Electrochemical and Solid-State Letters, 2011, 14, H346.	2.2	10

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37	Operation Characteristics of Thin-Film Transistors Using Very Thin Amorphous Inâ€“Gaâ€“Znâ€“O Channels. Electrochemical and Solid-State Letters, 2011, 14, H197.	2.2	46
38	Comprehensive studies on the stabilities of a-In-Ga-Zn-O based thin film transistor by constant current stress. Thin Solid Films, 2010, 518, 3012-3016.	0.8	50
39	Steady-state photoconductivity of amorphous Inâ€“Gaâ€“Znâ€“O. Thin Solid Films, 2010, 518, 3000-3003.	0.8	18
40	Fabrication of GaN epitaxial thin film on InGaZnO4 single-crystalline buffer layer. Thin Solid Films, 2010, 518, 2996-2999.	0.8	3
41	Device characteristics improvement of a-Inâ€“Gaâ€“Znâ€“O TFTs by low-temperature annealing. Thin Solid Films, 2010, 518, 3017-3021.	0.8	84
42	Large Photoresponse in Amorphous Inâ€“Gaâ€“Znâ€“O and Origin of Reversible and Slow Decay. Electrochemical and Solid-State Letters, 2010, 13, H324.	2.2	62
43	Sputtering formation of p-type SnO thin-film transistors on glass toward oxide complimentary circuits. Applied Physics Letters, 2010, 97, .	1.5	189
44	Three-dimensionally stacked flexible integrated circuit: Amorphous oxide/polymer hybrid complementary inverter using n-type a-Inâ€“Gaâ€“Znâ€“O and p-type poly-(9,9-dioctylfluorene-co-bithiophene) thin-film transistors. Applied Physics Letters, 2010, 96, .	1.5	91
45	Intrinsic carrier mobility in amorphous Inâ€“Gaâ€“Znâ€“O thin-film transistors determined by combined field-effect technique. Applied Physics Letters, 2010, 96, 262105.	1.5	51
46	Present status of amorphous Inâ€“Gaâ€“Znâ€“O thin-film transistors. Science and Technology of Advanced Materials, 2010, 11, 044305.	2.8	1,559
47	Fabrication of Atomically Flat ScAlMgO‹sub›4‹/sub› Epitaxial Buffer Layer and Low-Temperature Growth of High-Mobility ZnO Films. Crystal Growth and Design, 2010, 10, 1084-1089.	1.4	7
48	Origin of definite Hall voltage and positive slope in mobility-donor density relation in disordered oxide semiconductors. Applied Physics Letters, 2010, 96, .	1.5	139
49	Interface and bulk effects for biasâ€”lightâ€illumination instability in amorphousâ€Inâ€”Gaâ€”Znâ€”O thinâ€film transistors. Journal of the Society for Information Display, 2010, 18, 789-795.	0.8	69
50	Field-modulated thermopower in SrTiO3-based field-effect transistors with amorphous 12CaOâ‹…7Al2O3 glass gate insulator. Applied Physics Letters, 2009, 95, .	1.5	54
51	Amorphous Inâ€“Gaâ€“Znâ€“O coplanar homojunction thin-film transistor. Applied Physics Letters, 2009, 94, 133502.	1.5	168
52	Interactive Radical Dimers in Photoconductive Organic Thin Films. Angewandte Chemie - International Edition, 2009, 48, 4022-4024.	7.2	54
53	Large domain growth of GaN epitaxial films on lattice-matched buffer layer ScAlMgO4. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2009, 161, 66-70.	1.7	6
54	Tin monoxide as an sâ€orbitalâ€based pâ€type oxide semiconductor: Electronic structures and TFT application. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 2187-2191.	0.8	213

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55	Effects of postâ€annealing on (110) Cu₂O epitaxial films and origin of low mobility in Cu₂O thinâ€film transistor. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 2192-2197.	0.8	65
56	Amorphous Inâ€“Gaâ€“Zn-O thin-film transistor with coplanar homojunction structure. Thin Solid Films, 2009, 518, 1309-1313.	0.8	57
57	Origins of High Mobility and Low Operation Voltage of Amorphous Oxide TFTs: Electronic Structure, Electron Transport, Defects and Doping. Journal of Display Technology, 2009, 5, 273-288.	1.3	464
58	Electronic Structures Above Mobility Edges in Crystalline and Amorphous In-Ga-Zn-O: Percolation Conduction Examined by Analytical Model. Journal of Display Technology, 2009, 5, 462-467.	1.3	219
59	Anisotropic carrier transport properties in layered cobaltate epitaxial films grown by reactive solid-phase epitaxy. Applied Physics Letters, 2009, 94, .	1.5	22
60	Amorphous oxide channel TFTs. Thin Solid Films, 2008, 516, 1516-1522.	0.8	166
61	Specific contact resistances between amorphous oxide semiconductor Inâ€“Gaâ€“Znâ€“O and metallic electrodes. Thin Solid Films, 2008, 516, 5899-5902.	0.8	191
62	Control of carrier concentration and surface flattening of CuGaO2 epitaxial films for a p-channel transparent transistor. Thin Solid Films, 2008, 516, 5790-5794.	0.8	39
63	Fabrication of ScAlMgO4 epitaxial thin films using ScGaO3(ZnO)m buffer layers and its application to lattice-matched buffer layer for ZnO epitaxial growth. Thin Solid Films, 2008, 516, 5842-5846.	0.8	6
64	Trap densities in amorphous-InGaZnO4 thin-film transistors. Applied Physics Letters, 2008, 92, .	1.5	290
65	Factors controlling electron transport properties in transparent amorphous oxide semiconductors. Journal of Non-Crystalline Solids, 2008, 354, 2796-2800.	1.5	162
66	p -channel thin-film transistor using p-type oxide semiconductor, SnO. Applied Physics Letters, 2008, 93, .	1.5	577
67	Modeling of amorphous InGaZnO4 thin film transistors and their subgap density of states. Applied Physics Letters, 2008, 92, .	1.5	318
68	Epitaxial growth of high mobility Cu2O thin films and application to p-channel thin film transistor. Applied Physics Letters, 2008, 93, .	1.5	222
69	Photofieldâ€effect in amorphous Inâ€Gaâ€Znâ€O (aâ€IGZO) thinâ€film transistors. Journal of Information Display, 2008, 9, 21-29.	2.1	92
70	Optical and Carrier Transport Properties of Cosputtered Znâ€“Inâ€“Snâ€“O Films and Their Applications to TFTs. Journal of the Electrochemical Society, 2008, 155, H390.	1.3	57
71	Subgap states in transparent amorphous oxide semiconductor, Inâ€“Gaâ€“Znâ€“O, observed by bulk sensitive x-ray photoelectron spectroscopy. Applied Physics Letters, 2008, 92, .	1.5	298
72	Defect passivation and homogenization of amorphous oxide thin-film transistor by wet O2 annealing. Applied Physics Letters, 2008, 93, .	1.5	276

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73	Fast Thin-Film Transistor Circuits Based on Amorphous Oxide Semiconductor. IEEE Electron Device Letters, 2007, 28, 273-275.	2.2	110
74	Combinatorial approach to thin-film transistors using multicomponent semiconductor channels: An application to amorphous oxide semiconductors in Inâ€“Gaâ€“Znâ€“O system. Applied Physics Letters, 2007, 90, 242114.	1.5	219
75	Epitaxial film growth, optical, electrical, and magnetic properties of layered oxide In3FeTi2O10. Journal of Applied Physics, 2007, 101, 103714.	1.1	6
76	Circuits using uniform TFTs based on amorphous Inâ€Gaâ€Znâ€O. Journal of the Society for Information Display, 2007, 15, 915-921.	0.8	121
77	Giant thermoelectric Seebeck coefficient of a two-dimensional electron gas in SrTiO3. Nature Materials, 2007, 6, 129-134.	13.3	910
78	Epitaxial Film Growth and Superconducting Behavior of Sodiumâ^'Cobalt Oxyhydrate, NaxCoO2Â·yH2O (xâ^¼) Tj ETQq0 0 0 rgBT /Overl	1.9	14
79	High-mobility thin-film transistor with amorphous InGaZnO4 channel fabricated by room temperature rf-magnetron sputtering. Applied Physics Letters, 2006, 89, 112123.	1.5	1,048
80	Amorphous Oxide Semiconductors for High-Performance Flexible Thin-Film Transistors. Japanese Journal of Applied Physics, 2006, 45, 4303-4308.	0.8	659
81	Self-Adjusted, Three-Dimensional Lattice-Matched Buffer Layer for Growing ZnO Epitaxial Film:â€‰ Homologous Series Layered Oxide, InGaO3(ZnO)5. Crystal Growth and Design, 2006, 6, 2451-2456.	1.4	20
82	Growth and structure of heteroepitaxial thin films of homologous compounds RAO3(MO)m by reactive solid-phase epitaxy: Applicability to a variety of materials and epitaxial template layers. Thin Solid Films, 2006, 496, 64-69.	0.8	13
83	Device applications of transparent oxide semiconductors: Excitonic blue LED and transparent flexible TFT. Journal of Electroceramics, 2006, 17, 267-275.	0.8	46
84	Growth, structure and carrier transport properties of Ga2O3 epitaxial film examined for transparent field-effect transistor. Thin Solid Films, 2006, 496, 37-41.	0.8	173
85	Carrier transport and electronic structure in amorphous oxide semiconductor, a-InGaZnO4. Thin Solid Films, 2005, 486, 38-41.	0.8	423
86	Growth of epitaxial ZnO thin films on lattice-matched buffer layer: Application of InGaO3(ZnO)6 single-crystalline thin film. Thin Solid Films, 2005, 486, 28-32.	0.8	13
87	Field-Induced Current Modulation in Nanoporous Semiconductor, Electron-Doped 12CaOÂ·7Al2O3. Chemistry of Materials, 2005, 17, 6311-6316.	3.2	45
88	é«˜æ€§èƒ½ãƒ•ãƒ¬ã,·ãƒ–ãƒ« TFT å®Ÿç¾¤ã«å‘ã‘ã¥ã,¢ãƒ¢ãƒ«ã,¡ã,¹é…,åŒ–ç‰©©åŠå°Žä½“ã®æœ–™æŽ¢ç´¢ãƒ•ãƒ¬ã,·ãƒ–ãƒ« TFT		
89	Growth mechanism for single-crystalline thin film of InGaO3(ZnO)5 by reactive solid-phase epitaxy. Journal of Applied Physics, 2004, 95, 5532-5539.	1.1	58
90	Room-temperature fabrication of transparent flexible thin-film transistors using amorphous oxide semiconductors. Nature, 2004, 432, 488-492.	13.7	6,503

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91	All oxide transparent MISFET using high-k dielectrics gates. Microelectronic Engineering, 2004, 72, 294-298.	1.1	22
92	Carrier transport in transparent oxide semiconductor with intrinsic structural randomness probed using single-crystalline InGaO3(ZnO)5 films. Applied Physics Letters, 2004, 85, 1993-1995.	1.5	247
93	Electron transport in InGaO3(ZnO)m (m=integer) studied using single-crystalline thin films and transparent MISFETs. Thin Solid Films, 2003, 445, 322-326.	0.8	11
94	Frontier of transparent oxide semiconductors. Solid-State Electronics, 2003, 47, 2261-2267.	0.8	129
95	Thin-Film Transistor Fabricated in Single-Crystalline Transparent Oxide Semiconductor. Science, 2003, 300, 1269-1272.	6.0	1,709
96	Preparation of Zinc Oxide Thin Films by Pulsed Current Electrolysis. Journal of the Electrochemical Society, 2002, 149, F76.	1.3	21
97	Novel film growth technique of single crystalline In2O3(ZnO)m (m=integer) homologous compound. Thin Solid Films, 2002, 411, 147-151.	0.8	39
98	Orientation control of zinc oxide films by pulsed current electrolysis. Journal of Crystal Growth, 2002, 235, 224-228.	0.7	24
99	In situObservation of the Crystallization Process of Ferroelectric Thin Films by Raman Microspectroscopy. Japanese Journal of Applied Physics, 2000, 39, 5247-5251.	0.8	15