Akira Heya

List of Publications by Year
in descending order

50 papers	375 citations	840776 11 h-index	888059 17 g-index
50 all docs	50 docs citations	50 times ranked	103 citing authors

#	Article	IF	Citations
1	Effects of Ge and Ni catalytic underlayers to nanographene synthesis from pentacene-based film via soft X-ray irradiation. Japanese Journal of Applied Physics, 2022, 61, SC1057.	1.5	0
2	Nanographene synthesis on metal film using pentacene, H₂ gas and heated W mesh at low temperature. Japanese Journal of Applied Physics, 2021, 60, SBBK09.	1.5	1
3	Soft X-ray absorption and emission spectra of nanographene prepared from pentacene with hot mesh deposition and soft X-ray irradiation. Japanese Journal of Applied Physics, 2021, 60, 045506.	1.5	3
4	Structural and Electrical Properties of Nanographene Prepared from Pentacene by Hot Mesh Deposition and Soft X-ray Irradiation. , 2021, , .		0
5	Graphene synthesis from pentacene by soft X-ray irradiation. Thin Solid Films, 2020, 713, 138365.	1.8	9
6	Deuteration of Pentacene Using Deuterium Gas and Heated Catalyst. , 2020, , .		0
7	Evaluation of atomic hydrogen effect using polycrystalline Ge thin-film transistors. Japanese Journal of Applied Physics, 2019, 58, 068006.	1.5	3
8	Fabrication of nanographene using nickel supported by a tungsten mesh. Thin Solid Films, 2019, 685, 186-194.	1.8	8
9	Low-temperature fabrication of nanographene on a copper substrate using pentacene. Thin Solid Films, 2019, 675, 143-147.	1.8	5
10	Removal of carbon contamination on oxidation-prone metal-coated mirrors using atomic hydrogen. AIP Conference Proceedings, 2019, , .	0.4	0
11	Guidelines for bottom-up approach of nanocarbon film formation from pentacene using heated tungsten on quartz substrate without metal catalyst. Japanese Journal of Applied Physics, 2018, 57, 04FL03.	1.5	7
12	Low-temperature activation of boron ion in silicon substrate using B10H14 + cluster and by soft X-ray irradiation. Japanese Journal of Applied Physics, 2018, 57, 116502.	1.5	3
13	Graphene oxide film reduction using atomic hydrogen annealing. Thin Solid Films, 2017, 625, 93-99.	1.8	14
14	Synthesis of Phenylenevinylene Oligothiophene Derivatives with and without Cyano Side Substitution and Evaluation of Optoelectronic Characteristics. Chemistry Letters, 2015, 44, 1010-1012.	1.3	1
15	Thermal Treatment of Ultrathin Pentacene Thin-Film Transistors. Molecular Crystals and Liquid Crystals, 2015, 618, 83-88.	0.9	0
16	Study on graphene on pentacene structure and fabrication process. , 2014, , .		0
17	Etching of pentacene film using atomic hydrogen generated on heated tungsten. Japanese Journal of Applied Physics, 2014, 53, 058002.	1.5	12
18	Low-temperature activation of boron in silicon by soft X-ray irradiation. , 2014, , .		0

#	Article	IF	Citations
19	Properties of pentacene-based films prepared using a heated tungsten mesh. Thin Solid Films, 2014, 570, 20-26.	1.8	11
20	Study of charge retention mechanism for DNA memory FET. IEICE Electronics Express, 2014, 11, 20130900-20130900.	0.8	5
21	Low-temperature crystallization of amorphous silicon and amorphous germanium by soft X-ray irradiation. Thin Solid Films, 2013, 534, 334-340.	1.8	16
22	Crystallization of Si_{1-x}Ge_xMultilayer by Soft X-ray Irradiation. Applied Physics Express, 2013, 6, 065501.	2.4	8
23	Bulk-Phase Pentacene Film Prepared by Heated Tungsten Mesh. Journal of the Vacuum Society of Japan, 2013, 56, 461-465.	0.3	0
24	Decomposition of Pentacene Molecules by Heated Tungsten Mesh. Japanese Journal of Applied Physics, 2012, 51, 110204.	1.5	8
25	Quantum effects of ultrathin OTFT and fabrication processes by atomic hydrogen annealing. , 2012, , .		0
26	Crystallization mechanism of thick a-Si<inf>0.5</inf>Ge<inf>0.5</inf> film by excimer laser annealing. , 2012, , .		0
27	Decomposition of Pentacene Molecules by Heated Tungsten Mesh. Japanese Journal of Applied Physics, 2012, 51, 110204.	1.5	6
28	Dependence of electrical properties of pentacene Thin-Film Transistor on active layer thickness. IEICE Electronics Express, 2011, 8, 360-366.	0.8	3
29	Structural Property of Pentacene Film Prepared by Hydrogen Chemical Transport Deposition. Japanese Journal of Applied Physics, 2011, 50, 028002.	1.5	3
30	Electrical and structural properties of organic thin-film transistor using very thin pentacene film. , 2011, , .		0
31	Structural Property of Pentacene Film Prepared by Hydrogen Chemical Transport Deposition. Japanese Journal of Applied Physics, 2011, 50, 028002.	1.5	7
32	Influence of Laser Plasma Soft X-Ray Irradiation on Crystallization of a-Si Film by Infrared Furnace Annealing. Materials Transactions, 2010, 51, 1490-1493.	1.2	15
33	Atomic Hydrogen Annealing of Gate Dielectric in Pentacene Organic Thin-Film Transistors. Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan, 2010, 61, 548-549.	0.2	1
34	Effects of High Nitrogen Pressure and Thermal Treatment on Adhesion to Amorphous Silicon/Silicon Nitride/Polyethersulfone Substrate during Excimer Laser Annealing. Journal of the Vacuum Society of Japan, 2010, 53, 692-695.	0.3	0
35	Properties of SiO2 Surface and Pentacene OTFT Subjected to Atomic Hydrogen Annealing. IEICE Transactions on Electronics, 2010, E93-C, 1516-1517.	0.6	10
36	Role of hydrogen in excimer laser annealing of hydrogen-modulation doped a-Si film. Solid-State Electronics, 2008, 52, 381-387.	1.4	3

#	Article	IF	Citations
37	Cat-CVD SiN passivation films for OLEDs and packaging. Thin Solid Films, 2008, 516, 553-557.	1.8	22
38	Properties of Surface-Modification Layer Generated by Atomic Hydrogen Annealing on Poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	1.5	9
39	Surface Modification of Poly(ethylene naphthalate) Substrate and Its Effect on SiN_x Film Deposition by Atomic Hydrogen Annealing. Japanese Journal of Applied Physics, 2007, 46, L709.	1.5	11
40	Surface Treatment of Plastic Substrates using Atomic Hydrogen Generated on Heated Tungsten Wire at Low Temperatures. Japanese Journal of Applied Physics, 2007, 46, 3545-3548.	1.5	21
41	Excimer Laser Annealing of Hydrogen Modulation Doped a-Si Film. Materials Transactions, 2007, 48, 975-979.	1.2	5
42	Fabrication of tunneling dielectric thin-film transistor with very thin SiNx films onto source and drain. IEICE Electronics Express, 2007, 4, 442-447.	0.8	9
43	Influence of Post Excimer Laser Annealing on Crystallinity of Precursor Polycrystalline Si Film Formed by Solid Phase Crystallization. Shinku/Journal of the Vacuum Society of Japan, 2007, 50, 527-529.	0.2	0
44	High-rate deposition of SiNx films over 100 nm/min by Cat-CVD method at low temperatures below 80 Â°C. Thin Solid Films, 2006, 501, 55-57.	1.8	7
45	Formation of highly moisture-resistive SiNx films on Si substrate by Cat-CVD at room temperature. Thin Solid Films, 2006, 501, 154-156.	1.8	6
46	Effect of Hydrogen on Secondary Grain Growth of Polycrystalline Silicon Films by Excimer Laser Annealing in Low-Temperature Process. Japanese Journal of Applied Physics, 2006, 45, 6908-6910.	1.5	11
47	Preparation of Low-Stress SiNxFilms by Catalytic Chemical Vapor Deposition at Low Temperatures. Japanese Journal of Applied Physics, 2005, 44, 4098-4102.	1.5	12
48	Moisture-Resistive Properties of SiNxFilms Prepared by Catalytic Chemical Vapor Deposition below 100Â°C for Flexible Organic Light-Emitting Diode Displays. Japanese Journal of Applied Physics, 2005, 44, 1923-1927.	1.5	10
49	Effect of Atomic Hydrogen on Preparation of Highly Moisture-Resistive SiNxFilms at Low Substrate Temperatures. Japanese Journal of Applied Physics, 2004, 43, L1546-L1548.	1.5	13
50	Low-temperature crystallization of amorphous silicon using atomic hydrogen generated by catalytic reaction on heated tungsten. Applied Physics Letters, 1999, 74, 2143-2145.	3.3	77