

Akira Heya

List of Publications by Year in descending order

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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	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
2	Cat-CVD SiN passivation films for OLEDs and packaging. Thin Solid Films, 2008, 516, 553-557.	1.8	22
3	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
4	Low-temperature crystallization of amorphous silicon and amorphous germanium by soft X-ray irradiation. Thin Solid Films, 2013, 534, 334-340.	1.8	16
5	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
6	Graphene oxide film reduction using atomic hydrogen annealing. Thin Solid Films, 2017, 625, 93-99.	1.8	14
7	Effect of Atomic Hydrogen on Preparation of Highly Moisture-Resistive SiN _x Films at Low Substrate Temperatures. Japanese Journal of Applied Physics, 2004, 43, L1546-L1548.	1.5	13
8	Preparation of Low-Stress SiN _x Films by Catalytic Chemical Vapor Deposition at Low Temperatures. Japanese Journal of Applied Physics, 2005, 44, 4098-4102.	1.5	12
9	Etching of pentacene film using atomic hydrogen generated on heated tungsten. Japanese Journal of Applied Physics, 2014, 53, 058002.	1.5	12
10	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
11	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
12	Properties of pentacene-based films prepared using a heated tungsten mesh. Thin Solid Films, 2014, 570, 20-26.	1.8	11
13	Moisture-Resistive Properties of SiN _x Films Prepared by Catalytic Chemical Vapor Deposition below 100Å°C for Flexible Organic Light-Emitting Diode Displays. Japanese Journal of Applied Physics, 2005, 44, 1923-1927.	1.5	10
14	Properties of SiO ₂ Surface and Pentacene OTFT Subjected to Atomic Hydrogen Annealing. IEICE Transactions on Electronics, 2010, E93-C, 1516-1517.	0.6	10
15	Fabrication of tunneling dielectric thin-film transistor with very thin SiN _x films onto source and drain. IEICE Electronics Express, 2007, 4, 442-447.	0.8	9
16	Properties of Surface-Modification Layer Generated by Atomic Hydrogen Annealing on Poly(ethylene) Tj ETQq0 0 0 rBT /Overlock 10 Tf	1.5	9
17	Graphene synthesis from pentacene by soft X-ray irradiation. Thin Solid Films, 2020, 713, 138365.	1.8	9
18	Decomposition of Pentacene Molecules by Heated Tungsten Mesh. Japanese Journal of Applied Physics, 2012, 51, 110204.	1.5	8

#	ARTICLE	IF	CITATIONS
19	Crystallization of Si _{1-x} Ge _x Multilayer by Soft X-ray Irradiation. Applied Physics Express, 2013, 6, 065501.	2.4	8
20	Fabrication of nanographene using nickel supported by a tungsten mesh. Thin Solid Films, 2019, 685, 186-194.	1.8	8
21	High-rate deposition of SiN _x films over 100 nm/min by Cat-CVD method at low temperatures below 80 Å°C. Thin Solid Films, 2006, 501, 55-57.	1.8	7
22	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
23	Structural Property of Pentacene Film Prepared by Hydrogen Chemical Transport Deposition. Japanese Journal of Applied Physics, 2011, 50, 028002.	1.5	7
24	Formation of highly moisture-resistive SiN _x films on Si substrate by Cat-CVD at room temperature. Thin Solid Films, 2006, 501, 154-156.	1.8	6
25	Decomposition of Pentacene Molecules by Heated Tungsten Mesh. Japanese Journal of Applied Physics, 2012, 51, 110204.	1.5	6
26	Excimer Laser Annealing of Hydrogen Modulation Doped a-Si Film. Materials Transactions, 2007, 48, 975-979.	1.2	5
27	Study of charge retention mechanism for DNA memory FET. IEICE Electronics Express, 2014, 11, 20130900-20130900.	0.8	5
28	Low-temperature fabrication of nanographene on a copper substrate using pentacene. Thin Solid Films, 2019, 675, 143-147.	1.8	5
29	Role of hydrogen in excimer laser annealing of hydrogen-modulation doped a-Si film. Solid-State Electronics, 2008, 52, 381-387.	1.4	3
30	Dependence of electrical properties of pentacene Thin-Film Transistor on active layer thickness. IEICE Electronics Express, 2011, 8, 360-366.	0.8	3
31	Structural Property of Pentacene Film Prepared by Hydrogen Chemical Transport Deposition. Japanese Journal of Applied Physics, 2011, 50, 028002.	1.5	3
32	Low-temperature activation of boron ion in silicon substrate using B ₁₀ H ₁₄ + cluster and by soft X-ray irradiation. Japanese Journal of Applied Physics, 2018, 57, 116502.	1.5	3
33	Evaluation of atomic hydrogen effect using polycrystalline Ge thin-film transistors. Japanese Journal of Applied Physics, 2019, 58, 068006.	1.5	3
34	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
35	Atomic Hydrogen Annealing of Gate Dielectric in Pentacene Organic Thin-Film Transistors. Hyomen Cijutsu/Journal of the Surface Finishing Society of Japan, 2010, 61, 548-549.	0.2	1
36	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

#	ARTICLE	IF	CITATIONS
37	Nanographene synthesis on metal film using pentacene, H ₂ gas and heated W mesh at low temperature. Japanese Journal of Applied Physics, 2021, 60, SBBK09.	1.5	1
38	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
39	Electrical and structural properties of organic thin-film transistor using very thin pentacene film. , 2011, , .		0
40	Quantum effects of ultrathin OTFT and fabrication processes by atomic hydrogen annealing. , 2012, , .		0
41	Crystallization mechanism of thick a-Si _{0.5} Ge _{0.5} film by excimer laser annealing. , 2012, , .		0
42	Study on graphene on pentacene structure and fabrication process. , 2014, , .		0
43	Low-temperature activation of boron in silicon by soft X-ray irradiation. , 2014, , .		0
44	Thermal Treatment of Ultrathin Pentacene Thin-Film Transistors. Molecular Crystals and Liquid Crystals, 2015, 618, 83-88.	0.9	0
45	Removal of carbon contamination on oxidation-prone metal-coated mirrors using atomic hydrogen. AIP Conference Proceedings, 2019, , .	0.4	0
46	Structural and Electrical Properties of Nanographene Prepared from Pentacene by Hot Mesh Deposition and Soft X-ray Irradiation. , 2021, , .		0
47	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
48	Bulk-Phase Pentacene Film Prepared by Heated Tungsten Mesh. Journal of the Vacuum Society of Japan, 2013, 56, 461-465.	0.3	0
49	Deuteration of Pentacene Using Deuterium Gas and Heated Catalyst. , 2020, , .		0
50	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