Hisashi Sugime

List of Publications by Year
in descending order

67 papers	1,760 citations	236925 25 h-index	289244 40 g-index
69 all docs	69 docs citations	69 times ranked	1996 citing authors

#	Article	IF	Citations
1	Millimeter-Thick Single-Walled Carbon Nanotube Forests: Hidden Role of Catalyst Support. Japanese Journal of Applied Physics, 2007, 46, L399-L401.	1.5	194
2	Multiple â€œoptimumâ€• conditions for Coâ€“Mo catalyzed growth of vertically aligned single-walled carbon nanotube forests. Carbon, 2009, 47, 234-241.	10.3	96
3	Ultrafast Growth of a Cu(OH)₂â€“CuO Nanoneedle Array on Cu Foil for Methanol Oxidation Electrocatalysis. ACS Applied Materials & Interfaces, 2020, 12, 27327-27338.	8.0	95
4	A simple combinatorial method to discover Coâ€“Mo binary catalysts that grow vertically aligned single-walled carbon nanotubes. Carbon, 2006, 44, 1414-1419.	10.3	86
5	Sub-millimeter-long carbon nanotubes repeatedly grown on and separated from ceramic beads in a single fluidized bed reactor. Carbon, 2011, 49, 1972-1979.	10.3	67
6	Stable, efficient p-type doping of graphene by nitric acid. RSC Advances, 2016, 6, 113185-113192.	3.6	66
7	Surface amorphized nickel hydroxy sulphide for efficient hydrogen evolution reaction in alkaline medium. Chemical Engineering Journal, 2021, 408, 127275.	12.7	64
8	Millimeter-tall single-walled carbon nanotube forests grown from ethanol. Carbon, 2010, 48, 2203-2211.	10.3	53
9	Low temperature growth of ultra-high mass density carbon nanotube forests on conductive supports. Applied Physics Letters, 2013, 103, .	3.3	49
10	Growth of Continuous Monolayer Graphene with Millimeter-sized Domains Using Industrially Safe Conditions. Scientific Reports, 2016, 6, 21152.	3.3	48
11	Combinatorial Surface-Enhanced Raman Spectroscopy and Spectroscopic Ellipsometry of Silver Island Films. Journal of Physical Chemistry C, 2009, 113, 4820-4828.	3.1	42
12	Why shouldnâ€™t double-layer capacitance (Cdl) be always trusted to justify Faradaic electrocatalytic activity differences?. Journal of Electroanalytical Chemistry, 2021, 903, 115842.	3.8	42
13	Growth Window and Possible Mechanism of Millimeter-Thick Single-Walled Carbon Nanotube Forests. Journal of Nanoscience and Nanotechnology, 2008, 8, 6123-6128.	0.9	40
14	Efficient Transfer Doping of Carbon Nanotube Forests by MoO₃. ACS Nano, 2015, 9, 10422-10430.	14.6	39
15	Fluidized-bed synthesis of sub-millimeter-long single walled carbon nanotube arrays. Carbon, 2012, 50, 1538-1545.	10.3	38
16	Ultra-long carbon nanotube forest via in situ supplements of iron and aluminum vapor sources. Carbon, 2021, 172, 772-780.	10.3	36
17	Achieving Increased Electrochemical Accessibility and Lowered Oxygen Evolution Reaction Activation Energy for Co²⁺ Sites with a Simple Anion Preoxidation. Journal of Physical Chemistry C, 2020, 124, 9673-9684.	3.1	33
18	Millimeter-tall carbon nanotube arrays grown on aluminum substrates. Carbon, 2018, 130, 834-842.	10.3	32

#	Article	IF	Citations
19	CO2-assisted growth of millimeter-tall single-wall carbon nanotube arrays and its advantage against H2O for large-scale and uniform synthesis. Carbon, 2018, 136, 143-149.	10.3	32
20	Fast and stable hydrogen storage in the porous composite of MgH2 with Nb2O5 catalyst and carbon nanotube. Journal of Alloys and Compounds, 2022, 893, 162206.	5.5	32
21	Cold-gas chemical vapor deposition to identify the key precursor for rapidly growing vertically-aligned single-wall and few-wall carbon nanotubes from pyrolyzed ethanol. Carbon, 2012, 50, 2953-2960.	10.3	31
22	Growth of high quality, high density single-walled carbon nanotube forests on copper foils. Carbon, 2016, 98, 624-632.	10.3	31
23	Low-Temperature Growth of Carbon Nanotube Forests Consisting of Tubes with Narrow Inner Spacing Using Co/Al/Mo Catalyst on Conductive Supports. ACS Applied Materials & Interfaces, 2015, 7, 16819-16827.	8.0	27
24	Growth of high-density carbon nanotube forests on conductive TiSiN supports. Applied Physics Letters, 2015, 106, 083108.	3.3	26
25	Pushing the Limits of Rapid Anodic Growth of CuO/Cu(OH)₂Nanoneedles on Cu for the Methanol Oxidation Reaction: Anodization pH Is the Game Changer. ACS Applied Energy Materials, 2021, 4, 899-912.	5.1	26
26	Electrolysis of ammonia in aqueous solution by platinum nanoparticles supported on carbon nanotube film electrode. Electrochimica Acta, 2020, 341, 136027.	5.2	25
27	A Simple Combinatorial Method Aiding Research on Single-Walled Carbon Nanotube Growth on Substrates. Japanese Journal of Applied Physics, 2010, 49, 02BA02.	1.5	23
28	Flame-assisted chemical vapor deposition for continuous gas-phase synthesis of 1-nm-diameter single-wall carbon nanotubes. Carbon, 2018, 138, 1-7.	10.3	23
29	Chemical Leaching of Inactive Cr and Subsequent Electrochemical Resurfacing of Catalytically Active Sites in Stainless Steel for High-Rate Alkaline Hydrogen Evolution Reaction. ACS Applied Energy Materials, 2020, 3, 12596-12606.	5.1	21
30	Growth Kinetics and Growth Mechanism of Ultrahigh Mass Density Carbon Nanotube Forests on Conductive Ti/Cu Supports. ACS Applied Materials & Interfaces, 2014, 6, 15440-15447.	8.0	20
31	Enhancing the photovoltaic performance of hybrid heterojunction solar cells by passivation of silicon surface via a simple 1-min annealing process. Scientific Reports, 2019, 9, 12051.	3.3	19
32	Field Emission Properties of Single-Walled Carbon Nanotubes with a Variety of Emitter Morphologies. Japanese Journal of Applied Physics, 2008, 47, 4780-4787.	1.5	18
33	Dispersing and doping carbon nanotubes by poly(p-styrene-sulfonic acid) for high-performance and stable transparent conductive films. Carbon, 2020, 164, 150-156.	10.3	18
34	From Growth Surface to Device Interface: Preserving Metallic Fe under Monolayer Hexagonal Boron Nitride. ACS Applied Materials & Interfaces, 2017, 9, 29973-29981.	8.0	16
35	Boosting the oxygen evolution activity of copper foam containing trace Ni by intentionally supplementing Fe and forming nanowires in anodization. Electrochimica Acta, 2020, 364, 137170.	5.2	16
36	Gd-Enhanced Growth of Multi-Millimeter-Tall Forests of Single-Wall Carbon Nanotubes. ACS Nano, 2019, 13, 13208-13216.	14.6	15

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37	Carbon nanotube growth on conductors: Influence of the support structure and catalyst thickness. Carbon, 2014, 73, 13-24.	10.3	14
38	Co-catalytic Absorption Layers for Controlled Laser-Induced Chemical Vapor Deposition of Carbon Nanotubes. ACS Applied Materials & Interfaces, 2014, 6, 4025-4032.	8.0	14
39	An interdigitated electrode with dense carbon nanotube forests on conductive supports for electrochemical biosensors. Analyst, The, 2018, 143, 3635-3642.	3.5	12
40	Facile catalyst deposition using mists for fluidized-bed production of sub-millimeter-long carbon nanotubes. Carbon, 2020, 167, 256-263.	10.3	12
41	Combinatorial Evaluation for Field Emission Properties of Carbon Nanotubes. Journal of Physical Chemistry C, 2008, 112, 17974-17982.	3.1	11
42	Hybrids of carbon Nanotube Forests and Gold Nanoparticles for Improved Surface Plasmon Manipulation. ACS Applied Materials & Interfaces, 2014, 6, 5344-5349.	8.0	11
43	Low temperature growth of fully covered single-layer graphene using a CoCu catalyst. Nanoscale, 2017, 9, 14467-14475.	5.6	11
44	Performance enhancement of carbon nanotube/silicon solar cell by solution processable MoO. Applied Surface Science, 2021, 542, 148682.	6.1	11
45	Carbon nanotube isolation layer enhancing in-liquid quality-factors of thin film bulk acoustic wave resonators for gravimetric sensing. Sensors and Actuators B: Chemical, 2018, 261, 398-407.	7.8	10
46	1.5 Minute-synthesis of continuous graphene films by chemical vapor deposition on Cu foils rolled in three dimensions. Chemical Engineering Science, 2019, 201, 319-324.	3.8	10
47	Effect of Oxygen Plasma Alumina Treatment on Growth of Carbon Nanotube Forests. Journal of Physical Chemistry C, 2014, 118, 18683-18692.	3.1	9
48	Comparison of carbon nanotube forest growth using AlSi, TiSiN, and TiN as conductive catalyst supports. Physica Status Solidi (B): Basic Research, 2014, 251, 2389-2393.	1.5	9
49	Fluidized-bed production of 0.3Âmm-long single-wall carbon nanotubes at 28% carbon yield with 0.1 mass% catalyst impurities using ethylene and carbon dioxide. Carbon, 2021, 182, 23-31.	10.3	8
50	Efficient field emission from triode-type 1D arrays of carbon nanotubes. Nanotechnology, 2009, 20, 475707.	2.6	7
51	Carbon nanotube forests as top electrode in electroacoustic resonators. Applied Physics Letters, 2015, 107, .	3.3	7
52	Catalyst nucleation and carbon nanotube growth from flame-synthesized Co-Al-O nanopowders at ten-second time scale. Carbon, 2017, 114, 31-38.	10.3	7
53	High-performance solution-based silicon heterojunction solar cells using carbon nanotube with polymeric acid doping. Carbon, 2021, 175, 519-524.	10.3	7
54	Carbon nanotube/silicon heterojunction solar cell with an active area of 4Âcm2 realized using a multifunctional molybdenum oxide layer. Carbon, 2021, 185, 215-223.	10.3	7

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55	Enhanced CO2-assisted growth of single-wall carbon nanotube arrays using Fe/AlO catalyst annealed without CO2. Carbon, 2021, 185, 264-271.	10.3	7
56	Evaluation of bimetallic catalysts for the growth of carbon nanotube forests. Physica Status Solidi (B): Basic Research, 2013, 250, 2605-2610.	1.5	6
57	Direct formation of continuous multilayer graphene films with controllable thickness on dielectric substrates. Thin Solid Films, 2019, 675, 136-142.	1.8	5
58	Systematic investigation of anode catalysts for liquid ammonia electrolysis. Journal of Catalysis, 2022, 406, 222-230.	6.2	5
59	Numerical simulation of heat supply and hydrogen desorption by hydrogen flow to porous MgH2 sheet. Chemical Engineering Journal, 2021, 421, 129648.	12.7	4
60	Switching of Electron Transport Direction from the Long Axis to Short Axis in a Radial SnO₂(Head)â€“Rutile TiO₂ Nanorod(Tail) Heteromesocrystal Photocatalyst. Journal of Physical Chemistry Letters, 2021, 12, 11717-11722.	4.6	4
61	Thermocatalytic Activity of Gold Truncated Nanopyramids on Strontium Titanate Nanocube. Chemistry Letters, 2021, 50, 1997-2000.	1.3	3
62	Ten-Second Epitaxy of Cu on Repeatedly Used Sapphire for Practical Production of High-Quality Graphene. ACS Omega, 2017, 2, 3354-3362.	3.5	2
63	Noble Metalâ€Free Inorganic Photocatalyst Consisting of Antimonyâ€Doped Tin Oxide Nanorod and Titanium oxide for Twoâ€Electron Oxygen Reduction Reaction. ChemPhysChem, 2022, 23, .	2.1	2
64	12.3: 1â€Second Implementation of CNTâ€Emitter Arrays on Glasses for BLUs. Digest of Technical Papers SID International Symposium, 2009, 40, 139-141.	0.3	1
65	Spatial variability in large area single and few-layer CVD graphene. , 2015, , .		1
66	Tailoring the Morphology of Carbon Nanotube Assemblies Using Microgradients in the Catalyst Thickness. Japanese Journal of Applied Physics, 2011, 50, 095101.	1.5	0
67	Tailoring the Morphology of Carbon Nanotube Assemblies Using Microgradients in the Catalyst Thickness. Japanese Journal of Applied Physics, 2011, 50, 095101.	1.5	0