Hisashi Sugime

List of Publications by Citations

65 papers	1,295 citations	20 h-index	34 g-index
69 ext. papers	1,511 ext. citations	6.9 avg, IF	4.97 L-index

#	Paper	IF	Citations
65	Millimeter-Thick Single-Walled Carbon Nanotube Forests: Hidden Role of Catalyst Support. *Japanese Journal of Applied Physics*, **2007**, 46, L399-L401	1.4	180
64	Multiple Optimum Conditions for Co/Mo catalyzed growth of vertically aligned single-walled carbon nanotube forests. *Carbon*, **2009**, 47, 234-241	10.4	88
63	A simple combinatorial method to discover Co/Mo binary catalysts that grow vertically aligned single-walled carbon nanotubes. *Carbon*, **2006**, 44, 1414-1419	10.4	81
62	Sub-millimeter-long carbon nanotubes repeatedly grown on and separated from ceramic beads in a single fluidized bed reactor. *Carbon*, **2011**, 49, 1972-1979	10.4	57
61	Millimeter-tall single-walled carbon nanotube forests grown from ethanol. *Carbon*, **2010**, 48, 2203-2211	10.4	51
60	Ultrafast Growth of a Cu(OH)-CuO Nanoneedle Array on Cu Foil for Methanol Oxidation Electrocatalysis. *ACS Applied Materials & Interfaces*, **2020**, 12, 27327-27338	9.5	49
59	Stable, efficient p-type doping of graphene by nitric acid. *RSC Advances*, **2016**, 6, 113185-113192	3.7	49
58	Low temperature growth of ultra-high mass density carbon nanotube forests on conductive supports. *Applied Physics Letters*, **2013**, 103, 073116	3.4	44
57	Growth of Continuous Monolayer Graphene with Millimeter-sized Domains Using Industrially Safe Conditions. *Scientific Reports*, **2016**, 6, 21152	4.9	40
56	Combinatorial Surface-Enhanced Raman Spectroscopy and Spectroscopic Ellipsometry of Silver Island Films. *Journal of Physical Chemistry C*, **2009**, 113, 4820-4828	3.8	37
55	Growth window and possible mechanism of millimeter-thick single-walled carbon nanotube forests. *Journal of Nanoscience and Nanotechnology*, **2008**, 8, 6123-8	1.3	37
54	Efficient Transfer Doping of Carbon Nanotube Forests by MoO3. *ACS Nano*, **2015**, 9, 10422-30	16.7	33
53	Fluidized-bed synthesis of sub-millimeter-long single walled carbon nanotube arrays. *Carbon*, **2012**, 50, 1538-1545	10.4	32
52	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	10.4	30
51	Growth of high quality, high density single-walled carbon nanotube forests on copper foils. *Carbon*, **2016**, 98, 624-632	10.4	25
50	Growth of high-density carbon nanotube forests on conductive TiSiN supports. *Applied Physics Letters*, **2015**, 106, 083108	3.4	25
49	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, 16819-27	9.5	23

48	Millimeter-tall carbon nanotube arrays grown on aluminum substrates. *Carbon*, **2018**, 130, 834-842	10.4	22
47	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	10.4	22
46	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	3.8	21
45	Surface amorphized nickel hydroxy sulphide for efficient hydrogen evolution reaction in alkaline medium. *Chemical Engineering Journal*, **2021**, 408, 127275	14.7	20
44	Flame-assisted chemical vapor deposition for continuous gas-phase synthesis of 1-nm-diameter single-wall carbon nanotubes. *Carbon*, **2018**, 138, 1-7	10.4	19
43	Growth kinetics and growth mechanism of ultrahigh mass density carbon nanotube forests on conductive Ti/Cu supports. *ACS Applied Materials & Interfaces*, **2014**, 6, 15440-7	9.5	19
42	A Simple Combinatorial Method Aiding Research on Single-Walled Carbon Nanotube Growth on Substrates. *Japanese Journal of Applied Physics*, **2010**, 49, 02BA02	1.4	19
41	Field Emission Properties of Single-Walled Carbon Nanotubes with a Variety of Emitter Morphologies. *Japanese Journal of Applied Physics*, **2008**, 47, 4780-4787	1.4	17
40	Ultra-long carbon nanotube forest via in situ supplements of iron and aluminum vapor sources. *Carbon*, **2021**, 172, 772-780	10.4	15
39	Electrolysis of ammonia in aqueous solution by platinum nanoparticles supported on carbon nanotube film electrode. *Electrochimica Acta*, **2020**, 341, 136027	6.7	13
38	Carbon nanotube growth on conductors: Influence of the support structure and catalyst thickness. *Carbon*, **2014**, 73, 13-24	10.4	13
37	From Growth Surface to Device Interface: Preserving Metallic Fe under Monolayer Hexagonal Boron Nitride. *ACS Applied Materials & Interfaces*, **2017**, 9, 29973-29981	9.5	13
36	Co-catalytic absorption layers for controlled laser-induced chemical vapor deposition of carbon nanotubes. *ACS Applied Materials & Interfaces*, **2014**, 6, 4025-32	9.5	12
35	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	4.9	11
34	Low temperature growth of fully covered single-layer graphene using a CoCu catalyst. *Nanoscale*, **2017**, 9, 14467-14475	7.7	11
33	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	6.1	10
32	Dispersing and doping carbon nanotubes by poly(p-styrene-sulfonic acid) for high-performance and stable transparent conductive films. *Carbon*, **2020**, 164, 150-156	10.4	10
31	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	8.5	10

30	Pushing the Limits of Rapid Anodic Growth of CuO/Cu(OH)2 Nanoneedles on Cu for the Methanol Oxidation Reaction: Anodization pH Is the Game Changer. *ACS Applied Energy Materials*, **2021**, 4, 899-912	6.1	10
29	Hybrids of carbon nanotube forests and gold nanoparticles for improved surface plasmon manipulation. *ACS Applied Materials & Interfaces*, **2014**, 6, 5344-9	9.5	9
28	Combinatorial Evaluation for Field Emission Properties of Carbon Nanotubes. *Journal of Physical Chemistry C*, **2008**, 112, 17974-17982	3.8	9
27	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	6.7	9
26	An interdigitated electrode with dense carbon nanotube forests on conductive supports for electrochemical biosensors. *Analyst, The*, **2018**, 143, 3635-3642	5	8
25	Effect of Oxygen Plasma Alumina Treatment on Growth of Carbon Nanotube Forests. *Journal of Physical Chemistry C*, **2014**, 118, 18683-18692	3.8	8
24	Why Shouldn□t Double-Layer Capacitance (Cdl) Be Always Trusted to Justify Faradaic Electrocatalytic Activity Differences?. *Journal of Electroanalytical Chemistry*, **2021**, 115842	4.1	8
23	Catalyst nucleation and carbon nanotube growth from flame-synthesized Co-Al-O nanopowders at ten-second time scale. *Carbon*, **2017**, 114, 31-38	10.4	7
22	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	4.4	7
21	Facile catalyst deposition using mists for fluidized-bed production of sub-millimeter-long carbon nanotubes. *Carbon*, **2020**, 167, 256-263	10.4	7
20	Gd-Enhanced Growth of Multi-Millimeter-Tall Forests of Single-Wall Carbon Nanotubes. *ACS Nano*, **2019**, 13, 13208-13216	16.7	7
19	Efficient field emission from triode-type 1D arrays of carbon nanotubes. *Nanotechnology*, **2009**, 20, 475707	3.4	7
18	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	1.3	6
17	Carbon nanotube forests as top electrode in electroacoustic resonators. *Applied Physics Letters*, **2015**, 107, 133106	3.4	6
16	Evaluation of bimetallic catalysts for the growth of carbon nanotube forests. *Physica Status Solidi (B): Basic Research*, **2013**, 250, 2605-2610	1.3	5
15	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	5.7	5
14	Performance enhancement of carbon nanotube/silicon solar cell by solution processable MoOx. *Applied Surface Science*, **2021**, 542, 148682	6.7	5
13	Ten-Second Epitaxy of Cu on Repeatedly Used Sapphire for Practical Production of High-Quality Graphene. *ACS Omega*, **2017**, 2, 3354-3362	3.9	2

12	Fluidized-bed production of 0.3 mm-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	10.4	2
11	Numerical simulation of heat supply and hydrogen desorption by hydrogen flow to porous MgH2 sheet. *Chemical Engineering Journal*, **2021**, 421, 129648	14.7	2
10	Spatial variability in large area single and few-layer CVD graphene **2015**,		1
9	12.3: 1-Second Implementation of CNT-Emitter Arrays on Glasses for BLUs. *Digest of Technical Papers SID International Symposium*, **2009**, 40, 139	0.5	1
8	High-performance solution-based silicon heterojunction solar cells using carbon nanotube with polymeric acid doping. *Carbon*, **2021**, 175, 519-524	10.4	1
7	Direct formation of continuous multilayer graphene films with controllable thickness on dielectric substrates. *Thin Solid Films*, **2019**, 675, 136-142	2.2	1
6	Carbon nanotube/silicon heterojunction solar cell with an active area of 4 cm2 realized using a multifunctional molybdenum oxide layer. *Carbon*, **2021**, 185, 215-223	10.4	1
5	Enhanced CO2-assisted growth of single-wall carbon nanotube arrays using Fe/AlO catalyst annealed without CO2. *Carbon*, **2021**, 185, 264-271	10.4	1
4	Systematic investigation of anode catalysts for liquid ammonia electrolysis. *Journal of Catalysis*, **2022**, 406, 222-230	7.3	0
3	Switching of Electron Transport Direction from the Long Axis to Short Axis in a Radial SnO(Head)-Rutile TiO Nanorod(Tail) Heteromesocrystal Photocatalyst. *Journal of Physical Chemistry Letters*, **2021**, 12, 11717-11722	6.4	0
2	Tailoring the Morphology of Carbon Nanotube Assemblies Using Micrograd ients in the Catalyst Thickness. *Japanese Journal of Applied Physics*, **2011**, 50, 095101	1.4	
1	Tailoring the Morphology of Carbon Nanotube Assemblies Using Micrograd ients in the Catalyst Thickness. *Japanese Journal of Applied Physics*, **2011**, 50, 095101	1.4	