Shunsuke Sakurai

List of Publications by Year
in descending order

49 papers	2,218 citations	257450 24 h-index	214800 47 g-index
52 all docs	52 docs citations	52 times ranked	2689 citing authors

#	Article	IF	Citations
1	First Observation of Phase Transformation of All Four Fe₂O₃Phases (Î³ â†' Îµ â†' Î² â†') Tj ETQq1 1 0.784314	13.7	293
2	Synthesis of an Electromagnetic Wave Absorber for High-Speed Wireless Communication. Journal of the American Chemical Society, 2009, 131, 1170-1173.	13.7	217
3	A Millimeterâ€Wave Absorber Based on Galliumâ€Substituted Îµâ€Iron Oxide Nanomagnets. Angewandte Chemie - International Edition, 2007, 46, 8392-8395.	13.8	194
4	Hard magnetic ferrite with a gigantic coercivity and high frequency millimetre wave rotation. Nature Communications, 2012, 3, 1035.	12.8	184
5	Nonlinear Magnetooptical Effects Caused by Piezoelectric Ferromagnetism inF4Ì„3m-type Prussian Blue Analogues. Journal of the American Chemical Society, 2005, 127, 11604-11605.	13.7	113
6	Role of Subsurface Diffusion and Ostwald Ripening in Catalyst Formation for Single-Walled Carbon Nanotube Forest Growth. Journal of the American Chemical Society, 2012, 134, 2148-2153.	13.7	113
7	Reorientation Phenomenon in a Magnetic Phase of Îµ-Fe2O3 Nanocrystal. Journal of the Physical Society of Japan, 2005, 74, 1946-1949.	1.6	80
8	The addition effects of alkaline earth ions in the chemical synthesis of Îµ-Fe2O3 nanocrystals that exhibit a huge coercive field. Journal of Applied Physics, 2005, 97, 10K312.	2.5	80
9	Lithographically Integrated Microsupercapacitors for Compact, High Performance, and Designable Energy Circuits. Advanced Energy Materials, 2015, 5, 1500741.	19.5	67
10	Diameter control of single-walled carbon nanotube forests from 1.3â€“3.0â€…nm by arc plasma deposition. Scientific Reports, 2014, 4, 3804.	3.3	60
11	Large coercive field in magnetic-field oriented Îµ-Fe2O3 nanorods. Chemical Physics Letters, 2008, 458, 333-336.	2.6	56
12	Interplay of wall number and diameter on the electrical conductivity of carbon nanotube thin films. Carbon, 2014, 67, 318-325.	10.3	56
13	Robust and Soft Elastomeric Electronics Tolerant to Our Daily Lives. Nano Letters, 2015, 15, 5716-5723.	9.1	56
14	Synthesis, Crystal Structure, and Magnetic Properties of Ïµâ€In_{<i>x</i>}Fe_{2â€“}_{<i>x</i>}O₃ Nanorodâ€Shaped Magnets. Advanced Functional Materials, 2007, 17, 2278-2282.	14.9	53
15	The Origin of Ferromagnetism in Îµ-Fe₂O₃ and Îµ-Ga_{<i>x</i>}Fe_{2â^'<i>x</i>}O₃ Nanomagnets. Journal of Physical Chemistry C, 2009, 113, 11235-11238.	3.1	53
16	Influence of lengths of millimeter-scale single-walled carbon nanotube on electrical and mechanical properties of buckypaper. Nanoscale Research Letters, 2013, 8, 546.	5.7	52
17	Diameter and Density Control of Singleâ€Walled Carbon Nanotube Forests by Modulating Ostwald Ripening through Decoupling the Catalyst Formation and Growth Processes. Small, 2013, 9, 3584-3592.	10.0	52
18	A sweet spot for highly efficient growth of vertically aligned single-walled carbon nanotube forests enabling their unique structures and properties. Nanoscale, 2016, 8, 162-171.	5.6	52

#	Article	IF	Citations
19	Preparation of the Nanowire Form of Îµ-Fe₂O₃Single Crystal and a Study of the Formation Process. Journal of Physical Chemistry C, 2008, 112, 20212-20216.	3.1	49
20	Absence of an Ideal Single-Walled Carbon Nanotube Forest Structure for Thermal and Electrical Conductivities. ACS Nano, 2013, 7, 10218-10224.	14.6	36
21	Unexpectedly High Yield Carbon Nanotube Synthesis from Low-Activity Carbon Feedstocks at High Concentrations. ACS Nano, 2013, 7, 3150-3157.	14.6	35
22	The relationship between the growth rate and the lifetime in carbon nanotube synthesis. Nanoscale, 2015, 7, 8873-8878.	5.6	34
23	A Fundamental Limitation of Small Diameter Single-Walled Carbon Nanotube Synthesisâ€"A Scaling Rule of the Carbon Nanotube Yield with Catalyst Volume. Materials, 2013, 6, 2633-2641.	2.9	24
24	Highly pure, millimeter-tall, sub-2-nanometer diameter single-walled carbon nanotube forests. Carbon, 2016, 107, 433-439.	10.3	24
25	Two-dimensional metamagnet composed of a cesium copper octacyanotungstate. Chemical Physics Letters, 2007, 446, 292-296.	2.6	23
26	Unexpected Efficient Synthesis of Millimeter-Scale Single-Wall Carbon Nanotube Forests Using a Sputtered MgO Catalyst Underlayer Enabled by a Simple Treatment Process. Journal of the American Chemical Society, 2016, 138, 16608-16611.	13.7	18
27	The Infinite Possible Growth Ambients that Support Single-Wall Carbon Nanotube Forest Growth. Scientific Reports, 2013, 3, 3334.	3.3	14
28	A phenomenological model for selective growth of semiconducting single-walled carbon nanotubes based on catalyst deactivation. Nanoscale, 2016, 8, 1015-1023.	5.6	13
29	Synthesis of sub-millimeter tall SWNT forests on a catalyst underlayer of MgO single crystal. MRS Advances, 2017, 2, 1-8.	0.9	13
30	High magnetic permeability of Îµ-GaxFe2âˆ'xO3 magnets in the millimeter wave region. Journal of Applied Physics, 2010, 107, .	2.5	12
31	Colored magnetic films composed of cyano-bridged metal assemblies and magneto-optical functionalities. Polyhedron, 2005, 24, 2901-2905.	2.2	10
32	The Application of Gas Dwell Time Control for Rapid Single Wall Carbon Nanotube Forest Synthesis to Acetylene Feedstock. Nanomaterials, 2015, 5, 1200-1210.	4.1	10
33	A New, General Strategy for Fabricating Highly Concentrated and Viscoplastic Suspensions Based on a Structural Approach To Modulate Interparticle Interaction. Journal of the American Chemical Society, 2018, 140, 1098-1104.	13.7	9
34	Synthesis, crystal structure, and magnetic properties of Îµ-GaIIIâ€‰FxeIIIâ€‰O2âˆ'x3 nanorods. Journal of Applied Physics, 2009, 105, .	2.5	8
35	A mini-microplasma-based synthesis reactor for growing highly crystalline carbon nanotubes. Carbon, 2021, 173, 448-453.	10.3	6
36	Role of Hydrogen in Catalyst Activation for Plasma-Based Synthesis of Carbon Nanotubes. ACS Omega, 2021, 6, 18763-18769.	3.5	5

#	Article	IF	Citations
37	Quantitative Evidence for the Dependence of Highly Crystalline Single Wall Carbon Nanotube Synthesis on the Growth Method. Nanomaterials, 2021, 11, 3461.	4.1	5
38	Limitation in growth temperature for water-assisted single wall carbon nanotube forest synthesis. MRS Advances, 2018, 3, 91-96.	0.9	4
39	Breakdown of metallic single-wall carbon nanotube paths by NiO nanoparticle point etching for high performance thin film transistors. Nanoscale, 2015, 7, 1280-1284.	5.6	3
40	Inside Cover: A Millimeter-Wave Absorber Based on Gallium-Substituted É›-Iron Oxide Nanomagnets (Angew. Chem. Int. Ed. 44/2007). Angewandte Chemie - International Edition, 2007, 46, 8306-8306.	13.8	2
41	Scalability of the Heat and Current Treatment on SWCNTs to Improve their Crystallinity and Thermal and Electrical Conductivities. Nanoscale Research Letters, 2015, 10, 220.	5.7	2
42	Millimetre-scale growth of single-wall carbon nanotube forests using an aluminium nitride catalyst underlayer. MRS Advances, 2019, 4, 177-183.	0.9	2
43	A Hydrogen-Free Approach for Activating an Fe Catalyst Using Trace Amounts of Noble Metals and Confinement into Nanoparticles. Journal of Physical Chemistry Letters, 2022, 13, 1879-1885.	4.6	2
44	Multi-step chemical vapor synthesis reactor based on a microplasma for structure-controlled synthesis of single-walled carbon nanotubes. Chemical Engineering Journal, 2022, 444, 136634.	12.7	2
45	The double-edged effects of annealing MgO underlayers on the efficient synthesis of single-wall carbon nanotube forests. Nanoscale, 2017, 9, 17617-17622.	5.6	1
46	Additional obstacles in carbon nanotube growth by gas-flow directed chemical vapour deposition unveiled through improving growth density. Nanoscale Advances, 2019, 1, 4076-4081.	4.6	1
47	Sub-millimeter arbitrary arrangements of monolithically micro-scale electrical double layer capacitors. Journal of Physics: Conference Series, 2015, 660, 012086.	0.4	0
48	Examining the structural contribution to the electrical character of single wall carbon nanotube forest by a height dependent study. Carbon, 2016, 108, 106-111.	10.3	0
49	Modulation of carbon nanotube yield and type through the collective effects of initially deposited catalyst amount and MgO underlayer annealing temperature. MRS Advances, 2019, 4, 139-146.	0.9	0