Yoshiyuki Suda

List of Publications by Year
in descending order

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86 papers	889 citations	516710 16 h-index	526287 27 g-index
87 all docs	87 docs citations	87 times ranked	952 citing authors

#	Article	IF	Citations
1	Self-assembled nanostructures of 3D hierarchical faceted-iron oxide containing vertical carbon nanotubes on reduced graphene oxide hybrids for enhanced electromagnetic interface shielding. Composites Part B: Engineering, 2019, 168, 66-76.	12.0	88
2	Effects of hydrogen on carbon nanotube formation in CH4/H2 plasmas. Carbon, 2007, 45, 1518-1526.	10.3	63
3	Predicting the amount of carbon in carbon nanotubes grown by CH4 rf plasmas. Journal of Applied Physics, 2006, 99, 014302.	2.5	57
4	Catalytic activity of several carbons with different structures for methane decomposition and by-produced carbons. Applied Surface Science, 2019, 473, 291-297.	6.1	52
5	Amorphous fluorocarbon polymer (a-C:F) films obtained by plasma enhanced chemical vapor deposition from perfluoro-octane (C8F18) vapor I: Deposition, morphology, structural and chemical properties. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2004, 22, 13-19.	2.1	38
6	Nanopore formation process in artificial cell membrane induced by plasma-generated reactive oxygen species. Archives of Biochemistry and Biophysics, 2016, 605, 26-33.	3.0	38
7	Plasma irradiation of artificial cell membrane system at solidâ€“liquid interface. Applied Physics Express, 2014, 7, 077001.	2.4	31
8	Analysis of Oxidation State of Multilayered Catalyst Thin Films for Carbon Nanotube Growth Using Plasma-Enhanced Chemical Vapor Deposition. Japanese Journal of Applied Physics, 2006, 45, 8323-8329.	1.5	28
9	Dry machining of metal using an engraving cutter coated with a droplet-free ta-C film prepared via a T-shape filtered arc deposition. Surface and Coatings Technology, 2016, 307, 1029-1033.	4.8	26
10	Numerical analysis of pressure dependence on carbon nanotube growth in CH4/H2 plasmas. Thin Solid Films, 2008, 516, 6570-6574.	1.8	25
11	Effects of Oxygen and Substrate Temperature on Properties of Amorphous Carbon Films Fabricated by Plasma-Assisted Pulsed Laser Deposition Method. Japanese Journal of Applied Physics, 2002, 41, 4651-4654.	1.5	24
12	Reduction in lateral lipid mobility of lipid bilayer membrane by atmospheric pressure plasma irradiation. Japanese Journal of Applied Physics, 2016, 55, 03DF05.	1.5	24
13	Torsion fracture of carbon nanocoils. Journal of Applied Physics, 2012, 112, .	2.5	22
14	Electrochemical properties of fuel cell catalysts loaded on carbon nanomaterials with different geometries. Materials Today Communications, 2015, 3, 96-103.	1.9	19
15	Splitting and Flattening of Helical Carbon Nanofibers by Acid Treatment. Journal of Nanoscience and Nanotechnology, 2010, 10, 3910-3914.	0.9	18
16	Real-time deformation of carbon nanocoils under axial loading. Carbon, 2015, 83, 183-187.	10.3	18
17	Timesaving techniques for decision of electronâ€“molecule collisions in Monte Carlo simulation of electrical discharges. Journal of Computational Physics, 2007, 223, 298-304.	3.8	16
18	Argon-dominated plasma beam generated by filtered vacuum arc and its substrate etching. Applied Surface Science, 2009, 255, 7780-7785.	6.1	15

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19	Effective Utilization of Carbon Nanocoil-supported PtRu Anode Catalyst by Applying Anode Microporous Layer for Improved Direct Methanol Fuel Cell Performance. Electrochemistry, 2015, 83, 381-385.	1.4	15
20	High-Yield Synthesis of Helical Carbon Nanofibers Using Iron Oxide Fine Powder as a Catalyst. Crystals, 2015, 5, 47-60.	2.2	15
21	Hydrogen-free fluorinated DLC films with high hardness prepared by using T-shape filtered arc deposition system. Vacuum, 2019, 167, 536-541.	3.5	15
22	Filament discharge enhances field emission properties by making twisted carbon nanofibres stand up. Journal Physics D: Applied Physics, 2008, 41, 205418.	2.8	13
23	Carbon-Nanotube Growth in Alcohol-Vapor Plasma. IEEE Transactions on Plasma Science, 2009, 37, 1150-1155.	1.3	13
24	T-shape filtered arc deposition system with built-in electrostatic macro-particle trap for DLC film preparation. Thin Solid Films, 2009, 518, 1498-1502.	1.8	11
25	Electromagnetic wave absorption characteristics of multiwalled carbon nanocoils. Japanese Journal of Applied Physics, 2014, 53, 045102.	1.5	11
26	Structural Analysis of Multi-Walled Carbon Nanocoils Synthesized with Feâ€“Sn Catalyst Supported on Zeolite. Journal of Nanoscience and Nanotechnology, 2011, 11, 2344-2348.	0.9	10
27	Computational study of temporal behavior of incident species impinging on a water surface in dielectric barrier discharge for the understanding of plasmaâ€“liquid interface. Japanese Journal of Applied Physics, 2015, 54, 01AF03.	1.5	10
28	Electron and excited particle densities in a carbon ablation plume. Applied Surface Science, 2002, 197-198, 257-262.	6.1	9
29	Hydrogen-Sensing Response of Carbon-Nanotube Thin-Film Sensor with Pd Comb-Like Electrodes. Japanese Journal of Applied Physics, 2007, 46, L362-L364.	1.5	9
30	Influences of internal resistance and specific surface area of electrode materials on characteristics of electric double layer capacitors. AIP Conference Proceedings, 2017, , .	0.4	9
31	Enhancement of Nitrogen Gas Breakdown Voltage between Coated Aluminum Electrodes with Fluorocarbon Polymer Film Prepared in C8F18Vapor RF Plasma. Japanese Journal of Applied Physics, 2003, 42, L201-L203.	1.5	8
32	Supporting PtRu catalysts on various types of carbon nanomaterials for fuel cell applications. Journal of Physics: Conference Series, 2013, 433, 012008.	0.4	8
33	Improving the characteristic of electric double layer capacitors using oxidized carbon nanoballoon. Electrochimica Acta, 2014, 131, 207-213.	5.2	8
34	Wear-resistive and electrically conductive nitrogen-containing DLC film consisting of ultra-thin multilayers prepared by using filtered arc deposition. Japanese Journal of Applied Physics, 2019, 58, SEED05.	1.5	8
35	Preparation of Arc Black and Carbon Nano Balloon by Arc Discharge and Their Application to a Fuel Cell. Japanese Journal of Applied Physics, 2011, 50, 01AF13.	1.5	7
36	DMFC Catalyst Layer Prepared Using Arc-Soot Nano-Carbon by Dry-Squeegee Method and Its Impedance Analysis. Electrochemistry, 2009, 77, 210-213.	1.4	6

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37	Effect of gas introduction position on substrate etching by means of Ar-dominated graphite-cathodic-arc plasma beam in Î¼T-FAD. Thin Solid Films, 2010, 518, 3546-3550.	1.8	6
38	Fabrication of nitrogen-containing diamond-like carbon film by filtered arc deposition as conductive hard-coating film. Japanese Journal of Applied Physics, 2018, 57, 01AE07.	1.5	6
39	Development of Y-Shaped Filtered-Arc-Deposition System for Preparing Multielement Composition-Controlled Film. IEEE Transactions on Plasma Science, 2009, 37, 1140-1145.	1.3	5
40	Remote Plasma Chemical Vapor Deposition of Carbon Nanotubes and Analysis of Plasma Effect. IEEE Transactions on Plasma Science, 2011, 39, 3133-3139.	1.3	5
41	Effects of Dielectric Barrier Discharge Treatment Conditions on the Uprightness of Carbon Nanofibers. IEEE Transactions on Plasma Science, 2012, 40, 1794-1800.	1.3	5
42	Improved mechanical properties of bucky paper achieved via the addition of carbon nanocoils. AIP Conference Proceedings, 2014, , .	0.4	5
43	Improvement of carbon nanocoil purity achieved by supplying catalyst molecules from the vapor phase in chemical vapor deposition. Journal of Materials Research, 2014, 29, 2179-2187.	2.6	5
44	Preparation of self-supporting Au thin films on perforated substrate by releasing from water-soluble sacrificial layer. Japanese Journal of Applied Physics, 2016, 55, 07LE05.	1.5	5
45	Preparation of multi-layer film consisting of hydrogen-free DLC and nitrogen-containing DLC for conductive hard coating. AIP Conference Proceedings, 2018, , .	0.4	5
46	Electromagnetic wave absorption properties of carbon nanocoil composites in the millimeter waveband. AIP Conference Proceedings, 2018, , .	0.4	5
47	Optimizing the Magnetocuring of Epoxy Resins via Electromagnetic Additives. Advanced Materials Interfaces, 2021, 8, 2100881.	3.7	5
48	Deposition of Tungsten Carbide Thin Films by Simultaneous RF Sputtering. Japanese Journal of Applied Physics, 2006, 45, 8449-8452.	1.5	4
49	Optimization of Chemical Vapor Deposition Process for Reducing the Fiber Diameter and Number of Graphene Layers in Multi Walled Carbon Nanocoils. Japanese Journal of Applied Physics, 2013, 52, 11NL04.	1.5	4
50	Precise measurement of single carbon nanocoils using focused ion beam technique. Applied Physics Letters, 2016, 108, 153108.	3.3	4
51	Preparation of Arc Black and Carbon Nano Balloon by Arc Discharge and Their Application to a Fuel Cell. Japanese Journal of Applied Physics, 2011, 50, 01AF13.	1.5	4
52	Removal of Diamond-Like Carbon Film by Oxygen-Dominated Plasma Beam Converted from Filtered Carbon-Cathodic Arc. Japanese Journal of Applied Physics, 2011, 50, 01AF12.	1.5	3
53	Effect of Filament Discharge on Uprightness of Carbon Nanotwists Tightly-Adhered to Substrate. Japanese Journal of Applied Physics, 2011, 50, 08JF08.	1.5	3
54	Use of carbon nanocoil as a catalyst support in direct methanol fuel cell. , 2014, , .		3

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55	Nitrogen doping of carbon nanoballoons by radiofrequency magnetron plasma and evaluation of their oxygen reduction reaction activity. Electronics and Communications in Japan, 2019, 102, 3-10.	0.5	3
56	Electrical Characteristics and Zirconia Film Preparation by a Zirconium-Oxygen Plasma using a Positively Biased Electrode. Plasma Processes and Polymers, 2007, 4, S647-S650.	3.0	2
57	Plasma processing for carbon nanomaterials. Syntheses of nanostructures and their process control by numerical simulation of plasma. Electronics and Communications in Japan, 2013, 96, 1-8.	0.5	2
58	High-purity synthesis of helical carbon nanofibers and application for energy devices. Metal Powder Report, 2017, 72, 317-321.	0.1	2
59	Improvement of Growth Yield of Multi-Walled Carbon Nanocoils by Mesoporous Materials and Sn Amount. Transactions of the Materials Research Society of Japan, 2011, 36, 469-473.	0.2	2
60	Removal of Machine Oil from Metal Surface by Mesoplasma Jet under Open Atmosphere. Japanese Journal of Applied Physics, 2009, 48, 08HH03.	1.5	1
61	Fabrication of Micro-OLEDs by Room-temperature Curing Nanocontact-print Lithography Using DLC Molds. Materials Research Society Symposia Proceedings, 2012, 1511, 1.	0.1	1
62	Improvement in the Characteristics of Electric Double Layer Capacitor Using a Mixture of Arc Black and Carbon Nanoballoon. Japanese Journal of Applied Physics, 2013, 52, 11NM05.	1.5	1
63	Chemical Vapor Deposition of Helical Carbon Nanofibers. , 2019, , .		1
64	Manufacturing of Electric Double-layer Capacitors using Carbon Nanocoils and Evaluation of their Specific Capacitance at a High Scan Rate. IEEJ Transactions on Fundamentals and Materials, 2013, 133, 660-667.	0.2	1
65	Effect of Filament Discharge on Uprightness of Carbon Nanotwists Tightly-Adhered to Substrate. Japanese Journal of Applied Physics, 2011, 50, 08JF08.	1.5	1
66	Fabrication and Investigation of Carbon Nano-tube Transistor by the Dip Coat Method. IEEJ Transactions on Fundamentals and Materials, 2015, 135, 409-413.	0.2	1
67	Plasma-enhanced chemical vapor deposition of carbon nanotubes using alcohol vapor. Materials Research Society Symposia Proceedings, 2007, 1057, 1.	0.1	0
68	Is the Diameter or Chirality Distribution of Single-Walled Carbon Nanotubes Selected in the Synthesis Process?. Journal of Nanoscience and Nanotechnology, 2009, 9, 1897-1903.	0.9	0
69	Special Issue on Carbon-Related Materials Processing by Plasma Technologies. IEEE Transactions on Plasma Science, 2012, 40, 1781-1782.	1.3	0
70	Use of Carbon Nanomaterials as a Catalyst Support in Fuel Cells. Materials Science Forum, 2016, 879, 1882-1888.	0.3	0
71	Fabrication and Investigation of Carbon Nanotube Transistor by the Dip Coat Method. Electronics and Communications in Japan, 2016, 99, 79-84.	0.5	0
72	Effects of catalyst support and chemical vapor deposition condition on synthesis of multi-walled carbon nanocoils. AIP Conference Proceedings, 2016, , .	0.4	0

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73	Preparation and properties of fibrous nanocarbon. , 2019, , 471-487.		0
74	Self-supporting tetrahedral amorphous carbon films consisting of multilayered structure prepared using filtered arc deposition. Thin Solid Films, 2019, 675, 123-127.	1.8	0
75	Study of a Wide Area Carbon Nanotubes Preparation for an Environmental Application. Journal of Advanced Oxidation Technologies, 2006, 9, .	0.5	0
76	Evaluation of Ion and Radical Fluxes in CH4/H2 Plasma for CNT Growth. IEEJ Transactions on Fundamentals and Materials, 2008, 128, 624-628.	0.2	0
77	Erosion of Pt-Rh Electrode in Atmospheric-Pressure Mesoplasma Jet. IEEJ Transactions on Fundamentals and Materials, 2009, 129, 157-158.	0.2	0
78	Development of Electromagnetically Pulled-Out Gas Plasma (EPOP) Gun for Medium Vacuum and its Fundamental Discharge Characteristics. IEEJ Transactions on Fundamentals and Materials, 2011, 131, 139-144.	0.2	0
79	Removal of Diamond-Like Carbon Film by Oxygen-Dominated Plasma Beam Converted from Filtered Carbon-Cathodic Arc. Japanese Journal of Applied Physics, 2011, 50, 01AF12.	1.5	0
80	Plasma Processing for Carbon Nanomaterials. IEEJ Transactions on Fundamentals and Materials, 2012, 132, 421-427.	0.2	0
81	Performance of Membrane-Electrode-Assembly Using Anode Catalyst Layers with Carbon Nanomaterials of Particle and Fiber Geometries in Direct Methanol Fuel Cell. ECS Meeting Abstracts, 2016, , .	0.0	0
82	Effect of Anode Microporous Layer on the Performance of Direct Methanol Fuel Cell Using Carbon Nanocoil-Supported PtRu Catalyst. ECS Meeting Abstracts, 2016, , .	0.0	0
83	Catalyst Support on Carbon Nanoballoon and Evaluation of Its Catalytic Activity in Direct Methanol Fuel Cells. ECS Meeting Abstracts, 2016, , .	0.0	0
84	Application of Carbon Nanomaterials to an Active Electrode Material in Electric Double Layer Capacitors. ECS Meeting Abstracts, 2016, , .	0.0	0
85	Development of Photovoltaic Simple Pyranometer with Temperature Compensation. IEEJ Transactions on Fundamentals and Materials, 2017, 137, 674-675.	0.2	0
86	Nitrogen Doping of Carbon Nanoballoons by Radio-frequency Magnetron Plasma and Evaluation of their Oxygen Reduction Reaction Activity. IEEJ Transactions on Fundamentals and Materials, 2019, 139, 140-146.	0.2	0