Hiroyuki Muramatsu

List of Publications by Year
in descending order

114	4,863	117571	95218
papers	citations	34 h-index	68 g-index

116	116	116	7521
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Bulk Production of a New Form of sp² Carbon: Crystalline Graphene Nanoribbons. Nano Letters, 2008, 8, 2773-2778.	4.5	588
2	Nitrogen-doped graphene: beyond single substitution and enhanced molecular sensing. Scientific Reports, 2012, 2, 586.	1.6	563
3	Effective NaCl and dye rejection of hybrid graphene oxide/graphene layered membranes. Nature Nanotechnology, 2017, 12, 1083-1088.	15.6	307
4	Raman Spectroscopy of Boron-Doped Single-Layer Graphene. ACS Nano, 2012, 6, 6293-6300.	7.3	245
5	Conducting linear chains of sulphur inside carbon nanotubes. Nature Communications, 2013, 4, 2162.	5.8	228
6	Rice Huskâ€Derived Graphene with Nanoâ€Sized Domains and Clean Edges. Small, 2014, 10, 2766-2770.	5.2	181
7	Observation of magnetic edge state in graphene nanoribbons. Physical Review B, 2010, 81, .	1.1	132
8	Development and Application of Carbon Nanotubes. Japanese Journal of Applied Physics, 2006, 45, 4883-4892.	0.8	94
9	Efficient anchorage of Pt clusters on N-doped carbon nanotubes and their catalytic activity. Chemical Physics Letters, 2008, 463, 124-129.	1.2	91
10	Large Area Films of Alternating Grapheneâ€“Carbon Nanotube Layers Processed in Water. ACS Nano, 2013, 7, 10788-10798.	7.3	85
11	Confirmation of blood flow in perforating arteries using fluorescein cerebral angiography during aneurysm surgery. Journal of Neurosurgery, 2007, 107, 68-73.	0.9	82
12	Nanocarbons from rice husk by microwave plasma irradiation: From graphene and carbon nanotubes to graphenated carbon nanotube hybrids. Carbon, 2015, 94, 479-484.	5.4	81
13	Formation of Nitrogen-Doped Graphene Nanoribbons via Chemical Unzipping. ACS Nano, 2013, 7, 2192-2204.	7.3	80
14	Nanotube Coalescence-Inducing Mode: A Novel Vibrational Mode in Carbon Systems. Small, 2006, 2, 1031-1036.	5.2	77
15	Coalescence of Double-Walled Carbon Nanotubes:â€‰ Formation of Novel Carbon Bicables. Nano Letters, 2004, 4, 1451-1454.	4.5	75
16	In Situ Raman Study on Single- and Double-Walled Carbon Nanotubes as a Function of Lithium Insertion. Small, 2006, 2, 667-676.	5.2	73
17	Atomic Nanotube Welders:â€‰ Boron Interstitials Triggering Connections in Double-Walled Carbon Nanotubes. Nano Letters, 2005, 5, 1099-1105.	4.5	72
18	Compressive strength sensitivity of cement mortar using rice husk-derived graphene with a high specific surface area. Construction and Building Materials, 2015, 96, 189-197.	3.2	67

#	Article	IF	Citations
19	Selective Optical Property Modification of Double-Walled Carbon Nanotubes by Fluorination. ACS Nano, 2008, 2, 485-488.	7.3	64
20	Synthesis and Isolation of Molybdenum Atomic Wires. Nano Letters, 2008, 8, 237-240.	4.5	61
21	Enhanced electrical conductivities of N-doped carbon nanotubes by controlled heat treatment. Nanoscale, 2011, 3, 4359.	2.8	60
22	Robust, Conducting, and Transparent Polymer Composites Using Surfaceâ€Modified and Individualized Doubleâ€Walled Carbon Nanotubes. Advanced Materials, 2008, 20, 4509-4512.	11.1	58
23	Nanostructured carbon materials for enhanced nitrobenzene adsorption: Physical vs. chemical surface properties. Carbon, 2018, 139, 833-844.	5.4	55
24	Clean Nanotube Unzipping by Abrupt Thermal Expansion of Molecular Nitrogen: Graphene Nanoribbons with Atomically Smooth Edges. ACS Nano, 2012, 6, 2261-2272.	7.3	54
25	Efficient H2Adsorption by Nanopores of High-Purity Double-Walled Carbon Nanotubes. Journal of the American Chemical Society, 2006, 128, 12636-12637.	6.6	50
26	A Review of Double-Walled and Triple-Walled Carbon Nanotube Synthesis and Applications. Applied Sciences (Switzerland), 2016, 6, 109.	1.3	44
27	Selective Tuning of the Electronic Properties of Coaxial Nanocables through Exohedral Doping. Nano Letters, 2007, 7, 2383-2388.	4.5	43
28	Properties of One-Dimensional Molybdenum Nanowires in a Confined Environment. Nano Letters, 2009, 9, 1487-1492.	4.5	43
29	Superconductivity in Bundles of Double-Wall Carbon Nanotubes. Scientific Reports, 2012, 2, 625.	1.6	43
30	Catalytic metal-free formation of multi-walled carbon nanotubes in atmospheric arc discharge. Carbon, 2012, 50, 4588-4595.	5.4	40
31	Capacitance response of double-walled carbon nanotubes depending on surface modification. Electrochemistry Communications, 2009, 11, 719-723.	2.3	39
32	Bright Photoluminescence from the Inner Tubes of â€œPeapodâ€â€Derived Doubleâ€Walled Carbon Nanotubes. Small, 2009, 5, 2678-2682.	5.2	38
33	Evidence of Water Adsorption in Hydrophobic Nanospaces of Highly Pure Double-Walled Carbon Nanotubes. Journal of the American Chemical Society, 2010, 132, 1214-1215.	6.6	37
34	Double-walled carbon nanotubes: synthesis, structural characterization, and application. Carbon Letters, 2014, 15, 77-88.	3.3	35
35	Strong and stable photoluminescence from the semiconducting inner tubes within double walled carbon nanotubes. Applied Physics Letters, 2009, 94, 083106.	1.5	34
36	Linear carbon chains inside multi-walled carbon nanotubes: Growth mechanism, thermal stability and electrical properties. Carbon, 2016, 107, 217-224.	5.4	33

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37	Optically and Biologically Active Mussel Proteinâ€Coated Doubleâ€Walled Carbon Nanotubes. Small, 2011, 7, 3292-3297.	5.2	31
38	Characterization of Bundled and Individual Triple-Walled Carbon Nanotubes by Resonant Raman Spectroscopy. ACS Nano, 2013, 7, 2381-2387.	7.3	30
39	Double-Wall Carbon Nanotubes Doped with Different Br2 Doping Levels: A Resonance Raman Study. Nano Letters, 2008, 8, 4168-4172.	4.5	28
40	Chirality-Dependent Transport in Double-Walled Carbon Nanotube Assemblies: The Role of Inner Tubes. ACS Nano, 2011, 5, 7547-7554.	7.3	28
41	Loop formation in graphitic nanoribbon edges using furnace heating or Joule heating. Journal of Vacuum Science & Technology B, 2009, 27, 1996.	1.3	26
42	Freestanding, bendable thin film for supercapacitors using DNA-dispersed double walled carbon nanotubes. Applied Physics Letters, 2009, 95, .	1.5	26
43	Raman and Fluorescence Spectroscopic Studies of a DNA-Dispersed Double-Walled Carbon Nanotube Solution. ACS Nano, 2010, 4, 1060-1066.	7.3	25
44	Wall-to-wall stress induced in (6,5) semiconducting nanotubes by encapsulation in metallic outer tubes of different diameters: A resonance Raman study of individual C60-derived double-wall carbon nanotubes. Nanoscale, 2010, 2, 406-411.	2.8	25
45	Bulk Synthesis of Narrow Diameter and Highly Crystalline Tripleâ€Walled Carbon Nanotubes by Coalescing Fullerene Peapods. Advanced Materials, 2011, 23, 1761-1764.	11.1	25
46	Structural evolution of hydrothermal carbon spheres induced by high temperatures and their electrical properties under compression. Carbon, 2017, 121, 426-433.	5.4	25
47	Rapidly self-heating shape memory polyurethane nanocomposite with boron-doped single-walled carbon nanotubes using near-infrared laser. Composites Part B: Engineering, 2019, 175, 107065.	5.9	25
48	Role of Intertube Interactions in Double- and Triple-Walled Carbon Nanotubes. ACS Nano, 2014, 8, 1330-1341.	7.3	24
49	The possible way to evaluate the purity of double-walled carbon nanotubes over single wall carbon nanotubes by chemical doping. Chemical Physics Letters, 2006, 420, 377-381.	1.2	23
50	Comparison of the Resonance Raman Behavior of Double-Walled Carbon Nanotubes Doped with Bromine or Iodine Vapors. Journal of Physical Chemistry C, 2009, 113, 3934-3938.	1.5	23
51	Microwave plasma-induced graphene-sheet fibers from waste coffee grounds. Journal of Materials Chemistry A, 2015, 3, 14545-14549.	5.2	22
52	Anharmonicity and Universal Response of Linear Carbon Chain Mechanical Properties under Hydrostatic Pressure. Physical Review Letters, 2020, 125, 105501.	2.9	22
53	Hybridized double-walled carbon nanotubes and activated carbon as free-standing electrode for flexible supercapacitor applications. Carbon Letters, 2020, 30, 527-534.	3.3	20
54	Behavior of the high frequency Raman modes of double-wall carbon nanotubes after doping with bromine or iodine vapors. Carbon, 2011, 49, 3585-3596.	5.4	19

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55	Geometric and Electronic Structure of Closed Graphene Edges. Journal of Physical Chemistry Letters, 2012, 3, 2097-2102.	2.1	19
56	Diameter-selective separation of double-walled carbon nanotubes. Applied Physics Letters, 2008, 93, 223107.	1.5	18
57	Defectâ€Enhanced Dispersion of Carbon Nanotubes in DNA Solutions. ChemPhysChem, 2009, 10, 2414-2417.	1.0	18
58	TEM image simulation study of small carbon nanotubes and carbon nanowire. Carbon, 2006, 44, 1130-1136.	5.4	17
59	Optical spectroscopic studies of photochemically oxidized single-walled carbon nanotubes. Nanotechnology, 2009, 20, 105708.	1.3	17
60	Electrochemical role of oxygen containing functional groups on activated carbon electrode. RSC Advances, 2014, 4, 62678-62683.	1.7	17
61	CO2 adsorption on crystalline graphitic nanostructures. Journal of CO2 Utilization, 2014, 5, 60-65.	3.3	17
62	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mi>G</mml:mi><mml:mo>â€²</mml:mo></mml:msup></mm in double- and triple-walled carbon nanotubes: A Raman study. Physical Review B, 2015, 91, .	1.1	16
63	Boron Atoms as Loop Accelerator and Surface Stabilizer in Plateletâ€Type Carbon Nanofibers. ChemPhysChem, 2010, 11, 2345-2348.	1.0	15
64	Elucidating the local interfacial structure of highly photoresponsive carbon nanotubes/PbS-QDs based nanohybrids grown by pulsed laser deposition. Carbon, 2016, 96, 145-152.	5.4	15
65	CdSe quantum dot-decorated double walled carbon nanotubes: The effect of chemical moieties. Applied Physics Letters, 2008, 93, 051901.	1.5	13
66	Controlled interlayer spacing of scrolled reduced graphene nanotubes by thermal annealing. RSC Advances, 2013, 3, 4161.	1.7	13
67	Oxidation and Thermal Stability of Linear Carbon Chains Contained in Thermally Treated Double-Walled Carbon Nanotubes. Small, 2007, 3, 788-792.	5.2	12
68	A reversible strain-induced electrical conductivity in cup-stacked carbon nanotubes. Nanoscale, 2013, 5, 10212.	2.8	12
69	Hysteretic transfer characteristics of double-walled and single-walled carbon nanotube field-effect transistors. Applied Physics Letters, 2007, 91, 143118.	1.5	11
70	Covalent Attachment of Aromatic Diisocyanate to the Sidewalls of Single- and Double-Walled Carbon Nanotubes. European Journal of Inorganic Chemistry, 2010, 2010, 4305-4308.	1.0	11
71	Combined catalyst system for preferential growth of few-walled carbon nanotubes. Carbon, 2009, 47, 2543-2546.	5.4	10
72	Hydrolytic Unzipping of Boron Nitride Nanotubes in Nitric Acid. Nanoscale Research Letters, 2017, 12, 94.	3.1	10

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73	Raman study on electrochemical lithium insertion into multiwalled carbon nanotubes. Journal of Raman Spectroscopy, 2008, 39, 1183-1188.	1.2	9
74	A simple route to short cup-stacked carbon nanotubes by sonication. Carbon, 2010, 48, 3643-3647.	5.4	9
75	Synthesis and luminescence properties of Eu 2+ -doped 8-coordinated SrO phosphors. Ceramics International, 2013, 39, 7115-7118.	2.3	9
76	Iron Particle Nanodrilling of Few Layer Graphene at Low Electron Beam Accelerating Voltages. Particle and Particle Systems Characterization, 2013, 30, 76-82.	1.2	9
77	Optical and structural stability of blue SrO:Eu2+ phosphor. Journal of Solid State Chemistry, 2013, 204, 186-189.	1.4	9
78	Deposition of Metal Oxide Films from Metalâ€“EDTA Complexes by Flame Spray Technique. Journal of Thermal Spray Technology, 2014, 23, 833-838.	1.6	9
79	Synthesis of outer tube-selectively nitrogen-doped double-walled carbon nanotubes by nitrogen plasma treatment. Nanoscale, 2018, 10, 15938-15942.	2.8	9
80	Controlled growth of one-dimensional clusters of molybdenum atoms using double-walled carbon nanotube templating. Applied Physics Letters, 2009, 94, .	1.5	8
81	Unusually High Dispersion of Nitrogen-Doped Carbon Nanotubes in DNA Solution. Journal of Physical Chemistry B, 2011, 115, 14295-14300.	1.2	8
82	Outer Tube-Selectively Boron-Doped Double-Walled Carbon Nanotubes for Thermoelectric Applications. ACS Applied Nano Materials, 2020, 3, 3347-3354.	2.4	8
83	Singleâ€wall carbon nanotube interactions with copperâ€oxamato building block of moleculeâ€based magnets probed by resonance Raman spectroscopy. Journal of Raman Spectroscopy, 2012, 43, 1951-1956.	1.2	7
84	A selective way to create defects by the thermal treatment of fluorinated double walled carbon nanotubes. Chinese Journal of Catalysis, 2014, 35, 864-868.	6.9	7
85	Spontaneously restored electrical conductivity of bioactive gel comprising mussel adhesive protein-coated carbon nanotubes. RSC Advances, 2016, 6, 87044-87048.	1.7	7
86	Synthesis and characterization of graphene from rice husks. Tanso, 2016, 2016, 182-190.	0.1	7
87	Formation of off-centered double-walled carbon nanotubes exhibiting wide interlayer spacing from bi-cables. Chemical Physics Letters, 2006, 432, 240-244.	1.2	6
88	Transparent and Conductive Polyethylene Oxide Film by the Introduction of Individualized Singleâ€Walled Carbon Nanotubes. Macromolecular Rapid Communications, 2009, 30, 2084-2088.	2.0	6
89	Sensitive G-Band Raman Features for the Electrical Conductivity of Multi-Walled Carbon Nanotubes. Journal of Nanoscience and Nanotechnology, 2010, 10, 3940-3944.	0.9	6
90	Densification of metal oxide films synthesized from metal complexes by flame spraying. Surface and Coatings Technology, 2017, 325, 89-97.	2.2	6

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91	Field emission properties of a DWCNT bundle and a single MWCNT. Journal of Physics and Chemistry of Solids, 2018, 113, 229-234.	1.9	6
92	Constraint spaces in carbon materials. RSC Advances, 2019, 9, 22823-22840.	1.7	6
93	Fundamental Understanding of Nanoporous Carbons for Energy Application Potentials. Carbon Letters, 2009, 10, 177-180.	3.3	6
94	Determination of the stacking order of curved few-layered graphene systems. Nanoscale, 2012, 4, 6419.	2.8	5
95	Boron-assisted coalescence of parallel multi-walled carbon nanotubes. RSC Advances, 2013, 3, 26266.	1.7	5
96	Synthesis of Strontium Oxide Whiskers with Preferential <111> Orientation by Atmospheric Chemical Vapor Deposition. Journal of Materials Science Research, 2016, 5, 50.	0.1	4
97	Synthesis of (Y,Er)₂O₃ Films from Multiple-Nuclei EDTA·(Y,Er)·H Complexes by Flame Spray Method. Materials Transactions, 2016, 57, 70-74.	0.4	4
98	Flame-Sprayed Y2O3 Films with Metal-EDTA Complex Using Various Cooling Agents. Journal of Thermal Spray Technology, 2017, 26, 195-202.	1.6	4
99	Stacking Nature of the Catalytic Chemical Vapor Deposition-Derived Double-Walled Carbon Nanotubes. Journal of Nanoscience and Nanotechnology, 2006, 6, 3321-3324.	0.9	3
100	Effect of MoO₃ as conditioning catalyst on synthesis of carbon nanotubes. Journal of Materials Research, 2009, 24, 1307-1310.	1.2	3
101	Mass-Produced Multi-Walled Carbon Nanotubes as Catalyst Supports for Direct Methanol Fuel Cells. Journal of Nanoscience and Nanotechnology, 2011, 11, 675-680.	0.9	3
102	Dramatic change of water-cluster accessibility of highly pure double-walled carbon nanotubes with high temperature annealing. Nanoscale, 2012, 4, 4960.	2.8	3
103	Structural behaviours of nanoporous carbon fabricated from rice husk. Physica E: Low-Dimensional Systems and Nanostructures, 2020, 115, 113661.	1.3	3
104	Synthesis of catalytic chemical vapor grown carbon fibers: carbon nanotube and carbon nanofiber. Tanso, 2010, 2010, 153-160.	0.1	3
105	Sharma etÂal. Reply:. Physical Review Letters, 2022, 128, .	2.9	2
106	Highly Conductive One-Dimensional Manganese Oxide Wires by Coating with Graphene Oxides. Applied Physics Express, 2012, 5, 105001.	1.1	1
107	Optical sensitivity of mussel protein-coated double-walled carbon nanotubes on the ironâ€“DOPA conjugation bond. RSC Advances, 2016, 6, 16308-16313.	1.7	1
108	Thermal treatment-induced structural changes in graphene nanoribbons obtained from partially unzipped double-walled carbon nanotubes. RSC Advances, 2016, 6, 91562-91566.	1.7	1

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109	Optical Spectroscopic Studies of Thermally Coalesced Single-Walled Carbon Nanotubes. Journal of Nanoscience and Nanotechnology, 2010, 10, 3878-3883.	0.9	0
110	Molybdenum-encapsulation modified the optical property of single walled carbon nanotubes. RSC Advances, 2014, 4, 54747-54751.	1.7	0
111	Environmental effects, intertube interactions and Ïƒ-Ï€ bond re-hybridization in bundles of double- and triple-walled carbon nanotubes. Carbon, 2020, 158, 651-661.	5.4	0
112	æ°—ç›¸æˆé•·ã‚«ãƒ¼ãƒœãƒ³ãƒŠãƒŽãƒãƒ¥ãƒ¼ãƒ–ãƒ»ãƒŠãƒŽãƒ•ã‚¡ã‚¤ãƒãƒ¼ã®å•æˆã¨ãã®æ§‹é€ è§£æž. Hyomen Kagaku, 2004, 25, 352-3	0.0	0
113	Optical studies of inner tubes within double-walled carbon nanotubes. Tanso, 2009, 2009, 172-179.	0.1	0
114	Preparation and structure analysis of double wall-carbon nanotubes encapsulating gadolinium trichloride nanowires. Tanso, 2013, 2013, 279-283.	0.1	0