Takeshi Tanaka

List of Articles by Year
in descending order

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103 PR articles	4,119 PR citations	143540 31 PR h-index	125866 61 g-index
107 documents	4673 doc citations	156339 32 h-index	5131 citing authors

#	Article	IF	Citations
1	Iptycene-Assisted Alignment of Chirality-Sorted SWCNTs for Field-Effect Transistors. ACS Applied Nano Materials, 2025, 8, 944-951.	5.3	2
2	Coalescence of carbon nanotubes while preserving the chiral angles. Nature Communications, 2025, 16, .	13.7	9
3	Actuator-Driven, Purge-Free Formaldehyde Gas Sensor Based on Single-Walled Carbon Nanotubes. Nanomaterials, 2025, 15, 962.	4.0	0
4	Birefringent optical responses of single-chirality carbon nanotube membranes. Carbon, 2024, 218, 118720.	10.7	8
5	Bright NIR-II fluorescence from biocompatible gel-coated carbon nanotubes for in vivo imaging. Carbon, 2024, 218, 118728.	10.7	28
6	Amperometric Biosensor Strip With Carbon Nanotube and Ketone Body 3-Hydroxybutyrate Dehydrogenase. IEEE Sensors Journal, 2023, 23, 1778-1785.	3.6	1
7	Coenzyme corona formation on carbon nanotubes leads to disruption of the redox balance in metabolic reactions. Nanoscale, 2023, 15, 2340-2353.	5.0	2
8	Selective Detection of Toxic C1 Chemicals Using a Hydroxylamine-Based Chemiresistive Sensor Array. ACS Sensors, 2023, 8, 1585-1592.	8.5	9
9	Low-Potential Operation of Direct Electron Transfer Biosensor Strip With Single-Walled Carbon Nanotubes and Flavin Adenine Dinucleotide Glucose Dehydrogenase. , 2023, 7, 1-4.		4
10	Chromatographic purification of histidine-tagged proteins using zirconia particles modified with phosphate groups. Journal of Chromatography A, 2023, 1703, 464112.	3.7	8
11	Near-Infrared Photoluminescence of Carbon Nanotubes Powered by Biochemical Reactions of Luciferin/Luciferase. Journal of Physical Chemistry Letters, 2023, 14, 5955-5959.	4.2	5
12	Solubilization of Carbon Nanobelts in Aqueous Solutions: Optical and Colloidal Properties. Nano Letters, 2023, 23, 11167-11173.	8.7	4
13	Empirical formulation of broadband complex refractive index spectra of singleâ€chirality carbon nanotube assembly. Nanophotonics, 2022, 11, 1011-1020.	6.2	18
14	Fabricating one-dimensional van der Waals heterostructures on chirality-sorted single-walled carbon nanotubes. Carbon, 2022, 199, 407-414.	10.7	13
15	Direct Electron Transfer Between Single-Walled Carbon Nanotube and Fructose Dehydrogenase. IEEE Nanotechnology Magazine, 2021, 20, 610-618.	2.1	3
16	Band structure dependent electronic localization in macroscopic films of single-chirality single-wall carbon nanotubes. Carbon, 2021, 183, 774-779.	10.7	10
17	Cold-induced Conversion of Connective Tissue Skeleton in Brown Adipose Tissues. Acta Histochemica Et Cytochemica, 2021, 54, 131-141.	1.6	4
18	Directly crosslinked dextran gels for SWCNT separation. Carbon, 2020, 156, 422-429.	10.7	10

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19	Photoluminescence Quantum Yield of Single-Wall Carbon Nanotubes Corrected for the Photon Reabsorption Effect. Nano Letters, 2020, 20, 410-417.	8.7	47
20	Electrochemical determination of uric acid in urine and serum with uricase/carbon nanotube /carboxymethylcellulose electrode. Analytical Biochemistry, 2020, 590, 113533.	2.4	74
21	Xylose-Insensitive Direct Electron Transfer Biosensor Strip With Single-Walled Carbon Nanotubes and Novel Fungal Flavin Adenine Dinucleotide Glucose Dehydrogenase. IEEE Sensors Journal, 2020, 20, 12522-12529.	3.6	7
22	Automatic Sorting of Single-Chirality Single-Wall Carbon Nanotubes Using Hydrophobic Cholates: Implications for Multicolor Near-Infrared Optical Technologies. ACS Applied Nano Materials, 2020, 3, 11289-11297.	5.3	42
23	Filling control of n-type and p-type dopant molecules in single-wall carbon nanotubes. Applied Physics Express, 2020, 13, 065003.	2.1	2
24	Cascade Reaction-Based Chemiresistive Array for Ethylene Sensing. ACS Sensors, 2020, 5, 1405-1410.	8.5	24
25	Sustained photodynamic effect of single chirality-enriched single-walled carbon nanotubes. Carbon, 2020, 161, 718-725.	10.7	20
26	Quantitative analysis of the effect of reabsorption on the Raman spectroscopy of distinct (n, m) carbon nanotubes. Analytical Methods, 2020, 12, 2376-2384.	2.5	5
27	Polyaromatic Nanotweezers on Semiconducting Carbon Nanotubes for the Growth and Interfacing of Lead Halide Perovskite Crystal Grains in Solar Cells. Chemistry of Materials, 2020, 32, 5125-5133.	6.7	52
28	Diameter dependence of single-walled carbon nanotubes with flavin adenine dinucleotide glucose dehydrogenase for direct electron transfer bioanodes. Japanese Journal of Applied Physics, 2019, 58, 051015.	1.9	5
29	Ultrafast Vibrational Energy Transfer from Photoexcited Carbon Nanotubes to Proteins. EPJ Web of Conferences, 2019, 205, 05009.	0.3	0
30	Semiconducting carbon nanotubes as crystal growth templates and grain bridges in perovskite solar cells. Journal of Materials Chemistry A, 2019, 7, 12987-12992.	9.3	72
31	Photoluminescence Intensity Fluctuations and Temperature-Dependent Decay Dynamics of Individual Carbon Nanotube sp³ Defects. Journal of Physical Chemistry Letters, 2019, 10, 1423-1430.	4.2	25
32	Fate of Carbon Nanotubes Locally Implanted in Mice Evaluated by Near-Infrared Fluorescence Imaging: Implications for Tissue Regeneration. ACS Applied Nano Materials, 2019, 2, 1382-1390.	5.3	15
33	High-yield and high-throughput single-chirality enantiomer separation of single-wall carbon nanotubes. Carbon, 2018, 132, 1-7.	10.7	50
34	Facile synthesis of guar gum gel for the separation of metallic and semiconducting single-wall carbon nanotubes. Carbon, 2018, 129, 745-749.	10.7	15
35	Fasting-dependent Vascular Permeability Enhancement in Brown Adipose Tissues Evidenced by Using Carbon Nanotubes as Fluorescent Probes. Scientific Reports, 2018, 8, .	3.4	19
36	Suppression of single-wall carbon nanotube redox reaction by adsorbed proteins. Applied Physics Express, 2018, 11, 075101.	2.1	5

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37	Direct Proof of a Defect-Modulated Gap Transition in Semiconducting Nanotubes. Nano Letters, 2018, 18, 3920-3925.	8.7	15
38	Disulfide bond formation of thiols by using carbon nanotubes. Nanoscale, 2017, 9, 5389-5393.	5.0	13
39	Near-Infrared Photoluminescent Carbon Nanotubes for Imaging of Brown Fat. Scientific Reports, 2017, 7, .	3.4	83
40	Determination of Enantiomeric Purity of Single-Wall Carbon Nanotubes Using Flavin Mononucleotide. Journal of the American Chemical Society, 2017, 139, 16068-16071.	15.0	40
41	Highâ€Efficiency Separation of (6,5) Carbon Nanotubes by Stepwise Elution Gel Chromatography. Physica Status Solidi (B): Basic Research, 2017, 254, .	1.5	13
42	Carbon Nanotubes Facilitate Oxidation of Cysteine Residues of Proteins. Journal of Physical Chemistry Letters, 2017, 8, 5216-5221.	4.2	9
43	Metallic versus Semiconducting SWCNT Chemiresistors: A Case for Separated SWCNTs Wrapped by a Metallosupramolecular Polymer. ACS Applied Materials & Interfaces, 2017, 9, 38062-38067.	8.0	45
44	Amperometric Detection of Sub-ppm Formaldehyde Using Single-Walled Carbon Nanotubes and Hydroxylamines: A Referenced Chemiresistive System. ACS Sensors, 2017, 2, 1405-1409.	8.5	51
45	Diameterâ€Selective Separation of Semiconducting Singleâ€Walled Carbon Nanotubes in Large Diameter Range. Physica Status Solidi (B): Basic Research, 2017, 254, .	1.5	12
46	Tunable room-temperature single-photon emission at telecom wavelengths from sp3 defects in carbon nanotubes. Nature Photonics, 2017, 11, 577-582.	29.0	290
47	Vibrational energy transfer from photoexcited carbon nanotubes to proteins observed by coherent phonon spectroscopy. Applied Physics Express, 2017, 10, 125101.	2.1	3
48	Origin of the Surfactantâ€Dependent Redox Chemistry of Singleâ€Wall Carbon Nanotubes. ChemNanoMat, 2016, 2, 911-920.	2.5	22
49	Industrial-scale separation of high-purity single-chirality single-wall carbon nanotubes for biological imaging. Nature Communications, 2016, 7, .	13.7	222
50	Arginine Suppresses the Adsorption of Lysozyme onto Single-wall Carbon Nanotubes. Chemistry Letters, 2016, 45, 952-954.	1.1	7
51	Experimental determination of excitonic band structures of single-walled carbon nanotubes using circular dichroism spectra. Nature Communications, 2016, 7, .	13.7	130
52	Single-Chirality Separation and Optical Properties of (5,4) Single-Wall Carbon Nanotubes. Journal of Physical Chemistry C, 2016, 120, 10705-10710.	3.1	40
53	Liquid Chromatographic Analysis of the Interaction between Amino Acids and Aromatic Surfaces Using Single-Wall Carbon Nanotubes. Langmuir, 2015, 31, 8923-8929.	3.6	22
54	Solubilization of Single-Walled Carbon Nanotubes Using a Peptide Aptamer in Water below the Critical Micelle Concentration. Langmuir, 2015, 31, 3482-3488.	3.6	20

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55	Simultaneous Chirality and Enantiomer Separation of Metallic Single-Wall Carbon Nanotubes by Gel Column Chromatography. Analytical Chemistry, 2015, 87, 9467-9472.	6.5	42
56	Arginine Side Chains as a Dispersant for Individual Singleâ€Wall Carbon Nanotubes. Chemistry - A European Journal, 2014, 20, 4922-4930.	3.4	37
57	Optical Isomer Separation of Single-Chirality Carbon Nanotubes Using Gel Column Chromatography. Nano Letters, 2014, 14, 6237-6243.	8.7	81
58	pH- and Solute-Dependent Adsorption of Single-Wall Carbon Nanotubes onto Hydrogels: Mechanistic Insights into the Metal/Semiconductor Separation. ACS Nano, 2013, 7, 10285-10295.	15.3	78
59	High-Efficiency Single-Chirality Separation of Carbon Nanotubes Using Temperature-Controlled Gel Chromatography. Nano Letters, 2013, 13, 1996-2003.	8.7	168
60	Effects of Surfactants on the Electronic Transport Properties of Thin-Film Transistors of Single-Wall Carbon Nanotubes. Journal of Physical Chemistry C, 2013, 117, 11744-11749.	3.1	45
61	Fabrication of Homogeneous Thin Films of Semiconductor-Enriched Single-Wall Carbon Nanotubes for Uniform-Quality Transistors by Using Immersion Coating. Applied Physics Express, 2013, 6, 105103.	2.1	2
62	Coherent monochromatic phonons in highly purified semiconducting single-wall carbon nanotubes. Applied Physics Letters, 2013, 102, .	3.0	1
63	Separation of carbon nanotubes (CNTs) by the separation method for biomolecules. Synthesiology, 2013, 6, 75-83.	0.0	1
64	Separation of carbon nanotubes (CNTs) by the separation method for biomolecules. Synthesiology, 2013, 6, 75-83.	0.0	0
65	Thermodynamic Determination of the Metal/Semiconductor Separation of Carbon Nanotubes Using Hydrogels. ACS Nano, 2012, 6, 10195-10205.	15.3	54
66	Synthesis of novel thiopheneâ€phenylene oligomer derivatives with a dibenzothiopheneâ€5,5â€dioxide core for use in organic solar cells. Physica Status Solidi (B): Basic Research, 2012, 249, 2648-2651.	1.5	13
67	Purification of Single-Wall Carbon Nanotubes by Controlling the Adsorbability onto Agarose Gels Using Deoxycholate. Journal of Physical Chemistry C, 2012, 116, 9816-9823.	3.1	30
68	In vitro selection of peptide aptamers with affinity to single-wall carbon nanotubes using a ribosome display. Biotechnology Letters, 2012, 35, 39-45.	1.9	18
69	Adsorbability of Single-Wall Carbon Nanotubes onto Agarose Gels Affects the Quality of the Metal/Semiconductor Separation. Journal of Physical Chemistry C, 2011, 115, 21723-21729.	3.1	24
70	Binding ability of chitinase onto cellulose: an atomic force microscopy study. Polymer Journal, 2011, 43, 742-744.	2.5	7
71	Discovery of Surfactants for Metal/Semiconductor Separation of Single-Wall Carbon Nanotubes via High-Throughput Screening. Journal of the American Chemical Society, 2011, 133, 17610-17613.	15.0	45
72	Large-scale single-chirality separation of single-wall carbon nanotubes by simple gel chromatography. Nature Communications, 2011, 2, .	13.7	843

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73	From metal/semiconductor separation to singleâ€chirality separation of singleâ€wall carbon nanotubes using gel. Physica Status Solidi - Rapid Research Letters, 2011, 5, 301-306.	2.0	49
74	Oneâ€step separation of highâ€purity (6,5) carbon nanotubes by multicolumn gel chromatography. Physica Status Solidi (B): Basic Research, 2011, 248, 2524-2527.	1.5	28
75	High performance thinâ€film transistors using moderately aligned semiconducting singleâ€wall carbon nanotubes. Physica Status Solidi (B): Basic Research, 2011, 248, 2692-2696.	1.5	14
76	Embedding of single-wall carbon nanotubes into nanopores of porous alumina by electrophoresis. Microelectronic Engineering, 2010, 87, 1516-1518.	2.7	3
77	Metal/semiconductor separation of singleâ€wall carbon nanotubes by selective adsorption and desorption for agarose gel. Physica Status Solidi (B): Basic Research, 2010, 247, 2867-2870.	1.5	25
78	Sorting singleâ€wall carbon nanotubes combining gel chromatography and densityâ€gradient ultracentrifugation. Physica Status Solidi (B): Basic Research, 2010, 247, 2746-2749.	1.5	6
79	Siteâ€selective deposition of singleâ€wall carbon nanotubes by patterning selfâ€assembled monolayer for application to thinâ€film transistors. Physica Status Solidi (B): Basic Research, 2010, 247, 2750-2753.	1.5	12
80	Diameterâ€selective desorption of semiconducting singleâ€wall carbon nanotubes from agarose gel. Physica Status Solidi (B): Basic Research, 2010, 247, 2649-2652.	1.5	3
81	Diameter-Selective Metal/Semiconductor Separation of Single-wall Carbon Nanotubes by Agarose Gel. Journal of Physical Chemistry C, 2010, 114, 9270-9276.	3.1	101
82	Effective Separation of Carbon Nanotubes and Metal Particles from Pristine Raw Soot by Ultracentrifugation. Japanese Journal of Applied Physics, 2009, 48, 015004.	1.9	14
83	Mass separation of metallic and semiconducting singleâ€wall carbon nanotubes using agarose gel. Physica Status Solidi (B): Basic Research, 2009, 246, 2490-2493.	1.5	23
84	PERIPUTOS: Purity evaluated by Raman intensity of pristine and ultracentrifuged topping of singleâ€wall carbon nanotubes. Physica Status Solidi (B): Basic Research, 2009, 246, 2728-2731.	1.5	11
85	Thinâ€film transistors fabricated from semiconductorâ€enriched singleâ€wall carbon nanotubes. Physica Status Solidi (B): Basic Research, 2009, 246, 2849-2852.	1.5	3
86	Continuous Separation of Metallic and Semiconducting Carbon Nanotubes Using Agarose Gel. Applied Physics Express, 2009, 2, 125002.	2.1	125
87	Simple and Scalable Gel-Based Separation of Metallic and Semiconducting Carbon Nanotubes. Nano Letters, 2009, 9, 1497-1500.	8.7	320
88	Colors of carbon nanotubes. Diamond and Related Materials, 2009, 18, 935-939.	4.8	19
89	Interaction Force of Chitin-Binding Domains onto Chitin Surface. Biomacromolecules, 2008, 9, 2126-2131.	5.1	28
90	Expression Profiles and Physiological Roles of Two Types of Prefoldins from the Hyperthermophilic Archaeon Thermococcus kodakaraensis. Journal of Molecular Biology, 2008, 382, 298-311.	4.1	27

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91	Diameter Analysis of Rebundled Single-Wall Carbon Nanotubes Using X-ray Diffraction: Verification of Chirality Assignment Based on Optical Spectra. Journal of Physical Chemistry C, 2008, 112, 15997-16001.	3.1	31
92	Characterization of MobR, the 3-Hydroxybenzoate-responsive Transcriptional Regulator for the 3-Hydroxybenzoate Hydroxylase Gene of Comamonas testosteroni KH122-3s. Journal of Molecular Biology, 2006, 364, 863-877.	4.1	22
93	Characterization of a Novel Glucosamine-6-Phosphate Deaminase from a Hyperthermophilic Archaeon. Journal of Bacteriology, 2005, 187, 7038-7044.	2.9	27
94	Concerted Action of Diacetylchitobiose Deacetylase and Exo-Î²-D-glucosaminidase in a Novel Chitinolytic Pathway in the Hyperthermophilic Archaeon Thermococcus kodakaraensis KOD1. Journal of Biological Chemistry, 2004, 279, 30021-30027.	2.2	80
95	Characterization of an Exo-Î²-d-Glucosaminidase Involved in a Novel Chitinolytic Pathway from the Hyperthermophilic Archaeon Thermococcus kodakaraensis KOD1. Journal of Bacteriology, 2003, 185, 5175-5181.	2.9	102
96	Tk-PTP, protein tyrosine/serine phosphatase from hyperthermophilic archaeon Thermococcus kodakaraensis KOD1: enzymatic characteristics and identification of its substrate proteins. Biochemical and Biophysical Research Communications, 2002, 295, 508-514.	2.1	23
97	Different Cleavage Specificities of the Dual Catalytic Domains in Chitinase from the Hyperthermophilic Archaeon Thermococcus kodakaraensis KOD1. Journal of Biological Chemistry, 2001, 276, 35629-35635.	2.2	94
98	Gene analysis and enzymatic properties of thermostable Î²-glycosidase from Pyrococcus kodakaraensis KOD1. Journal of Bioscience and Bioengineering, 1999, 88, 130-135.	2.8	27
99	A Unique Chitinase with Dual Active Sites and Triple Substrate Binding Sites from the Hyperthermophilic Archaeon <i>Pyrococcus kodakaraensis</i> KOD1. Applied and Environmental Microbiology, 1999, 65, 5338-5344.	3.6	162
100	High-Yield Separation of Metallic and Semiconducting Single-Wall Carbon Nanotubes by Agarose Gel Electrophoresis. Applied Physics Express, 0, 1, 114001.	2.1	180
101	Performance Enhancement of Thin-Film Transistors by Using High-Purity Semiconducting Single-Wall Carbon Nanotubes. Applied Physics Express, 0, 2, 071601.	2.1	33
102	Non-volatile Resistance Switching using Single-Wall Carbon Nanotube Encapsulating Fullerene Molecules. Applied Physics Express, 0, 2, 035008.	2.1	25
103	Oxidative Stress of Carbon Nanotubes on Proteins Is Mediated by Metals Originating from the Catalyst Remains. ACS Nano, 0, , .	15.3	9