Ray H Baughman

List of Publications by Year
in descending order

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293	45,569	3159 92	1934 207
papers	citations	h-index	g-index

302	302	302	39033
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Improved thermoacoustic sound projectors by vibration mode modification. Journal of Sound and Vibration, 2022, 524, 116753.	3.9	1
2	The strongest and toughest predicted materials: Linear atomic chains without a Peierls instability. Matter, 2022, 5, 1192-1203.	10.0	11
3	More Powerful Twistron Carbon Nanotube Yarn Mechanical Energy Harvesters. Advanced Materials, 2022, 34, e2201826.	21.0	20
4	Fast Largeâ€Stroke Sheathâ€Driven Electrothermal Artificial Muscles with High Power Densities. Advanced Functional Materials, 2022, 32, .	14.9	21
5	Self-Powered Carbon Nanotube Yarn for Acceleration Sensor Application. IEEE Transactions on Industrial Electronics, 2021, 68, 2676-2683.	7.9	10
6	Unipolar stroke, electroosmotic pump carbon nanotube yarn muscles. Science, 2021, 371, 494-498.	12.6	110
7	Humidity- and Water-Responsive Torsional and Contractile Lotus Fiber Yarn Artificial Muscles. ACS Applied Materials & Interfaces, 2021, 13, 6642-6649.	8.0	47
8	High-strength scalable graphene sheets by freezing stretch-induced alignment. Nature Materials, 2021, 20, 624-631.	27.5	117
9	Understanding the low frequency response of carbon nanotube thermoacoustic projectors. Journal of Sound and Vibration, 2021, 498, 115940.	3.9	1
10	The Power of Fiber Twist. Accounts of Chemical Research, 2021, 54, 2624-2636.	15.6	52
11	Using ultra-thin interlaminar carbon nanotube sheets to enhance the mechanical and electrical properties of carbon fiber reinforced polymer composites. Composites Part B: Engineering, 2021, 216, 108842.	12.0	36
12	Bounds on the in-plane Poisson's ratios and the in-plane linear and area compressibilities for sheet crystals. Journal of the Mechanics and Physics of Solids, 2021, 152, 104409.	4.8	10
13	The Interfacial Shear Strength of Carbon Nanotube Sheet Modified Carbon Fiber Composites. Conference Proceedings of the Society for Experimental Mechanics, 2021, , 25-32.	0.5	90
14	Predicted Confinement-Enhanced Stability and Extraordinary Mechanical Properties for Carbon Nanotube Wrapped Chains of Linear Carbon. ACS Nano, 2020, 14, 17071-17079.	14.6	29
15	Selfâ€Powered, Electrochemical Carbon Nanotube Pressure Sensors for Wave Monitoring. Advanced Functional Materials, 2020, 30, 2004564.	14.9	30
16	Bidirectional Core Sandwich Structure of Reduced Graphene Oxide and Spinnable Multiwalled Carbon Nanotubes for Electromagnetic Interference Shielding Effectiveness. ACS Applied Materials & Interfaces, 2020, 12, 46883-46891.	8.0	11
17	Three-dimensional carbon nanotube networks from beta zeolite templates: Thermal stability and mechanical properties. Computational Materials Science, 2020, 182, 109781.	3.0	6
18	Two-Ply Carbon Nanotube Fiber-Typed Enzymatic Biofuel Cell Implanted in Mice. IEEE Transactions on Nanobioscience, 2020, 19, 333-338.	3.3	11

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19	Additive Functionalization and Embroidery for Manufacturing Wearable and Washable Textile Supercapacitors. Advanced Functional Materials, 2020, 30, 1910541.	14.9	55
20	Programmable and Thermally Hardening Composite Yarn Actuators with a Wide Range of Operating Temperature. Advanced Materials Technologies, 2020, 5, 2000329.	5.8	17
21	Super-tough MXene-functionalized graphene sheets. Nature Communications, 2020, 11, 2077.	12.8	289
22	Wearable Energy Generating and Storing Textile Based on Carbon Nanotube Yarns. Advanced Functional Materials, 2020, 30, 2000411.	14.9	45
23	Electrical energy harvesting from ferritin biscrolled carbon nanotube yarn. Biosensors and Bioelectronics, 2020, 164, 112318.	10.1	19
24	Shaping nanomaterials by short electrical pulses. Nanotechnology, 2020, 31, 365302.	2.6	1
25	SYNTHESIS OF CARBON NANOTUBES WITH NI-TI CATALYST. News of the National Academy of Sciences of the Republic of Kazakhstan, 2020, 4, 5-12.	0.0	0
26	Silver Nanowires on Carbon Nanotube Aerogel Sheets for Flexible, Transparent Electrodes. ACS Applied Materials & Interfaces, 2019, 11, 32235-32243.	8.0	22
27	Electrodeposition of Î±-MnO2/Î³-MnO2 on Carbon Nanotube for Yarn Supercapacitor. Scientific Reports, 2019, 9, 11271.	3.3	55
28	Modeling the Compressive Buckling Strain as a Function of the Nanocomposite Interphase Thickness in a Carbon Nanotube Sheet Wrapped Carbon Fiber Composite. Journal of Applied Mechanics, Transactions ASME, 2019, 86, .	2.2	2
29	Torsional refrigeration by twisted, coiled, and supercoiled fibers. Science, 2019, 366, 216-221.	12.6	133
30	Intelligently Actuating Liquid Crystal Elastomerâ€Carbon Nanotube Composites. Advanced Functional Materials, 2019, 29, 1905063.	14.9	135
31	Self-Powered Coiled Carbon-Nanotube Yarn Sensor for Gastric Electronics. ACS Sensors, 2019, 4, 2893-2899.	7.8	37
32	Carbon nanotubesâ€“elastomer actuator driven electrothermally by low-voltage. Nanoscale Advances, 2019, 1, 965-968.	4.6	26
33	Electrochemical graphene/carbon nanotube yarn artificial muscles. Sensors and Actuators B: Chemical, 2019, 286, 237-242.	7.8	50
34	Highly loaded MXene/carbon nanotube yarn electrodes for improved asymmetric supercapacitor performance. MRS Communications, 2019, 9, 114-121.	1.8	45
35	Orthogonal pattern of spinnable multiwall carbon nanotubes for electromagnetic interference shielding effectiveness. Carbon, 2019, 152, 33-39.	10.3	23
36	Enhancing the strength, toughness, and electrical conductivity of twist-spun carbon nanotube yarns by ï€ bridging. Carbon, 2019, 150, 268-274.	10.3	32

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37	Moisture Sensitive Smart Yarns and Textiles from Selfâ€Balanced Silk Fiber Muscles. Advanced Functional Materials, 2019, 29, 1808241.	14.9	200
38	Enhancing the Work Capacity of Electrochemical Artificial Muscles by Coiling Plies of Twist-Released Carbon Nanotube Yarns. ACS Applied Materials & Interfaces, 2019, 11, 13533-13537.	8.0	34
39	A multiscale model to study the enhancement in the compressive strength of multi-walled CNT sheet overwrapped carbon fiber composites. Composite Structures, 2019, 219, 170-178.	5.8	16
40	Temperature-independent capacitance of carbon-based supercapacitor from â˜'100 to 60â€Â°C. Energy Storage Materials, 2019, 22, 323-329.	18.0	104
41	Controllable Preparation of Ordered and Hierarchically Buckled Structures for Inflatable Tumor Ablation, Volumetric Strain Sensor, and Communication via Inflatable Antenna. ACS Applied Materials & Interfaces, 2019, 11, 10862-10873.	8.0	15
42	Enhancement of electromagnetic interference shielding effectiveness with alignment of spinnable multiwalled carbon nanotubes. Carbon, 2019, 142, 528-534.	10.3	22
43	Sheath-run artificial muscles. Science, 2019, 365, 150-155.	12.6	218
44	Biomolecule based fiber supercapacitor for implantable device. Nano Energy, 2018, 47, 385-392.	16.0	103
45	Weavable asymmetric carbon nanotube yarn supercapacitor for electronic textiles. RSC Advances, 2018, 8, 13112-13120.	3.6	43
46	General Synthesis of 3D Ordered Macro-/Mesoporous Materials by Templating Mesoporous Silica Confined in Opals. Chemistry of Materials, 2018, 30, 1617-1624.	6.7	44
47	Ag/MnO2 Composite Sheath-Core Structured Yarn Supercapacitors. Scientific Reports, 2018, 8, 13309.	3.3	34
48	Tensile fatigue behavior of single carbon nanotube yarns. Journal of Materials Science, 2018, 53, 11426-11432.	3.7	10
49	Thermoacoustic sound projector: exceeding the fundamental efficiency of carbon nanotubes. Nanotechnology, 2018, 29, 325704.	2.6	16
50	Magnetic torsional actuation of carbon nanotube yarn artificial muscle. RSC Advances, 2018, 8, 17421-17425.	3.6	17
51	Harvesting electrical energy from torsional thermal actuation driven by natural convection. Scientific Reports, 2018, 8, 8712.	3.3	11
52	Biscrolled Carbon Nanotube Yarn Structured Silver-Zinc Battery. Scientific Reports, 2018, 8, 11150.	3.3	34
53	Stretchable Fiber Biofuel Cell by Rewrapping Multiwalled Carbon Nanotube Sheets. Nano Letters, 2018, 18, 5272-5278.	9.1	37
54	Strong, Conductive, Foldable Graphene Sheets by Sequential Ionic and Ï€ Bridging. Advanced Materials, 2018, 30, e1802733.	21.0	73

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55	Sequentially bridged graphene sheets with high strength, toughness, and electrical conductivity. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 5359-5364.	7.1	114
56	Largeâ€Stroke Electrochemical Carbon Nanotube/Graphene Hybrid Yarn Muscles. Small, 2018, 14, e1801883.	10.0	50
57	Highâ€Performance Biscrolled MXene/Carbon Nanotube Yarn Supercapacitors. Small, 2018, 14, e1802225.	10.0	158
58	High Power Density Electrochemical Thermocells for Inexpensively Harvesting Lowâ€Grade Thermal Energy. Advanced Materials, 2017, 29, 1605652.	21.0	166
59	Compact and low-cost humanoid hand powered by nylon artificial muscles. Bioinspiration and Biomimetics, 2017, 12, 026004.	2.9	105
60	Design of a 3D printed lightweight orthotic device based on twisted and coiled polymer muscle: iGrab hand orthosis. Proceedings of SPIE, 2017, , .	0.8	8
61	Microscopically Buckled and Macroscopically Coiled Fibers for Ultraâ€Stretchable Supercapacitors. Advanced Energy Materials, 2017, 7, 1602021.	19.5	106
62	Enhanced rate performance of flexible and stretchable linear supercapacitors based on polyaniline@Au@carbon nanotube with ultrafast axial electron transport. Journal of Power Sources, 2017, 340, 302-308.	7.8	67
63	Electrochemically Powered, Energyâ€Conserving Carbon Nanotube Artificial Muscles. Advanced Materials, 2017, 29, 1700870.	21.0	110
64	Tunable, Fast, Robust Hydrogel Actuators Based on Evaporation-Programmed Heterogeneous Structures. Chemistry of Materials, 2017, 29, 9793-9801.	6.7	98
65	Harvesting electrical energy from carbon nanotube yarn twist. Science, 2017, 357, 773-778.	12.6	306
66	Polarâ€Electrodeâ€Bridged Electroluminescent Displays: 2D Sensors Remotely Communicating Optically. Advanced Materials, 2017, 29, 1703552.	21.0	49
67	iGrab: hand orthosis powered by twisted and coiled polymer muscles. Smart Materials and Structures, 2017, 26, 105048.	3.5	57
68	A Biâ€Sheath Fiber Sensor for Giant Tensile and Torsional Displacements. Advanced Functional Materials, 2017, 27, 1702134.	14.9	100
69	Subwoofer and nanotube butterfly acoustic flame extinction. Journal Physics D: Applied Physics, 2017, 50, 29LT01.	2.8	3
70	Bioinspired Multifunctional Ceramic Plateletâ€Reinforced Piezoelectric Polymer Composite. Advanced Engineering Materials, 2017, 19, 1600570.	3.5	11
71	Probe Sensor Using Nanostructured Multi-Walled Carbon Nanotube Yarn for Selective and Sensitive Detection of Dopamine. Sensors, 2017, 17, 884.	3.8	37
72	Artificial Muscle: Carbon Nanotube Yarn-Based Glucose Sensing Artificial Muscle (Small 15/2016). Small, 2016, 12, 2100-2100.	10.0	1

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73	Elastomeric and Dynamic MnO₂/CNT Coreâ€“Shell Structure Coiled Yarn Supercapacitor. Advanced Energy Materials, 2016, 6, 1502119.	19.5	192
74	Carbon Nanotube Yarnâ€Based Glucose Sensing Artificial Muscle. Small, 2016, 12, 2085-2091.	10.0	50
75	Downsized Sheathâ€“Core Conducting Fibers for Weavable Superelastic Wires, Biosensors, Supercapacitors, and Strain Sensors. Advanced Materials, 2016, 28, 4998-5007.	21.0	131
76	Stretchable Triboelectric Fiber for Self-powered Kinematic Sensing Textile. Scientific Reports, 2016, 6, 35153.	3.3	111
77	Improvement of system capacitance via weavable superelastic biscrolled yarn supercapacitors. Nature Communications, 2016, 7, 13811.	12.8	146
78	Bio-inspired, Moisture-Powered Hybrid Carbon Nanotube Yarn Muscles. Scientific Reports, 2016, 6, 23016.	3.3	66
79	High-efficiency electrochemical thermal energy harvester using carbon nanotube aerogel sheet electrodes. Nature Communications, 2016, 7, 10600.	12.8	244
80	Mediator-free carbon nanotube yarn biofuel cell. RSC Advances, 2016, 6, 48346-48350.	3.6	19
81	A deformable robot with tensegrity structure using nylon artificial muscle. Proceedings of SPIE, 2016, , .	0.8	19
82	Knitted Carbon-Nanotube-Sheath/Spandex-Core Elastomeric Yarns for Artificial Muscles and Strain Sensing. ACS Nano, 2016, 10, 9129-9135.	14.6	189
83	New twist on artificial muscles. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 11709-11716.	7.1	254
84	Tensile actuators of carbon nanotube coiled yarn based on polydiacetyleneâ€“pluronic copolymers as temperature indicators. Smart Materials and Structures, 2016, 25, 075021.	3.5	3
85	Electrothermally Driven Carbon-Based Materials as EAPs: Fundamentals and Device Configurations. , 2016, , 455-470.		0
86	Twistable and Stretchable Sandwich Structured Fiber for Wearable Sensors and Supercapacitors. Nano Letters, 2016, 16, 7677-7684.	9.1	202
87	Electrochemically Driven Carbon-Based Materials as EAPs: Fundamentals and Device Configurations. , 2016, , 439-454.		0
88	Conducting Fibers: Downsized Sheathâ€“Core Conducting Fibers for Weavable Superelastic Wires, Biosensors, Supercapacitors, and Strain Sensors (Adv. Mater. 25/2016). Advanced Materials, 2016, 28, 4946-4946.	21.0	6
89	Brazing techniques for the fabrication of biocompatible carbon-based electronic devices. Carbon, 2016, 107, 180-189.	10.3	14
90	Bio-inspired Hybrid Carbon Nanotube Muscles. Scientific Reports, 2016, 6, 26687.	3.3	31

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91	Ultraviolet-induced irreversible tensile actuation of diacetylene/nylon microfibers. Smart Materials and Structures, 2016, 25, 075031.	3.5	1
92	Wovenâ€Yarn Thermoelectric Textiles. Advanced Materials, 2016, 28, 5038-5044.	21.0	195
93	Temperature-Responsive Tensile Actuator Based on Multi-walled Carbon Nanotube Yarn. Nano-Micro Letters, 2016, 8, 254-259.	27.0	16
94	Strong, Twistâ€Stable Carbon Nanotube Yarns and Muscles by Tension Annealing at Extreme Temperatures. Advanced Materials, 2016, 28, 6598-6605.	21.0	100
95	Biothermal sensing of a torsional artificial muscle. Nanoscale, 2016, 8, 3248-3253.	5.6	46
96	Ordered Mesoporous Nickel Sphere Arrays for Highly Efficient Electrocatalytic Water Oxidation. ACS Catalysis, 2016, 6, 1446-1450.	11.2	105
97	Highly stretchable hybrid nanomembrane supercapacitors. RSC Advances, 2016, 6, 24756-24759.	3.6	24
98	Straining to expand entanglements. Nature Materials, 2016, 15, 7-8.	27.5	9
99	Chapter 13. Bio-inspired Polymer Artificial Muscles. RSC Polymer Chemistry Series, 2016, , 429-459.	0.2	5
100	Electrochemically Driven Carbon-Based Materials as EAPs: Fundamentals and Device Configurations. , 2016, , 1-16.		0
101	Alternative Nanostructures for Thermophones. ACS Nano, 2015, 9, 4743-4756.	14.6	48
102	Efficient, Absorptionâ€Powered Artificial Muscles Based on Carbon Nanotube Hybrid Yarns. Small, 2015, 11, 3113-3118.	10.0	85
103	Torsional behaviors of polymer-infiltrated carbon nanotube yarn muscles studied with atomic force microscopy. Nanoscale, 2015, 7, 2489-2496.	5.6	21
104	Flexible, stretchable and weavable piezoelectric fiber. Advanced Engineering Materials, 2015, 17, 1270-1275.	3.5	84
105	Three-dimensionally bonded spongy graphene material with super compressive elasticity and near-zero Poissonâ€™s ratio. Nature Communications, 2015, 6, 6141.	12.8	458
106	Stability of carbon nanotube yarn biofuel cell in human body fluid. Journal of Power Sources, 2015, 286, 103-108.	7.8	21
107	High performance electrochemical and electrothermal artificial muscles from twist-spun carbon nanotube yarn. Nano Convergence, 2015, 2, .	12.1	10
108	Three-dimensionally ordered macro-/mesoporous Ni as a highly efficient electrocatalyst for the hydrogen evolution reaction. Journal of Materials Chemistry A, 2015, 3, 11367-11375.	10.3	42

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109	Nylon-muscle-actuated robotic finger. Proceedings of SPIE, 2015, , .	0.8	32
110	Stretchable, Weavable Coiled Carbon Nanotube/MnO2/Polymer Fiber Solid-State Supercapacitors. Scientific Reports, 2015, 5, 9387.	3.3	220
111	Optical, Electrical, and Electromechanical Properties of Hybrid Graphene/Carbon Nanotube Films. Advanced Materials, 2015, 27, 3053-3059.	21.0	114
112	Harvesting temperature fluctuations as electrical energy using torsional and tensile polymer muscles. Energy and Environmental Science, 2015, 8, 3336-3344.	30.8	57
113	Mechanism of stroke enhancement by coiling in carbon nanotube hybrid yarn artificial muscles (presentation video). , 2014, , .		0
114	Automated quantification of neurite outgrowth orientation distributions on patterned surfaces. Journal of Neural Engineering, 2014, 11, 046006.	3.5	5
115	Terahertz surface plasmon polaritons on freestanding multi-walled carbon nanotube aerogel sheets. , 2014, , .		0
116	Highly Conductive Carbon Nanotubeâ€Graphene Hybrid Yarn. Advanced Functional Materials, 2014, 24, 5859-5865.	14.9	113
117	Flexible, Ultralight, Porous Superconducting Yarns Containing Shellâ€Core Magnesium Diborideâ€“Carbon Nanotube Nanofibers. Advanced Materials, 2014, 26, 7510-7515.	21.0	17
118	Carbon-based torsional and tensile artificial muscles driven by thermal expansion (presentation) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 38	0.8	0
119	Simple and strong: twisted silver painted nylon artificial muscle actuated by Joule heating. Proceedings of SPIE, 2014, , .	0.8	44
120	Artificial Muscles from Fishing Line and Sewing Thread. Science, 2014, 343, 868-872.	12.6	1,006
121	Superior Rechargeability and Efficiency of Lithiumâ€“Oxygen Batteries: Hierarchical Air Electrode Architecture Combined with a Soluble Catalyst. Angewandte Chemie - International Edition, 2014, 53, 3926-3931.	13.8	407
122	Flexible Supercapacitor Made of Carbon Nanotube Yarn with Internal Pores. Advanced Materials, 2014, 26, 2059-2065.	21.0	345
123	Hybrid carbon nanotube yarn artificial muscle inspired by spider dragline silk. Nature Communications, 2014, 5, 3322.	12.8	120
124	All-Solid-State Carbon Nanotube Torsional and Tensile Artificial Muscles. Nano Letters, 2014, 14, 2664-2669.	9.1	101
125	Thermoacoustic excitation of sonar projector plates by free-standing carbon nanotube sheets. Journal Physics D: Applied Physics, 2014, 47, 355302.	2.8	9
126	Thermal management of thermoacoustic sound projectors using a free-standing carbon nanotube aerogel sheet as a heat source. Nanotechnology, 2014, 25, 405704.	2.6	30

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127	Primary Liver Cells Cultured on Carbon Nanotube Substrates for Liver Tissue Engineering and Drug Discovery Applications. ACS Applied Materials & Interfaces, 2014, 6, 10373-10380.	8.0	27
128	High-power biofuel cell textiles from woven biscrolled carbon nanotube yarns. Nature Communications, 2014, 5, 3928.	12.8	147
129	Advancements toward a high-power, carbon nanotube, thin-film loudspeaker. Noise Control Engineering Journal, 2014, 62, 360-367.	0.3	17
130	Nanotube Aerogel Sheet Flutter for Actuation, Power Generation and Infrasound Detection. Scientific Reports, 2014, 4, 6105.	3.3	6
131	Towards ionic liquid-based thermoelectrochemical cells for the harvesting of thermal energy. Electrochimica Acta, 2013, 113, 87-93.	5.2	81
132	Amyloidogenic Peptide/Single-Walled Carbon Nanotube Composites Based on Tau-Protein-Related Peptides Derived from AcPHF6: Preparation and Dispersive Properties. Journal of Physical Chemistry B, 2013, 117, 7593-7604.	2.6	5
133	A new catalyst-embedded hierarchical air electrode for high-performance Liâ€“O2 batteries. Energy and Environmental Science, 2013, 6, 3570.	30.8	152
134	Conductive functional biscrolled polymer and carbon nanotube yarns. RSC Advances, 2013, 3, 24028.	3.6	10
135	Carbon Nanotubes: Present and Future Commercial Applications. Science, 2013, 339, 535-539.	12.6	4,612
136	Enhanced Power and Rechargeability of a Liâ”O₂ Battery Based on a Hierarchicalâ€Fibril CNT Electrode. Advanced Materials, 2013, 25, 1348-1352.	21.0	299
137	Niobium Nanowire Yarns and their Application as Artificial Muscles. Advanced Functional Materials, 2013, 23, 4311-4316.	14.9	81
138	Ultrafast charge and discharge biscrolled yarn supercapacitors for textiles and microdevices. Nature Communications, 2013, 4, 1970.	12.8	475
139	Carbon Nanotube â€“ Reduced Graphene Oxide Composites for Thermal Energy Harvesting Applications. Advanced Materials, 2013, 25, 6602-6606.	21.0	178
140	Increasing the efficiency of thermoacoustic carbon nanotube sound projectors. Nanotechnology, 2013, 24, 235501.	2.6	54
141	Free-standing nanocomposites with high conductivity and extensibility. Nanotechnology, 2013, 24, 165401.	2.6	21
142	Protic ionic liquid-based thermoelectrochemical cells for the harvesting of waste heat.. Materials Research Society Symposia Proceedings, 2013, 1575, 1.	0.1	7
143	Terahertz surface plasmon polaritons on freestanding multi-walled carbon nanotube aerogel sheets. Optical Materials Express, 2012, 2, 782.	3.0	21
144	Electrically, Chemically, and Photonically Powered Torsional and Tensile Actuation of Hybrid Carbon Nanotube Yarn Muscles. Science, 2012, 338, 928-932.	12.6	585

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145	Regulation of morphogenesis and neural differentiation of human mesenchymal stem cells using carbon nanotube sheets. Integrative Biology (United Kingdom), 2012, 4, 587.	1.3	37
146	Reconstructed Ribbon Edges in Thermally Reduced Graphene Nanoribbons. Journal of Physical Chemistry C, 2012, 116, 24006-24015.	3.1	20
147	Electromechanical Actuator with Controllable Motion, Fast Response Rate, and High-Frequency Resonance Based on Graphene and Polydiacetylene. ACS Nano, 2012, 6, 4508-4519.	14.6	141
148	Electrical Stimulation of Myoblast Proliferation and Differentiation on Aligned Nanostructured Conductive Polymer Platforms. Advanced Healthcare Materials, 2012, 1, 801-808.	7.6	61
149	Oriented Graphene Nanoribbon Yarn and Sheet from Aligned Multiâ€Walled Carbon Nanotube Sheets. Advanced Materials, 2012, 24, 5695-5701.	21.0	67
150	Hybrid Nanomembranes for High Power and High Energy Density Supercapacitors and Their Yarn Application. ACS Nano, 2012, 6, 327-334.	14.6	83
151	Hydrogen-fuel-powered bell segments of biomimetic jellyfish. Smart Materials and Structures, 2012, 21, 045013.	3.5	41
152	Weak-acceptor-polyacrylonitrile/donor-polyaniline coreâ€“shell nanofibers: A novel 1D polymeric heterojunction with high photoconductive properties. Organic Electronics, 2012, 13, 2319-2325.	2.6	10
153	Fibers of reduced graphene oxide nanoribbons. Nanotechnology, 2012, 23, 235601.	2.6	71
154	Synergistic toughening of composite fibres by self-alignment of reduced graphene oxide and carbon nanotubes. Nature Communications, 2012, 3, 650.	12.8	354
155	Preparation and characterization of hybrid conducting polymerâ€“carbon nanotube yarn. Nanoscale, 2012, 4, 940-945.	5.6	50
156	Incorporation of CNT-yarns into metals by laser melting of powder. , 2012, , .		0
157	Carbon nanotube/graphene nanocomposite as efficient counter electrodes in dye-sensitized solar cells. Nanotechnology, 2012, 23, 085201.	2.6	135
158	Electrical Power From Nanotube and Graphene Electrochemical Thermal Energy Harvesters. Advanced Functional Materials, 2012, 22, 477-489.	14.9	180
159	Catalytic Twistâ€Spun Yarns of Nitrogenâ€Doped Carbon Nanotubes. Advanced Functional Materials, 2012, 22, 1069-1075.	14.9	38
160	Photoinduced Optical Transparency in Dye-Sensitized Solar Cells Containing Graphene Nanoribbons. Journal of Physical Chemistry C, 2011, 115, 25125-25131.	3.1	35
161	A Reel-Wound Carbon Nanotube Polarizer for Terahertz Frequencies. Nano Letters, 2011, 11, 4227-4231.	9.1	91
162	Structural Model for Dry-Drawing of Sheets and Yarns from Carbon Nanotube Forests. ACS Nano, 2011, 5, 985-993.	14.6	116

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163	High performance terahertz polarizer based on super-aligned carbon nanotube sheet. , 2011, , .		1
164	Torsional Carbon Nanotube Artificial Muscles. Science, 2011, 334, 494-497.	12.6	495
165	Mechanoelectrical Force Sensors Using Twisted Yarns of Carbon Nanotubes. IEEE/ASME Transactions on Mechatronics, 2011, 16, 90-97.	5.8	27
166	Mirage effect from thermally modulated transparent carbon nanotube sheets. Nanotechnology, 2011, 22, 435704.	2.6	39
167	Biscrolling Nanotube Sheets and Functional Guests into Yarns. Science, 2011, 331, 51-55.	12.6	338
168	Thermal actuation of graphene oxide nanoribbon mats. Chemical Physics Letters, 2011, 505, 31-36.	2.6	15
169	Auâ€Doped Polyacrylonitrileâ€“Polyaniline Coreâ€“Shell Electrospun Nanofibers Having High Fieldâ€Effect Mobilities. Small, 2011, 7, 597-600.	10.0	54
170	Electromechanical Actuators Based on Graphene and Graphene/Fe₃O₄ Hybrid Paper. Advanced Functional Materials, 2011, 21, 3778-3784.	14.9	170
171	Artificial Muscles Based on Polypyrrole/Carbon Nanotube Laminates. Advanced Materials, 2011, 23, 2966-2970.	21.0	64
172	Aligned, isotropic and patterned carbon nanotube substrates that control the growth and alignment of Chinese hamster ovary cells. Nanotechnology, 2011, 22, 205102.	2.6	26
173	Elastomeric Conductive Composites Based on Carbon Nanotube Forests. Advanced Materials, 2010, 22, 2663-2667.	21.0	367
174	Electron field emission from transparent multiwalled carbon nanotube sheets for inverted field emission displays. Carbon, 2010, 48, 41-46.	10.3	123
175	Spinnable carbon nanotube forests grown on thin, flexible metallic substrates. Carbon, 2010, 48, 3621-3627.	10.3	112
176	An explosive thrust for nanotubes. Nature Materials, 2010, 9, 385-386.	27.5	4
177	Load transfer between cross-linked walls of a carbon nanotube. Physical Review B, 2010, 81, .	3.2	39
178	Structure and process-dependent properties of solid-state spun carbon nanotube yarns. Journal of Physics Condensed Matter, 2010, 22, 334221.	1.8	51
179	Underwater Sound Generation Using Carbon Nanotube Projectors. Nano Letters, 2010, 10, 2374-2380.	9.1	123
180	Carbon Nanotube/Platinum (Pt) Sheet as an Improved Cathode for Microbial Fuel Cells. Energy & Fuels, 2010, 24, 5897-5902.	5.1	35

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181	Preparation and characterization of electrochemical supercapacitors based on SWNT/PPy nanocomposites. , 2010, , .		0
182	Thermal conductivity of multi-walled carbon nanotube sheets: radiation losses and quenching of phonon modes. Nanotechnology, 2010, 21, 035709.	2.6	199
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