Robert H Hauge

List of Publications by Year
in descending order

215 papers	25,726 citations	13099 68 h-index	6300 158 g-index
217 all docs	217 docs citations	217 times ranked	19935 citing authors

#	Article	IF	Citations
1	Band Gap Fluorescence from Individual Single-Walled Carbon Nanotubes. Science, 2002, 297, 593-596.	12.6	3,582
2	Structure-Assigned Optical Spectra of Single-Walled Carbon Nanotubes. Science, 2002, 298, 2361-2366.	12.6	2,826
3	Individually Suspended Single-Walled Carbon Nanotubes in Various Surfactants. Nano Letters, 2003, 3, 1379-1382.	9.1	1,532
4	Electronic Structure Control of Single-Walled Carbon Nanotube Functionalization. Science, 2003, 301, 1519-1522.	12.6	1,270
5	Macroscopic, Neat, Single-Walled Carbon Nanotube Fibers. Science, 2004, 305, 1447-1450.	12.6	785
6	Crystallization and orientation studies in polypropylene/single wall carbon nanotube composite. Polymer, 2003, 44, 2373-2377.	3.8	694
7	3-Dimensional Graphene Carbon Nanotube Carpet-Based Microsupercapacitors with High Electrochemical Performance. Nano Letters, 2013, 13, 72-78.	9.1	672
8	True solutions of single-walled carbon nanotubes for assembly into macroscopic materials. Nature Nanotechnology, 2009, 4, 830-834.	31.5	486
9	The Role of Surfactant Adsorption during Ultrasonication in the Dispersion of Single-Walled Carbon Nanotubes. Journal of Nanoscience and Nanotechnology, 2003, 3, 81-86.	0.9	466
10	A seamless three-dimensional carbon nanotube graphene hybrid material. Nature Communications, 2012, 3, 1225.	12.8	456
11	Synthesis, Structure, and Properties of PBO/SWNT Composites&. Macromolecules, 2002, 35, 9039-9043.	4.8	455
12	Poly(vinyl alcohol)/SWNT Composite Film. Nano Letters, 2003, 3, 1285-1288.	9.1	450
13	Role of Water in Super Growth of Single-Walled Carbon Nanotube Carpets. Nano Letters, 2009, 9, 44-49.	9.1	371
14	Controlled Oxidative Cutting of Single-Walled Carbon Nanotubes. Journal of the American Chemical Society, 2005, 127, 1541-1547.	13.7	354
15	Reversible, Band-Gap-Selective Protonation of Single-Walled Carbon Nanotubes in Solution. Journal of Physical Chemistry B, 2003, 107, 6979-6985.	2.6	345
16	Phase Behavior and Rheology of SWNTs in Superacids. Macromolecules, 2004, 37, 154-160.	4.8	337
17	Optical Signatures of the Aharonov-Bohm Phase in Single-Walled Carbon Nanotubes. Science, 2004, 304, 1129-1131.	12.6	307
18	A Convenient Route to Functionalized Carbon Nanotubes. Nano Letters, 2004, 4, 1257-1260.	9.1	297

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19	Wafer-scale monodomain films of spontaneously aligned single-walled carbon nanotubes. Nature Nanotechnology, 2016, 11, 633-638.	31.5	292
20	Dissolution of Pristine Single Walled Carbon Nanotubes in Superacids by Direct Protonation. Journal of Physical Chemistry B, 2004, 108, 8794-8798.	2.6	262
21	Single-Wall Carbon Nanotube Films. Chemistry of Materials, 2003, 15, 175-178.	6.7	259
22	Assignment of (n, m) Raman and Optical Features of Metallic Single-Walled Carbon Nanotubes. Nano Letters, 2003, 3, 1091-1096.	9.1	250
23	Carbon Nanotube Terahertz Polarizer. Nano Letters, 2009, 9, 2610-2613.	9.1	240
24	Overcoming the â€œCoffee-Stainâ€•Effect by Compositional Marangoni-Flow-Assisted Drop-Drying. Journal of Physical Chemistry B, 2012, 116, 6536-6542.	2.6	226
25	Carbon Nanotube Terahertz Detector. Nano Letters, 2014, 14, 3953-3958.	9.1	223
26	Covalent Sidewall Functionalization of Single Wall Carbon Nanotubes. Journal of the American Chemical Society, 2003, 125, 3617-3621.	13.7	212
27	Single Wall Carbon Nanotube Amplification:Â En Route to a Type-Specific Growth Mechanism. Journal of the American Chemical Society, 2006, 128, 15824-15829.	13.7	209
28	Influence of Alumina Type on the Evolution and Activity of Alumina-Supported Fe Catalysts in Single-Walled Carbon Nanotube Carpet Growth. ACS Nano, 2010, 4, 895-904.	14.6	201
29	Rebar Graphene. ACS Nano, 2014, 8, 5061-5068.	14.6	178
30	Evolution in Catalyst Morphology Leads to Carbon Nanotube Growth Termination. Journal of Physical Chemistry Letters, 2010, 1, 918-922.	4.6	177
31	Broadband Terahertz Polarizers with Ideal Performance Based on Aligned Carbon Nanotube Stacks. Nano Letters, 2012, 12, 787-790.	9.1	153
32	Atomic H-Induced Mo₂C Hybrid as an Active and Stable Bifunctional Electrocatalyst. ACS Nano, 2017, 11, 384-394.	14.6	149
33	Towards hybrid superlattices in graphene. Nature Communications, 2011, 2, 559.	12.8	145
34	Gas-Phase Purification of Single-Wall Carbon Nanotubes. Chemistry of Materials, 2000, 12, 1361-1366.	6.7	141
35	Optoelectronic Properties of Singleâ€Wall Carbon Nanotubes. Advanced Materials, 2012, 24, 4977-4994.	21.0	138
36	Controlled Multistep Purification of Single-Walled Carbon Nanotubes. Nano Letters, 2005, 5, 163-168.	9.1	130

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37	Spontaneous Dissolution of Ultralong Single- and Multiwalled Carbon Nanotubes. ACS Nano, 2010, 4, 3969-3978.	14.6	124
38	Isotropicâ˘'Nematic Phase Transition of Single-Walled Carbon Nanotubes in Strong Acids. Journal of the American Chemical Society, 2006, 128, 591-595.	13.7	122
39	Continued Growth of Single-Walled Carbon Nanotubes. Nano Letters, 2005, 5, 997-1002.	9.1	121
40	Studies of reactions of atomic and diatomic chromium, manganese, iron, cobalt, nickel, copper, and zinc with molecular water at 15 K. The Journal of Physical Chemistry, 1985, 89, 3541-3547.	2.9	111
41	Broadband, Polarization-Sensitive Photodetector Based on Optically-Thick Films of Macroscopically Long, Dense and Aligned Carbon Nanotubes. Scientific Reports, 2013, 3, 1335.	3.3	110
42	Capillary Electrophoresis Separations of Bundled and Individual Carbon Nanotubes. Journal of Physical Chemistry B, 2003, 107, 6063-6069.	2.6	107
43	Carbon dioxide activation by alkali metals. 2. Infrared spectra of M+CO2- and M22+CO22- in argon and nitrogen matrixes. Inorganic Chemistry, 1984, 23, 177-183.	4.0	105
44	Cutting single-walled carbon nanotubes. Nanotechnology, 2005, 16, S539-S544.	2.6	101
45	A Highly Selective, One-Pot Purification Method for Single-Walled Carbon Nanotubes. Journal of Physical Chemistry B, 2007, 111, 1249-1252.	2.6	99
46	Photothermoelectric pâ€"n Junction Photodetector with Intrinsic Broadband Polarimetry Based on Macroscopic Carbon Nanotube Films. ACS Nano, 2013, 7, 7271-7277.	14.6	99
47	Formation of Highly Dense Aligned Ribbons and Transparent Films of Single-Walled Carbon Nanotubes Directly from Carpets. ACS Nano, 2008, 2, 1871-1878.	14.6	98
48	Dielectrophoresis Field Flow Fractionation of Single-Walled Carbon Nanotubes. Journal of the American Chemical Society, 2006, 128, 8396-8397.	13.7	94
49	Synthesis of hollow carbon nano-onions and their use for electrochemical hydrogen storage. Carbon, 2012, 50, 3513-3521.	10.3	94
50	Mechanism of diamond film growth by hot-filament CVD: Carbon-13 studies. Journal of Materials Research, 1990, 5, 2405-2413.	2.6	93
51	Carbon Nanotube Salts. Arylation of Single-Wall Carbon Nanotubes. Organic Letters, 2005, 7, 4067-4069.	4.6	93
52	Coherent Lattice Vibrations in Single-Walled Carbon Nanotubes. Nano Letters, 2006, 6, 2696-2700.	9.1	93
53	Vertical Array Growth of Small Diameter Single-Walled Carbon Nanotubes. Journal of the American Chemical Society, 2006, 128, 6560-6561.	13.7	93
54	Investigation of Optimal Parameters for Oxide-Assisted Growth of Vertically Aligned Single-Walled Carbon Nanotubes. Journal of Physical Chemistry C, 2009, 113, 4125-4133.	3.1	91

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55	Dry Contact Transfer Printing of Aligned Carbon Nanotube Patterns and Characterization of Their Optical Properties for Diameter Distribution and Alignment. ACS Nano, 2010, 4, 1131-1145.	14.6	90
56	Estimation of Magnetic Susceptibility Anisotropy of Carbon Nanotubes Using Magnetophotoluminescence. Nano Letters, 2004, 4, 2219-2221.	9.1	89
57	Activation of methane with photoexcited metal atoms. Journal of the American Chemical Society, 1980, 102, 7393-7394.	13.7	88
58	Vertically Aligned Single-Walled Carbon Nanotubes as Low-cost and High Electrocatalytic Counter Electrode for Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2011, 3, 3157-3161.	8.0	88
59	Generation of Terahertz Radiation by Optical Excitation of Aligned Carbon Nanotubes. Nano Letters, 2015, 15, 3267-3272.	9.1	86
60	Three dimensional solid-state supercapacitors from aligned single-walled carbon nanotube array templates. Carbon, 2011, 49, 4890-4897.	10.3	84
61	Enrichment of Armchair Carbon Nanotubes via Density Gradient Ultracentrifugation: Raman Spectroscopy Evidence. ACS Nano, 2010, 4, 1955-1962.	14.6	83
62	High Electrocatalytic Activity of Vertically Aligned Single-Walled Carbon Nanotubes towards Sulfide Redox Shuttles. Scientific Reports, 2012, 2, 368.	3.3	83
63	SWNT/PAN composite film-based supercapacitors. Carbon, 2003, 41, 2440-2442.	10.3	80
64	Insights into the physics of spray coating of SWNT films. Chemical Engineering Science, 2010, 65, 2000-2008.	3.8	80
65	Matrix isolation studies of the reactions of silicon atoms with molecular hydrogen. The infrared spectrum of silylene. Journal of Chemical Physics, 1985, 82, 3542-3545.	3.0	75
66	Highly Exfoliated Water-Soluble Single-Walled Carbon Nanotubes. Chemistry of Materials, 2006, 18, 1520-1524.	6.7	75
67	Simple Length Determination of Single-Walled Carbon Nanotubes by Viscosity Measurements in Dilute Suspensions. Macromolecules, 2007, 40, 4043-4047.	4.8	75
68	Splitting of a Vertical Multiwalled Carbon Nanotube Carpet to a Graphene Nanoribbon Carpet and Its Use in Supercapacitors. ACS Nano, 2013, 7, 5151-5159.	14.6	71
69	Synthesis of High Aspect-Ratio Carbon Nanotube â€œFlying Carpetsâ€•from Nanostructured Flake Substrates. Nano Letters, 2008, 8, 1879-1883.	9.1	68
70	Matrix isolation studies of the reactions of silicon atoms. I. Interaction with water: The infrared spectrum of hydroxysilylene HSiOH. Journal of Chemical Physics, 1982, 77, 1617-1625.	3.0	67
71	Matrix-isolation studies of the reactions of iron atoms and iron dimers with acetylene in an argon matrix. The FT-IR spectrum of ethynyliron hydride. Journal of the American Chemical Society, 1985, 107, 7559-7562.	13.7	67
72	Cutting of Single-Walled Carbon Nanotubes by Ozonolysis. Journal of Physical Chemistry B, 2006, 110, 11624-11627.	2.6	67

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73	Closed-Edged Graphene Nanoribbons from Large-Diameter Collapsed Nanotubes. ACS Nano, 2012, 6, 6023-6032.	14.6	65
74	Electron spin resonance studies of the reaction of lithium atoms with Lewis bases in argon matrices: formation of reactive intermediates. 1. Water and ammonia. Journal of the American Chemical Society, 1978, 100, 2108-2112.	13.7	63
75	Length-Dependent Extraction of Single-Walled Carbon Nanotubes. Nano Letters, 2005, 5, 2355-2359.	9.1	62
76	Infrared Study of Matrixâ€Isolated Lithium Isocyanide. Journal of Chemical Physics, 1972, 57, 5137-5142.	3.0	61
77	Catalystâ€"support interactions and their influence in water-assisted carbon nanotube carpet growth. Carbon, 2012, 50, 2396-2406.	10.3	60
78	Infrared matrix isolation spectrum of the disilicon carbide (Si2C) molecule. The Journal of Physical Chemistry, 1983, 87, 797-800.	2.9	59
79	FTIR matrix isolation studies of the reactions of atomic and diatomic nickel with acetylene in solid argon. The photosynthesis of nickel vinylidene. Journal of the American Chemical Society, 1987, 109, 2402-2409.	13.7	57
80	Fundamental optical processes in armchair carbon nanotubes. Nanoscale, 2013, 5, 1411.	5.6	56
81	Temperature and Gas Pressure Effects in Vertically Aligned Carbon Nanotube Growth from Feâ^'Mo Catalyst. Journal of Physical Chemistry C, 2008, 112, 14041-14051.	3.1	52
82	Reactions of atomic scandium, titanium, and vanadium with molecular water at 15 K. The Journal of Physical Chemistry, 1985, 89, 3547-3552.	2.9	51
83	Alignment Dynamics of Single-Walled Carbon Nanotubes in Pulsed Ultrahigh Magnetic Fields. ACS Nano, 2009, 3, 131-138.	14.6	51
84	Figure of Merit for Carbon Nanotube Photothermoelectric Detectors. ACS Nano, 2015, 9, 11618-11627.	14.6	51
85	Three-Dimensional Thin Film for Lithium-Ion Batteries and Supercapacitors. ACS Nano, 2014, 8, 7279-7287.	14.6	50
86	Enhanced purification of carbon nanotubes by microwave and chlorine cleaning procedures. RSC Advances, 2016, 6, 11895-11902.	3.6	48
87	Infrared spectra of silicon difluoride in neon and argon matrixes. Journal of the American Chemical Society, 1969, 91, 2536-2538.	13.7	47
88	Low-Temperature Reactions of Atomic Cobalt with CH2N2, CH4, CH3D, CH2D2, CHD3, CD4, H2, D2, and HD. Journal of the American Chemical Society, 1995, 117, 1387-1392.	13.7	47
89	Surface Area Measurement of Functionalized Single-Walled Carbon Nanotubes. Journal of Physical Chemistry B, 2006, 110, 24812-24815.	2.6	47
90	Vertically Aligned Carbon Nanotubes/Graphene Hybrid Electrode as a TCO- and Pt-Free Flexible Cathode for Application in Solar Cells. Journal of Materials Chemistry A, 2014, 2, 20902-20907.	10.3	47

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91	Effects of atomic hydrogen and active carbon species in 1mm vertically aligned single-walled carbon nanotube growth. Applied Physics Letters, 2006, 89, 123116.	3.3	45
92	Odako growth of dense arrays of single-walled carbon nanotubes attached to carbon surfaces. Nano Research, 2009, 2, 526-534.	10.4	45
93	Near infrared bands of diatomic CaO and SrO. Journal of Molecular Spectroscopy, 1968, 25, 330-339.	1.2	44
94	Catalyst and catalyst support morphology evolution in single-walled carbon nanotube supergrowth: Growth deceleration and termination. Journal of Materials Research, 2010, 25, 1875-1885.	2.6	43
95	Infra-red spectra of matrix-isolated MgF2. Journal of the Chemical Society, Faraday Transactions 2, 1975, 71, 1082.	1.1	41
96	Methyl halides as carbon sources in a hot-filament diamond CVD reactor: A new gas phase growth species. Journal of Materials Research, 1993, 8, 233-236.	2.6	39
97	Unique Origin of Colors of Armchair Carbon Nanotubes. Journal of the American Chemical Society, 2012, 134, 4461-4464.	13.7	39
98	Selective Photochemical Functionalization of Surfactant-Dispersed Single Wall Carbon Nanotubes in Water. Journal of the American Chemical Society, 2008, 130, 14227-14233.	13.7	38
99	Infrared vibrational properties of germanium difluoride. The Journal of Physical Chemistry, 1968, 72, 4492-4496.	2.9	37
100	Matrix-isolation studies by electronic spectroscopy of group IIIA metalâ€“water photochemistry. Journal of the Chemical Society Faraday Transactions I, 1983, 79, 1533.	1.0	37
101	Infrared spectroscopy and photochemistry of iron-ethylene oxide in cryogenic matrixes. The FTIR spectrum of vinyliron hydroxide. Journal of the American Chemical Society, 1987, 109, 4775-4780.	13.7	37
102	Supergrowth of Nitrogen-Doped Single-Walled Carbon Nanotube Arrays: Active Species, Dopant Characterization, and Doped/Undoped Heterojunctions. ACS Nano, 2011, 5, 6925-6934.	14.6	37
103	Characterization and novel low-temperature reactions of FeCH2 and N2FeCH2. Journal of the American Chemical Society, 1988, 110, 7975-7980.	13.7	36
104	Matrix isolation studies of the reactions of silicon atoms. II. Infrared spectrum and structure of matrixâ€isolated fluorosilylene: HSiF. Journal of Chemical Physics, 1982, 77, 1626-1631.	3.0	35
105	Photochemistry of iron atoms and dimers with ethylene in cryogenic matrixes. The FT-IR spectrum of ethenyliron hydride. Journal of the American Chemical Society, 1985, 107, 7550-7559.	13.7	35
106	Chlorineâ€Activated Diamond Chemical Vapor Deposition. Journal of the Electrochemical Society, 1994, 141, 3246-3249.	2.9	35
107	Sidewall functionalization of single-wall carbon nanotubes (SWNTs) through aryl free radical addition. Chemical Physics Letters, 2006, 430, 93-96.	2.6	34
108	Growing Carbon Nanotubes from Both Sides of Graphene. ACS Applied Materials & Interfaces, 2016, 8, 7356-7362.	8.0	34

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109	Functionalization and Extraction of Large Fullerenes and Carbon-Coated Metal Formed during the Synthesis of Single Wall Carbon Nanotubes by Laser Oven, Direct Current Arc, and High-Pressure Carbon Monoxide Production Methods. Journal of Physical Chemistry B, 2005, 109, 4416-4418.	2.6	33
110	Preparation and evaluation of polyethyleneimine-single walled carbon nanotube conjugates as vectors for pancreatic cancer treatment. Journal of Materials Chemistry B, 2014, 2, 4740.	5.8	33
111	Infrared studies of matrix isolated sodium and potassium chloride and cyanide dimers. Journal of Molecular Spectroscopy, 1975, 54, 402-411.	1.2	31
112	Isolation and characterization of copper methylene (CuCH2) via FTIR matrix isolation spectroscopy. Journal of the American Chemical Society, 1987, 109, 4508-4513.	13.7	31
113	Reactions of small carbon clusters with water in cryogenic matrixes: the FTIR spectrum of hydroxyethynyl carbene. The Journal of Physical Chemistry, 1990, 94, 7973-7977.	2.9	30
114	Reductive Alkylation of Fluorinated Graphite. Chemistry of Materials, 2008, 20, 3134-3136.	6.7	30
115	Low-temperature reactions of methane with photoexcited nickel atoms. Inorganic Chemistry, 1988, 27, 205-206.	4.0	29
116	Infrared spectra of matrix-isolated sodium and potassium cyanides. Journal of Molecular Spectroscopy, 1973, 45, 304-315.	1.2	28
117	Interactions of atomic and molecular iron with methane in argon matrix. Journal of the American Chemical Society, 1985, 107, 6134-6135.	13.7	28
118	A Multisurface Matrix-Isolation Apparatus. Applied Spectroscopy, 1986, 40, 588-595.	2.2	28
119	Reactions of iron atoms with benzene and cyclohexadiene in argon matrixes: iron-benzene complexes and photolytic dehydrogenation of cyclohexadiene. Journal of the American Chemical Society, 1986, 108, 6621-6626.	13.7	28
120	Detection of a .sigma.-complex in the reaction of cobalt atoms with methane. Journal of the American Chemical Society, 1993, 115, 2039-2041.	13.7	28
121	Electron-induced cutting of single-walled carbon nanotubes. Carbon, 2009, 47, 178-185.	10.3	28
122	Statistically Accurate Length Measurements of Single-Walled Carbon Nanotubes. Journal of Nanoscience and Nanotechnology, 2007, 7, 2917-2921.	0.9	27
123	Rapid and Scalable Reduction of Dense Surface-Supported Metal-Oxide Catalyst with Hydrazine Vapor. ACS Nano, 2009, 3, 1897-1905.	14.6	27
124	Isolation and characterization of iron methylene (FeCH2) via FTIR matrix isolation. Journal of the American Chemical Society, 1985, 107, 1447-1448.	13.7	26
125	Ellipsometric method for the measurement of temperature and optical constants of incandescent transition metals. Applied Optics, 1989, 28, 1885.	2.1	26
126	Uniform Large Diameter Carbon Nanotubes in Vertical Arrays from Premade Near-Monodisperse Nanoparticles. Chemistry of Materials, 2011, 23, 3466-3475.	6.7	26

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127	Growth and Transfer of Seamless 3D Grapheneâ€"Nanotube Hybrids. Nano Letters, 2016, 16, 1287-1292.	9.1	26
128	The vaccum ultraviolet spectra of SiF2 and GeF2. Journal of Molecular Spectroscopy, 1972, 43, 441-451.	1.2	24
129	Interaction of carbon monoxide with alkali, alkaline-earth, transition, and lanthanoid metal fluorides in an argon matrix. Journal of the Chemical Society Dalton Transactions, 1979, , 745.	1.1	24
130	Amplification of Single-Walled Carbon Nanotubes from Designed Seeds:â€‰ Separation of Nucleation and Growthâ€. Journal of Physical Chemistry C, 2007, 111, 17804-17806.	3.1	24
131	Control over the Diameter, Length, and Structure of Carbon Nanotube Carpets Using Aluminum Ferrite and Iron Oxide Nanocrystals as Catalyst Precursors. Journal of Physical Chemistry C, 2012, 116, 10287-10295.	3.1	24
132	Alignment dependence of one-dimensional electronic hopping transport observed in films of highly aligned, ultralong single-walled carbon nanotubes. Applied Physics Letters, 2009, 94, .	3.3	23
133	Studies of the effects of O-methylation on the pyrolysis behaviour of four coals. Fuel, 1986, 65, 1740-1749.	6.4	22
134	Enhancement of the chemical resistance of nitrile rubber by direct fluorination. Journal of Applied Polymer Science, 2003, 89, 971-979.	2.6	22
135	Effect of Magnesium and Iron on the Hydration and Hydrolysis of Guar Gum. Biomacromolecules, 2006, 7, 441-445.	5.4	22
136	Dispersions of Functionalized Single-Walled Carbon Nanotubes in Strong Acids:Solubility and Rheology. Journal of Nanoscience and Nanotechnology, 2007, 7, 3378-3385.	0.9	22
137	Single walled carbon nanotube growth and chirality dependence on catalyst composition. Nanoscale, 2013, 5, 9848.	5.6	22
138	Identification of Large Fullerenes Formed during the Growth of Single-Walled Carbon Nanotubes in the HiPco Process. Journal of Physical Chemistry B, 2003, 107, 1360-1365.	2.6	21
139	In situ Raman studies on lithiated single-wall carbon nanotubes in liquid ammonia. Chemical Physics Letters, 2005, 410, 467-470.	2.6	21
140	Recycling Ultrathin Catalyst Layers for Multiple Single-Walled Carbon Nanotube Array Regrowth Cycles and Selectivity in Catalyst Activation. Chemistry of Materials, 2009, 21, 1550-1556.	6.7	21
141	Formation of polymeric (GeF2)n in the vapor phase over germanium fluoride. Inorganic Chemistry, 1968, 7, 608-609.	4.0	20
142	Activation of Oâ€"H and Câ€"O bonds of methanol by photoexcited iron atoms. Journal of the Chemical Society Chemical Communications, 1985, , 1570-1571.	2.0	20
143	Infrared spectroscopic studies of the reactions of copper and ammonia in cryogenic argon matrices. Inorganic Chemistry, 1989, 28, 1599-1601.	4.0	20
144	Efficient Transfer of a VA-SWNT Film by a Flip-Over Technique. Journal of the American Chemical Society, 2006, 128, 9312-9313.	13.7	20

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145	Isolation and characterization of ZnCH2 by Fourier transform I.R. matrix isolation spectroscopy and its photolytic rearrangement to HZnCH. Journal of the Chemical Society Chemical Communications, 1987, , 1682.	2.0	19
146	A Model for Nucleation and Growth of Single Wall Carbon Nanotubes via the HiPco Process: A Catalyst Concentration Study. Journal of Nanoscience and Nanotechnology, 2005, 5, 1035-1040.	0.9	19
147	Overcoming Catalyst Residue Inhibition of the Functionalization of Single-Walled Carbon Nanotubes via the Billupsâ€"Birch Reduction. ACS Applied Materials & Interfaces, 2017, 9, 37972-37980.	8.0	18
148	Matrix isolation studies on the lithium-induced reductive coupling of carbon dioxide. Journal of the Chemical Society Chemical Communications, 1981, , 1258.	2.0	17
149	Matrix-isolation studies of the iron/cyclopentadiene system: infrared detection of cyclopentadienyliron hydride. Inorganic Chemistry, 1985, 24, 3708-3710.	4.0	17
150	Nickel and cyclopropane reactions and photochemistry using matrix-isolation Fourier-transform IR spectroscopy. Nickelacyclobutane synthesis and photofragmentation. Organometallics, 1988, 7, 1512-1516.	2.3	17
151	Dendrimer-Assisted Self-Assembled Monolayer of Iron Nanoparticles for Vertical Array Carbon Nanotube Growth. ACS Applied Materials & Interfaces, 2010, 2, 15-18.	8.0	17
152	Wet Catalyst-Support Films for Production of Vertically Aligned Carbon Nanotubes. ACS Applied Materials & Interfaces, 2010, 2, 1851-1856.	8.0	17
153	Infrared spectra of sodium and potassium fluorides by matrix isolation. Journal of Inorganic and Nuclear Chemistry, 1973, 35, 3201-3206.	0.5	16
154	Synthesis and characterization of bis(trifluoromethyl)gold .mu.-halide dimers: x-ray structural characterization of [Au(CF3)2(.mu.-I)]2. Inorganic Chemistry, 1990, 29, 3252-3253.	4.0	16
155	Nebulization of single-walled carbon nanotubes for respiratory toxicity studies. Carbon, 2009, 47, 2528-2530.	10.3	16
156	Structure-Dependent Thermal Defunctionalization of Single-Walled Carbon Nanotubes. ACS Nano, 2015, 9, 6324-6332.	14.6	16
157	The Role of the Substrate Surface Morphology and Water in Growth of Vertically Aligned Single-Walled Carbon Nanotubes. Journal of Nanoscience and Nanotechnology, 2008, 8, 6158-6164.	0.9	15
158	Templated growth of graphenic materials. Nanotechnology, 2009, 20, 245607.	2.6	15
159	Characterization of Large Fullerenes in Single-Wall Carbon Nanotube Production by Ion Mobility Mass Spectrometry. Journal of Physical Chemistry C, 2007, 111, 36-44.	3.1	14
160	Physical removal of metallic carbon nanotubes from nanotube network devices using a thermal and fluidic process. Nanotechnology, 2013, 24, 105202.	2.6	13
161	Carbon-carbon bond formation in the reaction of calcium atoms with ethers. Journal of the American Chemical Society, 1980, 102, 3649-3650.	13.7	12
162	Activation of ethane, propane, and cyclopropane by photoexcited iron atoms. Journal of the Chemical Society Chemical Communications, 1983, , 1230.	2.0	12

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163	Reactions of Atomic Manganese with CH2N2 in Solid Argon at 12 K. Organometallics, 1999, 18, 3551-3553.	2.3	12
164	Revealing the Substructure of Single-Walled Carbon Nanotube Fibers. Chemistry of Materials, 2005, 17, 6361-6368.	6.7	12
165	Diameter Selection of Single-Walled Carbon Nanotubes through Programmable Solvation in Binary Sulfonic Acid Mixtures. Journal of Physical Chemistry C, 2007, 111, 17827-17834.	3.1	12
166	Abrasion as a Catalyst Deposition Technique for Carbon Nanotube Growth. Journal of the American Chemical Society, 2009, 131, 15041-15048.	13.7	12
167	Direct imaging of carbon nanotubes spontaneously filled with solvent. Chemical Communications, 2011, 47, 1228-1230.	4.1	12
168	Ultraviolet absorption spectra of gaseous tin difluoride and lead difluoride. The Journal of Physical Chemistry, 1968, 72, 3510-3511.	2.9	11
169	Synthesis and structure of the unligated carbene of chromium. Inorganic Chemistry, 1993, 32, 1529-1531.	4.0	11
170	Adsorption of Fluorinated C60on the Si(111)-(7Ã—7) Surface Studied by Scanning Tunneling Microscopy and High-Resolution Electron Energy Loss Spectroscopy. Japanese Journal of Applied Physics, 2002, 41, 245-249.	1.5	11
171	Ultrathin â€œBed-of-Nailsâ€•Membranes of Single-Wall Carbon Nanotubes. Journal of the American Chemical Society, 2004, 126, 9502-9503.	13.7	11
172	Ozonolysis of Functionalized Single-Walled Carbon Nanotubes. Journal of Nanoscience and Nanotechnology, 2006, 6, 1935-1938.	0.9	11
173	Infrared spectrum of hexacarbonylbis(.mu.-carbonyl)(.mu.-methylene)diiron, Fe2(CO)6(.mu.-CO)2(.mu.-CH2), in cryogenic matrixes. Inorganic Chemistry, 1986, 25, 4530-4533.	4.0	10
174	Nanoscopically Flat Open-Ended Single-Walled Carbon Nanotube Substrates for Continued Growth. Nano Letters, 2007, 7, 15-21.	9.1	10
175	Matric-isolation infrared and electron paramagnetic resonance spectroscopic studies of the reaction of lithium with silicon tetrafluoride. Inorganic Chemistry, 1978, 17, 1364-1367.	4.0	9
176	Low-temperature reactions of atomic nickel with diazomethane. Inorganic Chemistry, 1990, 29, 4373-4376.	4.0	9
177	Free Radical Chemistry During Slow Pyrolysis of Solid Fuels. Energy Sources Part A Recovery, Utilization, and Environmental Effects, 2005, 27, 279-298.	0.5	9
178	Matrix-Isolation Studies of the Reactions of Ground- and Excited-State Atomic Iron with Cyclopropane. Organometallics, 2000, 19, 39-48.	2.3	8
179	Comment on "Single Crystals of Single-Walled Carbon Nanotubes Formed by Self-Assembly". Science, 2003, 300, 1236b-1236.	12.6	8
180	Chirality Assignment of Micelle-Suspended Single-Walled Carbon Nanotubes Using Coherent Phonon Oscillations. Journal of the Korean Physical Society, 2007, 51, 306.	0.7	8

#	Article	IF	Citations
181	Infrared Spectra of the Alkali Metal Cyanides in the Solid State. Applied Spectroscopy, 1973, 27, 93-94.	2.2	7
182	Low temperature chlorination and bromination of UF4 in argon matrices. Inorganic and Nuclear Chemistry Letters, 1979, 15, 65-68.	0.7	7
183	Activation of dimethyl ether with barium and strontium atoms. Journal of Organometallic Chemistry, 1980, 194, C22-C24.	1.8	7
184	Studies of the reactions of lithium atoms with methyl cyanide and methyl isocyanide in inert gas matrices. Polyhedron, 1983, 2, 167-169.	2.2	7
185	Infrared absorption characteristics of hydroxyl groups in coal tars. Fuel, 1987, 66, 51-54.	6.4	7
186	Chemical reactions of carbon atoms and molecules from laser-induced vaporization of graphite, TaC and WC. Journal of Quantitative Spectroscopy and Radiative Transfer, 1988, 40, 439-447.	2.3	7
187	Studies of Diamond Growth Mechanisms in a Hot Filament Reactor. Materials Research Society Symposia Proceedings, 1989, 162, 85.	0.1	7
188	Quantitative In Situ Growth Measurements of Chlorine-Activated Homoepitaxial Diamond Cvd. Materials Research Society Symposia Proceedings, 1994, 349, 427.	0.1	7
189	Solubility and Size Separation of Large Fullerenes in Concentrated Sulfuric Acids. Journal of Physical Chemistry C, 2007, 111, 17966-17969.	3.1	7
190	Using Nonionic Surfactants for Production of Semiconductor-Type Carbon Nanotubes by Gel-Based Affinity Chromatography. Nanomaterials and Nanotechnology, 2014, 4, 19.	3.0	7
191	Matrix isolation-Fourier transform infrared spectroscopy studies of flash pyrolysis of four coal tars. Journal of Analytical and Applied Pyrolysis, 1988, 14, 99-114.	5.5	6
192	ZnBr2-catalyzed chemical effects in poly(acrylonitrile-co-butadiene). Journal of Applied Polymer Science, 2003, 89, 1250-1257.	2.6	6
193	Catalyst design for carbon nanotube growth using atomistic modeling. Nanotechnology, 2008, 19, 405704.	2.6	6
194	Apparatus for Scalable Functionalization of Single-Walled Carbon Nanotubes via the Billups-Birch Reduction. Journal of Carbon Research, 2017, 3, 19.	2.7	6
195	Co-condensation reactions of uranium tetrafluoride and hexafluoride with alkali metals and alkali-metal fluorides in low-temperature argon matrices. Journal of the Chemical Society Dalton Transactions, 1978, , 433.	1.1	5
196	The isolation and characterization of copper methylene via matrix isolation spectroscopy. Tetrahedron Letters, 1987, 28, 1733-1736.	1.4	5
197	Matrix isolation-Fourier transform infrared spectroscopy studies of slow pyrolysis processes for four coals. Journal of Analytical and Applied Pyrolysis, 1988, 14, 115-134.	5.5	4
198	Oxidative Properties and Chemical Stability of Fluoronanotubes in Matrixes of Binary Inorganic Compounds. Journal of Nanoscience and Nanotechnology, 2003, 3, 87-92.	0.9	4

#	Article	IF	Citations
199	Controlled attachment of metal nanoparticles to single walled carbon nanotubes as a key step in their seeded growth and lengthening. Carbon, 2010, 48, 561-565.	10.3	4
200	Activation of dimethyl ether with transition metal atoms. Tetrahedron Letters, 1980, 21, 3861-3864.	1.4	3
201	Activation of hexafluoroethane by calcium atoms. Journal of Fluorine Chemistry, 1984, 26, 165-167.	1.7	3
202	Matrix isolation electron paramagnetic resonance studies of tin(II) fluoride. Evidence for a vapor phase radical species. Inorganica Chimica Acta, 1986, 116, L17-L19.	2.4	3
203	Growth of Single-Walled Carbon Nanotubes on a Nanorough Surface. Journal of Physical Chemistry C, 2007, 111, 9142-9145.	3.1	3
204	Mechanism of CVD diamond growth on diamond (111), (110) and (100) surfaces. Carbon, 1990, 28, 805.	10.3	2
205	Mechanism for Step Growth on Diamond (100). Materials Research Society Symposia Proceedings, 1992, 280, 683.	0.1	2
206	(n,m)-Assigned Absorption and Emission Spectra of Single-Walled Carbon Nanotubes. AIP Conference Proceedings, 2003, , .	0.4	2
207	Photoactivation of methyl acetate by chromium atoms. Organometallics, 1986, 5, 1917-1918.	2.3	1
208	Homoepitaxial Growth Rate Studies on Diamond (110), (111), and (100) Surfaces in a Hot-Filament Reactor. Materials Research Society Symposia Proceedings, 1992, 270, 341.	0.1	1
209	Other CVD Methods for Diamond Production. , 1998, , 119-138.		1
210	Evolution, Activity, and Lifetime of Alumina-supported Fe Catalyst During Super Growth of Single-walled Carbon Nanotube Carpets: Influence of the Type of Alumina. Materials Research Society Symposia Proceedings, 2010, 1258, 1.	0.1	1
211	From Newspaper Substrate to Nanotubesâ€"Analysis of Carbonized Soot Grown on Kaolin Sized Newsprint. Journal of Carbon Research, 2019, 5, 66.	2.7	1
212	Status Report on Second International Conference on New Diamond Science and Technology. Materials and Processing Report, 1991, 5, 6-7.	0.0	0
213	Carbon Nanotube Salts. Arylation of Single-Wall Carbon Nanotubes.. ChemInform, 2005, 36, no.	0.0	0
214	Terahertz Detector Based on a p-n Junction Film of Aligned Carbon Nanotubes. , 2014, , .		0
215	Polarization-Dependent Terahertz Spectroscopy of Macroscopically Aligned Carbon Nanotubes. , 2015, , .		0