

Robert C Haddon

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

250 papers	25,138 citations	76 h-index	155 g-index
278 ext. papers	26,467 ext. citations	10.6 avg, IF	6.68 L-index

#	Paper	IF	Citations
250	Solution properties of single-walled carbon nanotubes. <i>Science</i> , 1998 , 282, 95-8	33.3	2120
249	Solution properties of graphite and graphene. <i>Journal of the American Chemical Society</i> , 2006 , 128, 7720-7	16.4	1119
248	Graphite Nanoplatelet/Epoxy Composite Thermal Interface Materials. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 7565-7569	3.8	844
247	Enhanced Thermal Conductivity in a Hybrid Graphite Nanoplatelet /Carbon Nanotube Filler for Epoxy Composites. <i>Advanced Materials</i> , 2008 , 20, 4740-4744	24	776
246	Chemical modification of epitaxial graphene: spontaneous grafting of aryl groups. <i>Journal of the American Chemical Society</i> , 2009 , 131, 1336-7	16.4	722
245	Multiscale carbon nanotube-carbon fiber reinforcement for advanced epoxy composites. <i>Langmuir</i> , 2007 , 23, 3970-4	4	702
244	Proton Exchange Membrane Fuel Cells with Carbon Nanotube Based Electrodes. <i>Nano Letters</i> , 2004 , 4, 345-348	11.5	682
243	Chemically Functionalized Carbon Nanotubes as Substrates for Neuronal Growth. <i>Nano Letters</i> , 2004 , 4, 507-511	11.5	588
242	Bone cell proliferation on carbon nanotubes. <i>Nano Letters</i> , 2006 , 6, 562-7	11.5	582
241	Molecular functionalization of carbon nanotubes and use as substrates for neuronal growth. <i>Journal of Molecular Neuroscience</i> , 2000 , 14, 175-82	3.3	550
240	Dissolution of Single-Walled Carbon Nanotubes. <i>Advanced Materials</i> , 1999 , 11, 834-840	24	521
239	Dissolution of Full-Length Single-Walled Carbon Nanotubes. <i>Journal of Physical Chemistry B</i> , 2001 , 105, 2525-2528	3.4	492
238	Spectroscopy of covalently functionalized graphene. <i>Nano Letters</i> , 2010 , 10, 4061-6	11.5	461
237	Preparation of Single-Walled Carbon Nanotube Reinforced Polystyrene and Polyurethane Nanofibers and Membranes by Electrospinning. <i>Nano Letters</i> , 2004 , 4, 459-464	11.5	460
236	Nitric Acid Purification of Single-Walled Carbon Nanotubes. <i>Journal of Physical Chemistry B</i> , 2003 , 107, 13838-13842	3.4	422
235	Bolometric infrared photoresponse of suspended single-walled carbon nanotube films. <i>Science</i> , 2006 , 312, 413-6	33.3	381
234	Continuous spinning of a single-walled carbon nanotube-nylon composite fiber. <i>Journal of the American Chemical Society</i> , 2005 , 127, 3847-54	16.4	352

233	Sidewall functionalization of single-walled carbon nanotubes by addition of dichlorocarbene. <i>Journal of the American Chemical Society</i> , 2003 , 125, 14893-900	16.4	340
232	.pi.-Electrons in three dimensions. <i>Accounts of Chemical Research</i> , 1988 , 21, 243-249	24.3	331
231	Electronic properties of single-walled carbon nanotube networks. <i>Journal of the American Chemical Society</i> , 2005 , 127, 5990-5	16.4	323
230	Synthesis and characterization of water soluble single-walled carbon nanotube graft copolymers. <i>Journal of the American Chemical Society</i> , 2005 , 127, 8197-203	16.4	299
229	Comparison of analytical techniques for purity evaluation of single-walled carbon nanotubes. <i>Journal of the American Chemical Society</i> , 2005 , 127, 3439-48	16.4	282
228	Design of organic metals and superconductors. <i>Nature</i> , 1975 , 256, 394-396	50.4	259
227	A Bone Mimic Based on the Self-Assembly of Hydroxyapatite on Chemically Functionalized Single-Walled Carbon Nanotubes. <i>Chemistry of Materials</i> , 2005 , 17, 3235-3241	9.6	249
226	Crystal Growth, Structure, and Electronic Band Structure of β T Polymorphs. <i>Advanced Materials</i> , 1998 , 10, 379-382	24	245
225	Polyethyleneimine functionalized single-walled carbon nanotubes as a substrate for neuronal growth. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 4285-9	3.4	238
224	Resonating valence-bond ground state in a phenalenyl-based neutral radical conductor. <i>Science</i> , 2005 , 309, 281-4	33.3	234
223	Diels-Alder chemistry of graphite and graphene: graphene as diene and dienophile. <i>Journal of the American Chemical Society</i> , 2011 , 133, 3324-7	16.4	218
222	Applications of Carbon Nanotubes in Biotechnology and Biomedicine. <i>Journal of Biomedical Nanotechnology</i> , 2005 , 1, 3-17	4	210
221	Soluble graphene derived from graphite fluoride. <i>Chemical Physics Letters</i> , 2007 , 445, 51-56	2.5	206
220	A Disposable Biosensor for Organophosphorus Nerve Agents Based on Carbon Nanotubes Modified Thick Film Strip Electrode. <i>Electroanalysis</i> , 2005 , 17, 54-58	3	200
219	Influence of the zeta potential on the dispersability and purification of single-walled carbon nanotubes. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 11520-4	3.4	195
218	Chemical engineering of the single-walled carbon nanotube-nylon 6 interface. <i>Journal of the American Chemical Society</i> , 2006 , 128, 7492-6	16.4	174
217	Bistabilities in 1,3,2-dithiazolyl radicals. <i>Journal of the American Chemical Society</i> , 2004 , 126, 8256-65	16.4	174
216	Enhanced Physical Properties in a Pentacene Polymorph. <i>Angewandte Chemie - International Edition</i> , 2001 , 40, 1732-1736	16.4	171

215	High Energy Density Supercapacitor Based on a Hybrid Carbon NanotubeReduced Graphite Oxide Architecture. <i>Advanced Energy Materials</i> , 2012 , 2, 438-444	21.8	169
214	Conductive single-walled carbon nanotube substrates modulate neuronal growth. <i>Nano Letters</i> , 2009 , 9, 264-8	11.5	159
213	Rehybridization and .pi.-orbital overlap in nonplanar conjugated organic molecules: .pi.-orbital axis vector (POAV) analysis and three-dimensional Hueckel molecular orbital (3D-HMO) theory. <i>Journal of the American Chemical Society</i> , 1987 , 109, 1676-1685	16.4	151
212	Effect of covalent chemistry on the electronic structure and properties of carbon nanotubes and graphene. <i>Accounts of Chemical Research</i> , 2013 , 46, 65-76	24.3	148
211	High resolution capillary electrophoresis of carbon nanotubes. <i>Journal of the American Chemical Society</i> , 2002 , 124, 3169-74	16.4	139
210	Effect of single-walled carbon nanotube purity on the thermal conductivity of carbon nanotube-based composites. <i>Applied Physics Letters</i> , 2006 , 89, 133102	3.4	130
209	Functionalization and dissolution of nitric acid treated single-walled carbon nanotubes. <i>Journal of the American Chemical Society</i> , 2009 , 131, 18153-8	16.4	129
208	Aryl functionalization as a route to band gap engineering in single layer graphene devices. <i>Nano Letters</i> , 2011 , 11, 4047-51	11.5	127
207	Vibrational spectroscopy of superconducting K3C60 by inelastic neutron scattering. <i>Nature</i> , 1991 , 354, 462-463	50.4	127
206	Functionalized Single-Walled Carbon Nanotubes for Carbon FiberEpoxy Composites Journal of Physical Chemistry C, 2007 , 111, 17865-17871	3.8	126
205	V-type nerve agent detection using a carbon nanotube-based amperometric enzyme electrode. <i>Analytical Chemistry</i> , 2006 , 78, 331-6	7.8	124
204	Chemistry at the Dirac point: Diels-Alder reactivity of graphene. <i>Accounts of Chemical Research</i> , 2012 , 45, 673-82	24.3	122
203	Molecular semiconductors from bifunctional dithia- and diselenadiazolyl radicals. Preparation and solid-state structural and electronic properties of 1,4-[(E2N2C)C6H4(CN2E2)] (E = sulfur, selenium). <i>Journal of the American Chemical Society</i> , 1991 , 113, 582-588	16.4	121
202	Covalent Chemistry for Graphene Electronics. <i>Journal of Physical Chemistry Letters</i> , 2011 , 2, 2487-2498	6.4	118
201	Resonating valence bond ground state in oxygen-functionalized phenalenyl-based neutral radical molecular conductors. <i>Journal of the American Chemical Society</i> , 2006 , 128, 1982-94	16.4	118
200	Anisotropic Thermal and Electrical Properties of Thin Thermal Interface Layers of Graphite Nanoplatelet-Based Composites. <i>Scientific Reports</i> , 2013 , 3,	4.9	116
199	Chromatographic purification and properties of soluble single-walled carbon nanotubes. <i>Journal of the American Chemical Society</i> , 2001 , 123, 11673-7	16.4	116
198	Bistability and the phase transition in 1,3,2-dithiazolo[4,5-b]pyrazin-2-yl. <i>Journal of the American Chemical Society</i> , 2004 , 126, 14692-3	16.4	113

197	Chemically functionalized water soluble single-walled carbon nanotubes modulate neurite outgrowth. <i>Journal of Nanoscience and Nanotechnology</i> , 2005 , 5, 1707-12	1.3	108
196	Epitaxial graphene electronic structure and transport. <i>Journal Physics D: Applied Physics</i> , 2010 , 43, 374007		104
195	Poly(m-aminobenzene sulfonic acid) functionalized single-walled carbon nanotubes based gas sensor. <i>Nanotechnology</i> , 2007 , 18, 165504	3.4	103
194	Benzyne Adds Across a Closed 5 π Ring Fusion in C70: Evidence for Bond Delocalization in Fullerenes. <i>Journal of the American Chemical Society</i> , 1998 , 120, 2337-2342	16.4	101
193	Application of centrifugation to the large-scale purification of electric arc-produced single-walled carbon nanotubes. <i>Journal of the American Chemical Society</i> , 2006 , 128, 9902-8	16.4	100
192	³ He NMR of He@C606-and He@C706-. New Records for the Most Shielded and the Most Deshielded ³ He Inside a Fullerene1. <i>Journal of the American Chemical Society</i> , 1998 , 120, 6389-6393	16.4	99
191	Single-walled carbon nanotubes chemically functionalized with polyethylene glycol promote tissue repair in a rat model of spinal cord injury. <i>Journal of Neurotrauma</i> , 2011 , 28, 2349-62	5.4	98
190	Thermal conductivity measurements of semitransparent single-walled carbon nanotube films by a bolometric technique. <i>Nano Letters</i> , 2007 , 7, 900-4	11.5	97
189	Large-scale fabrication of aligned single-walled carbon nanotube array and hierarchical single-walled carbon nanotube assembly. <i>Journal of the American Chemical Society</i> , 2004 , 126, 16698-9	16.4	97
188	Resonance-stabilized 1,2,3-dithiazolo-1,2,3-dithiazolyls as neutral pi-radical conductors. <i>Journal of the American Chemical Society</i> , 2002 , 124, 9498-509	16.4	96
187	Advances in transferring chemical vapour deposition graphene: a review. <i>Materials Horizons</i> , 2017 , 4, 1054-1063	14.4	94
186	Side-wall opening of single-walled carbon nanotubes (SWCNTs) by chemical modification: a critical theoretical study. <i>Angewandte Chemie - International Edition</i> , 2004 , 43, 1552-4	16.4	92
185	Organometallic chemistry of extended periodic π -electron systems: hexahapto-chromium complexes of graphene and single-walled carbon nanotubes. <i>Chemical Science</i> , 2011 , 2, 1326	9.4	90
184	High Performance Hydrogen Fuel Cells with Ultralow Pt Loading Carbon Nanotube Thin Film Catalysts <i>Journal of Physical Chemistry C</i> , 2007 , 111, 17901-17904	3.8	89
183	Linear free energy relation of methanofullerene C61-substituents with cyclic voltammetry: Strong electron withdrawal anomaly. <i>Tetrahedron</i> , 1996 , 52, 5149-5159	2.4	89
182	X-ray crystal structures of the 1,3,2-benzodithiazolyl dimer and 1,3,2-benzodithiazolium chloride sulfur dioxide solvate: comparison of the molecular and electronic structures of the 10- π -electron C6H4S2N ⁺ cation and the C6H4S2N [•] radical and dimer and a study of the variable-temperature magnetic behavior of the radical. <i>Inorganic Chemistry</i> , 1990 , 29, 4821-4830	5.1	87
181	The First Electronically Stabilized Phenalenyl Radical: Effect of Substituents on Solution Chemistry and Solid-State Structure. <i>Crystal Growth and Design</i> , 2007 , 7, 802-809	3.5	82
180	1,9-Dithiophenalenyl system. <i>Journal of the American Chemical Society</i> , 1978 , 100, 7629-7633	16.4	82

179	Electrochemical Evidence for Through-Space Orbital Interactions in Spiromethanofullerenes. <i>Angewandte Chemie International Edition in English</i> , 1995 , 34, 1591-1594		81
178	Comparative molecular orbital study of [6]-, [10]-, and [18]annulenes and the bridged [10]annulenes. <i>Journal of the American Chemical Society</i> , 1985 , 107, 289-298	16.4	81
177	Incorporation of highly dispersed single-walled carbon nanotubes in a polyimide matrix. <i>Composites Science and Technology</i> , 2006 , 66, 1190-1197	8.6	79
176	Mechanism of ammonia detection by chemically functionalized single-walled carbon nanotubes: in situ electrical and optical study of gas analyte detection. <i>Journal of the American Chemical Society</i> , 2007 , 129, 10700-6	16.4	77
175	The dimers of carbon monoxide and carbon monosulfide. Chemically bound triplet electronic ground states. <i>Journal of the American Chemical Society</i> , 1983 , 105, 194-198	16.4	76
174	Diels-Alder reactions of graphene: computational predictions of products and sites of reaction. <i>Journal of the American Chemical Society</i> , 2013 , 135, 17643-9	16.4	71
173	Controlled Purification of Single-Walled Carbon Nanotube Films by Use of Selective Oxidation and Near-IR Spectroscopy. <i>Chemistry of Materials</i> , 2003 , 15, 4273-4279	9.6	71
172	New family of aminophenalenyl-based neutral radical molecular conductors: synthesis, structure, and solid state properties. <i>Journal of the American Chemical Society</i> , 2005 , 127, 8185-96	16.4	68
171	Room-temperature magnetic ordering in functionalized graphene. <i>Scientific Reports</i> , 2012 , 2, 624	4.9	67
170	Synthesis, crystal structure, and physical properties of sterically unprotected hydrocarbon radicals. <i>Journal of the American Chemical Society</i> , 2011 , 133, 14240-3	16.4	67
169	Water soluble single-walled carbon nanotubes inhibit stimulated endocytosis in neurons. <i>Nano Letters</i> , 2008 , 8, 3538-42	11.5	66
168	Functionalized single-walled carbon nanotube-based fuel cell benchmarked against US DOE 2017 technical targets. <i>Scientific Reports</i> , 2013 , 3, 2257	4.9	65
167	Unified theory of the thermodynamic and kinetic criteria of aromatic character in the [4n+2]annulenes. <i>Tetrahedron Letters</i> , 1980 , 21, 1191-1192	2	63
166	Theoretical studies in the norbornadiene-quadracyclane system. <i>Journal of the American Chemical Society</i> , 1983 , 105, 3110-3114	16.4	62
165	Prototypal dithiazolodithiazolyl radicals: synthesis, structures, and transport properties. <i>Journal of the American Chemical Society</i> , 2003 , 125, 14394-403	16.4	60
164	Fast Electrochromic Device Based on Single-Walled Carbon Nanotube Thin Films. <i>Nano Letters</i> , 2016 , 16, 5386-93	11.5	59
163	Effect of nitrophenyl functionalization on the magnetic properties of epitaxial graphene. <i>Small</i> , 2011 , 7, 1175-80	11	57
162	Ionic Liquid Gating of Suspended MoS ₂ Field Effect Transistor Devices. <i>Nano Letters</i> , 2015 , 15, 5284-8	11.5	56

161	Trisphenalenyl-based neutral radical molecular conductor. <i>Journal of the American Chemical Society</i> , 2008 , 130, 3942-51	16.4	56
160	Hysteretic spin and charge delocalization in a phenalenyl-based molecular conductor. <i>Journal of the American Chemical Society</i> , 2010 , 132, 17258-64	16.4	55
159	MINDO [modified intermediate neglect of differential overlap]/3 study of cyclopentadienyl(1+) and cyclopentadienyl(1-) ions. <i>Journal of the American Chemical Society</i> , 1973 , 95, 5836-5837	16.4	55
158	A MOLECULE LIKE SODIUM. <i>Phosphorus, Sulfur and Silicon and the Related Elements</i> , 2004 , 179, 673-684	1	54
157	Organometallic hexahapto functionalization of single layer graphene as a route to high mobility graphene devices. <i>Advanced Materials</i> , 2013 , 25, 1131-6	24	53
156	Visible-Blind UV Photodetector Based on Single-Walled Carbon Nanotube Thin Film/ZnO Vertical Heterostructures. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 37094-37104	9.5	52
155	ZnO growth on Si with low-temperature ZnO buffer layers by ECR-assisted MBE. <i>Journal of Crystal Growth</i> , 2006 , 286, 61-65	1.6	51
154	Covalent chemistry in graphene electronics. <i>Materials Today</i> , 2012 , 15, 276-285	21.8	50
153	Tetrathiophenalenyl radical and its disulfide-bridged dimer. <i>Organic Letters</i> , 2008 , 10, 3121-3	6.2	49
152	SWNT/WNT Hybrid Architecture for Proton Exchange Membrane Fuel Cell Cathodes. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 9089-9094	3.8	49
151	The First Structurally Characterized Homofullerene (Fulleroid). <i>Journal of the American Chemical Society</i> , 1999 , 121, 7971-7972	16.4	49
150	Metals on Graphene and Carbon Nanotube Surfaces: From Mobile Atoms to Atomtronics to Bulk Metals to Clusters and Catalysts. <i>Chemistry of Materials</i> , 2014 , 26, 184-195	9.6	48
149	Single-Walled Carbon Nanotube/Poly(porphyrin) Hybrid for Volatile Organic Compounds Detection. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 1602-1610	3.8	47
148	Synthesis, Dispersion, and Viscosity of Poly(ethylene glycol)-Functionalized Water-Soluble Single-Walled Carbon Nanotubes. <i>Chemistry of Materials</i> , 2011 , 23, 1246-1253	9.6	47
147	Pressure enhanced conductivity in bis-1,2,3-thiaselenazolyl dimers. <i>Journal of the American Chemical Society</i> , 2005 , 127, 18159-70	16.4	47
146	Dithiazolodithiazolyl Radicals: Substituent Effects on Solid State Structures and Properties. <i>Chemistry of Materials</i> , 2004 , 16, 1564-1572	9.6	47
145	The isolation, characterisation, gas phase electron diffraction and crystal structure of the thermally stable radical [CF ₃ CSN ₂ SCCF ₃]. <i>Dalton Transactions RSC</i> , 2000 , 3365-3382		47
144	Isostructural bisdithiazolyl and bisthiaselenazolyl radicals: trends in bandwidth and conductivity. <i>Inorganic Chemistry</i> , 2006 , 45, 10958-66	5.1	46

143	Localization of spin and charge in phenalenyl-based neutral radical conductors. <i>Journal of the American Chemical Society</i> , 2008 , 130, 13683-90	16.4	45
142	Fabrication and Properties of Conducting Polypyrrole/SWNT-PABS Composite Films and Nanotubes. <i>Electroanalysis</i> , 2006 , 18, 1047-1054	3	44
141	Light-mediated C-C sigma-bond driven crystallization of a phenalenyl radical dimer. <i>Journal of the American Chemical Society</i> , 2004 , 126, 14297-302	16.4	44
140	Chemically engineered graphene-based 2D organic molecular magnet. <i>ACS Nano</i> , 2013 , 7, 10011-22	16.7	43
139	Persistent Photoconductivity in Chemically Modified Single-Wall Carbon Nanotubes. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 19976-19981	3.4	43
138	Ab initio molecular orbital study of ethylenedione (O.dbd.C.dbd.C.dbd.O). <i>Journal of the American Chemical Society</i> , 1975 , 97, 1645-1649	16.4	41
137	Effects of electron correlation on the energies of 2-norbornyl cation structures. Evaluation of the nonclassical stabilization energy. <i>Journal of the American Chemical Society</i> , 1983 , 105, 5915-5917	16.4	40
136	3,4:3',4'-Bibenzo[b]thiophene. <i>Journal of Organic Chemistry</i> , 1979 , 44, 2491-2493	4.2	40
135	Ground states of molecules. 34. MINDO/3 calculations for nonclassical ions. <i>Journal of the American Chemical Society</i> , 1977 , 99, 377-385	16.4	40
134	Effect of atomic interconnects on percolation in single-walled carbon nanotube thin film networks. <i>Nano Letters</i> , 2014 , 14, 3930-7	11.5	39
133	Electron spin resonance studies of sulfur-based donor heterocycles: sulfur-33 couplings. <i>Journal of the American Chemical Society</i> , 1978 , 100, 4612-4614	16.4	39
132	Single-walled carbon nanotube thin film emitter-detector integrated optoelectronic device. <i>Nano Letters</i> , 2008 , 8, 2224-8	11.5	38
131	Chemical approach to the realization of electronic devices in epitaxial graphene. <i>Physica Status Solidi - Rapid Research Letters</i> , 2009 , 3, 184-186	2.5	37
130	Electro-oxidized epitaxial graphene channel field-effect transistors with single-walled carbon nanotube thin film gate electrode. <i>Journal of the American Chemical Society</i> , 2010 , 132, 14429-36	16.4	36
129	Phenalenyl-based neutral radical molecular conductors: substituent effects on solid-state structures and properties. <i>Journal of the American Chemical Society</i> , 2007 , 129, 7163-74	16.4	36
128	A (13)C INADEQUATE and HF-GIAO study of C(60)H(2) and C(60)H(6) identification of ring currents in a 1,2-dihydrofullerene. <i>Journal of the American Chemical Society</i> , 2002 , 124, 8090-4	16.4	36
127	A pi-stacked 1,2,3-dithiazolyl radical. Preparation and solid state characterization of (Cl2C3NS)(ClC2NS2). <i>Chemical Communications</i> , 2002 , 1872-3	5.8	36
126	Chemically functionalized water-soluble single-walled carbon nanotubes modulate morpho-functional characteristics of astrocytes. <i>Nano Letters</i> , 2012 , 12, 4742-7	11.5	35

125	Molecular materials from 1,3,2-dithiazolyls. Solid-state structures and magnetic properties of 2,3-naphthalene and quinoxaline derivatives. <i>Chemical Communications</i> , 1997 , 873-874	5.8	34
124	The effect of selenium incorporation on the bandwidth and conductivity of neutral radical conductors. <i>Chemical Communications</i> , 2005 , 5745-7	5.8	34
123	Heterocyclic Thiazyl and Selenazyl Radicals; Synthesis and Applications in Solid State Architecture. <i>Studies in Inorganic Chemistry</i> , 1992 , 14, 295-322		34
122	Hexahapto-Metal Complexes of Single-Walled Carbon Nanotubes. <i>Macromolecular Chemistry and Physics</i> , 2012 , 213, 1001-1019	2.6	33
121	Dependence of the thermal conductivity of two-dimensional graphite nanoplatelet-based composites on the nanoparticle size distribution. <i>Journal of Physics Condensed Matter</i> , 2010 , 22, 334216	1.8	33
120	The production of oxygenated polycrystalline graphene by one-step ethanol-chemical vapor deposition. <i>Carbon</i> , 2011 , 49, 3789-3795	10.4	33
119	Micropatterned Oriented Zeolite Monolayer Films by Direct In Situ Crystallization. <i>Chemistry of Materials</i> , 2003 , 15, 2687-2689	9.6	33
118	Mono- and difunctional furan-based 1,2,3,5-dithiadiazolyl radicals; preparation and solid state structures of 2,5-[(S2N2C)OC4H2(CN2S2)] and 2,5-[(S2N2C)OC4H2(CN)]. <i>Canadian Journal of Chemistry</i> , 1992 , 70, 919-925	0.9	33
117	Charge-compensated, semiconducting single-walled carbon nanotube thin film as an electrically configurable optical medium. <i>Nature Photonics</i> , 2013 , 7, 459-465	33.9	32
116	Structure-property trends in stacked dithiazolo-dithiazolyl conductors. <i>Chemical Communications</i> , 2002 , 2562-2563	5.8	32
115	Giant Raman Response to the Encapsulation of Sulfur in Narrow Diameter Single-Walled Carbon Nanotubes. <i>Journal of the American Chemical Society</i> , 2016 , 138, 40-3	16.4	31
114	Metals and superconductors: molecular analogs of atomic hydrogen. <i>ChemPhysChem</i> , 2012 , 13, 3581-3	3.2	31
113	Reversible grafting of naphthylmethyl radicals to epitaxial graphene. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 4901-4	16.4	31
112	Bis-1,2,3-thiaselenazolyl radicals and their sigma-bonded dimers. <i>Chemical Communications</i> , 2005 , 1543-5	5.8	31
111	Thermal hysteresis in dithiadiazolyl and dithiazolyl radicals induced by supercooling of paramagnetic liquids close to room temperature: a study of F3CCNSSN and an interpretation of the behaviour of F3CCSNSCCF3. <i>Chemical Communications</i> , 2002 , 1836-7	5.8	31
110	Perturbational molecular orbital (PMO) theory of homoaromaticity. <i>Journal of the American Chemical Society</i> , 1975 , 97, 3608-3615	16.4	31
109	Networks of semiconducting SWNTs: contribution of midgap electronic states to the electrical transport. <i>Accounts of Chemical Research</i> , 2015 , 48, 2270-9	24.3	30
108	Resonating valence bond and sigma-charge density wave phases in a benzannulated phenalenyl radical. <i>Journal of the American Chemical Society</i> , 2010 , 132, 2684-94	16.4	30

- 107 Preparation and crystal structure of the paramagnetic solid F₃CCSSSCCF₃AsF₆: implications for the identity of RCSSCR₃. *Journal of the Chemical Society Dalton Transactions*, **1992**, 1563-1572 30
- 106 Enhanced electrical conductivity in a substitutionally doped spiro-bis(phenalenyl)boron radical molecular solid. *Journal of the American Chemical Society*, **2014**, 136, 14738-41 16.4 29
- 105 Methoxy-Substituted Phenalenyl-Based Neutral Radical Molecular Conductor. *Chemistry of Materials*, **2009**, 21, 2226-2237 9.6 29
- 104 Controlling multidomain states to enable sub-10-nm magnetic force microscopy. *Applied Physics Letters*, **2008**, 93, 203116 3.4 29
- 103 Molecular, electronic, and crystal structure of naphthol[1,8-cd:4,5-c'd']bis[1,2,6]thiadiazine. *Journal of the American Chemical Society*, **1979**, 101, 7277-7281 16.4 29
- 102 Planar cis-[10]annulene and azulene revisited. *Journal of the American Chemical Society*, **1982**, 104, 3516-3518 16.4 29
- 101 Light Modulation of Electronic Transitions in Semiconducting Single Wall Carbon Nanotubes. *Nano Letters*, **2004**, 4, 1529-1533 11.5 27
- 100 Synthesis, characterization, and x-ray crystal structure of the paramagnetic solid 5-(trifluoromethyl)-1,2,3,4-trithiazolium hexafluoroarsenate, containing the novel, planar 7.π. CF₃CN₃SS⁺.bul. radical cation. *Inorganic Chemistry*, **1992**, 31, 2274-2279 5.1 27
- 99 Bis(η⁶-hexamethylbenzene)(η⁶-6,6-[2n]cyclophane)diruthenium(II,II) complexes and their two-electron reduction to [2n]cyclophane derivatives having two cyclohexadienyl anion decks joined by an extremely long carbon-carbon bond. *Journal of the American Chemical Society*, **1990**, 112, 6545-6556 16.4 27
- 98 Preparation and solid state characterization of 4,4'-bis(1,2,3,5-dithiadiazolyl). *Journal of the Chemical Society Chemical Communications*, **1994**, 1447-1448 26
- 97 Calculation of localised molecular orbitals with the Foster-Boys criterion. *Chemical Physics Letters*, **1976**, 42, 453-455 2.5 26
- 96 Effect of first row transition metals on the conductivity of semiconducting single-walled carbon nanotube networks. *Applied Physics Letters*, **2012**, 100, 223111 3.4 25
- 95 Energy barriers for rotation about carbon-carbon bonds in allyl cations. *Journal of the American Chemical Society*, **1970**, 92, 6691-6693 16.4 25
- 94 Chemically functionalized single-walled carbon nanotube films modulate the morpho-functional and proliferative characteristics of astrocytes. *Nano Letters*, **2013**, 13, 4387-92 11.5 24
- 93 Solid-state Bis-hexahapto-metal complexation of single-walled carbon nanotubes. *Journal of Physical Organic Chemistry*, **2012**, 25, 607-610 2.1 24
- 92 Enhanced electromodulation of infrared transmittance in semitransparent films of large diameter semiconducting single-walled carbon nanotubes. *Nano Letters*, **2010**, 10, 937-42 11.5 24
- 91 Theoretical study of conformational processes in sulfur diimides. *The Journal of Physical Chemistry*, **1983**, 87, 1308-1312 24
- 90 Optical and electronic properties of thin films and solutions of functionalized forms of graphene and related carbon materials. *Carbon*, **2014**, 72, 82-88 10.4 23

89	Resonance stabilized bis-thiadiazinyl radicals. <i>Chemical Communications</i> , 2005 , 1218-20	5.8	23
88	Preparation and solid state characterization of 1,2,3,5-diselenadiazolyl [HCN ₂ Se ₂] <i>Journal of the Chemical Society Chemical Communications</i> , 1992 , 1265		23
87	Molecular, electronic, and crystal structure of naphtho[1,8-cd:4,5-c'd']bis[1,2,6]selenadiazine. <i>Journal of the American Chemical Society</i> , 1980 , 102, 5070-5073	16.4	22
86	Multilevel-3D bit patterned magnetic media with 8 signal levels per nanocolumn. <i>PLoS ONE</i> , 2012 , 7, e40134	3.7	22
85	Application of Hybrid Fillers for Improving the Through-Plane Heat Transport in Graphite Nanoplatelet-Based Thermal Interface Layers. <i>Scientific Reports</i> , 2015 , 5, 13108	4.9	20
84	Spin-polarized transport in magnetically assembled carbon nanotube spin valves. <i>Applied Physics Letters</i> , 2006 , 89, 033119	3.4	20
83	p-Phenylenebistetrathiafulvalene. <i>Journal of the Chemical Society Chemical Communications</i> , 1977 , 388		20
82	Changes in the morphology and proliferation of astrocytes induced by two modalities of chemically functionalized single-walled carbon nanotubes are differentially mediated by glial fibrillary acidic protein. <i>Nano Letters</i> , 2014 , 14, 3720-7	11.5	19
81	Effect of Group 6 Transition Metal Coordination on the Conductivity of Graphite Nanoplatelets. <i>Materials Letters</i> , 2012 , 80, 171-174	3.3	19
80	Gram-scale preparation of surfactant-free, carboxylic acid groups functionalized, individual single-walled carbon nanotubes in aqueous solution. <i>Langmuir</i> , 2010 , 26, 1221-5	4	19
79	Ground states of molecules. XXXI. MINDO/3 study of methylene, nitrenium ion, and oxygen. <i>Journal of the American Chemical Society</i> , 1975 , 97, 4540-4545	16.4	19
78	Organometallic chemistry of graphene: Photochemical complexation of graphene with group 6 transition metals. <i>Carbon</i> , 2018 , 129, 450-455	10.4	19
77	Synthesis of tetrachalcogenide-substituted phenalenyl derivatives: preparation and solid-state characterization of bis(3,4,6,7-tetrathioalkyl-phenalenyl)boron radicals. <i>Journal of the American Chemical Society</i> , 2013 , 135, 12936-9	16.4	18
76	Synthesis, structure, and physical properties of a partial π -stacked phenalenyl-based neutral radical molecular conductor. <i>Chemistry - A European Journal</i> , 2011 , 17, 11576-84	4.8	18
75	Carbon nanotube free-standing membrane as gas diffusion layer in hydrogen fuel cells. <i>Micro and Nano Letters</i> , 2006 , 1, 62	0.9	18
74	Molecular orbital study of the electronic structure and spectrum of rectangular (D _{2h}) cyclobutadiene. <i>Journal of the American Chemical Society</i> , 1975 , 97, 6582-6584	16.4	18
73	Sulfur and selenium substituted spiro-biphenalenyl-boron neutral radicals. <i>Journal of Materials Chemistry</i> , 2012 , 22, 8245		17
72	Chemically engineered single-walled carbon nanotube materials for the electronic detection of hydrogen chloride. <i>Advanced Materials</i> , 2010 , 22, 848-52	24	17

- 71 Magnetically Assembled Multiwalled Carbon Nanotubes on Ferromagnetic Contacts *Journal of Physical Chemistry B*, **2004**, 108, 19818-19824 3.4 17
- 70 Sublimation-assisted graphene transfer technique based on small polyaromatic hydrocarbons. *Nanotechnology*, **2017**, 28, 255701 3.4 16
- 69 Chemically functionalized single-walled carbon nanotubes enhance the glutamate uptake characteristics of mouse cortical astrocytes. *Amino Acids*, **2015**, 47, 1379-88 3.5 16
- 68 Isolation and identification of low molecular weight carboxylated carbons derived from the nitric acid treatment of single-walled carbon nanotubes. *Carbon*, **2011**, 49, 4982-4986 10.4 16
- 67 Enhanced photosensitivity of electro-oxidized epitaxial graphene. *Applied Physics Letters*, **2011**, 98, 093115 3.4 16
- 66 ¹H NMR of C₆₁H₂₆—the aromatic character of C₆₀ upon reduction—view from the bridge of C₆₁H₂. *Chemical Communications*, **1999**, 2411-2412 5.8 16
- 65 The synthesis, characterization, X-ray crystal structure and solution ESR spectrum of the paramagnetic solid, 4,5-bis(trifluoromethyl)-1,2,3-trithiolium hexafluorarsenate: implications for the identity of 1,2-dithietes. *Journal of the Chemical Society Chemical Communications*, **1991**, 358-360 16
- 64 Application of Organometallic Chemistry to the Electrical Interconnection of Graphene Nanoplatelets. *Chemistry of Materials*, **2016**, 28, 2260-2266 9.6 15
- 63 Reversible Grafting of *N*-Naphthylmethyl Radicals to Epitaxial Graphene. *Angewandte Chemie*, **2012**, 124, 4985-4988 3.6 15
- 62 The effect of nitric acid doping on the optical properties of carbon nanotube films. *Physica Status Solidi (B): Basic Research*, **2010**, 247, 2754-2757 1.3 15
- 61 Carbon Nanotube Free-Standing Membrane of Pt/SWNTs as Catalyst Layer in Hydrogen Fuel Cells. *Australian Journal of Chemistry*, **2007**, 60, 528 1.2 15
- 60 Band Structure Engineering by Substitutional Doping in Solid-State Solutions of [5-Me-PLY(O,O)]₂B(1-x)Be(x) Radical Crystals. *Journal of the American Chemical Society*, **2015**, 137, 10000-8 16.4 14
- 59 Synthesis, crystallization, electrochemistry and single crystal X-ray analysis of a methoxy-substituted-tris-phenalenyl based neutral radical. *Journal of Materials Chemistry*, **2011**, 21, 1574-1581 14
- 58 Primary event in the thermal dehydrochlorination of pristine poly(vinyl chloride): intermediacy of a cyclic chloronium ion. *Journal of the American Chemical Society*, **1982**, 104, 5054-5056 16.4 14
- 57 Hexahapto-lanthanide interconnects between the conjugated surfaces of single-walled carbon nanotubes. *Dalton Transactions*, **2014**, 43, 7379-82 4.3 13
- 56 Homoaromatic, nonhomoaromatic, antihomoaromatic, and dihomooaromatic character. *Tetrahedron Letters*, **1974**, 15, 2797-2800 2 13
- 55 Nonlocal spin transport in single-walled carbon nanotube networks. *Physical Review B*, **2012**, 85, 3.3 12
- 54 Wide-range optical spectra of carbon nanotubes: a comparative study. *Physica Status Solidi (B): Basic Research*, **2008**, 245, 2229-2232 1.3 12

53	Phenaleno[1,9-cd][1,2,6]thiadiazinium cation. <i>Journal of Organic Chemistry</i> , 1981 , 46, 675-678	4.2	12
52	MINDO [modified intermediate neglect of differential overlap]/3 study of the multiplicity of cyclopentadienate cations. <i>Journal of the American Chemical Society</i> , 1974 , 96, 255-256	16.4	12
51	Oxidized Graphite Nanoplatelets as an Improved Filler for Thermally Conducting Epoxy-Matrix Composites. <i>Journal of Electronic Packaging, Transactions of the ASME</i> , 2011 , 133,	2	11
50	A 1,2,3,5-dithiadiazolyl dimeric radical cation. Preparation and solid state characterization of 1,3-[(S2N2C)C6H4(CN2S2)]2[Cl]3. <i>CrystEngComm</i> , 2002 , 4, 205	3.3	11
49	Phenalene-phosphazene complexes: effect of exocyclic charge densities on the cyclotriphosphazene ring system. <i>Inorganic Chemistry</i> , 1988 , 27, 1911-1915	5.1	11
48	A polymorph of the 6,13-dichloropentacene organic semiconductor: crystal structure, semiconductor measurements and band structure calculations. <i>CrystEngComm</i> , 2015 , 17, 4172-4178	3.3	10
47	Photochemical generation of bis-hexahapto chromium interconnects between the graphene surfaces of single-walled carbon nanotubes. <i>Materials Horizons</i> , 2015 , 2, 81-85	14.4	10
46	Enhanced Physical Properties in a Pentacene Polymorph. <i>Angewandte Chemie</i> , 2001 , 113, 1782-1786	3.6	10
45	MINDO [modified intermediate neglect of differential overlap]/3 study of the electronic states of methylene. <i>Journal of the American Chemical Society</i> , 1974 , 96, 253-255	16.4	10
44	MINDO/3 calculations of molecular electric polarizabilities. <i>Journal of the Chemical Society Chemical Communications</i> , 1974 , 611		10
43	Hexathiophenalenyliums cations: syntheses, structures, and redox chemistry. <i>Organic Letters</i> , 2013 , 15, 1198-201	6.2	9
42	Synthesis, structure and solid state properties of benzannulated phenalenyl based neutral radical conductor. <i>Journal of Physical Organic Chemistry</i> , 2012 , 25, 566-573	2.1	9
41	The involvement of the cyclobutane ring in homoaromatic conjugation. <i>Tetrahedron Letters</i> , 1974 , 15, 4303-4304	2	9
40	Stereochemical effect of covalent chemistry on the electronic structure and properties of the carbon allotropes and graphene surfaces. <i>Synthetic Metals</i> , 2015 , 210, 80-84	3.6	8
39	Reactivity, spectroscopy, and structure of reduced fullerenes. <i>Carbon</i> , 2000 , 38, 1535-1538	10.4	8
38	The structure of the homotropenylium cation. <i>Tetrahedron Letters</i> , 1975 , 16, 863-866	2	8
37	Electronic structure of the bicyclo[5.4.1]dodecapentaenylium cation. <i>Journal of Organic Chemistry</i> , 1977 , 42, 2017-2019	4.2	8
36	Phenaleno[1,9-cd]dithiolyl: the first example of a monomeric, coplanar, carbon-based free radical. <i>Journal of the Chemical Society Chemical Communications</i> , 1978 , 429		8

35	Effect of constructive rehybridization on transverse conductivity of aligned single-walled carbon nanotube films. <i>Materials Today</i> , 2018 , 21, 937-943	21.8	8
34	Behavior of fluids in nanoscopic space. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004 , 101, 6331-2	11.5	7
33	Electrical Conductivity in TCNQ Salts of Bis(4-dimethylaminophenylimino) sulfur and its Structural Analogues. <i>Molecular Crystals and Liquid Crystals</i> , 1982 , 80, 51-66		6
32	Solution-phase synthesis of chromium-functionalized single-walled carbon nanotubes. <i>Materials Letters</i> , 2015 , 142, 312-316	3.3	5
31	S77e NMR investigation of the field-induced spin-density-wave transitions in (TMTSF) ₂ ClO ₄ . <i>Physical Review B</i> , 2008 , 78,	3.3	5
30	The role of substituents on carbodication stability. <i>Journal of Organic Chemistry</i> , 1990 , 55, 5595-5601	4.2	5
29	Exploring the charge dynamics in graphite nanoplatelets by THz and infrared spectroscopy. <i>New Journal of Physics</i> , 2010 , 12, 113012	2.9	4
28	Raman spectroscopic study of a substituted poly(phosphazene). <i>Polymer Bulletin</i> , 1991 , 25, 351-356	2.4	4
27	Substituent effects on the stability of carbocations. <i>Tetrahedron Letters</i> , 1989 , 30, 2727-2730	2	4
26	Comparative Reaction Diagrams for the SN(2) Reaction Formulated According to the Leffler Analysis and the Hammond Postulate. <i>Journal of Organic Chemistry</i> , 2016 , 81, 3648-53	4.2	4
25	Effect of Lanthanide Metal Complexation on the Properties and Electronic Structure of Single-Walled Carbon Nanotube Films. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 28013-8	9.5	3
24	Formation of Transition Metal Cluster Adducts on the Surface of Single-walled Carbon Nanotubes: HRTEM Studies. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2014 , 22, 47-53	1.8	3
23	Preparation and Properties of Nanocomposites from Pristine and Modified SWCNTs of Comparable Average Aspect Ratios. <i>High Performance Polymers</i> , 2008 , 20, 567-587	1.6	3
22	Iodine charge-transfer salts of bis(1,2,3,5-diselenadiazolyl) diradicals; solid-state characterization of the thiophene- bridged derivative [(Se ₂ N ₂ C) ₄ H ₂ S(CN ₂ Se ₂)] ⁺ [I] ⁻ . <i>Canadian Journal of Chemistry</i> , 1998 , 76, 307-312	0.9	3
21	Origin of the Giant Enhanced Raman Scattering by Sulfur Chains Encapsulated inside Single-Wall Carbon Nanotubes. <i>ACS Nano</i> , 2021 , 15, 8574-8582	16.7	3
20	Realistic Quantum Control of Energy Transfer in Photosynthetic Processes. <i>Energies</i> , 2016 , 9, 1063	3.1	3
19	Effects of Chemically-Functionalized Single-Walled Carbon Nanotubes on the Morphology and Vitality of D54MG Human Glioblastoma Cells. <i>Neuroglia (Basel, Switzerland)</i> , 2018 , 1, 327-338		3
18	Organometallic Chemistry of Carbon Nanotubes and Graphene 2014 , 201-224		2

17	Synthesis, Structure and Solid State Properties of Cyclohexanemethylamine Substituted Phenalenyl Based Molecular Conductor. <i>Crystals</i> , 2012 , 2, 446-465	2.3	2
16	Biofunctionalization of Carbon Nanotubes 2007 ,		2
15	Electronic Structure of the Organic Conductors $\text{ET}_2\text{Cu}(\text{SCN})_2$ and $\text{ET}_2\text{Cu}[\text{N}(\text{CN})_2]\text{Br}$ Studied Using Soft X-ray Absorption and Soft X-ray Emission. <i>Journal of Solid State Chemistry</i> , 1999 , 143, 1-8	3.3	2
14	The Organic Computer. <i>The Sciences</i> , 1983 , 23, 40-44		2
13	Chemically Functionalized Water-Soluble Single-Walled Carbon Nanotubes Obstruct Vesicular/Plasmalemmal Recycling in Astrocytes Down-Stream of Calcium Ions. <i>Cells</i> , 2020 , 9,	7.9	1
12	Effect of functionalization on the electrostatic charging, tunneling, and Raman spectroscopy of epitaxial graphene. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2012 , 30, 03D103	1.3	1
11	Tautomerism and ^1H and ^{13}C NMR assignment of methyl derivatives of 9-hydroxyphenalenone. <i>Magnetic Resonance in Chemistry</i> , 2005 , 43, 1053-6	2.1	1
10	Absolute calibration of microwave loss in ESR spectrometers. <i>Advanced Materials</i> , 1994 , 6, 59-62	24	1
9	Neutron Spectroscopy of Superconducting Fullerides. <i>Materials Research Society Symposia Proceedings</i> , 1992 , 270, 185		1
8	Quantum Transfer Energy and Nonlocal Correlation in a Dimer with Time-Dependent Coupling Effect. <i>International Journal of Theoretical Physics</i> , 2017 , 56, 1417-1428	1.1	
7	Angular and temperature-dependent ^{77}Se NMR in the metallic, SDW, and field-induced spin density wave phases of $(\text{TMTSF})_2\text{X}$. <i>Journal of Physics: Conference Series</i> , 2008 , 132, 012014	0.3	
6	Carbon Nanotube Free-Standing Film of Pt/MWNTs as a Bifunctional Component in Hydrogen Proton Exchange Membrane Fuel Cells. <i>Materials Research Society Symposia Proceedings</i> , 2007 , 1018, 1		
5	Molecular components of the bulk electronic structure of organic conductors: a soft X-ray absorption and soft X-ray emission spectroscopy approach. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 1999 , 101-103, 539-544	1.7	
4	Recent Results in the Preparation of Molecular Conductors Based on P-Type Doped π Radicals. <i>Phosphorus, Sulfur and Silicon and the Related Elements</i> , 1994 , 93, 441-442	1	
3	Preparation, Structure and Chemistry of a Novel, Disjoint Diradical, 4,4'-Bis(1,2,3,5-Dithiadiazolyl). <i>Phosphorus, Sulfur and Silicon and the Related Elements</i> , 1994 , 93, 439-440	1	
2	Carbon Nanotubes: Functionalization 676-688		
1	Synthesis and Characterization of Hexahapto-Chromium Complexes of Single-Walled Carbon Nanotubes 2016 , 87-114		