Karl S Coleman

List of Publications by Year
in descending order

98 papers	5,489 citations	109264 35 h-index	79644 73 g-index
104 all docs	104 docs citations	104 times ranked	7220 citing authors

#	Article	IF	Citations
1	Graphene synthesis: relationship to applications. Nanoscale, 2013, 5, 38-51.	2.8	631
2	Bioelectrochemical Single-Walled Carbon Nanotubes. Journal of the American Chemical Society, 2002, 124, 12664-12665.	6.6	422
3	A manufacturing perspective on graphene dispersions. Current Opinion in Colloid and Interface Science, 2015, 20, 367-382.	3.4	329
4	Chemical and Biochemical Sensing with Modified Single Walled Carbon Nanotubes. Chemistry - A European Journal, 2003, 9, 3732-3739.	1.7	292
5	Capillarity and silver nanowire formation observed in single walled carbon nanotubes. Chemical Communications, 1999, , 699-700.	2.2	263
6	Functionalization of Single-Walled Carbon Nanotubes via the Bingel Reaction. Journal of the American Chemical Society, 2003, 125, 8722-8723.	6.6	250
7	The size distribution, imaging and obstructing properties of C60 and higher fullerenes formed within arc-grown single walled carbon nanotubes. Chemical Physics Letters, 2000, 316, 191-198.	1.2	192
8	Directly observed covalent coupling of quantum dots to single-wall carbon nanotubesElectronic supplementary information (ESI) available: TEM image of SWNTs decorated with silver colloids, and energy dispersive X-ray (EDX) spectrum. See http://www.rsc.org/suppdata/cc/b1/b110690b/. Chemical Communications, 2002, , 366-367.	2.2	172
9	Two layer 4:4 co-ordinated KI crystals grown within single walled carbon nanotubes. Chemical Physics Letters, 2000, 329, 61-65.	1.2	170
10	The relationship between the structure and the performance of Na-W-Mn/SiO2 catalysts for the oxidative coupling of methane. Applied Catalysis A: General, 2002, 225, 271-284.	2.2	138
11	Unweaving the rainbow: a review of the relationship between single-walled carbon nanotube molecular structures and their chemical reactivity. Chemical Society Reviews, 2012, 41, 4409.	18.7	129
12	Graphene Film Growth on Polycrystalline Metals. Accounts of Chemical Research, 2013, 46, 23-30.	7.6	128
13	Methane combustion over supported cobalt catalysts. Journal of Molecular Catalysis A, 2001, 175, 111-123.	4.8	100
14	Effect of carburising agent on the structure of molybdenum carbides. Journal of Materials Chemistry, 2001, 11, 3094-3098.	6.7	96
15	Crystallization of 2H and 4H PbI2in Carbon Nanotubes of Varying Diameters and Morphologies. Chemistry of Materials, 2006, 18, 2059-2069.	3.2	86
16	Catalytic oxidation of alcohols into aldehydes and ketones by an osmium-copper bifunctional system using molecular oxygen. Tetrahedron Letters, 1999, 40, 3723-3726.	0.7	81
17	Pyridine-Functionalized Single-Walled Carbon Nanotubes as Gelators for Poly(acrylic acid) Hydrogels. Journal of the American Chemical Society, 2010, 132, 15814-15819.	6.6	80
18	Silver(i) complex of a new imino-N-heterocyclic carbene and ligand transfer to palladium(ii) and rhodium(i). Dalton Transactions, 2003, , 2917-2922.	1.6	76

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19	1D lanthanide halide crystals inserted into single-walled carbon nanotubes. Chemical Communications, 2000, , 2427-2428.	2.2	73
20	A Stable Crystalline Imino-N-Heterocyclic Carbene Ligand and Its Corresponding Palladium(II) and Rhodium(I) Complexes. Organometallics, 2006, 25, 300-306.	1.1	71
21	Iodination of Single-Walled Carbon Nanotubes. Chemistry of Materials, 2007, 19, 1076-1081.	3.2	71
22	Electron beam induced in situ clusterisation of 1D ZrCl4 chains within single-walled carbon nanotubes. Chemical Communications, 2001, , 845-846.	2.2	61
23	High yield incorporation and washing properties of halides incorporated into single walled carbon nanotubes. Applied Physics A: Materials Science and Processing, 2003, 76, 457-462.	1.1	61
24	Leakage current and charge trapping behavior in TiO[sub 2]âˆ•SiO[sub 2] high-Î¼ gate dielectric stack on 4H-SiC substrate. Journal of Vacuum Science & Technology B, 2007, 25, 217.	1.3	60
25	Fluorescent Single-Walled Carbon Nanotubes Following the 1,3-Dipolar Cycloaddition of Pyridinium Ylides. Journal of the American Chemical Society, 2009, 131, 10670-10676.	6.6	60
26	Simple and scalable route for the â€˜bottom-upâ€™ synthesis of few-layer graphene platelets and thin films. Journal of Materials Chemistry, 2011, 21, 3378.	6.7	56
27	Spatially Controlled Suzuki and Heck Catalytic Molecular Coupling. Journal of the American Chemical Society, 2006, 128, 14135-14141.	6.6	50
28	The Formation of ReS2 Inorganic Fullerene-like Structures Containing Re4 Parallelogram Units and Metalâˆ’Metal Bonds. Journal of the American Chemical Society, 2002, 124, 11580-11581.	6.6	49
29	Spatially Resolved Suzuki Coupling Reaction Initiated and Controlled Using a Catalytic AFM Probe. Journal of the American Chemical Society, 2005, 127, 13082-13083.	6.6	47
30	The superiority of air oxidation over liquid-phase oxidative treatment in the purification of carbon nanotubes. Carbon, 2011, 49, 3031-3038.	5.4	45
31	Synthesis of a new bidentate ferrocenyl N-heterocyclic carbene ligand precursor and the palladium (II) complex trans-[PdCl2(Câˆ§fcâˆ§C)], where (Câˆ§fcâˆ§C)=1,1â€²-di-tert-butyl-3,3â€²-(1,1â€²-dimethyleneferrocenyl)-diimidazol-2-ylidene. Journal of Organometallic Chemistry, 2005, 690, 653-658.	2.8	43
32	Heterogenised N-heterocyclic carbene complexes: synthesis, characterisation and application for hydroformylation and Câ€“C bond formation reactions. Dalton Transactions, 2011, 40, 661-672.	1.6	43
33	Energy-band alignment of HfO2âˆ•SiO2âˆ•SiC gate dielectric stack. Applied Physics Letters, 2008, 92, .	1.5	42
34	Ruthenium and osmium acyl fluoride complexes. Crystal structure of [OC-6-13][RuF2(CO)2(PPh3)2]Â·CD2Cl2. Journal of the Chemical Society Dalton Transactions, 1995, , 1073-1076.	1.1	39
35	Distortion of Chain Conformation and Reduced Entanglement in Polymerâ€“Graphene Oxide Nanocomposites. ACS Macro Letters, 2016, 5, 430-434.	2.3	39
36	A Facile, Solvent-Free, Noncovalent, and Nondisruptive Route To Functionalize Single-Wall Carbon Nanotubes Using Tertiary Phosphines. Chemistry of Materials, 2008, 20, 1705-1709.	3.2	36

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37	Selective Catalytic Oxidation of Alcohols by a Ruthenium-Copper Bifunctional System Using Molecular Oxygen. European Journal of Inorganic Chemistry, 1998, 1998, 1673-1675.	1.0	35
38	Palladium(ii) complexes with the bidentate iminophosphine ligand [Ph2PCH2C(Ph)Ã®â‚¬Ân(2,6-Me2C6H3)]. Dalton Transactions RSC, 2001, , 3384-3395.	2.3	35
39	Synthesis, Structure, and Temperature-Dependent Dynamics of Neutral Palladium Allyl Complexes of Annulated Diaminocarbenes and Their Catalytic Application for Câˆ'C and Câˆ'N Bond Formation Reactions. Organometallics, 2010, 29, 4858-4870.	1.1	35
40	Co-ordination of the chiral N,O-ligand 2-[(1S, 2S, 5R)(âˆ')-menthol]-pyridine to molybdenum(VI) and vanadium(IV) oxo complexes. Polyhedron, 1999, 18, 2533-2536.	1.0	34
41	Electrical investigations of layer-by-layer films of carbon nanotubes. Journal Physics D: Applied Physics, 2006, 39, 3077-3085.	1.3	34
42	Pooleâ€"Frenkel conduction in single wall carbon nanotube composite films built up by electrostatic layer-by-layer deposition. Journal of Applied Physics, 2008, 104, .	1.1	31
43	The electronic fine structure of 4-nitrophenyl functionalized single-walled carbon nanotubes. Nanotechnology, 2009, 20, 155704.	1.3	30
44	Characterization of thermally oxidized Tiâ•SiO2 gate dielectric stacks on 4Hâ€"SiC substrate. Applied Physics Letters, 2006, 88, 072910.	1.5	29
45	Effects of interface engineering for HfO2 gate dielectric stack on 4H-SiC. Journal of Applied Physics, 2007, 102, 024105.	1.1	29
46	A New Route to the Production and Nanoscale Patterning of Highly Smooth, Ultrathin Zirconium Oxide Films. ACS Nano, 2008, 2, 643-650.	7.3	28
47	Influence of catalyst metal particles on the hydrogen sorption of single-walled carbon nanotube materials. Nanotechnology, 2005, 16, 512-517.	1.3	27
48	Formation of 3D graphene foams on soft templated metal monoliths. Nanoscale, 2016, 8, 13303-13310.	2.8	27
49	A nonenolizable imino-N-heterocyclic carbene ligand and corresponding silver (I) metal complex. Journal of Organometallic Chemistry, 2005, 690, 5591-5596.	0.8	26
50	Extrinsic Wrinkling and Single Exfoliated Sheets of Graphene Oxide in Polymer Composites. Chemistry of Materials, 2016, 28, 1698-1704.	3.2	26
51	Exploring the alignment of carbon nanotubes dispersed in a liquid crystal matrix using coplanar electrodes. Journal of Applied Physics, 2015, 117, .	1.1	25
52	Air-stable ruthenium(II) and osmium(II) fluoride complexes. Crystal structures of [OC-6-13][MF2(CO)2(PR3)2] [Mâ€...=â€...Ru, PR3â€...=â€...PEtPh2; Mâ€...=â€...Os, PR3â€...=â€...PPh3 or P(C6H11)3]. Journal of the Chemical Society Dalton Transactions, 1997, , 3557-3562.	1.1	24
53	Stable crystalline annulated diaminocarbenes: coordination with rhodium(i), iridium(i) and catalytic hydroformylation studies. Dalton Transactions, 2009, , 7203.	1.6	24
54	Formylation of single-walled carbon nanotubes. Carbon, 2010, 48, 3412-3419.	5.4	24

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55	Controlled Structure Evolution of Graphene Networks in Polymer Composites. Chemistry of Materials, 2018, 30, 1524-1531.	3.2	24
56	Poly(ethylene) Glycol/Single-Walled Carbon Nanotube Composites. Journal of Nanoscience and Nanotechnology, 2008, 8, 4013-4016.	0.9	23
57	A Statistical Approach to Raman Analysis of Graphene-Related Materials: Implications for Quality Control. ACS Applied Nano Materials, 2020, 3, 11229-11239.	2.4	20
58	Catalytic Combustion of Methane over Cobaltâ€“Magnesium Oxide Solid Solution Catalysts. Catalysis Letters, 2001, 75, 65-71.	1.4	18
59	New cationic palladium (II) and rhodium (I) complexes of [Ph2PCH2C(Ph)N(2,6-Me2C6H3)]. Journal of Organometallic Chemistry, 2005, 690, 1645-1658.	0.8	18
60	Temperature dependent shape transformation of Ge nanostructures by the vapor-liquid-solid method. Journal of Applied Physics, 2007, 101, 074307.	1.1	18
61	Synthesis and characterisation of ruthenium carbonyl fluorides. Journal of the Chemical Society Dalton Transactions, 1997, , 1713-1718.	1.1	17
62	Routes to Ruthenium-Fluoro Cations of the Type [RuL2(CO)nF]+ (n = 2,3; L = PR3, NHC): A Play-Off between Solvent, L and Weakly Coordinating Anion. European Journal of Inorganic Chemistry, 2010, 2010, 4130-4138.	1.0	17
63	Reaction of ruthenium(II) and osmium(II) hydrides with anhydrous HF. Journal of the Chemical Society Dalton Transactions, 1997, , 4555-4560.	1.1	16
64	New group 10 complexes of the bulky iminophosphine ligands [Ph2PCH2C(Ph)î€N(2,6-R2C6H3)], where R = Me,iPr. New Journal of Chemistry, 2005, 29, 385-397.	1.4	15
65	Pentafluorophenylphosphine complexes of rhodium(I): extended X-ray absorption fine structure studies of [{Rh[PPhx(C6F5)3 â€“x]2(Âµ-Cl)}n](x= 0â€“2) and [{Rh[(C6F5)2PCH2CH2P(C6F5)2](Âµ-Cl)}2]. Crystal structures of [RhCl(PPh3){(C6F5)2PCH2CH2P(C6F5)2}]Â·C4H8O and (C6F5)2PCH2CH2P(C6F5)2. Journal of the Chemical Society Dalton Transactions, 1995, , 4029-4037.	1.1	14
66	Memory effects in MIS structures based on silicon and polymethylmethacrylate with nanoparticle charge-storage elements. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2009, 159-160, 14-17.	1.7	14
67	Cobalt nanoparticle catalysed graphitization and the effect of metal precursor decomposition temperature. Materials Advances, 0, , .	2.6	14
68	Reactions of iridium and rhodium hydrides with anhydrous HF; crystal structure of [Rh(CO)(PPh3)3][BF4] Â· thf. Journal of Fluorine Chemistry, 1998, 91, 207-211.	0.9	12
69	A new synthetic route to [MF(Î¼-F)(CO)3]4 (M=Ru, Os) and their reactivity with P(C6H4-4-X)3 (X=OCH3,) Tj ETQq1 1 0.7843]4 rgBT	0.9	12
70	Ester-functionalized single-walled carbon nanotubes via addition of haloformates. Journal of Materials Science, 2014, 49, 5190-5198.	1.7	11
71	Sensing properties of light-emitting single walled carbon nanotubes prepared via click chemistry of ylides bound to the nanotube surface. RSC Advances, 2015, 5, 36865-36873.	1.7	11
72	Probing the Selectivity of Azomethine Imine Cycloaddition to Singleâ€Walled Carbon Nanotubes by Resonance Raman Spectroscopy. Chemistry - an Asian Journal, 2012, 7, 2925-2930.	1.7	10

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73	Synthesis and characterization of a substituted indolizine and investigation of its photoluminescence quenching via electron deficient nitroaromatics. Arkivoc, 2014, 2014, 362-371.	0.3	10
74	Tris(2,6-difluorophenyl)phosphite complexes of platinum group metals: Structure of trans-PtCl2(PEt3){P(O-2,6-C6H3F2)3}. Polyhedron, 1995, 14, 2107-2113.	1.0	9
75	Synthesis and characterisation of [OC-6-33][OsCl2(CO)2L2] (L=phosphine). Crystal structure of [OC-6-33][OsCl2(CO)2(PEt3)2]. Polyhedron, 1999, 18, 1207-1210.	1.0	8
76	Synthesis of a new zwitterionic cyclopentadienyl-imidazolium compound and isolation of the 3,3â€²-(trans-3,5-cyclopentenyl)di(1-tert-butylimidazolium)bromide intermediate. Tetrahedron Letters, 2004, 45, 8695-8698.	0.7	8
77	A theoretical and experimental exploration of the mechanism ofÂmicrowave assisted 1,3-dipolar cycloaddition of pyridinium ylides to single walled carbon nanotubes. Materials Chemistry and Physics, 2014, 145, 99-107.	2.0	8
78	Gram-scale production of nitrogen doped graphene using a 1,3-dipolar organic precursor and its utilisation as a stable, metal free oxygen evolution reaction catalyst. Chemical Communications, 2017, 53, 7748-7751.	2.2	8
79	Synthesis and Characterization of Molecularly-Bridged Single-Walled Carbon Nanotubes and Electrical Properties of Their Films. Science of Advanced Materials, 2013, 5, 1967-1973.	0.1	6
80	Catalytic oxidation of alcohols to aldehydes or ketones using osmiumâ€“oxo complexes with sulfoxides or N-methylmorpholine-N-oxide as the co-oxidant: a comparative study. Comptes Rendus De L'Academie Des Sciences - Series IIc: Chemistry, 2000, 3, 765-769.	0.1	5
81	Tungstate sharpening: A versatile method for extending the profile of ultra sharp tungsten probes. Review of Scientific Instruments, 2013, 84, 035107.	0.6	5
82	Platinum(II)â€Coordinated Pyridineâ€Functionalized Singleâ€Wall Carbon Nanotubes and Electron Transport in Their Films. ChemNanoMat, 2015, 1, 353-358.	1.5	5
83	Carbon Nanotubes: Electronic Structure and Spectroscopy. , 2019, , 205-218.		5
84	Silicon containing ferrocenyl phosphane ligands. Journal of Organometallic Chemistry, 2004, 689, 770-774.	0.8	4
85	Nanotubes. Annual Reports on the Progress of Chemistry Section A, 2012, 108, 478.	0.8	4
86	Nanotubes. Annual Reports on the Progress of Chemistry Section A, 2007, 103, 392.	0.8	3
87	Nanotubes. Annual Reports on the Progress of Chemistry Section A, 2008, 104, 379.	0.8	3
88	Formylation of Single-Walled Carbon Nanotubes. Journal of Nanoscience and Nanotechnology, 2012, 12, 2929-2933.	0.9	3
89	Study of the Preparation and Catalytic Performance of Molybdenum Carbide Catalysts Prepared with C2H2/H2 Carburizing Mixture. Journal of Catalysis, 2002, 211, 183-191.	3.1	2
90	Nanotubes. Annual Reports on the Progress of Chemistry Section A, 2009, 105, 382.	0.8	2

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91	Graphene oxide nanocapsules within silanized hydrogels suitable for electrochemical pseudocapacitors. Chemical Communications, 2015, 51, 10345-10348.	2.2	2
92	Functionalization of Single-Wall Carbon Nanotubes with Quantum Dots and Proteins. AIP Conference Proceedings, 2002, , .	0.3	0
93	Chemical and Biochemical Sensing with Modified Single Walled Carbon Nanotubes. ChemInform, 2003, 34, no.	0.1	0
94	Characteristics of Thermally Oxidized-Ti as a High-k Gate Dielectric on SiC Metal-Oxide-Semiconductor Devices. ECS Transactions, 2006, 1, 33-40.	0.3	0
95	Impact of Interfacial Nitridation of HfO2 High-k Gate Dielectric Stack on 4H-SiC. Materials Research Society Symposia Proceedings, 2007, 996, 1.	0.1	0
96	Nanotubes. Annual Reports on the Progress of Chemistry Section A, 2010, 106, 376.	0.8	0
97	Nanotubes. Annual Reports on the Progress of Chemistry Section A, 2011, 107, 490.	0.8	0
98	Controlled electrosharpening of tungsten probes. , 2012, , .		0