Gregory George Wildgoose

List of Publications by Year in Descending Order

98 papers	6,538 citations	39 h-index	80 g-index
102 ext. papers	6,877 ext. citations	6.2 avg, IF	5.72 L-index

#	Paper	IF	Citations
98	A New Mode of Chemical Reactivity for Metal-Free Hydrogen Activation by Lewis Acidic Boranes. *Angewandte Chemie*, **2019**, 131, 8450	3.6	
97	A New Mode of Chemical Reactivity for Metal-Free Hydrogen Activation by Lewis Acidic Boranes. *Angewandte Chemie - International Edition*, **2019**, 58, 8362-8366	16.4	11
96	"Janus" Calixarenes: Double-Sided Molecular Linkers for Facile, Multianchor Point, Multifunctional, Surface Modification. *Langmuir*, **2016**, 32, 7806-13	4	18
95	Metal-free electrocatalytic hydrogen oxidation using frustrated Lewis pairs and carbon-based Lewis acids. *Chemical Science*, **2016**, 7, 2537-2543	9.4	21
94	Exploring structural and electronic effects in three isomers of tris{bis(trifluoromethyl)phenyl}borane: towards the combined electrochemical-frustrated Lewis pair activation of H2. *Dalton Transactions*, **2016**, 45, 6023-31	4.3	29
93	Novel B(Ar')2(Ar'') hetero-tri(aryl)boranes: a systematic study of Lewis acidity. *Dalton Transactions*, **2016**, 45, 6032-43	4.3	34
92	H2 activation using the first 1 : 1 : 1 hetero-tri(aryl)borane. *RSC Advances*, **2016**, 6, 42421-42427	3.7	10
91	Teaching old compounds new tricks: efficient N2 fixation by simple Fe(N2)(diphosphine)2 complexes. *Dalton Transactions*, **2016**, 45, 7550-4	4.3	35
90	Investigations into the Speciation of Inorganic Arsenic in Weakly Alkaline Medium by Voltammetry. *Electroanalysis*, **2015**, 27, 890-901	3	5
89	Synthesis, Photochemical, and Redox Properties of Gold(I) and Gold(III) Pincer Complexes Incorporating a 2,2':6',2"-Terpyridine Ligand Framework. *Inorganic Chemistry*, **2015**, 54, 10667-77	5.1	22
88	Facile Protocol for Water-Tolerant "Frustrated Lewis Pair"-Catalyzed Hydrogenation. *ACS Catalysis*, **2015**, 5, 5540-5544	13.1	87
87	A combined "electrochemical-frustrated lewis pair" approach to hydrogen activation: surface catalytic effects at platinum electrodes. *Chemistry - A European Journal*, **2015**, 21, 900-6	4.8	12
86	The formazanate ligand as an electron reservoir: bis(formazanate) zinc complexes isolated in three redox states. *Angewandte Chemie - International Edition*, **2014**, 53, 4118-22	16.4	83
85	An electrochemical study of frustrated Lewis pairs: a metal-free route to hydrogen oxidation. *Journal of the American Chemical Society*, **2014**, 136, 6031-6	16.4	47
84	The Formazanate Ligand as an Electron Reservoir: Bis(Formazanate) Zinc Complexes Isolated in Three Redox States. *Angewandte Chemie*, **2014**, 126, 4202-4206	3.6	21
83	Cymantrene□Triazole □click□Products: Structural Characterization and Electrochemical Properties. *Organometallics*, **2014**, 33, 4687-4696	3.8	15
82	Metal-Free Dihydrogen Oxidation by a Borenium Cation: A Combined Electrochemical/Frustrated Lewis Pair Approach. *Angewandte Chemie*, **2014**, 126, 10080-10083	3.6	9

81	Metal-free dihydrogen oxidation by a borenium cation: a combined electrochemical/frustrated Lewis pair approach. *Angewandte Chemie - International Edition*, **2014**, 53, 9922-5	16.4	26
80	Innenrücktitelbild: The Formazanate Ligand as an Electron Reservoir: Bis(Formazanate) Zinc Complexes Isolated in Three Redox States (Angew. Chem. 16/2014). *Angewandte Chemie*, **2014**, 126, 4335-4335	3.6	
79	Synthesis and characterization of redox active cyrhetrene–triazole click products. *Journal of Organometallic Chemistry*, **2014**, 770, 29-34	2.3	6
78	Electrochemistry of Au(II) and Au(III) pincer complexes: determination of the Au(II)-Au(II) bond energy. *Chemical Communications*, **2013**, 49, 10169-71	5.8	26
77	Exploring the fate of the tris(pentafluorophenyl)borane radical anion in weakly coordinating solvents. *Dalton Transactions*, **2013**, 42, 782-9	4.3	52
76	Adsorption of bismuth ions on graphite chemically modified with gallic acid. *Physical Chemistry Chemical Physics*, **2012**, 14, 10027-31	3.6	7
75	Synthesis and characterization of carbon nanotubes covalently functionalized with amphiphilic polymer coated superparamagnetic nanocrystals. *Journal of Colloid and Interface Science*, **2012**, 383, 110-7	9.3	13
74	Separating electrophilicity and Lewis acidity: the synthesis, characterization, and electrochemistry of the electron deficient tris(aryl)boranes B(C6F5)(3-n)(C6Cl5)n (n = 1-3). *Journal of the American Chemical Society*, **2011**, 133, 14727-40	16.4	125
73	3-Aryl-3-(trifluoromethyl)diazirines as Versatile Photoactivated Linker Molecules for the Improved Covalent Modification of Graphitic and Carbon Nanotube Surfaces. *Chemistry of Materials* , **2011**, 23, 3740-3751	9.6	30
72	Enabling electrochemical studies of chemically-modified carbon nanotubes in non-aqueous electrolytes using superparamagnetic nanoparticle-nanotube composites co-modified by diazirine molecular wires. *Electrochemistry Communications*, **2011**, 13, 1139-1142	5.1	9
71	A G Stromberg First Class Scientist, Second Class Citizen **2011**,		5
70	Nickel(II) tetra-aminophthalocyanine modified MWCNTs as potential nanocomposite materials for the development of supercapacitors. *Energy and Environmental Science*, **2010**, 3, 228-236	35.4	131
69	Generator-collector experiments at a single electrode: exploring the general applicability of this approach by comparing the performance of surface immobilized versus solution phase sensing molecules. *Langmuir*, **2010**, 26, 1340-6	4	12
68	Building block syntheses of gallic acid monomers and tris-(O-gallyl)-gallic acid dendrimers chemically attached to graphite powder: a comparative study of their uptake of Al(III) ions. *Langmuir*, **2010**, 26, 1776-85	4	15
67	Bis(permethylpentalene)uranium. *Dalton Transactions*, **2010**, 39, 6789-93	4.3	21
66	Metallic nanoparticles deposited on carbon microspheres: novel materials for combinatorial electrochemistry and electroanalysis. *Journal of Nanoscience and Nanotechnology*, **2009**, 9, 2274-82	1.3	16
65	The electroreduction of C60 Films in aqueous electrolyte does not lead to alkali metal ion insertion Evidence for the involvement of adventitious poly-epoxidated C60 (C60On). *Sensors and Actuators B: Chemical*, **2009**, 138, 397-401	8.5	32
64	The physicochemical aspects of DNA sensing using electrochemical methods. *Biosensors and Bioelectronics*, **2009**, 24, 3183-90	11.8	76

63	Using multiwalled carbon nanotube modified electrodes for the adsorptive striping voltammetric determination of hesperidin. *Electrochimica Acta*, **2009**, 54, 5030-5034	6.7	49
62	Exploring the origins of the apparent 'electrocatalysis' observed at C60 film-modified electrodes. *Sensors and Actuators B: Chemical*, **2009**, 138, 524-531	8.5	65
61	Generator/Collector Experiments with a Single Electrode: Introduction and Application to Exploring the Oxidation Mechanism of Serotonin. *Journal of Physical Chemistry C*, **2009**, 113, 14285-14289	3.8	15
60	Characterising chemical functionality on carbon surfaces. *Journal of Materials Chemistry*, **2009**, 19, 4875		71
59	Carbon nanotube-based electrochemical sensors for quantifying the 'heat' of chilli peppers: the adsorptive stripping voltammetric determination of capsaicin. *Analyst, The*, **2008**, 133, 888-95	5	126
58	Gold Nanoparticle-Modified Carbon Nanotubes-Modified Electrodes. Using Voltammetry to Measure the Total Length of the Nanotubes. *Journal of Physical Chemistry C*, **2008**, 112, 1933-1937	3.8	18
57	The contrasting behaviour of polycrystalline bulk gold and gold nanoparticle modified electrodes towards the underpotential deposition of thallium. *New Journal of Chemistry*, **2008**, 32, 941	3.6	16
56	Homoleptic permethylpentalene complexes: "double metallocenes" of the first-row transition metals. *Journal of the American Chemical Society*, **2008**, 130, 15662-77	16.4	80
55	Unusual Voltammetry of the Reduction of O2 in [C4dmim][N(Tf)2] Reveals a Strong Interaction of O2 with the [C4dmim]+ Cation. *Journal of Physical Chemistry C*, **2008**, 112, 13709-13715	3.8	77
54	Removal of palladium ions from aqueous systems by chemically modified cysteine carbon powder. *Journal of Materials Chemistry*, **2008**, 18, 3948		12
53	Investigating the voltammetric reduction of methylviologen at gold and carbon based electrode materials. Evidence for a surface bound adsorption mechanism leading to electrode 'protection' using multi-walled carbon nanotubes. *New Journal of Chemistry*, **2008**, 32, 1628	3.6	20
52	Electrochemical Opening of Single-Walled Carbon Nanotubes Filled with Metal Halides and with Closed Ends. *Journal of Physical Chemistry C*, **2008**, 112, 10389-10397	3.8	46
51	Developing Random Network Theory for Carbon Nanotube Modified Electrode Voltammetry: Introduction and Application to Estimating the Potential Drop between MWCNT/MWCNT Contacts. *Journal of Physical Chemistry C*, **2008**, 112, 13729-13738	3.8	15
50	Copper oxide nanoparticle impurities are responsible for the electroanalytical detection of glucose seen using multiwalled carbon nanotubes. *Sensors and Actuators B: Chemical*, **2008**, 132, 356-360	8.5	146
49	The use of copper(II) oxide nanorod bundles for the non-enzymatic voltammetric sensing of carbohydrates and hydrogen peroxide. *Sensors and Actuators B: Chemical*, **2008**, 135, 230-235	8.5	167
48	The influence of edge-plane defects and oxygen-containing surface groups on the voltammetry of acid-treated, annealed and 'super-annealed' multiwalled carbon nanotubes. *Journal of Solid State Electrochemistry*, **2008**, 12, 1337-1348	2.6	95
47	A mechanistic investigation into the covalent chemical derivatisation of graphite and glassy carbon surfaces using aryldiazonium salts. *Journal of Physical Organic Chemistry*, **2008**, 21, 433-439	2.1	56
46	Fabricating random arrays of boron doped diamond nano-disc electrodes: Towards achieving maximum Faradaic current with minimum capacitive charging. *Sensors and Actuators B: Chemical*, **2008**, 133, 118-127	8.5	23

45	Cyclic voltammetry on electrode surfaces covered with porous layers: An analysis of electron transfer kinetics at single-walled carbon nanotube modified electrodes. *Sensors and Actuators B: Chemical*, **2008**, 133, 462-466	8.5	352
44	Design, fabrication, characterisation and application of nanoelectrode arrays. *Chemical Physics Letters*, **2008**, 459, 1-17	2.5	107
43	Sensitive adsorptive stripping voltammetric determination of paracetamol at multiwalled carbon nanotube modified basal plane pyrolytic graphite electrode. *Analytica Chimica Acta*, **2008**, 618, 54-60	6.6	224
42	Sensitive electrochemical detection of arsenic (III) using gold nanoparticle modified carbon nanotubes via anodic stripping voltammetry. *Analytica Chimica Acta*, **2008**, 620, 44-9	6.6	167
41	Direct electrochemistry of horseradish peroxidase immobilized in a chitosan-[C4mim][BF4] film: determination of electrode kinetic parameters. *Bioelectrochemistry*, **2008**, 74, 183-7	5.6	23
40	The influence of substrate effects when investigating new nanoparticle modified electrodes exemplified by the electroanalytical determination of aspirin on NiO nanoparticles supported on graphite. *Electrochemistry Communications*, **2008**, 10, 1129-1131	5.1	15
39	An electrochemical comparison of manganese dioxide microparticles versus □ and □ manganese dioxide nanorods: mechanistic and electrocatalytic behaviour. *New Journal of Chemistry*, **2008**, 32, 1195	3.6	40
38	Identifying quinone-like species on the surface of graphitic carbon and multi-walled carbon nanotubes using reactions with 2,4-dinitrophenylhydrazine to provide a voltammetric fingerprint. *New Journal of Chemistry*, **2007**, 31, 958	3.6	40
37	The expansion/contraction of gold microparticles during voltammetrically induced amalgamation leads to mechanical instability. *New Journal of Chemistry*, **2007**, 31, 2071	3.6	24
36	Voltammetric and X-ray photoelectron spectroscopic fingerprinting of carboxylic acid groups on the surface of carbon nanotubes via derivatisation with arylnitro labels. *Journal of Materials Chemistry*, **2007**, 17, 3515		59
35	A New Method of Studying Ion Transfer at Liquid|Liquid Phase Boundaries Using a Carbon Nanotube Paste Electrode with a Redox Active Binder. *Journal of Physical Chemistry C*, **2007**, 111, 18353-18360	3.8	11
34	Investigating the thermodynamic causes behind the anomalously large shifts in pKa values of benzoic acid-modified graphite and glassy carbon surfaces. *Langmuir*, **2007**, 23, 7847-52	4	50
33	The voltammetric determination of peroxynitrite at a mercury film electrode. *New Journal of Chemistry*, **2007**, 31, 394	3.6	9
32	Contrasting pKa of protonated bis(3-aminopropyl)-terminated polyethylene glycol "Jeffamine" and the associated thermodynamic parameters in solution and covalently attached to graphite surfaces. *Chemistry - A European Journal*, **2007**, 13, 9663-7	4.8	20
31	Investigating the reactive sites and the anomalously large changes in surface pKa values of chemically modified carbon nanotubes of different morphologies. *Journal of Materials Chemistry*, **2007**, 17, 2616		44
30	A facile method of modifying graphite powder with aminophenyl groups in bulk quantities. *Journal of Materials Chemistry*, **2007**, 17, 3008		38
29	Differentiating between ortho- and para-Quinone Surface Groups on Graphite, Glassy Carbon, and Carbon Nanotubes Using Organic and Inorganic Voltammetric and X-ray Photoelectron Spectroscopy Labels. *Chemistry of Materials*, **2007**, 19, 4964-4974	9.6	48
28	Mathematical modelling and simulation of adsorption processes at spherical microparticles. *ChemPhysChem*, **2006**, 7, 697-703	3.2	5

27	The theory of non-Cottrellian diffusion on the surface of a sphere or truncated sphere. *ChemPhysChem*, **2006**, 7, 1328-36	3.2	18
26	The thermodynamics of sequestration of toxic copper(II) metal ion pollutants from aqueous media by L-cysteine methyl ester modified glassy carbon spheres. *Journal of Materials Chemistry*, **2006**, 16, 970		27
25	Designer interfaces: diffusional protection of electrodes using chemical architectures. *Journal of Materials Chemistry*, **2006**, 16, 4103		5
24	Designer electrode interfaces simultaneously comprising three different metal nanoparticle (Au, Ag, Pd)/carbon microsphere/carbon nanotube composites: progress towards combinatorial electrochemistry. *Analyst, The*, **2006**, 131, 1241-7	5	39
23	Electroanalysis using macro-, micro-, and nanochemical architectures on electrode surfaces. Bulk surface modification of glassy carbon microspheres with gold nanoparticles and their electrical wiring using carbon nanotubes. *Analytical Chemistry*, **2006**, 78, 6102-8	7.8	165
22	Apparent 'electrocatalytic' activity of multiwalled carbon nanotubes in the detection of the anaesthetic halothane: occluded copper nanoparticles. *Analyst, The*, **2006**, 131, 901-6	5	130
21	Multiwalled carbon nanotubes with molybdenum dioxide nanoplugs--new chemical nanoarchitectures by electrochemical modification. *Small*, **2006**, 2, 95-8	11	27
20	Metal nanoparticles and related materials supported on carbon nanotubes: methods and applications. *Small*, **2006**, 2, 182-93	11	885
19	Removal of toxic metal-ion pollutants from water by using chemically modified carbon powders. *Chemistry - an Asian Journal*, **2006**, 1, 614-22	4.5	23
18	Chemically Modified Carbon Nanotubes for Use in Electroanalysis. *Mikrochimica Acta*, **2006**, 152, 187-214	5.8	295
17	Cysteine methyl ester modified glassy carbon spheres for removal of toxic heavy metals from aqueous media. *Chemical Communications*, **2005**, 3694-6	5.8	39
16	Graphite powder derivatised with poly-L-cysteine using 'building-block' chemistry: a novel material for the extraction of heavy metal ions. *Journal of Materials Chemistry*, **2005**, 15, 2375		49
15	4-Nitrobenzylamine partially intercalated into graphite powder and multiwalled carbon nanotubes: characterization using X-ray photoelectron spectroscopy and in situ atomic force microscopy. *Langmuir*, **2005**, 21, 4584-91	4	22
14	Electrochemical ESR and voltammetric studies of lithium ion pairing with electrogenerated 9,10-anthraquinone radical anions either free in acetonitrile solution or covalently bound to multiwalled carbon nanotubes. *Journal of Physical Chemistry B*, **2005**, 109, 3971-8	3.4	70
13	X-Ray photoelectron spectroscopy studies of graphite powder and multiwalled carbon nanotubes covalently modified with Fast Black K: evidence for a chemical release mechanism via electrochemical reduction. *Journal of Materials Chemistry*, **2005**, 15, 953		32
12	Electrocatalysis at graphite and carbon nanotube modified electrodes: edge-plane sites and tube ends are the reactive sites. *Chemical Communications*, **2005**, 829-41	5.8	853
11	Graphite powder and multiwalled carbon nanotubes chemically modified with 4-nitrobenzylamine. *ChemPhysChem*, **2005**, 6, 352-62	3.2	49
10	Multiwalled carbon nanotubes covalently modified with fast black K. *ChemPhysChem*, **2005**, 6, 590-5	3.2	18

9	Electrocatalysis at Graphite and Carbon Nanotube Modified Electrodes: Edge-Plane Sites and Tube Ends Are the Reactive Sites. *ChemInform*, **2005**, 36, no		4
8	Evaluation of a novel pad printing technique for the fabrication of disposable electrode assemblies. *Sensors and Actuators B: Chemical*, **2005**, 107, 491-496	8.5	18
7	A sensitive reagentless pH probe with a ca. 120 mV/pH unit response. *Journal of Solid State Electrochemistry*, **2004**, 8, 718	2.6	37
6	Abrasively immobilised multiwalled carbon nanotube agglomerates: a novel electrode material approach for the analytical sensing of pH. *ChemPhysChem*, **2004**, 5, 669-77	3.2	38
5	Chemical derivatisation of multiwalled carbon nanotubes using diazonium salts. *ChemPhysChem*, **2004**, 5, 1794-9	3.2	79
4	Derivatised carbon powder electrodes: reagentless pH sensors. *Talanta*, **2004**, 63, 1039-51	6.2	83
3	Anthraquinone-derivatised carbon powder: reagentless voltammetric pH electrodes. *Talanta*, **2003**, 60, 887-93	6.2	93
2	Characterisation and application of a novel cell for mechanistic electrochemistry at elevated temperatures. *Physical Chemistry Chemical Physics*, **2003**, 5, 4219	3.6	5
1	Carbon Nanotube**B**ased Sensors and Biosensors1-37		