Robert H Hurt

List of Publications by Year in Descending Order

75 papers	8,438 citations	38 h-index	81 g-index
81 ext. papers	9,252 ext. citations	11 avg, IF	6.33 L-index

#	Paper	IF	Citations
75	Controlling pore structure and conductivity in graphene nanosheet films through partial thermal exfoliation. *Carbon*, **2021**, 174, 227-239	10.4	4
74	An all-inorganic, fully dense, stretchable ceramic magnetic film. *Nanoscale Advances*, **2021**, 3, 800-804	5.1	
73	Shear Failure in Supported Two-Dimensional Nanosheet Van der Waals Thin Films. *Carbon*, **2021**, 173, 410-418	10.4	0
72	Manganese dioxide nanosheets induce mitochondrial toxicity in fish gill epithelial cells. *Nanotoxicology*, **2021**, 15, 400-417	5.3	2
71	Controlling nanochannel orientation and dimensions in graphene-based nanofluidic membranes. *Nature Communications*, **2021**, 12, 507	17.4	14
70	A graphene-based hydrogel monolith with tailored surface chemistry for PFAS passive sampling.. *Environmental Science: Nano*, **2021**, 8, 2894-2907	7.1	3
69	Chemical and Colloidal Dynamics of MnO Nanosheets in Biological Media Relevant for Nanosafety Assessment. *Small*, **2020**, 16, e2000303	11	9
68	Pillared graphene oxide composite as an adsorbent of soluble hydrocarbons in water: pH and organic matter effects. *Journal of Environmental Management*, **2020**, 259, 110044	7.9	9
67	Mosquito bite prevention through graphene barrier layers. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 18304-18309	11.5	9
66	A novel human 3D lung microtissue model for nanoparticle-induced cell-matrix alterations. *Particle and Fibre Toxicology*, **2019**, 16, 15	8.4	17
65	Improved reductive transformation of iopromide by magnetite containing reduced graphene oxide nanosacks as electron shuttles. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2019**, 566, 188-195	5.1	3
64	A carbon science perspective in 2018: Current achievements and future challenges. *Carbon*, **2018**, 132, 785-801	10.4	59
63	The asbestos-carbon nanotube analogy: An update. *Toxicology and Applied Pharmacology*, **2018**, 361, 68-80	4.6	52
62	Novel application of magnetic nano-carbon composite as redox mediator in the reductive biodegradation of iopromide in anaerobic continuous systems. *Applied Microbiology and Biotechnology*, **2018**, 102, 8951-8961	5.7	10
61	Impact of emerging, high-production-volume graphene-based materials on the bioavailability of benzo(a)pyrene to brine shrimp and fish liver cells. *Environmental Science: Nano*, **2018**, 5, 2144-2161	7.1	2
60	Ultrastretchable Graphene-Based Molecular Barriers for Chemical Protection, Detection, and Actuation. *ACS Nano*, **2018**, 12, 234-244	16.7	32
59	Graphene Inks as Versatile Templates for Printing Tiled Metal Oxide Crystalline Films. *Advanced Materials*, **2018**, 30, 1705080	24	19

58	Biodissolution and Cellular Response to MoO3 Nanoribbons and a New Framework for Early Hazard Screening for 2D Materials. *Environmental Science: Nano*, **2018**, 5, 2545-2559	7.1	15
57	From Flatland to Spaceland: Higher Dimensional Patterning with Two-Dimensional Materials. *Advanced Materials*, **2017**, 29, 1605096	24	59
56	Breathable Vapor Toxicant Barriers Based on Multilayer Graphene Oxide. *ACS Nano*, **2017**, 11, 5670-5679	16.7	56
55	Oxidation suppression during hydrothermal phase reversion allows synthesis of monolayer semiconducting MoS in stable aqueous suspension. *Nanoscale*, **2017**, 9, 5398-5403	7.7	23
54	Influence of External Heating Rate on the Structure and Porosity of Thermally Exfoliated Graphite Oxide. *Carbon*, **2017**, 111, 651-657	10.4	29
53	Wrinkled, wavelength-tunable graphene-based surface topographies for directing cell alignment and morphology. *Carbon*, **2016**, 97, 14-24	10.4	82
52	Hierarchical Metal Oxide Topographies Replicated from Highly Textured Graphene Oxide by Intercalation Templating. *ACS Nano*, **2016**, 10, 10869-10879	16.7	43
51	Nanomechanical mechanism for lipid bilayer damage induced by carbon nanotubes confined in intracellular vesicles. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 12374-12379	11.5	89
50	Multiscale Graphene Topographies Programmed by Sequential Mechanical Deformation. *Advanced Materials*, **2016**, 28, 3564-71	24	86
49	Chemical Dissolution Pathways of MoS2 Nanosheets in Biological and Environmental Media. *Environmental Science & Technology*, **2016**, 50, 7208-17	10.3	142
48	Three-Dimensional Graphene-Based Microbarriers for Controlling Release and Reactivity in Colloidal Liquid Phases. *ACS Nano*, **2016**, 10, 2268-76	16.7	23
47	Thermochemistry and kinetics of graphite oxide exothermic decomposition for safety in large-scale storage and processing. *Carbon*, **2016**, 96, 20-28	10.4	62
46	Biological and environmental interactions of emerging two-dimensional nanomaterials. *Chemical Society Reviews*, **2016**, 45, 1750-80	58.5	168
45	Graphene Topographies: Multiscale Graphene Topographies Programmed by Sequential Mechanical Deformation (Adv. Mater. 18/2016). *Advanced Materials*, **2016**, 28, 3603-3603	24	3
44	Supramolecular Synthesis of Graphenic Mesogenic Materials **2016**, 69-85		
43	Crumpled graphene nanoreactors. *Nanoscale*, **2015**, 7, 10267-78	7.7	19
42	Porous Structures in Stacked, Crumpled and Pillared Graphene-Based 3D Materials. *Carbon*, **2014**, 66, 476-484	10.4	91
41	Highly conductive graphene-based segregated composites prepared by particle templating. *Journal of Materials Science*, **2014**, 49, 2567-2570	4.3	7

40	Two-dimensional materials as emulsion stabilizers: interfacial thermodynamics and molecular barrier properties. *Langmuir*, **2014**, 30, 3687-96	4	79
39	Antioxidant chemistry of graphene-based materials and its role in oxidation protection technology. *Nanoscale*, **2014**, 6, 11744-55	7.7	237
38	Explosive thermal reduction of graphene oxide-based materials: mechanism and safety implications. *Carbon*, **2014**, 72, 215-223	10.4	122
37	Effects of surface-engineered nanoparticle-based dispersants for marine oil spills on the model organism Artemia franciscana. *Environmental Science & Technology*, **2014**, 48, 6419-27	10.3	34
36	Biological and environmental transformations of copper-based nanomaterials. *ACS Nano*, **2013**, 7, 8715-27	16.7	180
35	Graphene microsheets enter cells through spontaneous membrane penetration at edge asperities and corner sites. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 12295-300	11.5	564
34	Engineering of Graphene Layer Orientation to Attain High Rate Capability and Anisotropic Properties in Li-Ion Battery Electrodes. *Advanced Functional Materials*, **2013**, 23, 2397-2404	15.6	47
33	Graphene-Induced Adsorptive and Optical Artifacts During In Vitro Toxicology Assays. *Small*, **2013**, 9, 1921-1927	11	37
32	Encapsulation of particle ensembles in graphene nanosacks as a new route to multifunctional materials. *ACS Nano*, **2013**, 7, 3744-53	16.7	66
31	Biological interactions and safety of graphene materials. *MRS Bulletin*, **2012**, 37, 1307-1313	3.2	30
30	Degradation products from consumer nanocomposites: a case study on quantum dot lighting. *Environmental Science & Technology*, **2012**, 46, 3220-7	10.3	37
29	Chemical transformations of nanosilver in biological environments. *ACS Nano*, **2012**, 6, 9887-99	16.7	252
28	Aerosol synthesis of cargo-filled graphene nanosacks. *Nano Letters*, **2012**, 12, 1996-2002	11.5	166
27	Biological interactions of graphene-family nanomaterials: an interdisciplinary review. *Chemical Research in Toxicology*, **2012**, 25, 15-34	4	953
26	Graphene-based environmental barriers. *Environmental Science & Technology*, **2012**, 46, 7717-24	10.3	110
25	Supramolecular Synthesis of Graphenic Mesogenic Materials. *Macromolecular Chemistry and Physics*, **2012**, 213, 1164-1174	2.6	7
24	Kinetics and mechanisms of nanosilver oxysulfidation. *Environmental Science & Technology*, **2011**, 45, 7345-53	10.3	202
23	Cell entry of one-dimensional nanomaterials occurs by tip recognition and rotation. *Nature Nanotechnology*, **2011**, 6, 714-9	28.7	376

22	A 3-dimensional in vitro model of epithelioid granulomas induced by high aspect ratio nanomaterials. *Particle and Fibre Toxicology*, **2011**, 8, 17	8.4	40
21	Antioxidant deactivation on graphenic nanocarbon surfaces. *Small*, **2011**, 7, 2775-85	11	116
20	Liquid Crystals: Vertically Aligned Graphene Layer Arrays from Chromonic Liquid Crystal Precursors (Adv. Mater. 4/2011). *Advanced Materials*, **2011**, 23, 436-436	24	1
19	Bioavailability, intracellular mobilization of nickel, and HIF-1 activation in human lung epithelial cells exposed to metallic nickel and nickel oxide nanoparticles. *Toxicological Sciences*, **2011**, 124, 138-48	4.4	113
18	Ion release kinetics and particle persistence in aqueous nano-silver colloids. *Environmental Science & Technology*, **2010**, 44, 2169-75	10.3	1329
17	Controlled release of biologically active silver from nanosilver surfaces. *ACS Nano*, **2010**, 4, 6903-13	16.7	841
16	Cancer Therapeutics: Selenium-Carbon Bifunctional Nanoparticles for the Treatment of Malignant Mesothelioma (Adv. Mater. 45/2010). *Advanced Materials*, **2010**, 22, 5072-5072	24	
15	Biodurability of Single-Walled Carbon Nanotubes Depends on Surface Functionalization. *Carbon*, **2010**, 48, 1961-1969	10.4	141
14	Mechanical behavior of anodic alumina coatings reinforced with carbon nanofibers. *Journal of Materials Science*, **2009**, 44, 6020-6027	4.3	8
13	Biopersistence and potential adverse health impacts of fibrous nanomaterials: what have we learned from asbestos?. *Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology*, **2009**, 1, 511-29	9.2	139
12	The inhibition of neuronal calcium ion channels by trace levels of yttrium released from carbon nanotubes. *Biomaterials*, **2009**, 30, 6351-7	15.6	59
11	Opportunities for nanotechnology-enabled bioactive bone implants. *Journal of Materials Chemistry*, **2009**, 19, 2653		70
10	Visualization of liquid crystal director fields within carbon nanotube cavities. *Applied Physics Letters*, **2006**, 88, 163110	3.4	12
9	Controlling water contact angle on carbon surfaces from 5 to 167 *Carbon*, **2006**, 44, 3116-3120	10.4	47
8	Novel Carbon Nanotubes Based on Disk-Rod Assemblies of Lyotropic Liquid Crystals. *Molecular Crystals and Liquid Crystals*, **2005**, 435, 107/[767]-116/[776]	0.5	3
7	25.4: Micro-Patterned Carbon Nanotube Arrays Using Pen-Writable Lyotropic Liquid Crystals. *Digest of Technical Papers SID International Symposium*, **2004**, 35, 936	0.5	1
6	A simple numerical model to estimate the effect of coal selection on pulverized fuel burnout. *Combustion Science and Technology*, **2003**, 175, 1085-1108	1.5	10
5	Systematic Molecular Control of Interfacial Structure in Nanoporous Carbons. *Materials Research Society Symposia Proceedings*, **2003**, 788, 691		

4	Development of an Evaluational Prediction Tool for Coal Combustion Histories. *Nihon Enerugi Gakkaishi/Journal of the Japan Institute of Energy*, **2003**, 82, 849-855	0.5	2
3	Dry and Semi-Dry Methods for Removal of Ammonia from Pulverized Fuel Combustion Fly Ash. *Energy & Fuels*, **2002**, 16, 1398-1404	4.1	4
2	Thermal Annealing of Chars from Diverse Organic Precursors under Combustion-like Conditions. *Energy & Fuels*, **2000**, 14, 340-348	4.1	61
1	Effects of Carbon on Air Entrainment in Fly Ash Concrete: The Role of Soot and Carbon Black. *Energy & Fuels*, **1997**, 11, 457-462	4.1	54