Timothy J Booth

List of Publications by Citations

55 papers	24,230 citations	25 h-index	56 g-index
56 ext. papers	26,502 ext. citations	8.9 avg, IF	6.42 L-index

#	Paper	IF	Citations
55	Two-dimensional atomic crystals. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 10451-3	11.5	8888
54	Fine structure constant defines visual transparency of graphene. *Science*, **2008**, 320, 1308	33.3	6461
53	The structure of suspended graphene sheets. *Nature*, **2007**, 446, 60-3	50.4	4019
52	Making graphene visible. *Applied Physics Letters*, **2007**, 91, 063124	3.4	1453
51	Graphene-based liquid crystal device. *Nano Letters*, **2008**, 8, 1704-8	11.5	1319
50	Macroscopic graphene membranes and their extraordinary stiffness. *Nano Letters*, **2008**, 8, 2442-6	11.5	528
49	The hot pick-up technique for batch assembly of van der Waals heterostructures. *Nature Communications*, **2016**, 7, 11894	17.4	289
48	Electronic properties of graphene. *Physica Status Solidi (B): Basic Research*, **2007**, 244, 4106-4111	1.3	229
47	Graphene mobility mapping. *Scientific Reports*, **2015**, 5, 12305	4.9	75
46	A universal approach for the synthesis of two-dimensional binary compounds. *Nature Communications*, **2019**, 10, 2957	17.4	62
45	Electrically continuous graphene from single crystal copper verified by terahertz conductance spectroscopy and micro four-point probe. *Nano Letters*, **2014**, 14, 6348-55	11.5	59
44	Discrete dynamics of nanoparticle channelling in suspended graphene. *Nano Letters*, **2011**, 11, 2689-92	11.5	58
43	Graphene transport properties upon exposure to PMMA processing and heat treatments. *2D Materials*, **2014**, 1, 035005	5.9	56
42	Differences in inflammation and acute phase response but similar genotoxicity in mice following pulmonary exposure to graphene oxide and reduced graphene oxide. *PLoS ONE*, **2017**, 12, e0178355	3.7	52
41	Controllable chemical vapor deposition of large area uniform nanocrystalline graphene directly on silicon dioxide. *Journal of Applied Physics*, **2012**, 111, 044103	2.5	46
40	Lithographic band structure engineering of graphene. *Nature Nanotechnology*, **2019**, 14, 340-346	28.7	44
39	Do-It-Yourself Transfer of Large-Area Graphene Using an Office Laminator and Water. *Chemistry of Materials*, **2019**, 31, 2328-2336	9.6	42

38	Copper Oxidation through Nucleation Sites of Chemical Vapor Deposited Graphene. *Chemistry of Materials*, **2016**, 28, 3789-3795	9.6	38
37	Unforeseen high temperature and humidity stability of FeCl3 intercalated few layer graphene. *Scientific Reports*, **2015**, 5, 7609	4.9	38
36	Non-destructive electrochemical graphene transfer from reusable thin-film catalysts. *Carbon*, **2015**, 85, 397-405	10.4	34
35	In situ TEM creation and electrical characterization of nanowire devices. *Nano Letters*, **2012**, 12, 2965-70	11.5	32
34	Catalyst Interface Engineering for Improved 2D Film Lift-Off and Transfer. *ACS Applied Materials & Interfaces*, **2016**, 8, 33072-33082	9.5	31
33	Fast and direct measurements of the electrical properties of graphene using micro four-point probes. *Nanotechnology*, **2011**, 22, 445702	3.4	30
32	Transfer induced compressive strain in graphene: Evidence from Raman spectroscopic mapping. *Microelectronic Engineering*, **2014**, 121, 113-117	2.5	27
31	Colorimetric sensing of dopamine using hexagonal silver nanoparticles decorated by task-specific pyridinum based ionic liquid. *Sensors and Actuators B: Chemical*, **2018**, 271, 64-72	8.5	26
30	Raman spectral indicators of catalyst decoupling for transfer of CVD grown 2D materials. *Carbon*, **2017**, 117, 75-81	10.4	25
29	Graphene Edges Dictate the Morphology of Nanoparticles during Catalytic Channeling. *Journal of Physical Chemistry C*, **2014**, 118, 4296-4302	3.8	24
28	Quality assessment of graphene: Continuity, uniformity, and accuracy of mobility measurements. *Nano Research*, **2017**, 10, 3596-3605	10	22
27	Quantitative optical mapping of two-dimensional materials. *Scientific Reports*, **2018**, 8, 6381	4.9	21
26	Conductivity mapping of graphene on polymeric films by terahertz time-domain spectroscopy. *Optics Express*, **2018**, 26, 17748-17754	3.3	21
25	Suppression of intrinsic roughness in encapsulated graphene. *Physical Review B*, **2017**, 96,	3.3	19
24	Conductance quantization suppression in the quantum Hall regime. *Nature Communications*, **2018**, 9, 659	17.4	18
23	Manipulation andin situtransmission electron microscope characterization of sub-100 nm nanostructures using a microfabricated nanogripper. *Journal of Micromechanics and Microengineering*, **2010**, 20, 035009	2	17
22	A Graphene-Edge Ferroelectric Molecular Switch. *Nano Letters*, **2018**, 18, 4675-4683	11.5	15
21	Sputtering an exterior metal coating on copper enclosure for large-scale growth of single-crystalline graphene. *2D Materials*, **2017**, 4, 045017	5.9	14

20	Directed self-assembled crystalline oligomer domains on graphene and graphite. *Nanotechnology*, **2014**, 25, 035602	3.4	12
19	Customizable in situ TEM devices fabricated in freestanding membranes by focused ion beam milling. *Nanotechnology*, **2010**, 21, 405304	3.4	11
18	Defect/oxygen assisted direct write technique for nanopatterning graphene. *Nanoscale*, **2015**, 7, 6271-7	7.7	9
17	Graphene-Subgrain-Defined Oxidation of Copper. *ACS Applied Materials & Interfaces*, **2019**, 11, 48518-48524	9.5	8
16	Probing the nanoscale origin of strain and doping in graphene-hBN heterostructures. *2D Materials*, **2019**, 6, 015022	5.9	8
15	Oxidation of Suspended Graphene: Etch Dynamics and Stability Beyond 1000 °C. *ACS Nano*, **2019**, 13, 2281-2288	16.7	7
14	High-quality graphene flakes exfoliated on a flat hydrophobic polymer. *Applied Physics Letters*, **2018**, 112, 033101	3.4	7
13	Catalytically mediated epitaxy of 3D semiconductors on van der Waals substrates. *Applied Physics Reviews*, **2020**, 7, 031402	17.3	6
12	Nanotechnology: Building and Observing at the Nanometer Scale **2017**, 633-643		4
11	Pattern recognition approach to quantify the atomic structure of graphene. *Carbon*, **2014**, 74, 363-366	10.4	4
10	Probing the Gas-Phase Dynamics of Graphene Chemical Vapour Deposition using in-situ UV Absorption Spectroscopy. *Scientific Reports*, **2017**, 7, 6183	4.9	4
9	Atomic Layer Deposition Alumina-Mediated Graphene Transfer for Reduced Process Contamination. *Physica Status Solidi - Rapid Research Letters*, **2019**, 13, 1900424	2.5	3
8	Graphene-Si CMOS oscillators. *Nanoscale*, **2019**, 11, 3619-3625	7.7	3
7	Optimization of FIB milling for rapid NEMS prototyping. *Microelectronic Engineering*, **2011**, 88, 2671-2674	2.5	3
6	Super-Resolution Nanolithography of Two-Dimensional Materials by Anisotropic Etching. *ACS Applied Materials & Interfaces*, **2021**, 13, 41886-41894	9.5	3
5	Carbon mediated reduction of silicon dioxide and growth of copper silicide particles in uniform width channels. *Journal of Applied Physics*, **2013**, 114, 114303	2.5	2
4	Selective area oxidation of copper derived from chemical vapor deposited graphene microstructure. *Nanotechnology*, **2020**, 31, 485603	3.4	2
3	Effective surface conductivity approach for graphene metamaterials based terahertz devices **2013**,		1

2	In Situ Tuning of Focused-Ion-Beam Defined Nanomechanical Resonators Using Joule Heating. *Journal of Microelectromechanical Systems*, **2011**, 20, 1074-1080	2.5	1
1	Long-term stability and tree-ring oxidation of WSe using phase-contrast AFM. *Nanoscale*, **2021**, 13, 19238-19246	7.7	