Timothy J Booth

List of Publications by Year
in descending order

55 papers	28,274 citations	172207 29 h-index	161609 54 g-index
56 all docs	56 docs citations	56 times ranked	31416 citing authors

#	Article	IF	Citations
1	Two-dimensional atomic crystals. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 10451-10453.	3.3	10,229
2	Fine Structure Constant Defines Visual Transparency of Graphene. Science, 2008, 320, 1308-1308.	6.0	7,667
3	The structure of suspended graphene sheets. Nature, 2007, 446, 60-63.	13.7	4,511
4	Making graphene visible. Applied Physics Letters, 2007, 91, .	1.5	1,653
5	Graphene-Based Liquid Crystal Device. Nano Letters, 2008, 8, 1704-1708.	4.5	1,441
6	Macroscopic Graphene Membranes and Their Extraordinary Stiffness. Nano Letters, 2008, 8, 2442-2446.	4.5	607
7	The hot pick-up technique for batch assembly of van der Waals heterostructures. Nature Communications, 2016, 7, 11894.	5.8	446
8	Electronic properties of graphene. Physica Status Solidi (B): Basic Research, 2007, 244, 4106-4111.	0.7	291
9	A universal approach for the synthesis of two-dimensional binary compounds. Nature Communications, 2019, 10, 2957.	5.8	93
10	Graphene mobility mapping. Scientific Reports, 2015, 5, 12305.	1.6	89
11	Lithographic band structure engineering of graphene. Nature Nanotechnology, 2019, 14, 340-346.	15.6	82
12	Discrete Dynamics of Nanoparticle Channelling in Suspended Graphene. Nano Letters, 2011, 11, 2689-2692.	4.5	77
13	Electrically Continuous Graphene from Single Crystal Copper Verified by Terahertz Conductance Spectroscopy and Micro Four-Point Probe. Nano Letters, 2014, 14, 6348-6355.	4.5	74
14	Graphene transport properties upon exposure to PMMA processing and heat treatments. 2D Materials, 2014, 1, 035005.	2.0	73
15	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.	1.1	71
16	Do-It-Yourself Transfer of Large-Area Graphene Using an Office Laminator and Water. Chemistry of Materials, 2019, 31, 2328-2336.	3.2	71
17	Controllable chemical vapor deposition of large area uniform nanocrystalline graphene directly on silicon dioxide. Journal of Applied Physics, 2012, 111, .	1.1	59
18	Copper Oxidation through Nucleation Sites of Chemical Vapor Deposited Graphene. Chemistry of Materials, 2016, 28, 3789-3795.	3.2	44

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19	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.	4.0	42
20	Unforeseen high temperature and humidity stability of FeCl3 intercalated few layer graphene. Scientific Reports, 2015, 5, 7609.	1.6	41
21	Non-destructive electrochemical graphene transfer from reusable thin-film catalysts. Carbon, 2015, 85, 397-405.	5.4	41
22	Catalyst Interface Engineering for Improved 2D Film Lift-Off and Transfer. ACS Applied Materials & Interfaces, 2016, 8, 33072-33082.	4.0	40
23	Fast and direct measurements of the electrical properties of graphene using micro four-point probes. Nanotechnology, 2011, 22, 445702.	1.3	37
24	In Situ TEM Creation and Electrical Characterization of Nanowire Devices. Nano Letters, 2012, 12, 2965-2970.	4.5	34
25	Raman spectral indicators of catalyst decoupling for transfer of CVD grown 2D materials. Carbon, 2017, 117, 75-81.	5.4	33
26	Transfer induced compressive strain in graphene: Evidence from Raman spectroscopic mapping. Microelectronic Engineering, 2014, 121, 113-117.	1.1	32
27	Quality assessment of graphene: Continuity, uniformity, and accuracy of mobility measurements. Nano Research, 2017, 10, 3596-3605.	5.8	31
28	Suppression of intrinsic roughness in encapsulated graphene. Physical Review B, 2017, 96, .	1.1	30
29	Graphene Edges Dictate the Morphology of Nanoparticles during Catalytic Channeling. Journal of Physical Chemistry C, 2014, 118, 4296-4302.	1.5	29
30	Quantitative optical mapping of two-dimensional materials. Scientific Reports, 2018, 8, 6381.	1.6	29
31	Conductivity mapping of graphene on polymeric films by terahertz time-domain spectroscopy. Optics Express, 2018, 26, 17748.	1.7	29
32	Conductance quantization suppression in the quantum Hall regime. Nature Communications, 2018, 9, 659.	5.8	25
33	Manipulation andin situtransmission electron microscope characterization of sub-100 nm nanostructures using a microfabricated nanogripper. Journal of Micromechanics and Microengineering, 2010, 20, 035009.	1.5	22
34	A Graphene-Edge Ferroelectric Molecular Switch. Nano Letters, 2018, 18, 4675-4683.	4.5	21
35	Sputtering an exterior metal coating on copper enclosure for large-scale growth of single-crystalline graphene. 2D Materials, 2017, 4, 045017.	2.0	17
36	Probing the nanoscale origin of strain and doping in graphene-hBN heterostructures. 2D Materials, 2019, 6, 015022.	2.0	17

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37	Super-Resolution Nanolithography of Two-Dimensional Materials by Anisotropic Etching. ACS Applied Materials & Interfaces, 2021, 13, 41886-41894.	4.0	16
38	Catalytically mediated epitaxy of 3D semiconductors on van der Waals substrates. Applied Physics Reviews, 2020, 7, .	5.5	15
39	Directed self-assembled crystalline oligomer domains on graphene and graphite. Nanotechnology, 2014, 25, 035602.	1.3	14
40	Graphene-Subgrain-Defined Oxidation of Copper. ACS Applied Materials & Interfaces, 2019, 11, 48518-48524.	4.0	13
41	Customizablein situTEM devices fabricated in freestanding membranes by focused ion beam milling. Nanotechnology, 2010, 21, 405304.	1.3	12
42	Defect/oxygen assisted direct write technique for nanopatterning graphene. Nanoscale, 2015, 7, 6271-6277.	2.8	11
43	Oxidation of Suspended Graphene: Etch Dynamics and Stability Beyond 1000 Â°C. ACS Nano, 2019, 13, 2281-2288.	7.3	10
44	High-quality graphene flakes exfoliated on a flat hydrophobic polymer. Applied Physics Letters, 2018, 112, .	1.5	8
45	Probing the Gas-Phase Dynamics of Graphene Chemical Vapour Deposition using in-situ UV Absorption Spectroscopy. Scientific Reports, 2017, 7, 6183.	1.6	6
46	Grapheneâ€“Si CMOS oscillators. Nanoscale, 2019, 11, 3619-3625.	2.8	6
47	Selective area oxidation of copper derived from chemical vapor deposited graphene microstructure. Nanotechnology, 2020, 31, 485603.	1.3	5
48	Chemical Vapor-Deposited Graphene on Ultraflat Copper Foils for van der Waals Hetero-Assembly. ACS Omega, 2022, 7, 22626-22632.	1.6	5
49	Optimization of FIB milling for rapid NEMS prototyping. Microelectronic Engineering, 2011, 88, 2671-2674.	1.1	4
50	Pattern recognition approach to quantify the atomic structure of graphene. Carbon, 2014, 74, 363-366.	5.4	4
51	Atomic Layer Deposition Aluminaâ€Mediated Graphene Transfer for Reduced Process Contamination. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1900424.	1.2	4
52	Long-term stability and tree-ring oxidation of WSe₂ using phase-contrast AFM. Nanoscale, 2021, 13, 19238-19246.	2.8	3
53	Carbon mediated reduction of silicon dioxide and growth of copper silicide particles in uniform width channels. Journal of Applied Physics, 2013, 114, 114303.	1.1	2
54	In Situ Tuning of Focused-Ion-Beam Defined Nanomechanical Resonators Using Joule Heating. Journal of Microelectromechanical Systems, 2011, 20, 1074-1080.	1.7	1

#	Article	IF	Citations
55	Effective surface conductivity approach for graphene metamaterials based terahertz devices. , 2013, , .		1