William A Hubbard

List of Publications by Year
in descending order

43 papers	589 citations	1039406 9 h-index	610482 24 g-index
44 all docs	44 docs citations	44 times ranked	1142 citing authors

#	Article	IF	Citations
1	Imaging Dielectric Breakdown in Valence Change Memory. Advanced Functional Materials, 2022, 32, 2102313.	7.8	10
2	InAsP Quantum Dot-Embedded InP Nanowires toward Silicon Photonic Applications. ACS Applied Materials & Interfaces, 2022, 14, 12488-12494.	4.0	7
3	Differential electron yield imaging with STXM. Ultramicroscopy, 2021, 222, 113198.	0.8	2
4	Modern STEM EBIC: Emerging Modes and Methods. Microscopy and Microanalysis, 2021, 27, 2350-2352.	0.2	0
5	Imaging Soft and Hard Dielectric Breakdown in Resistive Switching. Microscopy and Microanalysis, 2021, 27, 2354-2355.	0.2	0
6	Mapping Charge Recombination and the Effect of Point-Defect Insertion in GaAs Nanowire Heterojunctions. Physical Review Applied, 2021, 16, .	1.5	1
7	Visualizing the Electron Wind Force in the Elastic Regime. Nano Letters, 2021, 21, 10172-10177.	4.5	8
8	Observation of Rectifying and Ohmic Grain Boundaries in Polycrystalline BaTiO3 Capacitors with STEM EBIC. Microscopy and Microanalysis, 2020, 26, 374-375.	0.2	0
9	Electron-Transparent Thermoelectric Coolers Demonstrated with Nanoparticle and Condensation Thermometry. ACS Nano, 2020, 14, 11510-11517.	7.3	11
10	Electrical Isolation Preserved by Plasma Focused Ion Beam TEM Sample Preparation and Verified with STEM SEEBIC Imaging. Microscopy and Microanalysis, 2020, 26, 194-195.	0.2	0
11	STEM EBIC Thermometry Calibration with PEET on Al Nanoparticles. Microscopy and Microanalysis, 2020, 26, 3124-3125.	0.2	1
12	Irreversibility at macromolecular scales in the flake graphite of the lithium-ion battery anode. Journal of Power Sources, 2019, 436, 226841.	4.0	16
13	Secondary-Electron Electron-Beam-Induced Current Measurements at Lattice Resolution. Microscopy and Microanalysis, 2019, 25, 1656-1657.	0.2	1
14	Mapping Electronic State Changes with STEM EBIC. Microscopy and Microanalysis, 2019, 25, 1396-1397.	0.2	0
15	Adjusting the STEM Sample Holder Potential for Improved EBIC Contrast. Microscopy and Microanalysis, 2019, 25, 2354-2355.	0.2	2
16	Inducing Electrically-Active Defects in a Gallium Arsenide Nanowire with an Electron Beam. Microscopy and Microanalysis, 2019, 25, 1618-1619.	0.2	0
17	STEM of a Single Crystal Lithium Ion Battery Anode during Electrochemical Cycling. Microscopy and Microanalysis, 2019, 25, 2060-2061.	0.2	2
18	Mapping Ferroelectricity in Hafnia Thin Films with STEM EBIC. Microscopy and Microanalysis, 2019, 25, 1846-1847.	0.2	0

#	Article	IF	Citations
19	Scanning transmission electron microscope mapping of electronic transport in polycrystalline BaTiO3 ceramic capacitors. Applied Physics Letters, 2019, 115, .	1.5	19
20	Electron beam-induced current imaging with two-angstrom resolution. Ultramicroscopy, 2019, 207, 112852.	0.8	23
21	Scanning TEM Electron Beam Induced Current Imaging in Water. Microscopy and Microanalysis, 2018, 24, 252-253.	0.2	0
22	Scanning TEM EBIC Imaging of Resistive Memory Switching Processes. Microscopy and Microanalysis, 2018, 24, 1806-1807.	0.2	1
23	STEM Imaging with Beam-Induced Hole and Secondary Electron Currents. Physical Review Applied, 2018, 10, .	1.5	29
24	Secondary Electron Contrast in STEM Electron Beam-Induced Current (EBIC): a Path Towards Mapping Electronic Structure. Microscopy and Microanalysis, 2018, 24, 1846-1847.	0.2	3
25	Temperature-dependent signals in STEM Electron Beam-Induced Current (EBIC) Imaging. Microscopy and Microanalysis, 2017, 23, 1506-1507.	0.2	0
26	STEM EBIC Mapping of the Metal-Insulator Transition in Thin-film NbO₂. Microscopy and Microanalysis, 2017, 23, 1428-1429.	0.2	1
27	Detailed In Situ Observations of Electromigration in Aluminum Wires. Microscopy and Microanalysis, 2017, 23, 1450-1451.	0.2	0
28	In Situ Optical Microscopy of the Electrochemical Intercalation of Lithium into Single Crystal Graphite. Microscopy and Microanalysis, 2017, 23, 1982-1983.	0.2	2
29	In Situ Observation of Cooling in a Bismuth Telluride and Bismuth-Antimony Telluride Nanoscale Heterojunction. Microscopy and Microanalysis, 2017, 23, 1996-1997.	0.2	0
30	Nanoscale Mapping of Interfacial Electrical Transport in Graphene-MoS 2 Heterostructures with STEM-EBIC. Microscopy and Microanalysis, 2016, 22, 1552-1553.	0.2	0
31	STEM Video of Electronically-Driven Metal-Insulator Transitions in Nanoscale NbO 2 Devices. Microscopy and Microanalysis, 2016, 22, 1254-1255.	0.2	2
32	Asymmetric Temperature Profiles in Joule-Heated in Aluminum Nanowires. Microscopy and Microanalysis, 2016, 22, 772-773.	0.2	0
33	In Situ Scanning Transmission Electron Microscopy (STEM) of Individual Electrochemical Intercalation Events in Graphite. Microscopy and Microanalysis, 2015, 21, 1193-1194.	0.2	1
34	Imaging interfacial electrical transport in grapheneâ€“MoS2 heterostructures with electron-beam-induced-currents. Applied Physics Letters, 2015, 107, 223104.	1.5	18
35	Time-Resolved Imaging of Electrochemical Switching in Nanoscale Resistive Memory Elements. Microscopy and Microanalysis, 2015, 21, 1911-1912.	0.2	0
36	Applications of Plasmon Energy Expansion Thermometry. Microscopy and Microanalysis, 2015, 21, 663-664.	0.2	0

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37	Introduction to Plasmon Energy Expansion Thermometry. Microscopy and Microanalysis, 2015, 21, 1907-1908.	0.2	0
38	Nanoscale temperature mapping in operating microelectronic devices. Science, 2015, 347, 629-632.	6.0	253
39	Nanofilament Formation and Regeneration During Cu/Al₂O₃ Resistive Memory Switching. Nano Letters, 2015, 15, 3983-3987.	4.5	123
40	STEM EBIC to Study 2D Materials. Microscopy and Microanalysis, 2014, 20, 172-173.	0.2	1
41	In Situ Transmission Electron Microscopy of the Electrochemical Intercalation of Graphite in Concentrated Sulfuric Acid. Microscopy and Microanalysis, 2014, 20, 1528-1529.	0.2	9
42	In Situ STEM of Ag and Cu Conducting Bridge Formation through Al2O3 in Nanoscale Resistive Memory Devices. Microscopy and Microanalysis, 2014, 20, 1550-1551.	0.2	3
43	Dark-field transmission electron microscopy and the Debye-Waller factor of graphene. Physical Review B, 2013, 87, 045417.	1.1	35