

# Robert Hull

## List of Publications by Year in descending order

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40  
papers

348  
citations

1162367

8  
h-index

839053

18  
g-index

41  
all docs

41  
docs citations

41  
times ranked

413  
citing authors

#	ARTICLE	IF	CITATIONS
1	Development of a Nanoindenter for In Situ Transmission Electron Microscopy. <i>Microscopy and Microanalysis</i> , 2001, 7, 507-517.	0.2	97
2	Investigation of Structural Evolution of $\text{Li}_{1.1}\text{V}_3\text{O}_8$ by <i>In Situ</i> X-ray Diffraction and Density Functional Theory Calculations. <i>Chemistry of Materials</i> , 2017, 29, 2364-2373.	3.2	40
3	In Situ Studies of the Interaction of Dislocations with Point Defects during Annealing of Ion Implanted Si/SiGe/Si (001) Heterostructures. <i>Microscopy and Microanalysis</i> , 1998, 4, 294-307.	0.2	39
4	Metastable Structures in Al Thin Films Before the Onset of Corrosion Pitting as Observed using Liquid Cell Transmission Electron Microscopy. <i>Microscopy and Microanalysis</i> , 2014, 20, 462-468.	0.2	30
5	Strain compensated $\text{In}_{1-x}\text{Ga}_x\text{As}$ ( $x < 0.47$ ) quantum well photodiodes for extended wavelength operation. <i>Applied Physics Letters</i> , 1998, 73, 2263-2265.	1.5	23
6	Stochasticity in materials structure, properties, and processing—A review. <i>Applied Physics Reviews</i> , 2018, 5, .	5.5	15
7	Analysis of the three-dimensional ordering of epitaxial Ge quantum dots using focused ion beam tomography. <i>Applied Physics Letters</i> , 2006, 88, 263103.	1.5	9
8	Strain Accommodation and Relief in $\text{GeSi}/\text{Si}$ Heteroepitaxy. <i>Series on Directions in Condensed Matter Physics</i> , 1999, , 299-367.	0.1	8
9	Growth and characterizations of InP self-assembled quantum dots embedded in InAlP grown on GaAs substrates. <i>Journal of Electronic Materials</i> , 2001, 30, 471-476.	1.0	8
10	Composition and stress fields in undulated $\text{Si}_{0.7}\text{Ge}_{0.3}\text{Si}(100)$ thin films. <i>Journal of Applied Physics</i> , 2006, 100, 083510.	1.1	8
11	Modulation of the magnetism in ion implanted $\text{Mn}_x\text{Ge}_{1-x}$ thin films by rapid thermal anneal. <i>Journal of Applied Physics</i> , 2010, 108, .	1.1	8
12	Electrochemical memristive devices based on submonolayer metal deposition. <i>APL Materials</i> , 2019, 7, 101121.	2.2	8
13	In situ EC-TEM Studies of Metal Thin Film Corrosion in Liquid Solutions at Elevated Temperatures. <i>Microscopy and Microanalysis</i> , 2018, 24, 254-255.	0.2	7
14	Enhanced magnetic and electrical properties in amorphous Ge:Mn thin films by non-magnetic codoping. <i>Journal of Applied Physics</i> , 2012, 111, 033916.	1.1	6
15	In Situ Transmission Electron Microscopy of High-Temperature Inconel-625 Corrosion by Molten Chloride Salts. <i>Journal of the Electrochemical Society</i> , 2021, 168, 051507.	1.3	6
16	The material dependence of temperature measurement resolution in thermal scanning electron microscopy. <i>Applied Physics Letters</i> , 2013, 102, 113107.	1.5	5
17	Studies of Corrosion of Al Thin Films using Liquid Cell Transmission Electron Microscopy. <i>Materials Research Society Symposia Proceedings</i> , 2013, 1525, 1.	0.1	4
18	Liquid Cell TEM of Al Thin Film Corrosion under Potentiostatic Polarization. <i>Microscopy and Microanalysis</i> , 2015, 21, 973-974.	0.2	4

#	ARTICLE	IF	CITATIONS
19	Directed Self-Assembly of Ge Quantum Dots Using Focused Si <sup>2+</sup> Ion Beam Patterning. Scientific Reports, 2018, 8, 9361.	1.6	4
20	Nanoscale Tomographic Imaging using Focused Ion Beam Sputtering, Secondary Electron Imaging and Secondary Ion Mass Spectrometry. Microscopy and Microanalysis, 2001, 7, 934-935.	0.2	3
21	Self-Assembled III-Phosphide Quantum Dots Grown by Metalorganic Chemical Vapor Deposition. Materials Research Society Symposia Proceedings, 1999, 583, 39.	0.1	2
22	Ion-induced Auger Electron Spectroscopy as a Potential Route to Chemical Focused-Ion Beam Tomography. Microscopy and Microanalysis, 2014, 20, 310-311.	0.2	2
23	An In Situ Transmission Electron Microscopy Study of Localized Corrosion on Aluminum. MRS Advances, 2016, 1, 1877-1882.	0.5	2
24	Substrates with Programmable Heater Arrays for In-Situ Observation of Microstructural Evolution of Polycrystalline Films: Towards Real Time Control of Grain Growth. MRS Advances, 2016, 1, 1947-1952.	0.5	2
25	Influence of Controlled Cooling Rates During Thermal Processing of Ti 6% Al 4% V Alloys Using In-Situ Scanning Electron Microscopy. MRS Advances, 2020, 5, 1603-1611.	0.5	2
26	SiGe Epilayer Stress Relaxation: Quantitative Relationships Between Evolution of Surface Morphology and Misfit Dislocation Arrays. Materials Research Society Symposia Proceedings, 2001, 696, 1.	0.1	1
27	Nano-scale Chemistry of Complex Self-Assembled Nanostructures in Epitaxial SiGe Films. Materials Research Society Symposia Proceedings, 2013, 1551, 75-80.	0.1	1
28	Corrosion of Metal Films Observed Using In Situ and Ex Situ Electron Microscopy. Microscopy and Microanalysis, 2014, 20, 1540-1541.	0.2	1
29	In Situ Correlative Microscopy Combining Transmission Electron Microscopy and Secondary Ion Mass Spectrometry. Microscopy and Microanalysis, 2018, 24, 380-381.	0.2	1
30	Accelerated Electromigration Study of Cobalt Thin Films by In-Situ TEM. Microscopy and Microanalysis, 2019, 25, 1902-1903.	0.2	1
31	The effect of cooling conditions on Ti 6%Al 4%V microstructure observed using high-temperature in-situ scanning electron microscopy. Journal of Materials Research, 2021, 36, 717-728.	1.2	1
32	NANOELECTRONICS: SOME CURRENT ASPECTS AND PROSPECTS. , 2003, , .		0
33	Guided Control of Cu <sub>2</sub> O Nanodot Self-Assembly on SrTiO <sub>3</sub> (100). Materials Research Society Symposia Proceedings, 2004, 811, 146.	0.1	0
34	Nano-scale Stress and Compositional Analysis of Epitaxial Si <sub>1-x</sub> Ge <sub>x</sub> /Si (100) Undulated Films. Materials Research Society Symposia Proceedings, 2004, 854, U3.8.1.	0.1	0
35	Heteroepitaxial Self-Assembly of Higher-Complexity Structures By Combining Growth Control with Nanopatterning. Materials Research Society Symposia Proceedings, 2004, 849, 81.	0.1	0
36	Correlation of Nanoscale Structure and Magnetic Properties in Manganese Doped Germanium Dilute Magnetic Semiconductors. Materials Research Society Symposia Proceedings, 2011, 1305, 1.	0.1	0

#	ARTICLE	IF	CITATIONS
37	A Low Electron Voltage Approach to Increase Spatial Resolution of Temperature Mapping in Thermal Scanning Electron Microscopy. Materials Research Society Symposia Proceedings, 2013, 1525, 1.	0.1	0
38	Controlled Nucleation of Ge Islands on Si and Self-Assembly of Nanoscale Island Clusters. International Journal of High Speed Electronics and Systems, 2014, 23, 1420003.	0.3	0
39	New Methods for Measuring Chemistry and Temperature Using Scanning Ion and Electron Beams. Microscopy and Microanalysis, 2016, 22, 610-611.	0.2	0
40	Distributions of kinetic pathways in strain relaxation of heteroepitaxial films. Journal of Materials Research, 2017, 32, 3977-3991.	1.2	0