James L Hart

List of Publications by Year
in descending order

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41 papers	1,926 citations	361045 20 h-index	360668 35 g-index
41 all docs	41 docs citations	41 times ranked	2967 citing authors

#	Article	IF	Citations
1	Mechanistic Insight and Local Structure Evolution of NiPS₃ upon Electrochemical Lithiation. ACS Applied Materials & Interfaces, 2022, 14, 3980-3990.	4.0	9
2	Thickness-dependent phase transition kinetics in lithium-intercalated MoS₂. 2D Materials, 2022, 9, 025009.	2.0	8
3	Termination-Property Coupling via Reversible Oxygen Functionalization of MXenes. ACS Nanoscience Au, 2022, 2, 433-439.	2.0	5
4	Axial Higgs mode detected by quantum pathway interference in RTe3. Nature, 2022, 606, 896-901.	13.7	14
5	A percolation theory for designing corrosion-resistant alloys. Nature Materials, 2021, 20, 789-793.	13.3	48
6	Seeing Quantum Materials with Cryogenic Transmission Electron Microscopy. Nano Letters, 2021, 21, 5449-5452.	4.5	11
7	Intelligent Microscopy: A Path Toward Tailored Materials at the Atomic Scale. Microscopy and Microanalysis, 2021, 27, 962-963.	0.2	0
8	RapidEELS: machine learning for denoising and classification in rapid acquisition electron energy loss spectroscopy. Scientific Reports, 2021, 11, 19515.	1.6	20
9	Multimodal Spectroscopic Study of Surface Termination Evolution in Cr₂TiC₂T_x MXene. Advanced Materials Interfaces, 2021, 8, 2001789.	1.9	22
10	Functionalization-induced self-assembly under ambient conditions via thiol-epoxide â€œclickâ€•chemistry. Polymer Chemistry, 2020, 11, 298-303.	1.9	15
11	Nanoporous metals from thermal decomposition of transition metal dichalcogenides. Acta Materialia, 2020, 184, 79-85.	3.8	17
12	Chemical and Physical Characterization of 3D Printer Aerosol Emissions with and without a Filter Attachment. Environmental Science & Technology, 2020, 54, 947-954.	4.6	21
13	Annealing-Assisted Enhancement of Electrochemical Stability of Na-Preintercalated Bilayered Vanadium Oxide Electrodes in Na-Ion Batteries. ACS Applied Energy Materials, 2020, 3, 1063-1075.	2.5	20
14	Evidence of a magnetic transition in atomically thin Cr₂TiC₂T_x MXene. Nanoscale Horizons, 2020, 5, 1557-1565.	4.1	51
15	Structural transition and recovery of Ge implanted Î² -Ga2O3. Applied Physics Letters, 2020, 117, .	1.5	35
16	Insight into the kinetic stabilization of Al0.3CoCrFeNi high-entropy alloys. Materialia, 2020, 14, 100872.	1.3	9
17	Edge Capping of 2Dâ€MXene Sheets with Polyanionic Salts To Mitigate Oxidation in Aqueous Colloidal Suspensions. Angewandte Chemie, 2019, 131, 12785-12790.	1.6	78
18	Edge Capping of 2Dâ€MXene Sheets with Polyanionic Salts To Mitigate Oxidation in Aqueous Colloidal Suspensions. Angewandte Chemie - International Edition, 2019, 58, 12655-12660.	7.2	225

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19	Direct Detection EELS at High Energy: Elemental Mapping and EXELFS. Microscopy and Microanalysis, 2019, 25, 584-585.	0.2	2
20	Diffusion of implanted Ge and Sn in Î²-Ga2O3. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2019, 37, .	0.6	22
21	Sequential Capacitive Deposition of Ionic Liquids for Conformal Thin Film Coatings on Oxygen Reduction Reaction Electrocatalysts. ACS Catalysis, 2019, 9, 9311-9316.	5.5	42
22	Control of MXenesâ€™ electronic properties through termination and intercalation. Nature Communications, 2019, 10, 522.	5.8	721
23	Vertical geometry 33.2 A, 4.8 MWâ€‰cm2 Ga2O3 field-plated Schottky rectifier arrays. Applied Physics Letters, 2019, 114, .	1.5	50
24	Free Standing Nanoporous Palladium Alloys as CO Poisoning Tolerant Electrocatalysts for the Electrochemical Reduction of CO₂ to Formate. ACS Catalysis, 2019, 9, 5290-5301.	5.5	78
25	Tracking the evolution of intergranular corrosion through twin-related domains in grain boundary networks. Npj Materials Degradation, 2018, 2, .	2.6	26
26	Chemically Preintercalated Bilayered K_xV₂O₅Â·nH₂O Nanobelts as a High-Performing Cathode Material for K-Ion Batteries. ACS Energy Letters, 2018, 3, 562-567.	8.8	104
27	Direct Detection Electron Energy-loss Spectroscopy: Applications in Low-dose Chemical Mapping and In Situ Heating+biasing. Microscopy and Microanalysis, 2018, 24, 452-453.	0.2	0
28	Functionalization-Induced Self-Assembly of Block Copolymers for Nanoparticle Synthesis. ACS Macro Letters, 2018, 7, 1503-1508.	2.3	26
29	Direct Correlation of MXene Surface Chemistry and Electronic Properties. Microscopy and Microanalysis, 2018, 24, 1606-1607.	0.2	8
30	Morphological Instability in Topologically Complex, Three-Dimensional Electrocatalytic Nanostructures. ACS Catalysis, 2017, 7, 7995-8005.	5.5	35
31	Structural properties of electrodeposited Cu-Ag alloys. Electrochimica Acta, 2017, 251, 475-481.	2.6	25
32	Application of Electron Counting to Electron Energy-loss Spectroscopy and Implications for Low-Dose Characterization. Microscopy and Microanalysis, 2017, 23, 1796-1797.	0.2	0
33	Direct Detection Electron Energy-Loss Spectroscopy: A Method to Push the Limits of Resolution and Sensitivity. Scientific Reports, 2017, 7, 8243.	1.6	103
34	Elucidation of insulin assembly at acidic and neutral pH: Characterization of low molecular weight oligomers. Proteins: Structure, Function and Bioinformatics, 2017, 85, 2096-2110.	1.5	18
35	Control of hidden ground-state order in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>NdNi</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math> superlattices. Physical Review Materials, 2017, 1, .	0.9	12
36	Performance of a Direct Electron Detector for the Application of Electron Energy-Loss Spectroscopy. Microscopy and Microanalysis, 2016, 22, 336-337.	0.2	5

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37	Electron-beam-induced ferroelectric domain behavior in the transmission electron microscope: Toward deterministic domain patterning. Physical Review B, 2016, 94, .	1.1	26
38	Toward Deterministic Switching in Ferroelectric Systems: Insight Gained from In Situ TEM. Microscopy and Microanalysis, 2015, 21, 1347-1348.	0.2	0
39	Electron Beam Induced Domain Motion in Ferroelectric RKTP Observed By Transmission Electron Microscopy. Microscopy and Microanalysis, 2015, 21, 271-272.	0.2	0
40	The Perfect Cut: Focused Ion Beam Preparation for In Situ TEM. Microscopy and Microanalysis, 2015, 21, 1403-1404.	0.2	0
41	Real-Time Observation of Local Strain Effects on Nonvolatile Ferroelectric Memory Storage Mechanisms. Nano Letters, 2014, 14, 3617-3622.	4.5	15