

# Hannah Catherine Nerl

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9486359/publications.pdf>

Version: 2024-02-01

52  
papers

31,065  
citations

109321

35  
h-index

182427

51  
g-index

53  
all docs

53  
docs citations

53  
times ranked

32834  
citing authors

#	ARTICLE	IF	CITATIONS
1	Two-Dimensional Nanosheets Produced by Liquid Exfoliation of Layered Materials. <i>Science</i> , 2011, 331, 568-571.	12.6	6,190
2	High-yield production of graphene by liquid-phase exfoliation of graphite. <i>Nature Nanotechnology</i> , 2008, 3, 563-568.	31.5	5,431
3	Liquid Exfoliation of Layered Materials. <i>Science</i> , 2013, 340, .	12.6	3,109
4	Science and technology roadmap for graphene, related two-dimensional crystals, and hybrid systems. <i>Nanoscale</i> , 2015, 7, 4598-4810.	5.6	2,452
5	Liquid Phase Production of Graphene by Exfoliation of Graphite in Surfactant/Water Solutions. <i>Journal of the American Chemical Society</i> , 2009, 131, 3611-3620.	13.7	2,038
6	Scalable production of large quantities of defect-free few-layer graphene by shear exfoliation in liquids. <i>Nature Materials</i> , 2014, 13, 624-630.	27.5	1,958
7	Atom-by-atom structural and chemical analysis by annular dark-field electron microscopy. <i>Nature</i> , 2010, 464, 571-574.	27.8	1,138
8	Oxidation Stability of Colloidal Two-Dimensional Titanium Carbides (MXenes). <i>Chemistry of Materials</i> , 2017, 29, 4848-4856.	6.7	1,120
9	Large-scale Exfoliation of Inorganic Layered Compounds in Aqueous Surfactant Solutions. <i>Advanced Materials</i> , 2011, 23, 3944-3948.	21.0	1,012
10	Liquid exfoliation of solvent-stabilized few-layer black phosphorus for applications beyond electronics. <i>Nature Communications</i> , 2015, 6, 8563.	12.8	921
11	Transparent, Flexible, and Conductive 2D Titanium Carbide (MXene) Films with High Volumetric Capacitance. <i>Advanced Materials</i> , 2017, 29, 1702678.	21.0	756
12	Additive-free MXene inks and direct printing of micro-supercapacitors. <i>Nature Communications</i> , 2019, 10, 1795.	12.8	649
13	Edge and confinement effects allow in situ measurement of size and thickness of liquid-exfoliated nanosheets. <i>Nature Communications</i> , 2014, 5, 4576.	12.8	432
14	Stamping of Flexible, Coplanar Micro-supercapacitors Using MXene Inks. <i>Advanced Functional Materials</i> , 2018, 28, 1705506.	14.9	427
15	All-printed thin-film transistors from networks of liquid-exfoliated nanosheets. <i>Science</i> , 2017, 356, 69-73.	12.6	391
16	Towards Solutions of Single-walled Carbon Nanotubes in Common Solvents. <i>Advanced Materials</i> , 2008, 20, 1876-1881.	21.0	333
17	Graphene and MXene-based transparent conductive electrodes and supercapacitors. <i>Energy Storage Materials</i> , 2019, 16, 102-125.	18.0	313
18	Basal-Plane Functionalization of Chemically Exfoliated Molybdenum Disulfide by Diazonium Salts. <i>ACS Nano</i> , 2015, 9, 6018-6030.	14.6	293

#	ARTICLE	IF	CITATIONS
19	3D MXene Architectures for Efficient Energy Storage and Conversion. <i>Advanced Functional Materials</i> , 2020, 30, 2000842.	14.9	276
20	Production of Molybdenum Trioxide Nanosheets by Liquid Exfoliation and Their Application in High-Performance Supercapacitors. <i>Chemistry of Materials</i> , 2014, 26, 1751-1763.	6.7	266
21	In Situ Formed Protective Barrier Enabled by Sulfur@Titanium Carbide (MXene) Ink for Achieving High Capacity, Long Lifetime Li-ion Batteries. <i>Advanced Science</i> , 2018, 5, 1800502.	11.2	210
22	Preparation of Gallium Sulfide Nanosheets by Liquid Exfoliation and Their Application As Hydrogen Evolution Catalysts. <i>Chemistry of Materials</i> , 2015, 27, 3483-3493.	6.7	195
23	Liquid exfoliation of interlayer spacing-tunable 2D vanadium oxide nanosheets: High capacity and rate handling Li-ion battery cathodes. <i>Nano Energy</i> , 2017, 39, 151-161.	16.0	123
24	Cellular uptake mechanisms of functionalised multi-walled carbon nanotubes by 3D electron tomography imaging. <i>Nanoscale</i> , 2011, 3, 2627.	5.6	110
25	MXene materials based printed flexible devices for healthcare, biomedical and energy storage applications. <i>Materials Today</i> , 2021, 43, 99-131.	14.2	107
26	Effect of Percolation on the Capacitance of Supercapacitor Electrodes Prepared from Composites of Manganese Dioxide Nanoplatelets and Carbon Nanotubes. <i>ACS Nano</i> , 2014, 8, 9567-9579.	14.6	89
27	Covalently Functionalized Hexagonal Boron Nitride Nanosheets by Nitrene Addition. <i>Chemistry - A European Journal</i> , 2012, 18, 10808-10812.	3.3	75
28	Production of Ni(OH) <sub>2</sub> nanosheets by liquid phase exfoliation: from optical properties to electrochemical applications. <i>Journal of Materials Chemistry A</i> , 2016, 4, 11046-11059.	10.3	71
29	Enabling Flexible Heterostructures for Li-ion Battery Anodes Based on Nanotube and Liquid-Phase Exfoliated 2D Gallium Chalcogenide Nanosheet Colloidal Solutions. <i>Small</i> , 2017, 13, 1701677.	10.0	71
30	Two-dimensional material inks. <i>Nature Reviews Materials</i> , 2022, 7, 717-735.	48.7	71
31	Probing the local nature of excitons and plasmons in few-layer MoS <sub>2</sub> . <i>Npj 2D Materials and Applications</i> , 2017, 1, .	7.9	58
32	Production of Quasi-2D Platelets of Nonlayered Iron Pyrite (FeS <sub>2</sub> ) by Liquid-Phase Exfoliation for High Performance Battery Electrodes. <i>ACS Nano</i> , 2020, 14, 13418-13432.	14.6	45
33	Insights into Chemical Dynamics and Their Impact on the Reactivity of Pt Nanoparticles during CO Oxidation by Operando TEM. <i>ACS Catalysis</i> , 2020, 10, 3183-3193.	11.2	44
34	Unusual Stacking Variations in Liquid-Phase Exfoliated Transition Metal Dichalcogenides. <i>ACS Nano</i> , 2014, 8, 3690-3699.	14.6	43
35	Imaging methods for determining uptake and toxicity of carbon nanotubes <i>in vitro</i> and <i>in vivo</i> . <i>Nanomedicine</i> , 2011, 6, 849-865.	3.3	37
36	Liquid phase exfoliation of MoO <sub>2</sub> nanosheets for lithium ion battery applications. <i>Nanoscale Advances</i> , 2019, 1, 1560-1570.	4.6	35

#	ARTICLE	IF	CITATIONS
37	Extra lithium-ion storage capacity enabled by liquid-phase exfoliated indium selenide nanosheets conductive network. <i>Energy and Environmental Science</i> , 2020, 13, 2124-2133.	30.8	35
38	Growth of large sized two-dimensional MoS <sub>2</sub> flakes in aqueous solution. <i>Nanoscale</i> , 2017, 9, 6575-6580.	5.6	17
39	Field-Dependent Electrical and Thermal Transport in Polycrystalline WSe <sub>2</sub> . <i>Advanced Materials Interfaces</i> , 2018, 5, 1701161.	3.7	17
40	High mobility solution processed MoS <sub>2</sub> thin film transistors. <i>Solid-State Electronics</i> , 2019, 158, 75-84.	1.4	16
41	Liquid phase exfoliation of nonlayered non-van der Waals iron trifluoride (FeF <sub>3</sub> ) into 2D-platelets for high-capacity lithium storing cathodes. <i>FlatChem</i> , 2022, 33, 100360.	5.6	15
42	A comparison of catabolic pathways induced in primary macrophages by pristine single walled carbon nanotubes and pristine graphene. <i>RSC Advances</i> , 2016, 6, 65299-65310.	3.6	13
43	Versatile Homebuilt Gas Feed and Analysis System for <i>Operando</i> TEM of Catalysts at Work. <i>Microscopy and Microanalysis</i> , 2020, 26, 220-228.	0.4	12
44	Long-chain amine-templated synthesis of gallium sulfide and gallium selenide nanotubes. <i>Nanoscale</i> , 2016, 8, 11698-11706.	5.6	11
45	Visualizing the importance of oxide-metal phase transitions in the production of synthesis gas over Ni catalysts. <i>Journal of Energy Chemistry</i> , 2020, 50, 178-186.	12.9	10
46	Self-Assembly of Atomically Thin Chiral Copper Heterostructures Templated by Black Phosphorus. <i>Advanced Functional Materials</i> , 2019, 29, 1903120.	14.9	9
47	Efficient fluorescence quenching in electrochemically exfoliated graphene decorated with gold nanoparticles. <i>Nanotechnology</i> , 2016, 27, 275702.	2.6	6
48	2D nanosheets from fool's gold by LPE: High performance lithium-ion battery anodes made from stone. <i>FlatChem</i> , 2021, 30, 100295.	5.6	6
49	Sonochemical edge functionalisation of molybdenum disulfide. <i>Nanoscale</i> , 2019, 11, 15550-15560.	5.6	4
50	Synthesis of layered platelets by self-assembly of rhenium-based clusters directed by long-chain amines. <i>Npj 2D Materials and Applications</i> , 2017, 1, .	7.9	3
51	Study Using Low-loss EELS to Compare Properties of TMDs Produced by Mechanical and Liquid Phase Exfoliation. <i>Microscopy and Microanalysis</i> , 2015, 21, 1475-1476.	0.4	2
52	Synthesis and Advanced Characterisation of Layered Platelets by Self-assembly of Long-chain Amines. <i>Microscopy and Microanalysis</i> , 2018, 24, 1566-1567.	0.4	0