# Matthew Holwill

List of Publications by Year
in descending order



| 22 | 820 | 623734 | 713466 |
|---|---|---|---|
| papers | citations | 14 h-index | 21 g-index |

| 24 | 24 | 24 | 1449 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Out-of-equilibrium criticalities in graphene superlattices. Science, 2022, 375, 430-433. | 12.6 | 34 |
| 2 | Two-dimensional adaptive membranes with programmable water and ionic channels. Nature Nanotechnology, 2021, 16, 174-180. | 31.5 | 86 |
| 3 | Visualizing atomic structure and magnetism of 2D magnetic insulators via tunneling through graphene. Nature Communications, 2021, 12, 70. | 12.8 | 29 |
| 4 | Mechanical Properties of Atomically Thin Tungsten Dichalcogenides: WS<sub>2</sub>, WSe<sub>2</sub>, and WTe<sub>2</sub>. ACS Nano, 2021, 15, 2600-2610. | 14.6 | 65 |
| 5 | Dielectric Breakdown in Single-Crystal Hexagonal Boron Nitride. ACS Applied Electronic Materials, 2021, 3, 3547-3554. | 4.3 | 28 |
| 6 | Piezoelectricity in Monolayer Hexagonal Boron Nitride. Advanced Materials, 2020, 32, e1905504. | 21.0 | 87 |
| 7 | Piezoelectric Materials: Piezoelectricity in Monolayer Hexagonal Boron Nitride (Adv. Mater. 1/2020). Advanced Materials, 2020, 32, 2070006. | 21.0 | 0 |
| 8 | Long-range ballistic transport of Brown-Zak fermions in graphene superlattices. Nature Communications, 2020, 11, 5756. | 12.8 | 25 |
| 9 | Convergent beam electron diffraction of multilayer Van der Waals structures. Ultramicroscopy, 2020, 212, 112976. | 1.9 | 6 |
| 10 | Holographic reconstruction of the interlayer distance of bilayer two-dimensional crystal samples from their convergent beam electron diffraction patterns. Ultramicroscopy, 2020, 219, 113020. | 1.9 | 2 |
| 11 | Field-induced insulating states in a graphene superlattice. Physical Review B, 2019, 99, . | 3.2 | 2 |
| 12 | Engineering Graphene Flakes for Wearable Textile Sensors via Highly Scalable and Ultrafast Yarn Dyeing Technique. ACS Nano, 2019, 13, 3847-3857. | 14.6 | 179 |
| 13 | Composite super-moirÃ© lattices in double-aligned graphene heterostructures. Science Advances, 2019, 5, eaay8897. | 10.3 | 74 |
| 14 | Planar and van der Waals heterostructures for vertical tunnelling single electron transistors. Nature Communications, 2019, 10, 230. | 12.8 | 43 |
| 15 | Convergent and divergent beam electron holography and reconstruction of adsorbates on free-standing two-dimensional crystals. Frontiers of Physics, 2019, 14, 1. | 5.0 | 7 |
| 16 | Excess resistivity in graphene superlattices caused by umklapp electronâ€“electron scattering. Nature Physics, 2019, 15, 32-36. | 16.7 | 46 |
| 17 | Additional Work. Springer Theses, 2019, , 85-91. | 0.1 | 0 |
| 18 | Graphene hot-electron light bulb: incandescence from hBN-encapsulated graphene in air. 2D Materials, 2018, 5, 011006. | 4.4 | 43 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Tunnel spectroscopy of localised electronic states in hexagonal boron nitride. Communications Physics, 2018, 1, . | 5.3 | 33 |
| 20 | Convergent beam electron holography for analysis of van der Waals heterostructures. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 7473-7478. | 7.1 | 17 |
| 21 | Growth of graphene on tantalum and its protective properties. Carbon, 2018, 139, 29-34. | 10.3 | 5 |
| 22 | Bloch Surface Waves for MoS2 Emission Coupling and Polariton Systems. Applied Sciences (Switzerland), 2017, 7, 1217. | 2.5 | 8 |