

# Christopher A Howard

## List of Publications by Year in descending order

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Version: 2024-02-01

61  
papers

2,878  
citations

201385

27  
h-index

168136

53  
g-index

62  
all docs

62  
docs citations

62  
times ranked

4493  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | TOF-SIMS analysis of curcuminoids and curcumin crystals crystallized from their pure and impure solutions. <i>CrystEngComm</i> , 2022, 24, 2485-2504.  | 1.3  | 1         |
| 2  | Towards a Pseudocapacitive Battery: Benchmarking the Capabilities of Quantized Capacitance for Energy Storage. , 2022, 1, .  |      | 3         |
| 3  | Probing adsorbent heterogeneity using Toth isotherms. <i>Journal of Materials Chemistry A</i> , 2021, 9, 944-962.  | 5.2  | 12        |
| 4  | Exfoliating large monolayers in liquids. <i>Nature Materials</i> , 2021, 20, 130-131.  | 13.3 | 2         |
| 5  | Understanding spontaneous dissolution of crystalline layered carbon nitride for tuneable photoluminescent solutions and glasses. <i>Journal of Materials Chemistry A</i> , 2021, 9, 2175-2183.   | 5.2  | 8         |
| 6  | A novel fuel cell design for operando energy-dispersive x-ray absorption measurements. <i>Journal of Physics Condensed Matter</i> , 2021, 33, 314002.  | 0.7  | 6         |
| 7  | Charge Density Waves in Electron-Doped Molybdenum Disulfide. <i>Nano Letters</i> , 2021, 21, 5516-5521.  | 4.5  | 10        |
| 8  | Intermediate Range Order in Metal- <sup>+</sup> Ammonia Solutions: Pure and Na-Doped Ca-NH <sub>3</sub> . <i>Journal of Physical Chemistry B</i> , 2021, 125, 7456-7461.   | 1.2  | 1         |
| 9  | Deep neural networks in chemical engineering classrooms to accurately model adsorption equilibrium data. <i>Education for Chemical Engineers</i> , 2021, 36, 115-127.  | 2.8  | 18        |
| 10 | Characterizing Batteries by In Situ Electrochemical Atomic Force Microscopy: A Critical Review. <i>Advanced Energy Materials</i> , 2021, 11, 2101518.  | 10.2 | 40        |
| 11 | Scalable Sacrificial Templating to Increase Porosity and Platinum Utilisation in Graphene-Based Polymer Electrolyte Fuel Cell Electrodes. <i>Nanomaterials</i> , 2021, 11, 2530.   | 1.9  | 3         |
| 12 | Neutron studies of Na-ion battery materials. <i>JPhys Materials</i> , 2021, 4, 042008.   | 1.8  | 5         |
| 13 | Phosphorene Nanoribbon-Augmented Optoelectronics for Enhanced Hole Extraction. <i>Journal of the American Chemical Society</i> , 2021, 143, 21549-21559.   | 6.6  | 44        |
| 14 | Probing Electron-Phonon Interactions Away from the Fermi Level with Resonant Inelastic X-Ray Scattering. <i>Physical Review X</i> , 2021, 11, .  | 2.8  | 6         |
| 15 | Bioengineering the ameloblastoma tumour to study its effect on bone nodule formation. <i>Scientific Reports</i> , 2021, 11, 24088.   | 1.6  | 11        |
| 16 | Aquaporin-like water transport in nanoporous crystalline layered carbon nitride. <i>Science Advances</i> , 2020, 6, .  | 4.7  | 17        |
| 17 | Elucidating the Sodiation Mechanism in Hard Carbon by Operando Raman Spectroscopy. <i>ACS Applied Energy Materials</i> , 2020, 3, 7474-7484.   | 2.5  | 56        |
| 18 | Nanoporous Carbons: Superior Multifunctional Activity of Nanoporous Carbons with Widely Tunable Porosity: Enhanced Storage Capacities for Carbon Dioxide, Hydrogen, Water, and Electric Charge (Adv.) <i>TJ ETQq010.2 rgBT /D</i> Overlock 1 | 10.2 | 10        |

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 19 | Realising the electrochemical stability of graphene: scalable synthesis of an ultra-durable platinum catalyst for the oxygen reduction reaction. <i>Nanoscale</i> , 2020, 12, 16113-16122.  | 2.8  | 11        |
| 20 | Tuning the interlayer spacing of graphene laminate films for efficient pore utilization towards compact capacitive energy storage. <i>Nature Energy</i> , 2020, 5, 160-168.   | 19.8 | 381       |
| 21 | Superior Multifunctional Activity of Nanoporous Carbons with Widely Tunable Porosity: Enhanced Storage Capacities for Carbon Dioxide, Hydrogen, Water, and Electric Charge. <i>Advanced Energy Materials</i> , 2020, 10, 1903649. | 10.2 | 41        |
| 22 | The liquid structure of the solvents dimethylformamide (DMF) and dimethylacetamide (DMA). <i>Molecular Physics</i> , 2019, 117, 3353-3363.  | 0.8  | 19        |
| 23 | Formation of an ion-free crystalline carbon nitride and its reversible intercalation with ionic species and molecular water. <i>Chemical Science</i> , 2019, 10, 2519-2528.   | 3.7  | 30        |
| 24 | Solvation of Na <sup>+</sup> in the Sodide Solution, LiNa <sup>+</sup> ·10MeNH <sub>2</sub> . <i>Journal of Physical Chemistry B</i> , 2019, 123, 5337-5342.  | 1.2  | 1         |
| 25 | Production of phosphorene nanoribbons. <i>Nature</i> , 2019, 568, 216-220.  | 13.7 | 208       |
| 26 | Characterization of the adsorption site energies and heterogeneous surfaces of porous materials. <i>Journal of Materials Chemistry A</i> , 2019, 7, 10104-10137.  | 5.2  | 187       |
| 27 | Exceptional supercapacitor performance from optimized oxidation of graphene-oxide. <i>Energy Storage Materials</i> , 2019, 17, 12-21.   | 9.5  | 135       |
| 28 | Synthesis, Structure and Electronic Properties of Graphitic Carbon Nitride Films. <i>Journal of Physical Chemistry C</i> , 2018, 122, 25183-25194.  | 1.5  | 64        |
| 29 | Lattice dynamics of the cluster chain compounds $M_2M_2M_2$   |      |           |

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|----|---|-----|-----------|
| 37 | Trajectory of the Selective Dissolution of Charged Single-Walled Carbon Nanotubes. Journal of Physical Chemistry C, 2017, 121, 21703-21712.   | 1.5 | 9         |
| 38 | Single Crystal, Luminescent Carbon Nitride Nanosheets Formed by Spontaneous Dissolution. Nano Letters, 2017, 17, 5891-5896.   | 4.5 | 76        |
| 39 | Ionic solutions of two-dimensional materials. Nature Chemistry, 2017, 9, 244-249.   | 6.6 | 68        |
| 40 | Graphitic Carbon Nitride as a Catalyst Support in Fuel Cells and Electrolyzers. Electrochimica Acta, 2016, 222, 44-57.  | 2.6 | 97        |
| 41 | Superconductivity in Ca-doped graphene laminates. Scientific Reports, 2016, 6, 23254.   | 1.6 | 109       |
| 42 | Questioning Antiferromagnetic Ordering in the Expanded Metal, $\text{Li}(\text{NH}_3)_4$ : A Lack of Evidence from $^{14}\text{SR}$ . Journal of Physical Chemistry Letters, 2015, 6, 3966-3970.  | 2.1 | 1         |
| 43 | Probing the charging mechanisms of carbon nanomaterial polyelectrolytes. Faraday Discussions, 2014, 172, 311-325.   | 1.6 | 25        |
| 44 | Superconducting graphene sheets in $\text{CaC}_6$ enabled by phonon-mediated interband interactions. Nature Communications, 2014, 5, 3493.  | 5.8 | 91        |
| 45 | Electrochemical Processing of Discrete Single-Walled Carbon Nanotube Anions. ACS Nano, 2013, 7, 1769-1778.  | 7.3 | 29        |
| 46 | PanetÅal.Reply:. Physical Review Letters, 2012, 108, .  | 2.9 | 4         |
| 47 | Scalable Method for the Reductive Dissolution, Purification, and Separation of Single-Walled Carbon Nanotubes. ACS Nano, 2012, 6, 54-62.  | 7.3 | 81        |
| 48 | Structure and Morphology of Charged Graphene Platelets in Solution by Small-Angle Neutron Scattering. Journal of the American Chemical Society, 2012, 134, 8302-8305.                             | 6.6 | 60        |
| 49 | Nonsuperconducting $\text{BaC}_8$ and superconducting $\text{CaC}_6$ Graphite Intercalation Compounds: Evidence for a Graphene Sheet-Driven Superconducting State. Physical Review B, 2011, 84, . | 2.9 | 68        |
| 50 | Charge density waves in the graphene sheets of the superconductor $\text{CaC}_6$ . Nature Communications, 2011, 2, 558.   | 5.8 | 56        |
| 51 | Phonons in potassium-doped graphene: The effects of electron-phonon interactions, dimensionality, and adatom ordering. Physical Review B, 2011, 84, .   | 1.1 | 62        |
| 52 | Comparative study of the phonons in nonsuperconducting $\text{BaC}_8$ and superconducting $\text{CaC}_6$ using inelastic x-ray scattering. Physical Review B, 2011, 84, .                         | 1.1 | 14        |
| 53 | Structure of $\pi\text{-}\pi^*$ Interactions in Aromatic Liquids. Journal of the American Chemical Society, 2010, 132, 5735-5742.   | 6.6 | 177       |
| 54 | Nonadiabatic phonons within the doped graphene layers of $\text{CaC}_6$ . Physical Review B, 2010, 81, .  | 1.1 | 145       |

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|----|--|-----|-----------|
| 55 | Neutron scattering study of the high-energy graphitic phonons in superconducting $\text{CaC}_6$ . Physical Review B, 2010, 82, .   | 6.1 | 14        |
| 56 | Phonons and superconductivity in $\text{YbC}_6$ related compounds. Physical Review B, 2010, 82, .  | 6.1 | 14        |
| 57 | Anisotropic Electron-Phonon Coupling and Dynamical Nesting on the Graphene Sheets in Superconducting $\text{CaC}_6$ using Angle-Resolved Photoemission Spectroscopy. Physical Review Letters, 2009, 102, 107007. | 2.9 | 78        |
| 58 | Computer Simulations of Fulleride Anions in Metal-Ammonia Solutions. Journal of Physical Chemistry B, 2009, 113, 3324-3332.  | 1.2 | 15        |
| 59 | Phonons in superconducting $\text{CaC}_6$ via inelastic x-ray scattering. Physical Review B, 2007, 76, .   | 1.7 | 17        |
| 60 | The Solvation Structure of Fulleride $\text{C}_{60}^{5-}$ Anions in Potassium Ammonia Solution. Journal of Physical Chemistry C, 2007, 111, 5640-5647.   | 1.5 | 17        |
| 61 | Formation of Giant Solvation Shells around Fulleride Anions in Liquid Ammonia. Journal of the American Chemical Society, 2004, 126, 13228-13229.   | 6.6 | 27        |