# Christopher A Howard

List of Publications by Year
in descending order



| 61 | 2,878 | 201385 | 168136 |
|---|---|---|---|
| papers | citations | 27 h-index | 53 g-index |

| 62 | 62 | 62 | 4493 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Tuning the interlayer spacing of graphene laminate films for efficient pore utilization towards compact capacitive energy storage. Nature Energy, 2020, 5, 160-168. | 19.8 | 381 |
| 2 | Production of phosphorene nanoribbons. Nature, 2019, 568, 216-220. | 13.7 | 208 |
| 3 | Characterization of the adsorption site energies and heterogeneous surfaces of porous materials. Journal of Materials Chemistry A, 2019, 7, 10104-10137. | 5.2 | 187 |
| 4 | Charged Carbon Nanomaterials: Redox Chemistries of Fullerenes, Carbon Nanotubes, and Graphenes. Chemical Reviews, 2018, 118, 7363-7408. | 23.0 | 182 |
| 5 | Structure of Ï€âˆ’Ï€ Interactions in Aromatic Liquids. Journal of the American Chemical Society, 2010, 132, 5735-5742. | 6.6 | 177 |
| 6 | Exceptional supercapacitor performance from optimized oxidation of graphene-oxide. Energy Storage Materials, 2019, 17, 12-21. | 9.5 | 135 |
| 7 | Superconductivity in Ca-doped graphene laminates. Scientific Reports, 2016, 6, 23254. | 1.6 | 109 |
| 8 | Graphitic Carbon Nitride as a Catalyst Support in Fuel Cells and Electrolyzers. Electrochimica Acta, 2016, 222, 44-57. | 2.6 | 97 |
| 9 | Superconducting graphene sheets in CaC6 enabled by phonon-mediated interband interactions. Nature Communications, 2014, 5, 3493. | 5.8 | 91 |
| 10 | Scalable Method for the Reductive Dissolution, Purification, and Separation of Single-Walled Carbon Nanotubes. ACS Nano, 2012, 6, 54-62. | 7.3 | 81 |
| 11 | Anisotropic Electron-Phonon Coupling and Dynamical Nesting on the Graphene Sheets in Superconducting<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>CaC</mml:mi><mml:mn>6</mml:mn></mml:msub></mml:math>using Angle-Resolved Photoemission Spectroscopy. Physical Review Letters, 2009, 102, 107007. | 2.9 | 78 |
| 12 | Single Crystal, Luminescent Carbon Nitride Nanosheets Formed by Spontaneous Dissolution. Nano Letters, 2017, 17, 5891-5896. | 4.5 | 76 |
| 13 | Electronic Structure of Superconducting<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>KC</mml:mi><mml:mn>8</mml:mn></mml:msub></mml:math>and Nonsuperconducting<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>LiC</mml:mi><mml:mn>6</mml:mn></mml:msub></mml:math>Graphite Intercalation Compounds. Evidence for a Graphene-Sheet-Driven Superconducting State. Physical Revie | 2.9 | 68 |
| 14 | Ionic solutions of two-dimensional materials. Nature Chemistry, 2017, 9, 244-249. | 6.6 | 68 |
| 15 | Synthesis, Structure and Electronic Properties of Graphitic Carbon Nitride Films. Journal of Physical Chemistry C, 2018, 122, 25183-25194. | 1.5 | 64 |
| 16 | Phonons in potassium-doped graphene: The effects of electron-phonon interactions, dimensionality, and adatom ordering. Physical Review B, 2011, 84, . | 1.1 | 62 |
| 17 | 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 |
| 18 | Charge density waves in the graphene sheets of the superconductor CaC6. Nature Communications, 2011, 2, 558. | 5.8 | 56 |

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|---|---|---|---|
| 19 | Elucidating the Sodiation Mechanism in Hard Carbon by Operando Raman Spectroscopy. ACS Applied Energy Materials, 2020, 3, 7474-7484. | 2.5 | 56 |
| 20 | Nonadiabatic phonons within the doped graphene layers of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>X</mml:mi><mml:msub><mml:mtext>C</mml:mtext><mml:mn>6</mml:mn></mml:msub></m Physical Review B, 2010, 81, . | 1.1 | 45 |
| 21 | Phosphorene Nanoribbon-Augmented Optoelectronics for Enhanced Hole Extraction. Journal of the American Chemical Society, 2021, 143, 21549-21559. | 6.6 | 44 |
| 22 | Superior Multifunctional Activity of Nanoporous Carbons with Widely Tunable Porosity: Enhanced Storage Capacities for Carbonâ€Dioxide, Hydrogen, Water, and Electric Charge. Advanced Energy Materials, 2020, 10, 1903649. | 10.2 | 41 |
| 23 | Characterizing Batteries by In Situ Electrochemical Atomic Force Microscopy: A Critical Review. Advanced Energy Materials, 2021, 11, 2101518. | 10.2 | 40 |
| 24 | Fast Exfoliation and Functionalisation of Twoâ€Dimensional Crystalline Carbon Nitride by Framework Charging. Angewandte Chemie - International Edition, 2018, 57, 12656-12660. | 7.2 | 35 |
| 25 | Formation of an ion-free crystalline carbon nitride and its reversible intercalation with ionic species and molecular water. Chemical Science, 2019, 10, 2519-2528. | 3.7 | 30 |
| 26 | Electrochemical Processing of Discrete Single-Walled Carbon Nanotube Anions. ACS Nano, 2013, 7, 1769-1778. | 7.3 | 29 |
| 27 | Formation of Giant Solvation Shells around Fulleride Anions in Liquid Ammonia. Journal of the American Chemical Society, 2004, 126, 13228-13229. | 6.6 | 27 |
| 28 | Local Structure and Polar Order in Liquid N-Methyl-2-pyrrolidone (NMP). Journal of Physical Chemistry B, 2018, 122, 8963-8971. | 1.2 | 27 |
| 29 | Probing the charging mechanisms of carbon nanomaterial polyelectrolytes. Faraday Discussions, 2014, 172, 311-325. | 1.6 | 25 |
| 30 | The liquid structure of the solvents dimethylformamide (DMF) and dimethylacetamide (DMA). Molecular Physics, 2019, 117, 3353-3363. | 0.8 | 19 |
| 31 | Deep neural networks in chemical engineering classrooms to accurately model adsorption equilibrium data. Education for Chemical Engineers, 2021, 36, 115-127. | 2.8 | 18 |
| 32 | Phonons in superconducting<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mi>CaC</mml:mi><mml:mn>6</mml:mn></mml:msub></mml:mrow></mml:math>stu via inelastic x-ray scattering. Physical Review B, 2007, 76, . | 1.1 | 17 |
| 33 | The Solvation Structure of Fulleride C605-Anions in Potassium Ammonia Solution. Journal of Physical Chemistry C, 2007, 111, 5640-5647. | 1.5 | 17 |
| 34 | Electron Solvation and the Unique Liquid Structure of a Mixedâ€Amine Expanded Metal: The Saturated Liâ€“NH<sub>3</sub>â€“MeNH<sub>2</sub> System. Angewandte Chemie - International Edition, 2017, 56, 1561-1565. | 7.2 | 17 |
| 35 | Chemical routes to discharging graphenides. Nanoscale, 2017, 9, 3150-3158. | 2.8 | 17 |
| 36 | Aquaporin-like water transport in nanoporous crystalline layered carbon nitride. Science Advances, 2020, 6, . | 4.7 | 17 |

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|---|---|---|---|
| 37 | Computer Simulations of Fulleride Anions in Metal-Ammonia Solutions. Journal of Physical Chemistry B, 2009, 113, 3324-3332. | 1.2 | 15 |
| 38 | Neutron scattering study of the high-energy graphitic phonons in superconducting<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>CaC</mml:mtext></mml:mrow><mml:mn>6</mml:mn></mml:ms Physical Review B, 2010, 82, . | 1.1 | 14 |
| 39 | Phonons and superconductivity in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>YbC</mml:mtext></mml:mrow><mml:mn>6</mml:mn></mml:msub></mml:mrow></mml:math>and related compounds. Physical Review B, 2010, 82, . | 1.1 | 14 |
| 40 | Comparative study of the phonons in nonsuperconducting BaC<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>6</mml:mn></mml:msub></mml:math>and superconducting CaC<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>6</mml:mn></mml:msub></mml:math>using inelastic x-ray scattering. Physical Review B, 2011, 84, . | 1.1 | 14 |
| 41 | Fast Exfoliation and Functionalisation of Twoâ€Dimensional Crystalline Carbon Nitride by Framework Charging. Angewandte Chemie, 2018, 130, 12838-12842. | 1.6 | 14 |
| 42 | Probing adsorbent heterogeneity using Toth isotherms. Journal of Materials Chemistry A, 2021, 9, 944-962. | 5.2 | 12 |
| 43 | Realising the electrochemical stability of graphene: scalable synthesis of an ultra-durable platinum catalyst for the oxygen reduction reaction. Nanoscale, 2020, 12, 16113-16122. | 2.8 | 11 |
| 44 | Bioengineering the ameloblastoma tumour to study its effect on bone nodule formation. Scientific Reports, 2021, 11, 24088. | 1.6 | 11 |
| 45 | Charge Density Waves in Electron-Doped Molybdenum Disulfide. Nano Letters, 2021, 21, 5516-5521. | 4.5 | 10 |
| 46 | Trajectory of the Selective Dissolution of Charged Single-Walled Carbon Nanotubes. Journal of Physical Chemistry C, 2017, 121, 21703-21712. | 1.5 | 9 |
| 47 | Understanding spontaneous dissolution of crystalline layered carbon nitride for tuneable photoluminescent solutions and glasses. Journal of Materials Chemistry A, 2021, 9, 2175-2183. | 5.2 | 8 |
| 48 | Lattice dynamics of the cluster chain compounds <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>M</mml:mi><mml:mn>2</mml:mn></mml:m | | |

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|---|---|---|---|
| 55 | Exfoliating large monolayers in liquids. Nature Materials, 2021, 20, 130-131. | 13.3 | 2 |
| 56 | Questioning Antiferromagnetic Ordering in the Expanded Metal, Li(NH<sub>3</sub>)<sub>4</sub>: A Lack of Evidence from Î¼SR. Journal of Physical Chemistry Letters, 2015, 6, 3966-3970. | 2.1 | 1 |
| 57 | Electron Solvation and the Unique Liquid Structure of a Mixedâ€Amine Expanded Metal: The Saturated Liâ€“NH<sub>3</sub>â€“MeNH<sub>2</sub> System. Angewandte Chemie, 2017, 129, 1583-1587. | 1.6 | 1 |
| 58 | Solvation of Na<sup>â€“</sup> in the Sodide Solution, LiNaÂ·10MeNH<sub>2</sub>. Journal of Physical Chemistry B, 2019, 123, 5337-5342. | 1.2 | 1 |
| 59 | Nanoporous Carbons: Superior Multifunctional Activity of Nanoporous Carbons with Widely Tunable Porosity: Enhanced Storage Capacities for Carbonâ€Dioxide, Hydrogen, Water, and Electric Charge (Adv.) Tj ETQq1 1 0.784314 rgBT /Ov | 10.2 | 1 |
| 60 | Intermediate Range Order in Metalâ€“Ammonia Solutions: Pure and Na-Doped Ca-NH<sub>3</sub>. Journal of Physical Chemistry B, 2021, 125, 7456-7461. | 1.2 | 1 |
| 61 | TOF-SIMS analysis of curcuminoids and curcumin crystals crystallized from their pure and impure solutions. CrystEngComm, 2022, 24, 2485-2504. | 1.3 | 1 |