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# ADAM DAIZHEN WRIGHT

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| <b>Address:</b>  | Department of Physics, University of Warwick, Coventry, UK, CV4 7HS                                                       | <b>Tel:</b>         | +44 24765 74213              |
| <b>E-mail:</b>   | <a href="mailto:a.d.wright@warwick.ac.uk">a.d.wright@warwick.ac.uk</a>                                                    | <b>LinkedIn:</b>    | <a href="#">adamdzwright</a> |
| <b>Websites:</b> | <a href="http://warwick.ac.uk/adwright">warwick.ac.uk/adwright</a> , <a href="http://adwrightlab.com">adwrightlab.com</a> | <b>Nationality:</b> | British                      |

## APPOINTMENTS

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| <b>University of Warwick</b> , Assistant Professor<br>Establishing a research group to explore light-matter interactions.                                         | Aug 2023 –          |
| <b>Princeton University</b> , Postdoctoral Research Associate<br>Developed a novel experimental technique to prepare and study polaritons in gas-phase systems.   | Jul 2021 – Jun 2023 |
| <b>University of Oxford</b> , Postdoctoral Research Assistant<br>Experimental study of the factors influencing charge-carrier motion in metal halide perovskites. | Jan 2019 – Jun 2021 |

## EDUCATION

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| <b>University of Oxford</b> , DPhil Condensed Matter Physics                                      | 2015 – 2019 |
| <b>Imperial College London</b> , MRes Plastic Electronic Materials – <b>Distinction (82 %)</b>    | 2014 – 2015 |
| <b>University of Cambridge</b> , BA (Hons) & MSci Natural Sciences – <b>1<sup>st</sup> (72 %)</b> | 2010 – 2014 |

## AWARDS

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|-------------------------------------------------------------------------------------|-------------|
| Institute of Physics <b>Semiconductor Physics Thesis Prize</b>                      | 2020        |
| Mansfield College, Oxford <b>Junior Research Fellowship</b>                         | 2018 – 2020 |
| <b>Nicholas Kurti Prize</b> for distinguished work by a third year graduate student | 2018        |
| Corpus Christi College, Oxford <b>Senior Scholarship</b>                            | 2017 – 2018 |
| St Catharine's College, Cambridge <b>Senior Scholarship</b>                         | 2014        |

## TEACHING EXPERIENCE

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| <b>Lecturer</b>                  | <a href="#">PX399</a> The Earth and its Atmosphere (15 hours of lectures) | 2024 –      |
| <b>Final-Year Project Marker</b> | <a href="#">PX3A0</a> (BSc), <a href="#">PX402</a> (MPhys)                | 2024 –      |
| <b>Lab Demonstrator</b>          | <a href="#">PX428</a> , <a href="#">PX442</a>                             | 2023 –      |
| <b>Personal Tutor</b>            | Small-group teaching <a href="#">PX161</a>                                | 2023 –      |
| <b>Stipendiary Lecturer</b>      | Small-group teaching (Corpus Christi College, Oxford)                     | 2020 – 2021 |

## ACTIVITIES & RESPONSIBILITIES

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| <b>Programme Committee</b> , UK Semiconductors Conference                                                                                                                                                                              | 2022 –      |
| <b>Journal Reviewer:</b> ➤ ACS Appl. Energy Mater. ➤ APL Mater. ➤ Appl. Phys. Lett.<br>➤ Commun. Phys. ➤ J. Mater. Chem. ➤ J. Phys. Chem. C ➤ J. Phys. Chem. Lett. ➤ J. Phys. Mater.<br>➤ Nat. Commun. ➤ Nat. Mater. ➤ Physica Scripta | 2020 –      |
| Outreach: <b>Volunteer Assessor for CREST awards</b> , British Science Association                                                                                                                                                     | 2020 –      |
| Ordinary Member of the Institute of Physics <b>Semiconductor Physics Group Committee</b>                                                                                                                                               | 2020 – 2024 |

## REFERENCES

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**Prof. Mark Newton**, Head of Department, Dept. of Physics, University of Warwick, Coventry, CV4 7AL, UK  
[m.e.newton@warwick.ac.uk](mailto:m.e.newton@warwick.ac.uk) +44 24761 50799

**Prof. Marissa Weichman**, Assistant Professor of Chemistry, Dept. of Chemistry, Princeton University, NJ 08544, USA  
[weichman@princeton.edu](mailto:weichman@princeton.edu) +1 609 258 0926

**Prof. Laura Herz**, Professor of Physics, Dept. of Physics, University of Oxford, Oxford, OX1 3PU, UK  
[laura.herz@physics.ox.ac.uk](mailto:laura.herz@physics.ox.ac.uk) +44 1865 282214

## PUBLICATION LIST

**27 total.** My **7 first-author journal articles** are shown below. For full list, see my [Google Scholar](#) or [ORCID](#).

7. **A. D. Wright**, J. C. Nelson, M. L. Weichman, A versatile platform for gas-phase molecular polaritonics, *The Journal of Chemical Physics*, (2023), **159**, 164202.  
*Reports the extended capabilities of our gas-phase molecular polariton platform.*
6. **A. D. Wright**, J. C. Nelson, M. L. Weichman, Rovibrational polaritons in gas-phase methane, *Journal of the American Chemical Society*, (2023), **145**, 5982–5987.  
*The first demonstration of molecular gas-phase polaritons, a new platform for chemistry under vibrational strong coupling.*
5. **A. D. Wright**, J. B. Patel, M. B. Johnston, L. M. Herz, Temperature-dependent reversal of phase segregation in mixed-halide perovskites, *Advanced Materials*, (2023), **35**, 2210834.  
*Uncovers how both increases in temperature and light intensity can counteract the halide segregation process.*
4. **A. D. Wright**, L. R. V. Buizza, K. J. Savill, G. Longo, H. J. Snaith, M. B. Johnston, L. M. Herz, Ultrafast excited-state localization in Cs<sub>2</sub>AgBiBr<sub>6</sub> double perovskite, *The Journal of Physical Chemistry Letters*, (2021), **12**, 3352–3360.  
*Demonstrates the rapid self-trapping of photoexcited charge-carriers in the lead-free perovskite Cs<sub>2</sub>AgBiBr<sub>6</sub>.*
3. **A. D. Wright**, G. Volonakis, J. Borchert, C. L. Davies, F. Giustino, M. B. Johnston, L. M. Herz, Intrinsic quantum confinement in formamidinium lead triiodide perovskite, *Nature Materials*, (2020), **19**, 1201–1206.  
*Discovery of a novel above-bandgap absorption feature, attributed to intrinsically-occurring quantum confinement.*
2. **A. D. Wright**, R. L. Milot, G. E. Eperon, H. J. Snaith, M. B. Johnston, L. M. Herz, Band-tail recombination in hybrid lead iodide perovskite, *Advanced Functional Materials*, (2017), **27**, 1700860.  
*Shows the presence of an exponential trap-density tail of states in HC(NH<sub>2</sub>)<sub>2</sub>PbI<sub>3</sub> perovskite.*
1. **A. D. Wright**, C. Verdi, R. L. Milot, G. E. Eperon, M. A. Pérez-Osorio, H. J. Snaith, F. Giustino, M. B. Johnston, L. M. Herz, Electron-phonon coupling in hybrid lead halide perovskites, *Nature Communications*, (2016), **7**, 11755.  
*Scattering from longitudinal optical phonons dominates electron-phonon coupling in room temperature perovskites.*

## CONFERENCE PRESENTATIONS

|                                                                                      |                         |                |          |
|--------------------------------------------------------------------------------------|-------------------------|----------------|----------|
| 14. Materials Research Society Fall Meeting                                          | Boston, Mass., USA      | <b>Oral</b>    | Nov 2023 |
| 13. American Chemical Society Spring Meeting                                         | Indianapolis, Ind., USA | <b>Oral</b>    | Mar 2023 |
| 12. UK Semiconductors Conference                                                     | Sheffield, UK           | <b>Invited</b> | Jul 2022 |
| 11. American Physical Society March Meeting                                          | Chicago, Ill., USA      | <b>Oral</b>    | Mar 2022 |
| 10. Materials Research Society Fall Meeting                                          | Boston, Mass., USA      | <b>Oral</b>    | Dec 2021 |
| 9. Materials Research Society Spring Meeting                                         | Online                  | <b>Oral</b>    | Apr 2021 |
| 8. American Physical Society March Meeting                                           | Online                  | <b>Oral</b>    | Mar 2021 |
| 7. Materials Research Society Spring & Fall Meeting                                  | Online                  | <b>Oral</b>    | Dec 2020 |
| 6. nanoGe Fall Meeting                                                               | Online                  | <b>Oral</b>    | Oct 2020 |
| 5. Asia-Pacific Int'l Conf. on Perovskite, Organic Photovoltaics and Optoelectronics | Tsukuba, Japan          | <b>Oral</b>    | Jan 2020 |
| 4. Materials Research Society Spring Meeting                                         | Phoenix, Ariz., USA     | <b>Oral</b>    | Apr 2018 |
| 3. International Conference on Perovskite Photonics & Optoelectronics                | Rennes, France          | <b>Oral</b>    | Feb 2018 |
| 2. KAUST Conference: Emerging Concepts & Materials in Solar Energy Conversion        | Thuwal, Saudi Arabia    | <b>Oral</b>    | Nov 2016 |
| 1. 2nd International Conference on Perovskite Solar Cells & Optoelectronics          | Genoa, Italy            | <b>Oral</b>    | Sep 2016 |

## RESEARCH MENTORING EXPERIENCE (SINCE WARWICK)

|                 |                     |             |
|-----------------|---------------------|-------------|
| Thomas Gledhill | PhD student         | 2024 –      |
| Emma Imamovic   | BSc project student | 2024 – 2025 |
| Toby Jewers     | BSc project student | 2024 – 2025 |