

Curriculum Vitae

Professional experience	<p>1 Sept. 2020 – present: Senior Lecturer in Physics University of Central Lancashire, UK</p> <p>20 Jan. 2015 – 31 Aug. 2020: Lecturer in Physics University of Central Lancashire, UK</p> <p>1 Sept. 2013 – 19 Jan. 2015: Postdoctoral Researcher Royal Holloway, University of London, UK</p> <p>8 Sept. 2011 – 28 Aug. 2013: Research Associate in Physics Brookhaven National Laboratory, NY, USA</p> <p>14 Feb. 2009 – 30 Aug. 2011: Postdoctoral Researcher Max-Planck Institute for Chemical Physics of Solids, Germany</p> <p>8 months in 2005 – 2008: Visiting PhD Researcher Max-Planck Institute for Chemical Physics of Solids, Germany</p> <p>1 Feb. 2005 – 3 March 2005: Visiting PhD Researcher Institute of Low Temperature and Structure Research PAS, Poland</p> <p>1 Aug. 2004 – 30 Sept. 2004: Programmer and data base tester in AltaSoft s.c., Poland</p>
Research interests	<p>Design, synthesis, and characterization of novel quantum materials. My research aims to unravel unconventional physical phenomena that emerge in crystalline solids because of strong electronic correlations, frustration, or topological states.</p>
Publications, talks and posters	<ul style="list-style-type: none"> ➤ Author or coauthor of 30 articles published in per-reviewed journals ➤ 26 talks (inc. invited talk at CMQM 2019) and 18 posters presented at 51 conferences, workshops and seminars (details available on www.star.uclan.ac.uk/~mgamza)
Education	<p>Sept. 2018: Postgraduate Certificate in Teaching and Learning in Higher Education University of Central Lancashire, UK</p> <p>Feb. 2009: Doctor of Philosophy in Physics, specialization: Solid State Physics Institute of Physics, University of Silesia in Katowice, Poland thesis entitled “Experimental and theoretical study of electronic structure and the investigations of thermodynamic properties of the intermetallic compounds containing Ce and Rh” supervisor: Prof. dr hab. A. Ślebarski dissertation defended with honours</p> <p>June 2004 Master of Arts in Experimental Physics University of Silesia in Katowice, Poland finished within 5% of the best graduates in 2003/2004</p>

Grants	<ul style="list-style-type: none"> ➤ HE Infrastructure Fund, UCLAN, November 2018 „Low temperature system for routine physical properties measurements and to support development of advanced experimental techniques”, principal investigator ➤ Seed Corn Funding for Early Stage Researchers, 01.04.2017 - 31.07.2017 „Theory-assisted search for novel itinerant magnets”, principal investigator ➤ Learning and Teaching Development Grant, 01.04.2017 - 31.07.2017 „Learning by creating - embedding modern teaching strategies into Third Year Physics Laboratory module”, principal investigator ➤ Grant No. RG150773 by the Royal Society, 14.03.2016 - 13.03.2017 „Large non-saturating magnetoresistance in a novel superconductor with highly tunable electronic properties, $\text{Ca}_{3+x}\text{Co}_4\text{Sn}_{13-y}$”, principal investigator ➤ University Equipment Fund, April 2016 „Controlled atmosphere synthesis kit to support Undergraduate and Postgraduate Teaching, Learning and Research”, one of two principal investigators ➤ Grant No. N202 010 32/0487 of the Ministry of Science and Higher Education, Poland, 2007 – 2008, principal investigator ➤ Grant No. 1 PO3B 052 28 of the State Committee for Scientific Research (KBN), Poland, 2005 – 2007, co-investigator
Scholarships	<ul style="list-style-type: none"> • Max-Planck Society Fellowship, January – August 2011 & January 2009 - June 2010, Max-Planck Institute for Chemical Physics of Solids, Dresden, Germany Hosts: Prof. Yu. Grin, Dr. R. Gumeniuk, Dr. H. Rosner, Dr. W. Schnelle Project title: “Physics and chemistry of intermetallic compounds <i>RE-T-Sn</i>” • DAAD scholarship for young researchers, July - December 2010, Max-Planck Institute for Chemical Physics of Solids in Dresden, Germany Host: Prof. Yu. Grin Project title: “Valence transitions in Eu and Yb intermetallic compounds upon boron insertion probed by spectroscopy – a joined experimental and theoretical study” • Doctoral scholarship in academic years 2004/05, 2005/06, 2006/07 and 2007/08 University of Silesia, Katowice, Poland • Scientific scholarship as an award for academic achievements in years 1998/99, 1999/2000, 2000/01, 2001/02, 2002/03 and 2003/04 University of Silesia, Katowice, Poland • Scholarship of the city Dąbrowa Górnicza for the best students in the area of science in the summer semester of academic year 2003/2004 • Scholarship of the fund „Śląski Fundusz Stypendialny” in the summer semester of academic year 2003/2004 • Scholarship of the fund „Otwarty Zagłębiowski Fundusz Stypendialny” in the winter semester of academic year 2003/2004
Languages	<ul style="list-style-type: none"> ▪ Polish (mother tongue) ▪ English (fluent) ▪ German (working knowledge)

Memberships	<ul style="list-style-type: none"> • Member of American Physical Society (2012 – present) • Fellow of Higher Education Academy (2018 – present) • Member of the Institute of Physics (2015 – present) • Member of Polish Physical Society (2008 – present)
External roles	<ul style="list-style-type: none"> ✓ External Examiner for Physics courses at the University of Salford (Sept. 2023 – present) ✓ Guest Editor for the Special Issue of Materials entitled "Advanced Materials With Strong Electron Correlations" (2024 – 2025) ✓ Referee for Nature Communications, Physical Review Letters, Physical Review B, Physical Review Materials, Dalton Transactions, Journal of Magnetism and Magnetic Materials, American Journal of Modern Physics ✓ External Examiner for PhD degree of Dr Hong'En Tan University of Cambridge, 29 Sept. 2018 ✓ Member of the organising committee and a UCLan representative for the Expanding Conceptual Understanding in Physics programme by the Institute of Physics (2016 – 2019)
Internal roles	<ul style="list-style-type: none"> ▪ Coordinator of Third-Year BSc(Hons) Projects in Physics and Astrophysics at UCLan (September 2016 – present) ▪ Lab Manager for Synthetic Solid State Physics Laboratories MB325 & MB326 at UCLan (2015 – present) ▪ Member of the Juno/Athena Swan working group (2022 – present) ▪ Member of the Health & Safety Committee at UCLan (2016 – 2023) ▪ Member of the Centre for Smart Materials Management Team (2021 – 2023) ▪ Mentor for FHEA candidates within the Continuous Professional Development scheme at UCLan (2019 – 2022) ▪ Referee for FHEA applications at UCLan (2019 – 2021) ▪ Third Year Tutor for Physics and Astrophysics courses at UCLan (2018 – 2020) ▪ Internal Referee for MSc by Research of Jack Hanson, UCLan, 2018 – 2019 ▪ Internal Examiner for PhD degree of Dr Hamidreza Soltani, UCLan, 13 July 2016
Teaching	<ul style="list-style-type: none"> <input type="checkbox"/> Condensed Matter Physics in Third Year (Module Leader, 2021 – present) <input type="checkbox"/> Third Year Physics Laboratory (Module Leader, 2016 – present) <input type="checkbox"/> Thermal Physics in Second Year (Module Leader, 2021 – present) <input type="checkbox"/> Physics for Energy in Forth Year (Module Leader, 2022 – present) <input type="checkbox"/> Advanced Laboratory in Year Four (Tutor, 2018 – present) <input type="checkbox"/> Solid State Physics – Semester 2 (Module Leader, 2019 – 2021) <input type="checkbox"/> Solid State Physics – Semester 1 (Module Leader, 2016 – 2018) <input type="checkbox"/> Tutor for various Foundation Year modules (2015 – 2017)

Supervision

Postgraduate research students:

- Chenchen Yue: MSc by Research, March 2024 – present, Director of Study
- Ethan Faithfull-Evans: MSc by Research, Sept. 2023 – present, Director of Study
- Connor Maguire: PhD in Chemistry, Jan. 2020 – present, Second Supervisor
- Kasim Ali: MSc by Research, Oct. 2019 – Sept. 2021, Director of Study
- Ruqiya Al-Jaafar: PhD in Chemistry, Jan. 2018 – March 2023, Second Supervisor

Undergraduate projects and A-level students:

- Supervisor of fourteen students on final year BSc(Hons) Physics projects (2016 – present)
- Supervisor of one student on final year MPhys project (2016 – 2017)
- Co-supervisor of final year students on the following projects: MChem (two students), BSc(Hons) in Chemistry (two students), BSc(Hons) in Physics (one student), MSc in Instrumental Analysis (one student)
- Supervisor of nine A-level students from local colleges and/or supported by Nuffield Foundation on research placements (2016 – 2018)
- Supervisor of seven undergraduate internships (2016 – ongoing)
- Supervisor of three Physics Challenge teams (2016 – 2018)