Elisa De Ranieri

Personal profile

I am a hard-working, passionate individual motivated by the desire to help others achieve their personal and professional goals. I strongly believe in fairness, integrity and equity, and I try to embed these principles in my work. I am an effective communicator and I thrive when challenged, and I constantly look for opportunities to learn something new and improve myself and the environment around me.

Work experience

Head of Research Integrity and Author Experience, Cell Press (2021-present)

- Responsible for devising and implementing initiatives aimed at improving the author experience at Cell Press.
- Providing analytical support to journals and editorial management.
- Contributing to the definition of Cell Press strategy on innovation and research integrity, leading some of the relevant projects.
- Coordinating the development or update of editorial policies promoting openness and robustness in science.
- Supporting journal teams with ongoing research integrity cases.
- Managing a team of 15 cross-journal editors.
- Overseeing the activities of Cell Press Community Review.
- Representing Cell Press at the EASE Diversity Equity and Inclusion committee.

Editor-in-Chief, *Nature Communications*, Springer Nature, 2019-2021

- Responsible for setting and delivering the overall journal strategy, as well as meeting non-financial targets.
- Responsible for service offered to authors and peer reviewers and for published content.
- Responsible for managing a team of over 100 professional, PhD-trained editors in 4 locations (London, New York, Berlin, Shanghai) who publish around 6,000 research articles per year.
- Member of the executive team for the Nature-branded journal division.
- Oversaw changes in workflows, processes and policies to improve author service and reproducibility of research results.
- Oversaw serious cases of research integrity pre- and post-publication.
- Represented the editorial needs of the journal in interactions with other departments (marketing, sponsorship, publishing, production, press, other editorial divisions within the company).
- Represented the journal and company in external events and communications, advocating for Open Research.

Head of Editorial Process and Data Analytics, Nature journals, Springer Nature, 2016-2018

- Responsible for maintaining author resources on the journal websites.
- Responsible for supporting the Nature journals teams in relation to workflow changes, trial of new initiatives, and development and implementation of editorial policies.
- Represented the Nature editorial division in internal projects as well as external committees (CREDIT, Peer Review Week 2018).
- Assisted in the development of training modules for reviewers and editors.
- Responsible for providing data and its context to editorial and publishing departments on the performance of Nature-branded journals and their editors.
- Managed a team of 2 data analysts and co-managed 2 editorial specialists.
- Led a large analysis piece studying the outcome of submissions based on peer review model, resulting in a publication (listed below).

Senior Editor, *Nature Energy*, Springer Nature, 2015-2016

Senior Editor, *Nature Nanotechnology*, Springer Nature, 2013-2015

Associate Editor, *Nature Communications*, Springer Nature, 2012-2013

- Responsible for selecting research manuscripts for publication in various areas of applied physics and engineering (including 2D materials, spintronics and photovoltaics) and coordinating the peer review process up to manuscript acceptance. Handled a total of 1800 manuscripts.
- Responsible for commissioning content and writing editorial pieces. Contributed with 60 News & Views, 2 picture stories and 37 Research Highlights (see Appendix). Commissioned and/or published 16 review articles, 11 commentaries and 6 correspondences. Written 5 editorials and co-written 3 more. Coordinated 3 focus issues.
- Published the most cited *Nature Communications* paper ever published (2,097 citations); the most cited original research paper in *Nature Nanotechnology* published over the period I was there (2,262 citations); a commentary with over 684 citations; an 8-piece focus on graphene applications and a focus on spin-based memories for which I found a sponsor.
- Attended 22 conferences on behalf of Nature journals, giving invited talks on 'publishing in Nature journals' at 5 of those. Visited 12 labs to give talks on 'publishing in Nature journals'. Invited to 6 career planning events for students.

Talks on peer review and open research

- Academic Publishing in Europe: Why SDGs are important for innovation and scholarly communication, Berlin, Germany. 2020
- Foresighting Open Science, Paris, France. 2019
- Academic Publishing in Europe: Integrity and ethics in peer review, Berlin, Germany. 2019
- Peer Review Congress, Chicago, IL, 2017
- Peer Review Week: Transparency in peer review, London, UK. 2017

Education and research experience

Research Scientist, Hitachi Cambridge Laboratory, Cambridge, UK, 2009-2012

- Carried out experimental research in applied physics (semiconductor spintronics), including design, fabrication and characterisation of devices by magneto-transport and magneto-optical measurements.
- Designed materials and devices for injection and detection of spin polarisation in all-semiconductor structures for metrology applications.
- Demonstrated electrical control of current- and field-induced magnetic domain wall velocity for novel memory devices.

University of Cambridge, UK – PhD in Physics, 2005-2009
Thesis on the effects of induced strain on the magnetic properties of ferromagnetic semiconductor microstripes.

University of Pisa, Italy – Master Degree in Electronic Engineering, 2003-2005
Final mark: 108 out of 110.

University of Pisa, Italy – First Degree in Electronic Engineering, 1999-2003
Final mark: 109 out of 110.

Grants and fellowships

- Beneficiary of a Researcher Excellence Grant from the European Metrology Research Programme EUR 281,600 for 3 years. 2011-2012
- Junior Research Fellow, Wolfson College, Cambridge. 2009-2012
- Fondazione Della Riccia Scholarship €11,500. 2008
- Cambridge Philosophical Society Research Studentship £1000. 2008

- Churchill College Hardship Fund £1000. 2008
- Lundgren Research Award £250. 2008
- Fully funded PhD scholarship including: CASE studentship from Hitachi Europe Ltd £3000 pa; grant from the Engineering and Physical Sciences Research Council £5000 pa. 2005-2008

Peer-reviewed papers (orcid.org/0000-0002-5243-7218)

- McGillivray, B., De Ranieri, E. Uptake and outcome of manuscripts in Nature journals by review model and author characteristics. *Res Integr Peer Rev* **3,** 5 (2018).
- De Ranieri, E. et al. "Piezoelectric control of the mobility of a domain wall driven by adiabatic and non-adiabatic torques", *Nature Mater* **12**, 808–814 (2013).
- Němec, P. et al. "Experimental observation of the optical spin transfer torque", *Nature Phys* **8**, 411–415 (2012).
- Mikheev, E., "Magnetic domain wall propagation under ferroelectric control", *Phys. Rev. B* **86**, 235130 (2012).
- Casiraghi, A. et al., "Fast switching of magnetization in the ferromagnetic semiconductor (Ga,Mn)(As,P) using nonequilibrium phonon pulses", *Appl. Phys. Lett.* **99**, 262503 (2011);
- Hammura, K. et al., "Magnetisation of bulk Mn11Si19 and Mn4Si7", *Thin Solid Films* **519** 8516-8519 (2011).
- Wang, K. Y. et al. "Current Current-driven domain wall motion across a wide temperature range in a (Ga,Mn)(As,P) device", *Appl. Phys. Lett.* **97**, 262102 (2010).
- De Ranieri, E. et al., "Lithographically and electrically controlled strain effects on anisotropic magnetoresistance in (Ga,Mn)As", *New J. Phys.* **10** 065003 (2008).
- Rushforth, A. W. et al., "Voltage control of magnetocrystalline anisotropy in ferromagnetic-semiconductor-piezoelectric hybrid structures", *Phys. Rev. B* **78**, 085314 (2008).
- Wunderlich, J. et al. "Local control of magnetocrystalline anisotropy in (Ga,Mn)As microdevices: Demonstration in current-induced switching", *Phys. Rev. B* **76**, 054424 (2007).