

## Publications

- I.-A. Chioar, C. Vantaraki, M. Pohlitz, **R. M. Rowan-Robinson**, E. Th. Papaioannou, B. Hjorvarsson, V. Kapaklis, Steering light with magnetic textures, *Appl. Phys. Lett.*, **120**, 032407 (2022).
- **R. M. Rowan-Robinson**<sup>†</sup>, J. Hurst, A. Ciuciulkaite, I. A. Chioar, M. Pohlitz, M. Zapata, P. Vavassori, A. Dmitriev, P. M. Oppeneer, V. Kapaklis, Direction-sensitive magnetophotonic surface crystal, *Advanced Photonics Research*, **2**, 2170033, (2021). <https://doi.org/10.1002/adpr.202170033>
- J. Harris, Z. Leong, P. Gong, J. Cornide, C. Pughe, T. Hansen, A. Quintana-Nedelcos, **R. M. Rowan-Robinson**, U. Dahlborg, M. Calvo-Dahlborg, Investigation into the magnetic properties of CoFeNiCr<sub>y</sub>Cu<sub>x</sub> alloys, *J. Phys. D: Appl. Phys.*, **54**, 395003, (2021). <https://doi.org/10.1088/1361-6463/ac1139>
- A. Ciuciulkaite, K. Mishra, M. V. Moro, I. A. Chioar, **R. M. Rowan-Robinson**, S. Parchenko, A. Kleibert, B. Lindgren, G. Andersson, C. S. Davies, A. Kimel, M. Berritta, P. M. Oppeneer, A. Kirilyuk, V. Kapaklis, Magnetic and all-optical switching of amorphous Tb<sub>x</sub>Co<sub>1-x</sub> alloys, *Phys. Rev. Mat.*, **4**, 10 (2020). <https://doi.org/10.1103/PhysRevMaterials.4.104418>
- A. Rushforth, **R. M. Rowan-Robinson**, J. Zemen, Deterministic magnetic domain wall motion induced by pulsed anisotropy energy, *J. Phys. D: Appl. Phys.*, **54**, 164001 (2019). <https://doi.org/10.1088/1361-6463/ab6cc7>
- O. Inyang, L. Bouchenoire, B. Nicholson, M. Tokač, **R. M. Rowan-Robinson**, C. J. Kinane, and A. T. Hindmarch, Threshold interface magnetization required to induce magnetic proximity effect, *Phys. Rev. B*, **100**, 174418 (2019). <https://doi.org/10.1103/PhysRevB.100.174418>
- **R. M. Rowan-Robinson**, E. Melander, I.-A. Chioar, B. Caballero, A. García-Martín, E. Th. Papaioannou, V. Kapaklis, Thickness dependent enhancement of the polar Kerr rotation in Co magnetoplasmonic nanostructures, *AIP Advances* **9**, 025317 (2019). <https://doi.org/10.1063/1.5079713>
- **R. M. Rowan-Robinson**, A. T. Hindmarch, D. Atkinson, Efficient current-induced magnetization reversal by spin-orbit torque in Pt/Co/Pt, *J. Appl. Phys.*, **124**, 183901 (2018). <https://doi.org/10.1063/1.5046503>
- **R. M. Rowan-Robinson**, A. A. Stashkevich, Y. Roussigné, M. Belmeguenai, S.-M. Chérif, A. Thiaville, T. P. A. Hase, A. T. Hindmarch, D. Atkinson, The interfacial nature of proximity-induced magnetism and the Dzyaloshinskii-Moriya interaction at the Pt/Co interface, *Sci. Rep.*, **7**, 16835 (2017). <https://doi.org/10.1038/s41598-017-17137-z>
- S. Azzawi, A. Ganguly, M. Tokač, **R. M. Rowan-Robinson**, J. Sinha, A. T. Hindmarch, A. Barman, D. Atkinson, Evolution of damping in ferromagnetic/nonmagnetic thin film bilayers as a function of nonmagnetic layer thickness, *Phys. Rev. B*, **93**, 054402 (2016). <https://doi.org/10.1103/PhysRevB.93.054402>
- A. Ganguly, S. Azzawi, S. Saha, J. A. King, **R. M. Rowan-Robinson**, A. T. Hindmarch, J. Sinha, D. Atkinson, A. Barman, Tunable magnetization dynamics in interfacially modified Ni<sub>81</sub>Fe<sub>19</sub>/Pt bilayer thin film microstructures, *Sci. Rep.*, **5**, 17596 (2015). <https://doi.org/10.1038/srep17596>
- C. W. Barton, T. J. A. Slater, **R. M. Rowan-Robinson**, S. J. Haigh, D. Atkinson, T. Thomson, Precise control of interface anisotropy during deposition of Co/Pd multilayers, *J. Appl. Phys.*, **116**, 203903 (2014). <https://doi.org/10.1063/1.4902826>
- A. Ganguly, **R. M. Rowan-Robinson**<sup>\*</sup>, A. Haldar, S. Jaiswal, J. Sinha, A. T. Hindmarch, D. Atkinson, A. Barman, Time-domain detection of current controlled magnetization damping in Pt/Ni<sub>81</sub>Fe<sub>19</sub> bilayer and determination of Pt spin Hall angle, *Appl. Phys. Lett.*, **105**, 112409 (2014). <https://doi.org/10.1063/1.4896277>
- **R. M. Rowan-Robinson**, A. T. Hindmarch, D. Atkinson, Enhanced electron-magnon scattering in ferromagnetic thin films and the breakdown of the Mott two-current model, *Phys. Rev. B*, **90**, 104401 (2014). <https://doi.org/10.1103/PhysRevB.90.104401>

<sup>†</sup>Featured as the inside front cover article;      <sup>\*</sup>Joint first author