Probing spin wave propagation in 2D magnetic materials

Ever since the isolation of graphene in 2004, the study of 2D materials has flourished into its own branch of condensed matter physics. Scientists have discovered hundreds of 2D materials with remarkable chemical, electronic, optical and mechanical properties. It was not until 2017 that scientists fabricated the first 2D materials that display ordered magnetic properties such as ferromagnetism. The EU-funded MptDM project will study how spin waves (magnons) – propagating disturbances in the ordering of 2D magnetic materials – can be leveraged to produce a new generation of faster, more efficient and lower-power electronics devices.
Fields of science

engineering and technology > nanotechnology > nano-materials > two-dimensional nanostructures > graphene

Keywords

- van der Waal materials
- magnonics
- spin-charge conversion

Programme(s)

H2020-EU.1.3. - EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions
H2020-EU.1.3.2. - Nurturing excellence by means of cross-border and cross-sector mobility

Topic(s)

MSCA-IF-2019 - Individual Fellowships

Call for proposal

H2020-MSCA-IF-2019

See other projects for this call

Funding Scheme

MSCA-IF - Marie Skłodowska-Curie Individual Fellowships (IF)

Coordinator

THE UNIVERSITY OF MANCHESTER

Net EU contribution

€ 224 933,76

Address
Oxford road
M13 9PL Manchester
United Kingdom

Region
North West (England) > Greater Manchester > Manchester

Activity type
Higher or Secondary Education Establishments

Links
Contact the organisation 📘 Website 📘 Participation in EU R&I programmes 📘 HORIZON collaboration network 📘

Other funding
€ 0,00

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