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# THE CENTRE FOR QUANTUM TECHNOLOGY

**WORLD  
CHANGING  
GLASGOW**

**Dr Sara Diegoli**

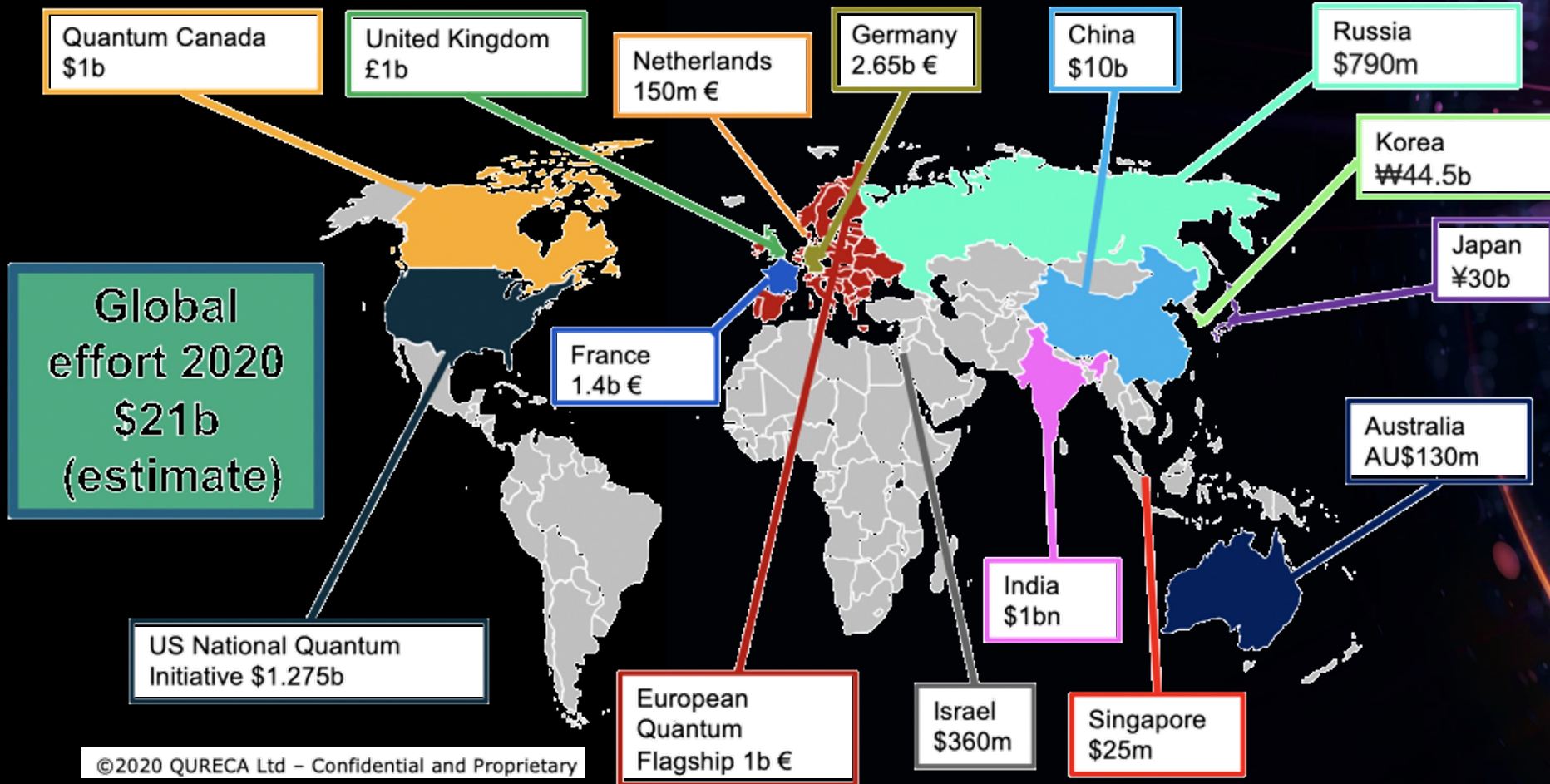
**Associate Director for Strategy**

**Centre for Quantum Technology, University of Glasgow**

**Director of QuantIC, the UK Hub in Quantum Imaging**



# Global Landscape for Quantum Technology





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# UK National Quantum Technology Programme UK-NQTP



- Established in 2014 with a 10- years strategic outlook
- £1b investment so far:
  - 4 UK Quantum Technology Hubs
  - QT Fellowships
  - Innovate UK QT programme
  - Industrial Strategy Challenge Fund
  - Skills: (CDTs and Skills Hubs)
  - Infrastructure: UKRI National Quantum Computing Centre



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# Innovation Stems from Excellent Research

- The Centre for Quantum Technology is a cornerstone of the UK National Quantum Technology Programme.
  - One of the largest UKRI quantum technology portfolio in the UK
  - The Centre contributes to all Hubs in the National Quantum Technology Programme
  - Leadership of QuantIC (£50m) and contributions to all four UK Quantum Technology Hub and the National Quantum Computing Centre
  - Cutting edge facilities for fabrication in the James Watt Nanofabrication Centre and Kelvin Nanotechnology



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# Quantum foundry and system integration

JWNC  
The James Watt  
Nanofabrication Centre

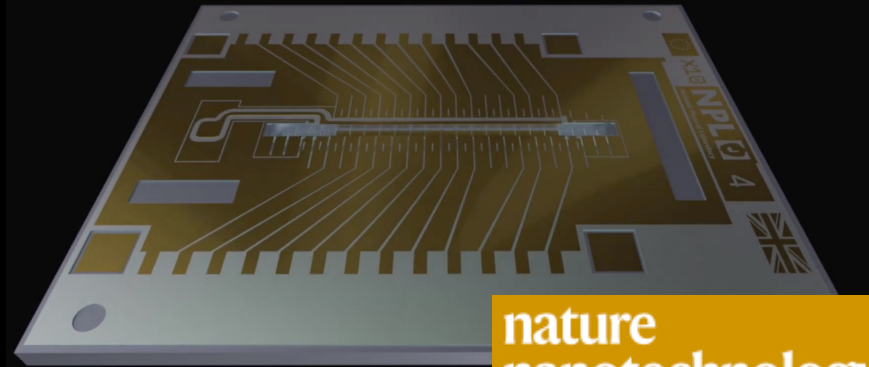


Magneto Optical  
Trap Gratings

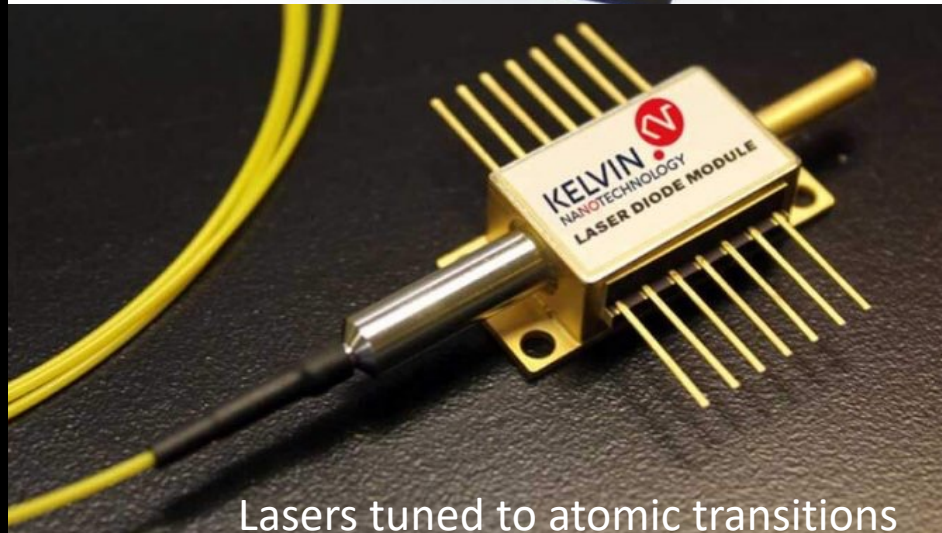


nature  
nanotechnology

Micro Ion Traps

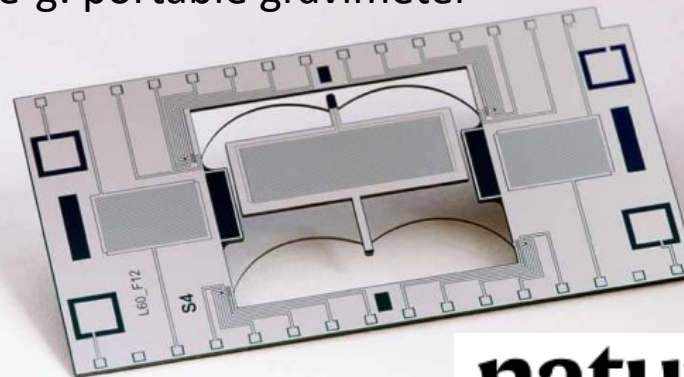


nature  
nanotechnology



Lasers tuned to atomic transitions

Wee-g: portable gravimeter



nature



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# Our Research and Innovation Areas



## Quantum computing

→ [Find out more](#)



## Quantum enhanced imaging

→ [Find out more](#)



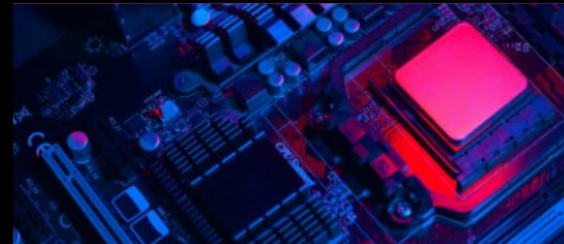
## Quantum communications

→ [Find out more](#)



## Quantum sensors and timing

→ [Find out more](#)



## Quantum foundry and system integration

→ [Find out more](#)



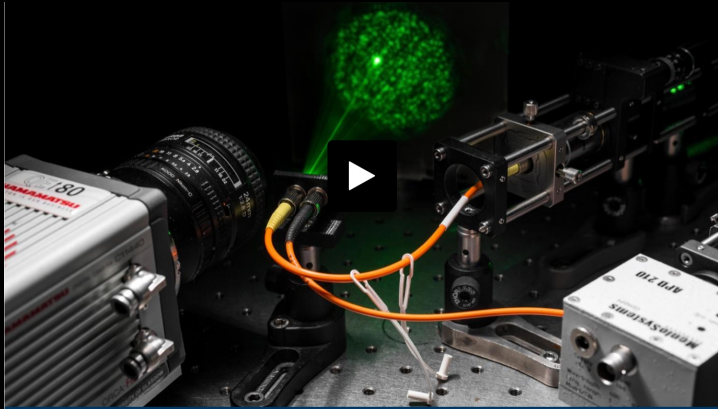
## Fundamentals of quantum science and algorithm development

→ [Find out more](#)



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[www.gla.ac.uk/quantumtech](http://www.gla.ac.uk/quantumtech)



Quantum 3D Endoscope



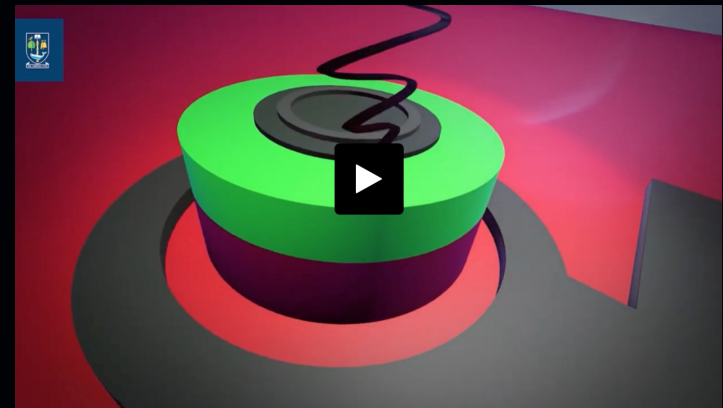
James Watt Nanofabrication Centre



Imaging Through the Body



Wee-g: gravity sensing for geophysics



Ge on Si Single Photon Avalanche Detectors (SPADs)



Quantum Sensors and Timing



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# Thank you

[www.gla.ac.uk/quantumtech](http://www.gla.ac.uk/quantumtech)

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