



THz imaging technology for public security

Results

Project Information

TERASEC

Grant agreement ID: 899315

DOI

[10.3030/899315](https://doi.org/10.3030/899315)

Project closed

EC signature date

27 March 2020

Start date

1 June 2020

End date

31 May 2022

Funded under

EXCELLENT SCIENCE - European Research Council (ERC)

Total cost

No data

EU contribution

€ 150 000,00

Coordinated by

CONSIGLIO NAZIONALE DELLE RICERCHE



Italy

CORDIS provides links to public deliverables and publications of HORIZON projects.

Links to deliverables and publications from FP7 projects, as well as links to some specific result types such as dataset and software, are dynamically retrieved from [OpenAIRE](#) .

Publications

Peer reviewed articles (13)

[Frustration-driven Josephson phase dynamics](#)

Author(s): Claudio Guarcello; Luca Chirolli; Maria Teresa Mercaldo; Francesco Giazotto; Mario Cuoco

Published in: Physical Review, Issue 2, 2022, ISSN 0031-899X

Publisher: American Physical Society

DOI: 10.1103/physrevb.105.134503

[Photonic heat rectification in a coupled qubits system](#)

Author(s): Iorio, Andrea; Strambini, Elia; Haack, Géraldine; Campisi, Michele; Giazotto, Francesco

Published in: Phys. Rev. Applied, Issue 9, 2021, ISSN 0031-899X

Publisher: American Physical Society

DOI: 10.1103/physrevapplied.15.054050

[Physical Review Research](#)

Author(s): Luca Chirolli; Luca Chirolli; Tommaso Cea; Tommaso Cea; Francesco Giazotto

Published in: Physical Review Research, Issue 15, 2021, ISSN 0031-899X

Publisher: American Physical Society

DOI: 10.1103/physrevresearch.3.023135

[Coexistence of Superconductivity and Spin-Splitting Fields in Superconductor/Ferromagnetic Insulator Bilayers of Arbitrary Thickness](#)

Author(s): Alberto Hijano; Stefan Ilić; Mikel Rouco; Carmen González-Orellana; M. Ilyn; Celia Rogero; Celia Rogero; Pauli Virtanen; Tero T. Heikkilä; S. Khorshidian; S. Khorshidian; Maria Spies; Nadia Ligato; Francesco Giazotto; Elia Strambini; F. Sebastian Bergeret; F. Sebastian Bergeret; F. Sebastian Bergeret

Published in: Physical Review Research, Issue 11, 2021, ISSN 0031-899X

Publisher: American Physical Society

DOI: 10.1103/physrevresearch.3.023131

[Gate Control of the Current–Flux Relation of a Josephson Quantum Interferometer Based on Proximitized Metallic Nanojunctions](#)

Author(s): Giorgio De Simoni; Sebastiano Battisti; Sebastiano Battisti; Nadia Ligato; Maria Teresa Mercaldo; Mario Cuoco; Francesco Giazotto

Published in: ACS Publications, Issue 4, 2021, ISSN 1520-5215

Publisher: American Chemical Society

DOI: 10.1021/acsaelm.1c00508

[Zero magnetic-field orbital vortices in s-wave spin-singlet superconductors](#)

Author(s): Mercaldo, Maria Teresa; Ortix, Carmine; Giazotto, Francesco; Cuoco, Mario

Published in: Phys.Rev., Issue 8, 2021, ISSN 0031-899X

Publisher: American Physical Society

DOI: 10.1103/physrevb.105.140507

[Colossal orbital-Edelstein effect in non-centrosymmetric superconductors](#) 

Author(s): Chirolli, Luca; Mercaldo, Maria Teresa; Guarcello, Claudio; Giazotto, Francesco; Cuoco, Mario

Published in: Phys. Rev. Letters, Issue 6, 2021, ISSN 0031-899X

Publisher: American Physical Society

DOI: 10.1103/physrevlett.128.217703

[Evidence of Josephson Coupling in a Few-Layer Black Phosphorus Planar Josephson Junction](#) 

Author(s): Francesca Telesio; Matteo Carrega; Giulio Cappelli; Andrea Iorio; Alessandro Crippa; Elia Strambini; Francesco Giazotto; Manuel Serrano-Ruiz; Maurizio Peruzzini; Stefan Heun

Published in: AC S Publication, Issue 3, 2022, ISSN 1520-5215

Publisher: American Chemical Society

DOI: 10.1021/acsnano.1c09315

[Phase slips dynamics in gated Ti and V all-metallic supercurrent nano-transistors](#) 

Author(s): Claudio Puglia; Claudio Puglia; G. De Simoni; Francesco Giazotto

Published in: Phys. Rev., Issue 2, 2021, ISSN 0031-899X

Publisher: American Physical Society

DOI: 10.1088/1361-6463/ac2e8b

[Electrostatic field-driven supercurrent suppression in ionic-gated metallic Josephson nanotransistors](#) 

Author(s): Paolucci, Federico; Crisà, Francesco; De Simoni, Giorgio; Bours, Lennart; Puglia, Claudio; Strambini, Elia; Roddaro, Stefano; Giazotto, Francesco

Published in: ACS Nanoletters, Issue 5, 2021, ISSN 1520-5215

Publisher: American Chemical Society

DOI: 10.1021/acs.nanolett.1c03481

[Thermal superconducting quantum interference proximity transistor](#) 

Author(s): Nadia Ligato; Federico Paolucci; Elia Strambini; Francesco Giazotto

Published in: Nature Physics, Issue 5, 2022, ISSN 1476-4687

Publisher: Nature Research

DOI: 10.1038/s41567-022-01578-z

[Spontaneous symmetry breaking induced thermospin effect in superconducting tunnel junctions](#) 

Author(s): Gaia Germanese; Gaia Germanese; Federico Paolucci; Giampiero Marchegiani; Alessandro Braggio; Francesco Giazotto

Published in: Phys. Rev., Issue 7, 2021, ISSN 0031-899X

Publisher: American Physical Society

DOI: 10.1103/physrevb.104.184502

[Spectroscopic signatures of gate-controlled superconducting phases](#) 

Author(s): Maria Teresa Mercaldo; Francesco Giazotto; Mario Cuoco
Published in: APS Physics, Issue 16, 2021, ISSN 1536-6065
Publisher: American Physical Society
DOI: 10.1103/physrevresearch.3.043042

Non-peer reviewed articles (1)

[Highly efficient phase-tunable photonic thermal diode](#) 

Author(s): Giampiero Marchegiani; Alessandro Braggio; Francesco Giazotto
Published in: Appl. Phys.Lett., Issue 2, 2021, ISSN 0003-6951
Publisher: American Institute of Physics
DOI: 10.1063/5.0036485

Last update: 9 December 2022

Permalink: <https://cordis.europa.eu/project/id/899315/results>

European Union, 2025