



Hybrid quantum dot and graphene wearable sensor for systemic hemodynamics and hydration monitoring

Fact Sheet

Project Information

GRAPHEALTH

Grant agreement ID: 713659

DOI

[10.3030/713659](https://doi.org/10.3030/713659)

Project closed

EC signature date

23 May 2016

Start date

1 June 2016

End date

30 November 2017

Funded under

EXCELLENT SCIENCE - European Research Council (ERC)

Total cost

€ 150 000,00

EU contribution

€ 150 000,00

Coordinated by

FUNDACIO INSTITUT DE CIENCIES FOTONIQUES



Spain

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11 January 2019



Objective

The main goal of GRAPHEALTH is to exploit the inherent properties of hybrid graphene – quantum dot detectors in order to enable constant non-invasive health monitoring through vital parameters. Unlike current bulky systems, our approach enables a flexible, compact and wearable health monitoring system for constant monitoring for consumer health applications and muscle health of athletes during exercise or after injury.

The hybrid quantum dot and graphene technology exhibits very high sensitivity and the technology is compatible with flexible electronic manufacturing processes, and also more compact detectors than current commercial devices.

Fields of science (EuroSciVoc)

[engineering and technology](#) > [mechanical engineering](#) > [manufacturing engineering](#)

[engineering and technology](#) > [nanotechnology](#) > [nano-materials](#) > [two-dimensional nanostructures](#) > [graphene](#)

[engineering and technology](#) > [electrical engineering, electronic engineering, information engineering](#) > [electronic engineering](#) > [sensors](#)



Programme(s)

[H2020-EU.1.1. - EXCELLENT SCIENCE - European Research Council \(ERC\)](#)

MAIN PROGRAMME

Topic(s)

[ERC-PoC-2015 - ERC Proof of Concept Grant](#)

Call for proposal

[ERC-2015-PoC](#)

[See other projects for this call](#)

Funding Scheme

[ERC-POC - Proof of Concept Grant](#)

Host institution



FUNDACIO INSTITUT DE CIENCIES FOTONIQUES

Net EU contribution

€ 150 000,00

Total cost

€ 150 000,00

Address

AVINGUDA CARL FRIEDRICH GAUSS 3

08860 Castelldefels

Spain

Region

Este > Catalunya > Barcelona

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Beneficiaries (1)



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Last update: 5 August 2022

Permalink: <https://cordis.europa.eu/project/id/713659>

European Union, 2025