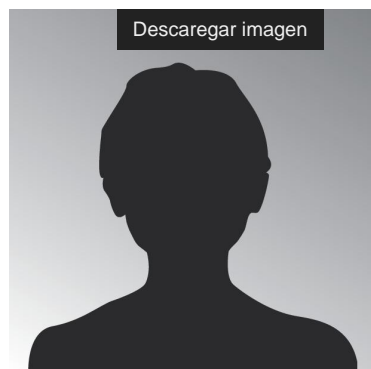




# Miquel Carrera Vilanova

## Dades personals-contacte / Datos personales-contacto / Personal information-contact



Miquel Carrera Vilanova

ry:

Titular d'Universitat / Titular de Universidad / Tenured University L

Física Aplicada / Física Aplicada / Applied Physics

/Department:

Medi Ambient i Ciències del Sòl / Medio Ambiente y Ciencias d  
and Soil Sciences

**Centre/Centro/Center:**

Escola Politècnica Superior / Escuela Politècnica Superior/ Polyte

**Despatx/Despacho/Office:**

Campus Cappont. Edifici EPS. Despatx 2.09 /Campus Cappont. I  
2.09 /Campus Cappont. EPS Building. Office 2.09



[mcarrera@macs.udl.cat](mailto:mcarrera@macs.udl.cat)

mailto:mcarrera@macs.udl.cat



+34 973 70 27 22

**Code ORCID:**

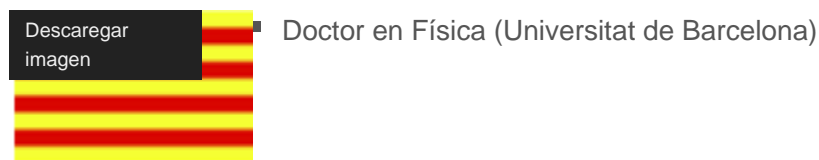
<https://orcid.org/0000-0002-5473-5622>

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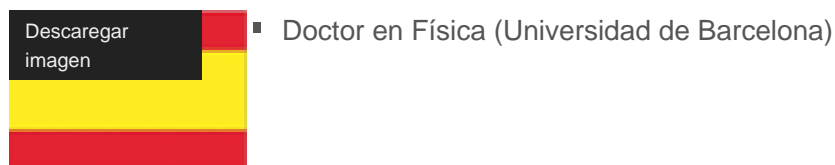


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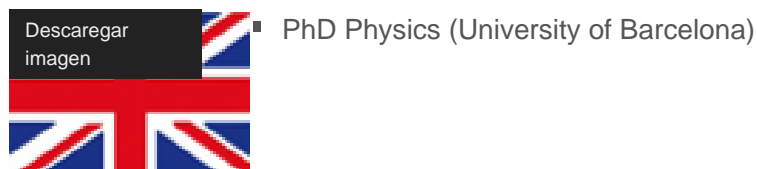
## Formació acadèmica / Formación académica / Academic training



Doctor en Física (Universitat de Barcelona)



Doctor en Física (Universidad de Barcelona)



PhD Physics (University of Barcelona)

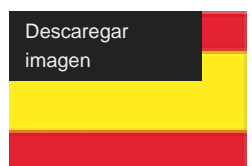


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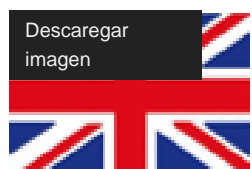
## Experiència professional / Experiencia profesional / Professional experience



- Docència universitària: UPC període 1986-1990; UdL des de 1990
- Recerca: membre del grup de recerca "Superconducting Materials and Large Scale Nanostructuring" , Institut de Ciència de Materials de Barcelona (ICMAB-CSIC), Ref. actual 2017 SGR 1519



- Docencia universitaria: UPC período 1986-1990; UdL desde 1990
- Investigación: miembro del grupo "Superconducting Materials and Large Scale Nanostructuring" , Institut de Ciència de Materials de Barcelona (ICMAB-CSIC), Ref. actual 2017 SGR 1519



- Teaching at university: UPC 1986-1990; UdL from 1990

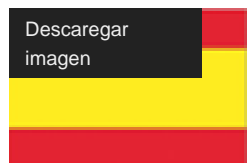


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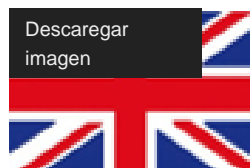
## Docència / Docencia / Teaching



- Grau en Enginyeria Informàtica
- Doble Grau en Enginyeria Informàtica i ADE
- Grau en Enginyeria Mecànica
- Grau en Enginyeria Electrònica Industrial i Automàtica
- Grau en Enginyeria de l'Energia i Sostenibilitat



- Grado en Ingeniería Informática
- Doble Grado en Ingeniería Informática y ADE
- Grado en Ingeniería Mecánica
- Grado en Ingeniería Electrónica Industrial y Automática
- Grado en Ingeniería de la Energía y Sostenibilidad

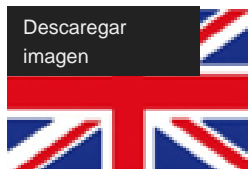


- Degree in Computer Engineering
- Double Degree in Computer Engineering and ADE
- Degree in Mechanical Engineering
- Degree in Industrial Electronics and Automation Engineering
- Degree in Energy and Sustainability Engineering



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## Gestió / Gestión / Management



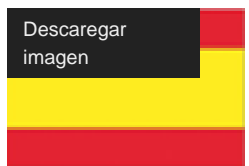
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## Recerca / Investigación / Research

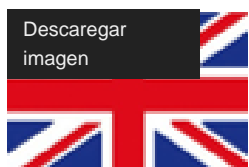
### Àmbit de recerca / Ambito de investigación / Research area



Superconductivity, Superconducting devices, Superconducting tapes, Hall probes, magnetometry, Critical currents, Inversion problem UNESCO codis: 2202.08, 2202.11, 2211.27, 3312.08, 3312.12



Superconductivity, Superconducting devices, Superconducting tapes, Hall probes, magnetometry, Critical currents, Inversion problem UNESCO: 2202.08, 2202.11, 2211.27, 3312.08, 3312.12



Superconductivity, Superconducting devices, Superconducting tapes, Hall probes, magnetometry, Critical currents, Inversion problem UNESCO: 2202.08, 2202.11, 2211.27, 3312.08, 3312.12

## Activitats de recerca / Actividades de investigación / Research activities



### Publicacions

Jaume Amorós , Arnau Duran, Miquel Carrera, Josep López and Xavier Granados

Singular spectrum analysis filtering and Fourier inversion: an efficient and fast way to improve resolution and quality of current density maps with low-cost Hall scanning systems

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ISSN: 0953-2048

DOI: 10.1088/0953-2048/25/10/104005

## II. Investigador en els projectes:

Project/Contract: Superconducting REBa<sub>2</sub>Cu<sub>3</sub>O<sub>7-x</sub> Materials and funcionalites for Technological devices (SuMaTe)

Type of contract/program: Proyectos I+D+i Convocatoria RETOS 2018 Funding institution: Ministerio de Ciencia e Innovación, Spain



Num. Project/contract: RTI2018-095853-B-C21 Funding: 375.100 €

From: 01-01-2019 to: 31-12-2021

IP: Teresa Puig Molina (ICMAB-CSIC), Xavier Obradors (ICMAB-CSIC)

Project/Contract: Cost effective FCL using advanced superconducting tapes for future HVDC grids (FASTGRID)

Type of contract/program: Horizon 2020, H2020-NMBP-2016-2017 Funding institution: EU H2020

Num. Project/contract: 72101 Funding Total: 9,031,376.79€, EU

contribution: 7,248,235.42€ From: 01/01/2017, to: 01/07/2020

Coordinator: Pascal Tixador (CNRS, France), IP Local: Xavier Obradors (ICMAB-CSIC)

Project/Contract: Cintas superconductoras y heteroestructuras de oxidos de bajo coste para el reto energético / Cost effective approaches to chemical superconducting conductors and oxide heterostructures for energy challenges (CoachSupenergy)

Type of contract/program: Proyectos I+D+i Convocatoria RETOS 2014

Funding institution: Ministerio de Ciencia e Innovación, Spain

Num. Project/contract: MAT2014-51778-C2-1-R Funding: 580.800€ From: 01-01-2015 to: 31-12-2017 (extended to 31-12-2018)

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Project/Contract: European development of superconducting tapes: Integrating novel materials and architectures into cost effective processes for power applications and magnets (EUROTAPES).

Type of contract/program: 7 Programa Marco de la Comunidad Europea (FP7/2007-2013)

Funding institution: EU FP7

Num. Project/contract: NMP3-LA-2012-280432 Total Funding: 13 M€ (ICMAB: 1.5 M€)

From: 1/09/2012, to: 1/03/2017

Coordinator: Xavier Obradors (ICMAB-CSIC)

Project/Contract: Materiales avanzados y Nanotecnologias para dispositivos y sistemas eléctricos y magnetoelectrónicos innovadores (NANOSELECT)

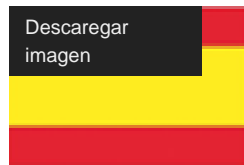
Type of contract/program: Consolider (CSD)

Funding institution: Ministerio de Educación y Ciencia, Spain



Num. Project/contract: CSD2007-00041 Funding: 5.950.000,00€ From: 2007  
, to: 2013

Coordinator: Xavier Obradors Berenguer (ICMAB-CSIC)



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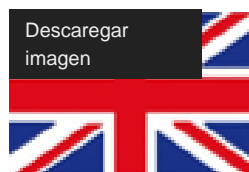
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