



# Gerard Laguna Benet

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

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Gerard Laguna Benet

ry:

Professor associat / Profesor asociado / Adjunct lecturer

Enginyeria i física / Ingeniería i física / Engineering and physics

/Department:

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

Escola Politècnica Superior / Escuela Politècnica Superior/ Polytec  
Campus de Cappont. Edifici CREA. Despatx 0.13-14 / Campu  
CREA. Despacho 0.13-14 / Campus of Cappont. CREA Building. C

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## Formació acadèmica / Formación académica / Academic training

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■ Grau en Enginyeria de l'Energia

■ Màster en Industrials

■ Doctorat en Enginyeria

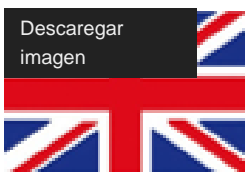
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■ Grado en Ingeniería de la Energía

■ Master en ingeniería industrial

■ Doctorado en Ingeniería

- Degree in Energy Engineering
- Master in Industrial Engineering
- PhD in Engineering



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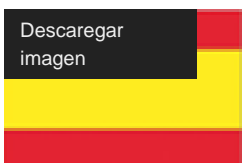
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## Experiència professional / Experiencia profesional / Professional experience



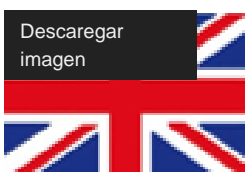
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Tècnic de laborator



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Técnico de Laboratorio



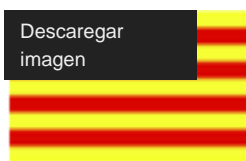
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Laboratory technician

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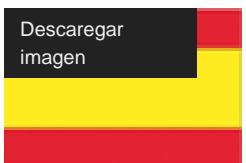
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## Docència / Docencia / Teaching



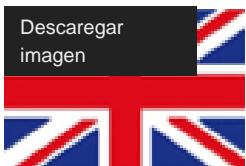
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- Tronc comú de les enginyeries industrials
- Grau en Arquitectura Tècnica i Edificació
- Grau en Enginyeria Mecànica
- Grau en Enginyeria de l'Energia i Sostenibilitat
  - Grau en Enginyeria Electrònica Industrial i Automàtica



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- Parte común de las ingenierías industriales
- Grado en Arquitectura Técnica y Edificación
- Grado en Ingeniería Mecánica
- Grado en Ingeniería de la Energía y Sostenibilidad
- Grado en Ingeniería Electrónica Industrial y Automática



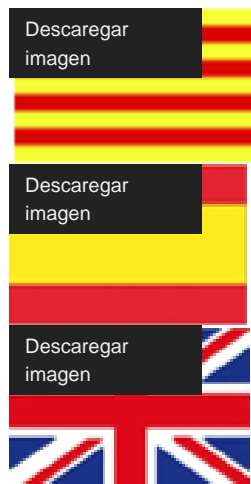
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- Common part of industrial engineering
- Degree in Technical Architecture and Building
- Degree in Mechanical Engineering
- Degree in Energy Engineering and Sustainability
- Degree in Industrial Electronic and Automatic Engineering



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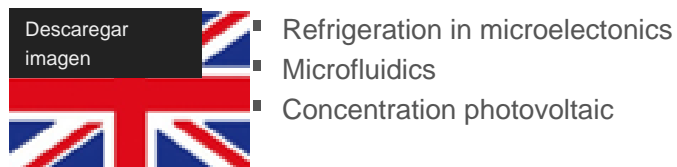
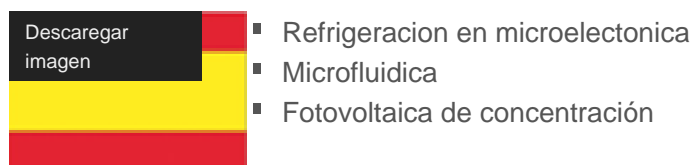
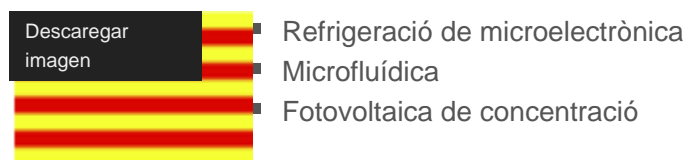
## Gestió / Gestión / Management



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## Recerca / Investigación / Research

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



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

Projectes:



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- Demostració experimental i viabilitat comercial d'un sistema universal i energèticament eficient de refredament. (AGAUR – Indústria del Coneixement)

- Smart Technologies for eneRgy Efficient Active cooling in Advanced Microelectronic Systems (STREAMS) (European Commission H2020)

#### Articles:

-Impact of the self-adaptive valve behavior on an array of microfluidic cells under unsteady and non-uniform heat load distributions <https://doi.org/10.36884/jafm.12.SI.29918> [ <https://doi.org/10.36884/jafm.12.SI.29918> ]

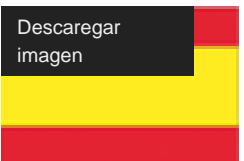
- Numerical parametric study of a hotspot-targeted microfluidic cooling array for microelectronics. <https://doi.org/10.1016/j.applthermaleng.2018.08.030> [ <https://doi.org/10.1016/j.applthermaleng.2018.08.030> ]

- Experimental and numerical study of micro-pin-fin heat sinks with variable density for increased temperature uniformity. <https://doi.org/10.1016/j.ijthermalsci.2018.06.019> [ <https://doi.org/10.1016/j.ijthermalsci.2018.06.019> ]

- Assessment of the impact of non-uniform illumination and temperature profiles on a dense array CPV receiver performance. <https://doi.org/10.1016/j.solener.2018.07.001> [ <https://doi.org/10.1016/j.solener.2018.07.001> ]

- Smoothing effect of the thermal interface material on the temperature distribution in a stepwise varying width microchannel cooling Device. <https://doi.org/10.1007/s00231-017-2045-0> [ <https://doi.org/10.1007/s00231-017-2045-0> ]

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#### Proyectos:

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