Gerard Laguna Benet

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

Descaregar imagen

Gerard Laguna Benet

ry: Professor associat / Profesor asociado / Adjunct lecturer

Enginyeria i física / Ingeniería i física / Engineering and physics

/Department: Química, Física, Ciències Ambientals i del Sòl / Química, Física, del Suelo / Chemistry, Physics, Environmental and Soil Sciences

Escola Politècnica Superior / Escuela Politécnica Superior/ Polyte

Despaxt/Despacho/Office: 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

Descaregar imagen

- 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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Experiència professional / Experiencia profesional / Professional experience

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Tècnic de laborator

Descaregar imagen

Técnico de Laboratorio

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Laboratory technician

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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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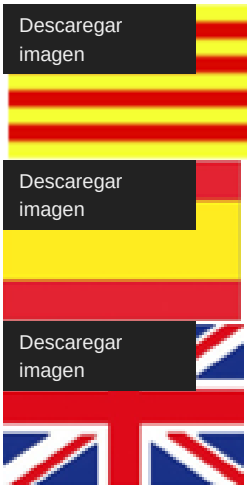
Gestió / Gestión / Management



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Recerca / Investigación / Research

Àmbit de recerca / Ambito de investigación / Research area

- Refrigeració de microelectrònica
- Microfluídica
- Fotovoltaica de concentració

- Refrigeracion en microelectonica
- Microfluidica
- Fotovoltaica de concentración

- Refrigeration in microelectonics
- Microfluidics
- Concentration photovoltaic

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:

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

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