

GROUP NAME	PI	CONTACT EMAIL	DEPARTAMENT	WEB	PHOTOVOLTAIC ENERGY
Q-NANOFOTONIKA	Aizpurua, Francisco Javier Zabala, Miren Nerea (CoIP)	aizpurua@ehu.eus nerea.zabala@ehu.eus	Electricidad y Electrónica	https://cfm.ehu.es/nanophotonics/	<ol style="list-style-type: none"> 1. Theory of Nanophotonics and Plasmonics 2. Optical response of plasmonic nanoantenna 3. Theory and development of nanoscopies with photons and electrons 4. Quantum nanophotonics; optical spectroscopies and photonic applications of nanoparticles and nanostructures at the nanoscale 5. Optoelectronics in nanosystems 6. Vibrational spectroscopies (SERS and SEIRA) 7. Topological effects in the optical response of material at the nanoscale
Advanced Control Group	Barambones, Oscar	oscar.barambones@ehu.eus	Ingeniería de Sistemas y Automática	-----	<ol style="list-style-type: none"> 1. Design and implementation of advanced control schemes for Photovoltaic systems. 2. Real time validation of the new control schemes. 3. Real time control test bench design and implementation. <p>More than 40 papers published in this topic.</p>
EKOPOL	Barcena Hinojal, Iñaki	inaki.barcena@ehu.eus	Ciencia Política y de la Administración	https://www.ehu.es/es/web/ekopol https://ekopol.eus/es/	<ol style="list-style-type: none"> 1. Reference project: EHUkhi. Campus Bizia Lab (CBL) project to promote photovoltaic energy at the UPV/EHU. The EHUkhi project seeks to assess the physical, technical and economic potential of renewable electricity generation through photovoltaic panels integrated into the buildings of the UPV/EHU campus.
Materials + Technologies (GMT)	Eceiza, M ^a Aranzazu	arantxa.eceiza@ehu.eus	Ingeniería Química y del Medio Ambiente	https://www.ehu.es/es/web/gmt/home	<ol style="list-style-type: none"> 1. Development of capacitors based only in polymeric materials (so called all polymer dielectrics) for energy storage applications. 2. Development of a new family of polymeric dielectrics based on poly(itaconate)s functionalized with polar groups which increase polarization of samples, resulting in an increased dielectric constant (up to 15, very high compared to classical polymers' constant around 2-4) with low dielectric loss.
GISEL	Eguia, Pablo Zamora, Inmacula	inmaculada.zamora@ehu.eus	Ingeniería Eléctrica	https://www.ehu.es/en/web/gisel	<ol style="list-style-type: none"> 1. Integration of PV in electricity systems. 2. Modeling of PV inverters and plants for power system studies. 3. Grid forming/grid following inverters. 4. Power system dynamics with high shares of IBRs
ELEKTRIKER	Fernández Herrero, Elvira	elvira.fernandezh@ehu.eus	Ingeniería Eléctrica	-----	<ol style="list-style-type: none"> 1. Energy community and storage capacity 2. Collective self-consumption 3. Energy community as the community's flexibility responses
ENEDI (Energy in Buildings)	Martin Escudero, Koldobika	Koldobika.martin@ehu.eus	Ingeniería Energética	https://www.ehu.es/en/web/enedi/enedi-group	<ol style="list-style-type: none"> 1. Local Energy Communities - LEC (new line of the group). The aim of these LEC is to produce the energy they consume. There are different research areas to be taken into account: Optimization of the distribution coefficients between the members of the LEC: static, variable or dynamic; Impact of the user behaviour and the influence of change of habits related to the energy use; Price of the electric energy according to different criteria, i.e.: multinational company vs cooperative; Impact of the energy efficiency of the buildings (thermal envelope and HVAC systems) in the LEC energy management; LEC as a tool to fight against the energy poverty; Analysis of different energy storage systems to improve the energy management of the LEC: electric battery/vehicle, thermal storage/inertia, hydraulic storage...