

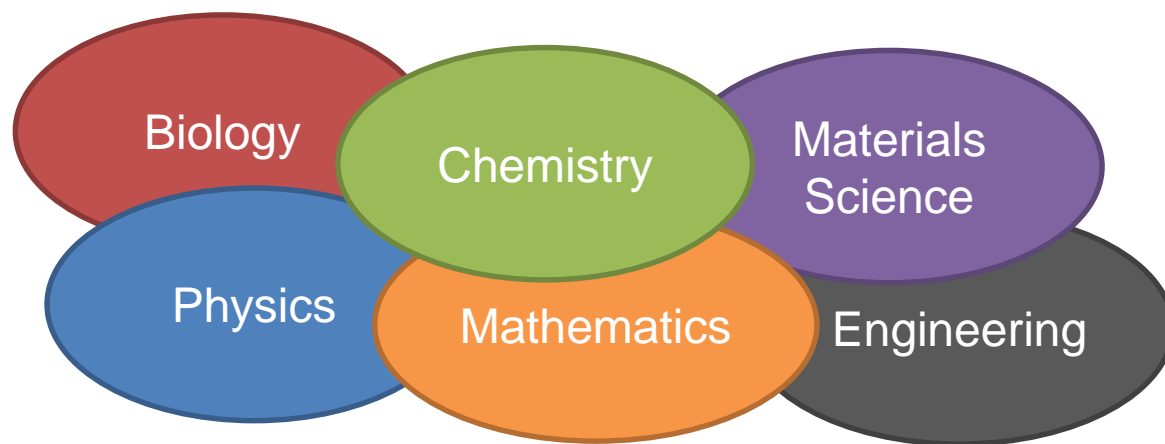


Department of Molecular Sciences and Nanosystems



Ca' Foscari
University
of Venice

Who we are



DSMN numbers

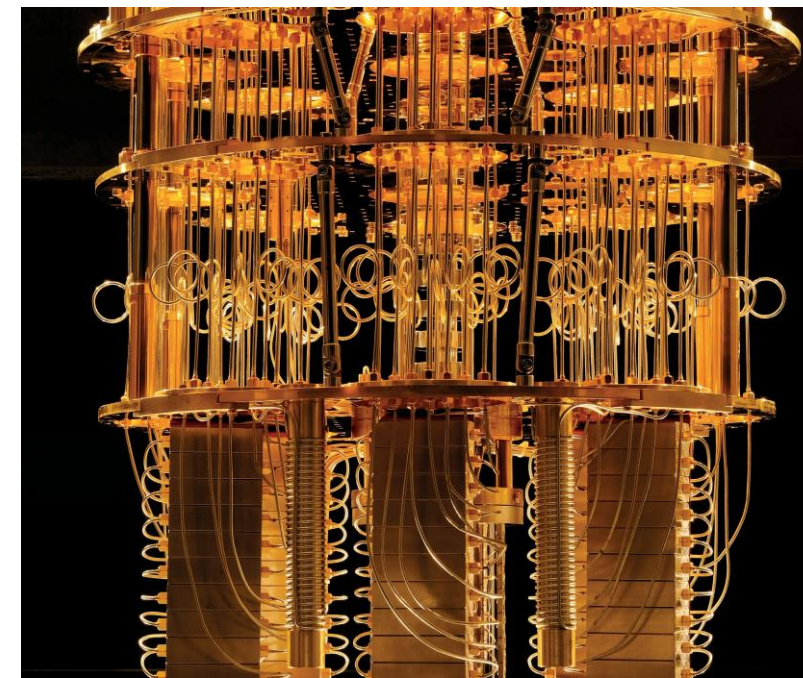
- Teaching staff (professors and researchers): 47 members
- Technical and administrative staff: 24 members
- PhD students and post-docs: 66 members

Education: bachelor's degrees

SUSTAINABLE CHEMISTRY AND TECHNOLOGIES



TECHNOLOGIES FOR THE CONSERVATION AND THE RESTORATION



ENGINEERING PHYSICS

Possibility of acquiring interdisciplinary skills by choosing optional paths (of three courses each):

- Economics and Management
- Language, Culture and Society of China

Education: masters's degrees

SUSTAINABLE CHEMISTRY AND TECHNOLOGIES



SCIENCE AND TECHNOLOGY OF BIO AND NANOMATERIALS



PhD Degrees and advanced training courses

PhD degree in Chemistry in partnership with the University of Trieste



PhD degree in Science and Technology of Bio and Nanomaterials in partnership with Kyoto Institute of Technology



Advanced training course «Chemist: from lab to industry» starting from 2021/2022



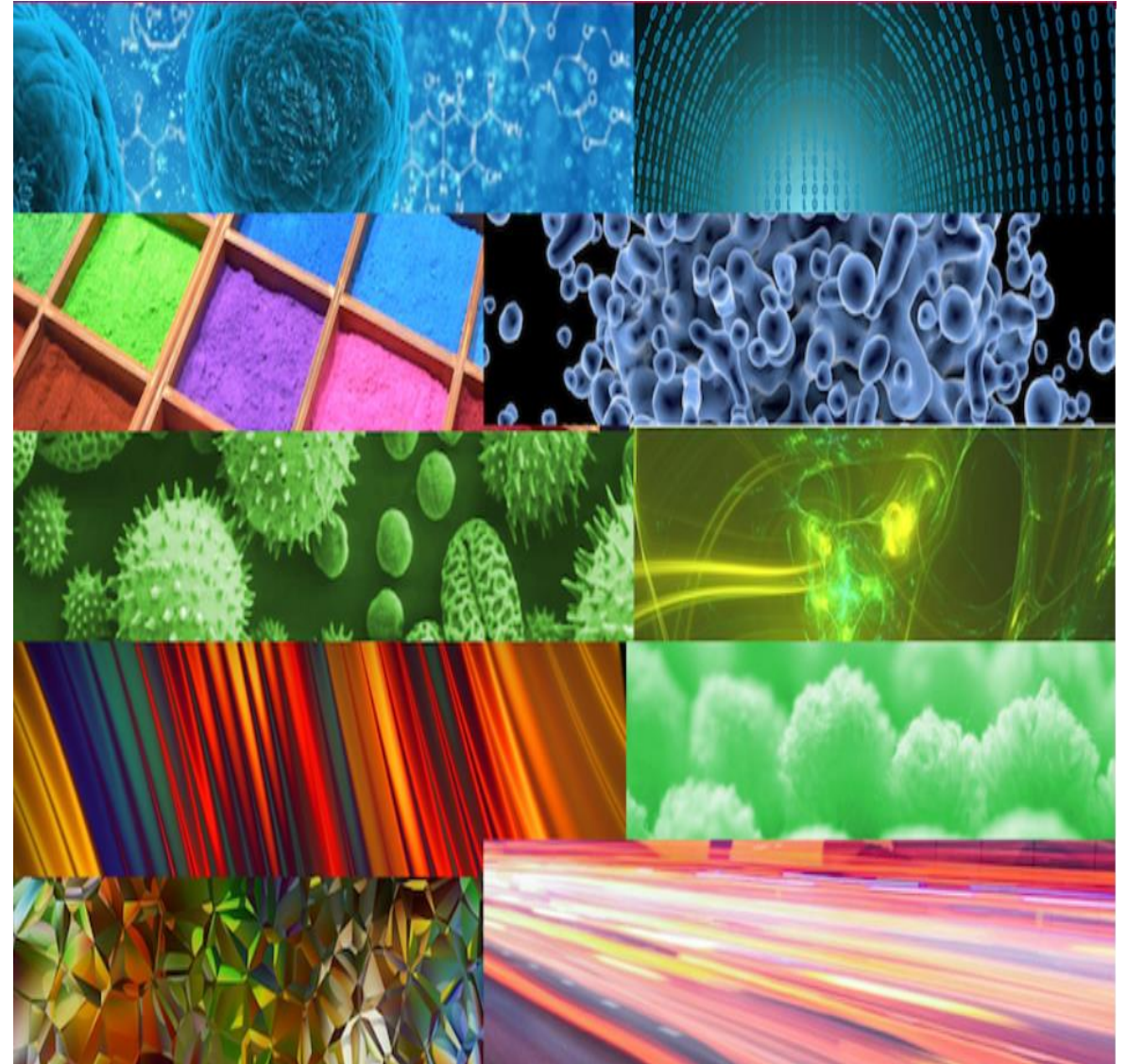
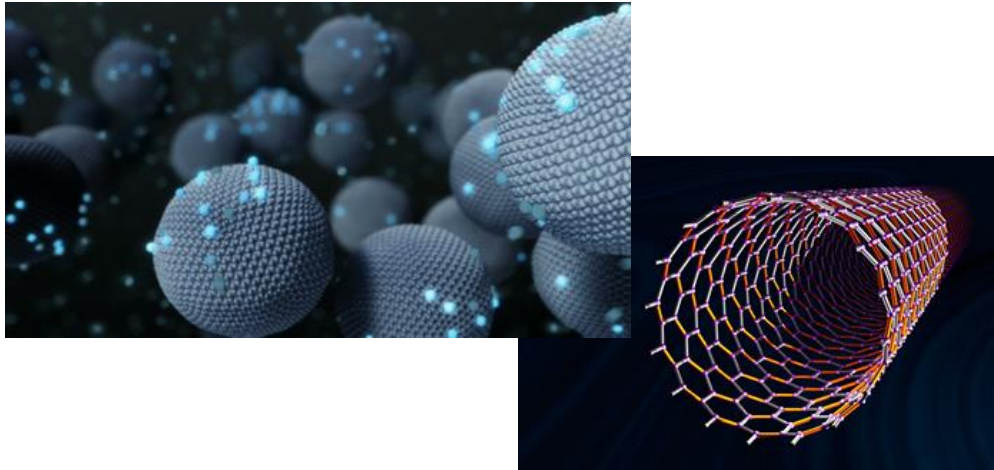
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Sustainable chemistry for industry and environment within circular economy paradigms



Nanobiomaterials and nanosystems for sensor, biomedical, environmental, energy and technological applications

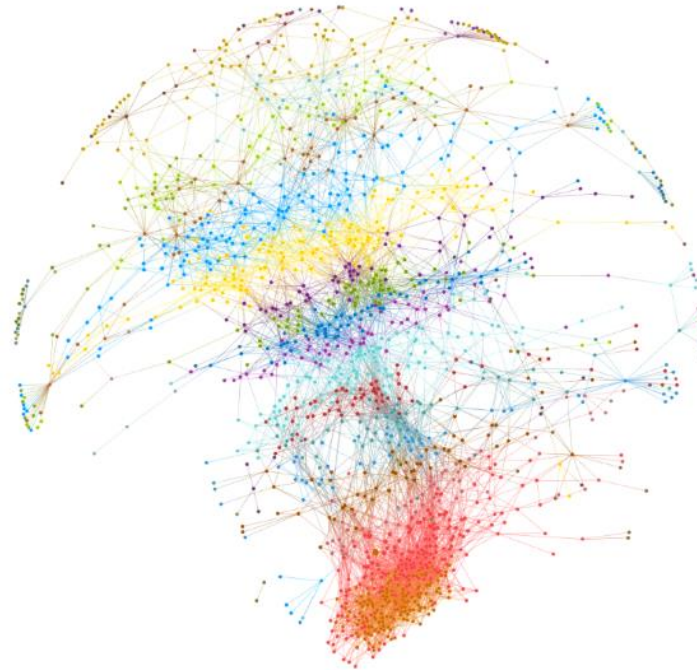
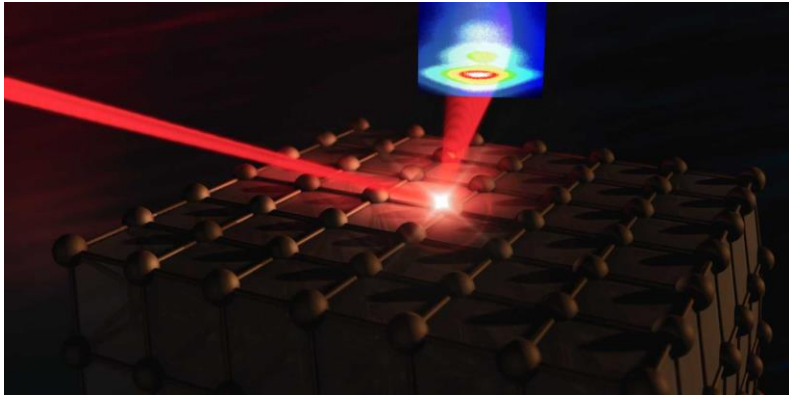


Innovative technologies, materials and analytical methods for cultural heritage

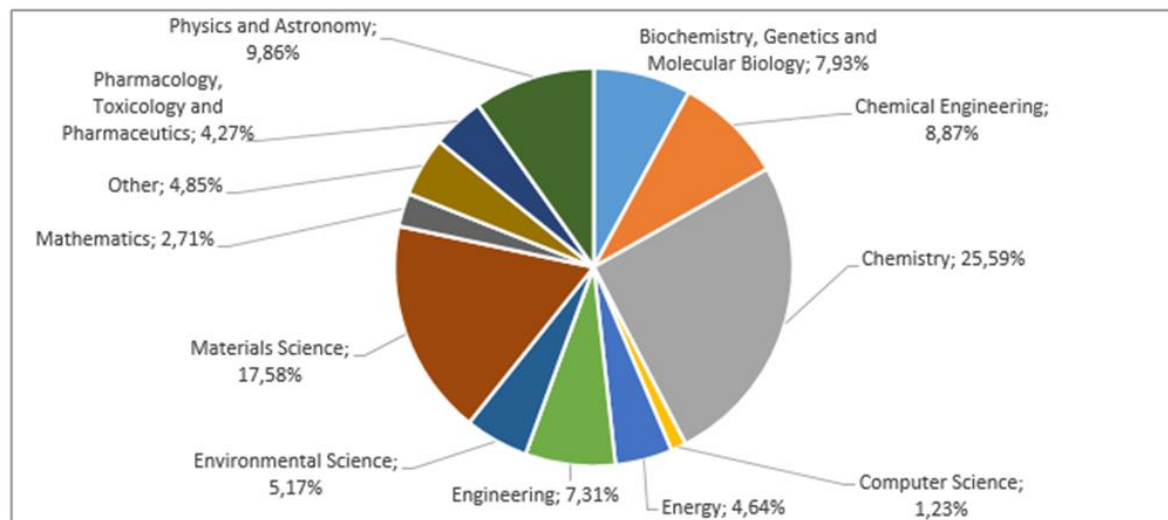


More recent research topics:

- **Networks and complex systems**
- **Ultrafast dynamics in condensed matter**



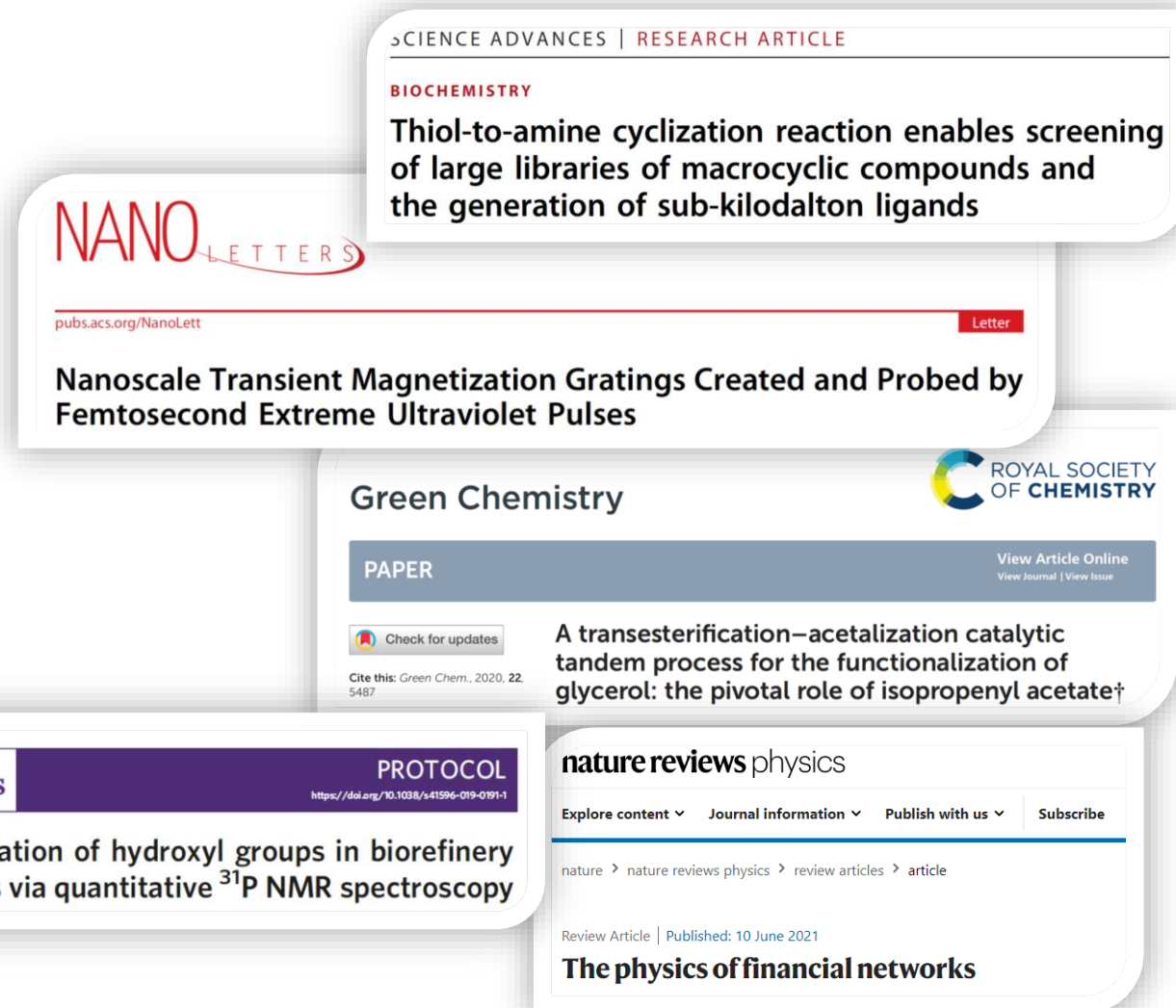
Publications



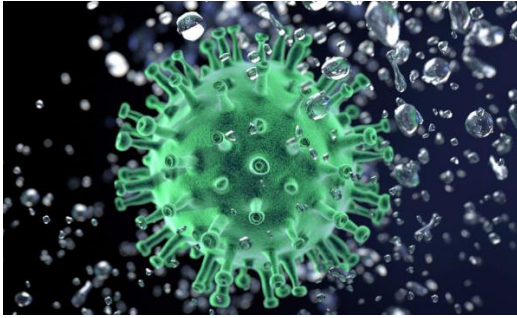
Over 450 publications indexed in Scopus in the last 3 years

High interdisciplinarity

Over 55% from international collaborations



Main ongoing national projects



RELIEAVED: reduction of SARS-CoV-2 spread in the human body by aerosol administration of cell-shielding PEGylated bicyclic peptides
budget DSMN: 56.872 € of 70.648 €



The golden hamster as animal model for the use of monoclonal antibodies for zoonotic infectious diseases
budget DSMN: 15.730 € of 160.000 €



SARR: advanced systems for waste management
budget DSMN: 246.400 € of 4.588.893 €



Soft Adaptive Network
budget DSMN: 121.860 € of 1.056.360 €



3S_4H: smart food for sustainable future
budget DSMN: 110.880 € of 5.188.650 €



Class IIa HDACs as therapeutic targets in human diseases: new roles and new selective inhibitors
budget DSMN: 111.000 € of 785.000 €



F.A.&A.F.: future agriculture and functional food
budget DSMN: 49.984 € of 1.914.048 €

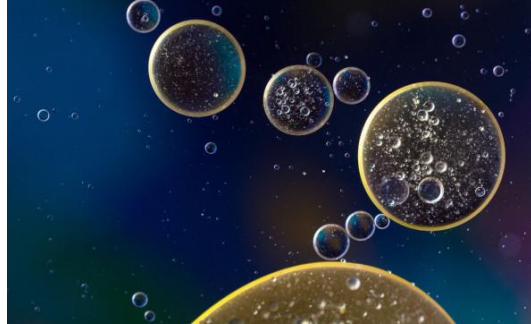
SAFE: Smart creAtivity for saFety and rEstart
budget DSMN: 67.250 € of 1.878.396,63 €

ECODPI: ECOdesign e recycling of individual protection devices
budget DSMN: 100.000,00 € of 2.999.460 €

Main ongoing international projects



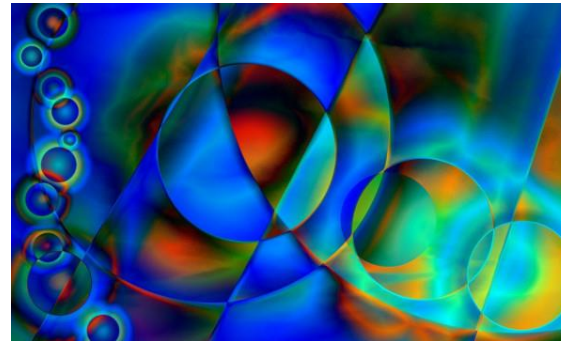
EffectFact: Effective Factorisation techniques for matrix-functions: Developing theory, numerical methods and impactful applications
budget DSMN: 128.800 € of 182.160 €



EMPHABIOSYS: Emergence of New Phases in Biopolymer Systems
budget DSMN: 269.003 €



B-LigZymes: Bacterial Enzymes and Bioprocesses for Lignin Valorisation
budget DSMN: 73.600 € of 970.600 €



MAGNETIC-SPEED-LIMIT: Understanding the speed limits of magnetism
budget DSMN: 218.750 € of 1.967.755 €



- **ISE-EMH:** Italian-Slovenian ecosystem for mobile and e-health
budget DSMN: 117.648 € of 882.351 €
- **Nano-Region:** an open access network for innovation through nanotechnology
budget DSMN: 375.000 € of 3.529.324 €

Technology transfer, patenting and spin offs



40% of Ca'Foscari spin offs
+170% patents in 2019

Spin Offs:

Biofuturemedicine Srl: diagnostic kits
Cheers Srl: photovoltaic cells
Crossing Srl: green products for industries
VeniCe Srl: cosmetics
Nasiertech Srl: cultural heritage restoration

Management of research activities for third parties, of granted projects at national/international level, preparation of research contracts



+170% granted projects as compared to the past 3 years

Social, educational and cultural activities



Public Engagement

- events for local companies, school students and wide public
- cooperation activities with local associations (cultural, industrial, etc.)

Activities with high schools

- training courses for high school teachers
- internships for high school students



Many collaboration possibilities:

- Stages and internships
- Research fellowships
- Industrial PhD degrees
- Joint laboratories
- Joint grant applications

Services for companies:

- Consulting, research activities and testing on request
- Patent licensing
- Spin offs



Network

- Beijing Jiaotong University
- Beijing Normal University
- Xiamen University
- City University of Hong Kong
- Kyoto Institute of Technology
- Kyoto University
- Tokyo University
- AIMMSCR, New Dehli
- University of Tehran
- University of Peshawar
- University of Natural Resources and Life Sciences (BOKU)
- KU University of Leuven
- Bulgarian Academy of Science
- University of Chemistry and Technology
- Åbo Akademi University
- European synchrotron Radiation Facility
- ILL –Institute Laue
- Universität Freie Berlin
- RWTH Aachen
- Langevin, Grenoble
- Université de Jean Monnet – Saint Etienne
- Università di Bordeaux
- Queen's University of Belfast
- Vilnius University
- ITMO University
- University of Ljubljana
- National Institute of Chemistry, Ljubljana
- University of Nova Gorica
- Emergency ONG, Milano
- IUAV, Venezia
- Università Parthenope, Napoli
- University of Malaga
- University of Seville
- University of Extremadura
- Universitat Autònoma de Barcelona
- University of Vigo
- ICIQ Institut Català d'Investigació Química
- Spanish Council for Scientific Research (CSIC)
- Università La Laguna
- ETH Zurich

- University of Amsterdam
- University of Bristol
- University of Oxford
- Heriot Watt University
- University of Southampton
- University of Nottingham
- University of Bath
- National University, Odessa
- Università Sao Paolo
- Université de Varrens
- INRS, Montreal
- McGill University Montréal
- The Scripps Research La Jolla
- Rockefeller University
- Temple University
- University of Florida, Gainesville
- University of Pennsylvania
- Fox Chase Cancer Center
- International Society for Advancement in Energy Research
- Methodist Hospital, Houston
- University of Maryland
- University of California, Irvine
- University of Sydney
- Université de Sfax
- Centre National des Recherches en Sciences des Matériaux, Soliman





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