Curriculum Vitae et Studiorum by

Gianmaria Sannino

BIOGRAPHICAL AND PERSONAL DATA

Place of birth: Naples (Na)
Nationality: Italian
Residence: Via Etna 2, 00141 Rome (RM)
Place of work: Italian National Agency for New Technologies, Energy and Sustainable Economic Development (hereinafter ENEA), Via Anguillarese 301, 00123 Roma, Italy.
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CURRENT POSITION

- Head of the Division *Models and Technologies for Risk Reduction* at ENEA - Department of Sustainability, Rome (https://impatti.sostenibilita.enea.it/en)
- Chair of the Implementation Working Group 'Ocean Energy' of the SET-PLAN of the European Commission (https://setis.ec.europa.eu/implementing-actions/ocean-energy)

EDUCATION AND TRAINING

2007: PhD in Marine Science and Engineering - Cycle XIX - University of Naples 'Federico II'. Thesis: 'The role of the interfacial layer in exchange and hydraulics in the Strait of Gibraltar: a 3D numerical modelling study'.

2001: Grand Combin Summer School Course IX - The Fluid Dynamics of Coastal Seas, Closed Basins and Lakes organised by the Institute of Atmospheric Sciences and Climate (ISAC) - CNR (Turin) and the Laboratoire de Météorologie Dynamique, École Normale Supérieure (Paris), St. Oyen (Italy).

1999: Training course 'Geophysical and Environmental Fluid Dynamics Summer School' organised by the Department of Applied Mathematics and Physics (DAMPT), Cambridge University, Cambridge (UK).

1999: Training course 'Techniques of optimisation, programming languages and the environment of parallel calculation' organised by CASPUR (Consorzio Interuniversitario per le Applicazioni di Supercalcolo Per Università e Ricerca, now CINECA), Rome (Italy).

1998: Fellowship at the Geophysical Fluid Dynamics Computation Group of the Interuniversity Consortium for Supercomputing Applications for Universities and Research (CASPUR, now CINECA). Title of the grant: "Development, use and application of numerical models of oceanic general circulation for the study of particular physical processes in the Mediterranean Sea", grant duration 1 year.

1997: Training course 'Ocean forecasting, Mast Advanced Study Course' organised by the International Marine Centre (IAMC-CNR), Oristano (Italy).

1997: Fellowship at ENEA Oceanographic Modelling group. Title of the grant: "Development, use and application of numerical models of ocean general circulation for the study of particular physical processes in the Mediterranean Sea", duration of the grant 1 year.

1996: Officer in charge of oceanographic measurements on board of the Italian Navy's Nave Magnaghi.

1995: Degree in Oceanography - Score 110/110 cum laude at the Istituto Universitario Navale di Napoli (now University of Naples 'Parthenope'). Thesis: "Lagrangian stochastic models in oceanography: the problem of boundary conditions".

KNOWLEDGE OF LANGUAGES

Italian: mother tongue;
English: C2 (listening, reading, oral production, oral interaction, writing)
Spanish: basic

WORK EXPERIENCE

2022-present: Head of the Division *Models and Technologies for Risk Reduction* at ENEA. Division Staff: 63 researchers.

2015-2022: Head of the *Climate Modelling and Impacts* Laboratory at ENEA. Laboratory Staff: in average 18 researchers.

2010-Present: Permanent Researcher (L3F4, EPR level) at the ENEA Climate Modelling and Impacts Laboratory, CR Casaccia, Rome.

2012: Visiting Scientist at the Institute of Marine Sciences, Middle East Technical University, Erdemli - Mersin (Turkey) as ENEA Contact Person for the research project: "Dynamics of high Energy Environment: oceanographic Processes at the Turkish Strait System (DEEP)". Research objective: Study of marine circulation in the area between the Dardanelles Strait and Bosphorus. The project was funded by the Italian Ministry of Foreign Affairs. Period 1 month.

2006 Visiting Scientist - Department of Earth, Atmospheric, and Planetary Sciences, Massachusetts Institute of Technology (MIT). Research objective: Study of the circulation of the Strait of Gibraltar through the implementation of the MITgcm numerical model in non-hydrostatic mode. Period 1 month.

2006: Visiting Scientist at the Departamento de Fisica Aplicada II, University of Malaga (Spain). Research objective: Study of the marine circulation of the Strait of Gibraltar through the use of in situ data and numerical simulations. Period 2 months.

2005-2023: Evaluator of national and international projects for the following research agencies and international institutions:

- EUROPEAN COMMISSION UNDER THE HORIZON (2020 and Europe) PROGRAMMES
- AGENCE NATIONALE DE LA RECHERCHE (NATIONAL RESEARCH AGENCY OF THE FRENCH GOVERNMENT)
- PARTNERSHIP FOR ADVANCED COMPUTING IN EUROPE (PRACE) (EU Commission)
- ITALIAN MINISTRY FOR UNIVERSITIES AND RESEARCH (MUR) - PROJECTS BANDO PRIN
- ITALIAN SUPER COMPUTING RESOURCE ALLOCATION (ISCRA) -CINECA
- ANVUR, NATIONAL AGENCY FOR THE EVALUATION OF THE UNIVERSITY SYSTEM AND RESEARCH
- JOINT PROGRAMMING INITIATIVE HEALTHY AND PRODUCTIVE SEAS AND OCEANS (JPI OCEANS)

2004: Visiting Scientist - Department of Earth, Atmospheric, and Planetary Sciences, Massachusetts Institute of Technology. Research objective: Study of the circulation of the Mediterranean Sea through the implementation of the MITgcm numerical model. Period 7 months.

2005-2010: Researcher with a Permanent Contract (Level 9 ENEA, L3 EPR equivalent) at ENEA, Climate Modelling and Impacts Laboratory, CR Casaccia, Rome.

2000-2005: Researcher with 5-year contract at the ENEA Climate Modelling Laboratory, CR Casaccia, Rome.

1995-1997: Italian Navy Officer (Ensign). Main duties were lecturer in physical oceanography at the Department of Marine Sciences at the Navy Academy in Livorno and officer in charge of oceanographic measurements on the MMI's Nave Magnaghi.

SCIENTIFIC ACTIVITY

During his career, he has worked on: physical oceanography, ocean dynamics, air-sea interaction, climatology and climate variability, operational oceanography, ocean energy, sea level projection, numerical modelling applied to ocean and climate physics, operational modelling, assessment of climate change impacts, regional climate downscaling. His scientific activity is documented by a large number of publications cited in the international scientific literature.

Currently (May 6th 2023):

Scopus: 89 papers with 2849 citations and h-index: 33

Google Scholar: 4041 citations, h-index: 36, i10-index:63

SCIENTIFIC COMPETENCES

- Analysis of hydrological data and measurement of the physical properties of the sea;
- Data processing and analysis of essential physical ocean variables (temperature, salinity, currents, sea level, ect) ;
- Integrated use of satellite data, models and in situ measurements to study ocean circulation and ocean processes;
- Advanced methods for the analysis of time series and dynamic systems;
- Implementation and application of complex climate models (Earth System Model) at regional scales for the study of climate variability;
- Implementation of oceanographic models to study marine dynamics at different spatial scales (from local to global);

- Production of coupled ocean-atmosphere climate scenarios for the WRCP MedCORDEX initiative;
- Knowledge of the main ocean circulation models (MITgcm, POM, ROMS, NEMO) and sea state models (WAM, SWAN, Wave Watch III).

COORDINATION AND ORGANISATIONAL SKILLS

Since 1/11/2022 he is coordinating the Division *Models and Technologies for the Risk Reduction.* The Division is composed by three Laboratories: (1) Climate Modelling and Impacts, (2) Technologies for Structure Dynamics and Seismic and Hydrogeological Risk Prevention, and (3) Modelling Atmospheric Pollution. Division Staff: 63 researchers. Currently (24 April 2023) the Division is working for a considerable number of projects (32 among national and international projects).

From 1/7/2015 to 31/10/2022 he coordinated the ENEA Climate Modelling and Impacts Laboratory (SSPT-MET-CLIM). The number of Researchers in the Laboratory has varied over time due to retirements, transfers and new hires between a minimum of 16 to a maximum of 22. During the period 1/7/2015 - 19/06/2022 the Laboratory acquired a considerable number of projects in the field of climatology, climate services, oceanography and ocean energy. The projects were mainly funded by the European Commission through the major research programmes (Horizon 2020, Interreg, Horizon Europe, Copernicus). The total funding of the acquired projects exceeds EUR 6 million. Below is a list of the main projects acquired by the laboratory:

1. **EU H2020** project "COASTAL CLIMATECORE SERVICES (CoCliCo)
2. Project CTN02_00059_9935997 TEOREMA "Technological solutions for multi-objective offshore energy platforms" within the framework of the Industrial Research and Experimental Development Cluster Project, area of specialisation "Economics of the Sea", referred to in the application for assistance marked with the identification code CTN02_00059 entitled "BIG - Blue Italian Growth", financed by **MIUR**
3. Energy from the Sea" project related to the 2019-2021 Three-Year Implementation Plan of the **MiSE- ENEA** Programme Agreement on Electricity System Research - ENEA Coordinates
4. **EU H2020** project "SOCLIMPACT (Downscaling CLImate imPACTs and decarbonisation pathways in EU islands, and enhancing socioeconomic and non-market evaluation of Climate Change for Europe, for 2050 and beyond). ENEA WP Leader
5. Sub concract Agreement between CNRS and ENEA under the ECMWF 2017/C3S_34b_lot1_CNRS Framework Agreement for the provision of C3S_34b_lot1 Regional climate projections. **Copernicus** C3S.
6. OpERATE project 'Ocean Energy Resources Assessment for Maldives' as part of the international cooperation activities promoted by the Ministry for the Environment, Land and Sea (**MATTM**).
7. **INTERREG-MED** project: "PELAGOS" Promoting innovative nEwERworks and cLusters for mArine renewable energy synerGies in mediterranean cOasts and iSlands. ENEA WP Leader
8. Carrying out marine energy resource studies of three sites through Resources Assessment and Forecasting activities on behalf of **ENEL-GP**.
9. **EU H2020** project 'Support to the Realisation of the Ocean Energy Implementation Plan of the SET-Plan (OceanSET)'.
10. **EU Horizon Europe** project: Framework for defining climate mitigation pathways based on understanding and integrated assessment of climate impacts, adaptation strategies and societal transformation (KNOWING)
11. WAVE4M project "Development of a WAVE FORecasting system for the Maldivian archipelago" as part of the international cooperation activities promoted by the Ministry of the Environment and Protection of Land and Sea-Directorate General for Sustainable Development, Environmental Damage and Relations with the European Union and International Bodies. Financing **MATTM**.
12. **EU H2020** S2S4E project "Sub-seasonal to Seasonal climate forecasting for Energy". ENEA WP Leader.
13. **EU H2020** project CRESCENDO 'Coordinated Research in Earth System and Climate: Experiment, kNowledge, Dissemination and Outreach'.
14. **EU H2020** MED-GOLD project 'Turning climate-related information into added value for traditional MEDiterranean Grape, Olive and Durum wheat food system'. ENEA Coordinator.
15. Project 'Assessing the interannual physiological response of phytoplankton to global warming using longterm satellite observations - PhysioGlob', within the framework of **ESA's** 'The Living Planet Fellowship' Programme
16. Subcontracted by CNR-ISAC for the Project "Scientific QUality Assessment and REports 4 Essential Climate Variables (SQUARE4ECVs)" within the European Programme **COPERNICUS** ITT C3S_511
17. DeteCtion and ThreAts of MaRinE Heat Waves' (CAREHeat) funded under the 'EarthObservation Science for Society' activities, 2020-2022 ESA FutureEO-1 programme (FutureEO-1 for short), and more specifically under the 'Grand Science Challenges' activity line. **ESA** funding.
18. Collaboration Agreement pursuant to Art. 15 of Law 241/90 with the National Institute of Oceanography and Experimental Geophysics. **OGS** funding.

19. DYNAMOL project "Dynamic downscaling of monthly and seasonal forecasts over the Mediterranean basin and the Lazio region. Project financed by the **Lazio Region**.
20. **Interreg-MED** Project "BLUE DEPloyment ALliance" BLUE DEAL
21. **Copernicus** C3S CLIMTOUR project "Operational climate service for European tourism operators".
22. **EU H2020** project SECLI-FIRM "The Added Value of Seasonal Climate Forecast for Integrated Risk Management Decisions". ENEA WP Leader.

Since 1/1/2021, he coordinates the European Working Group for the Implementation of the Action Plan for the Development of Ocean Renewable Energy in Europe. The Working Group was established in 2018 by the EU Commission and operates under the control of the Strategic Plan for the Development of European Energy Technologies (SET-Plan). The Working Group consists of representatives from 12 EU Member States, DG MARE, DG RESEARCH, DG ENERGY, and key European stakeholders interested in the development of the energy from the sea sector.

He was also PI and/or Work Package Leader for several national and international projects on climate change, oceanography ocean energy:

- **Coordinator (PI)** of the three-year project (2022-2024) "**Ocean Energy** " funded by the Italian Ministry for Environment and Energy (MASE).
- **Coordinator (PI)** of the three-year **OpERATE** (Ocean Energy Resources Assessment for Maldives) Project funded by the Government of Maldives.
- **Coordinator (PI)** of the three-year project (2019-2021) "**Ocean Energy** " funded by the Italian Ministry for Environment and Energy (MiTE).
- **Scientific Officer and WP Leader** of the EU H2020 project **SOCLIMPACT** (DownScaling CLImate imPACTs and decarbonisation pathways in EU islands, and enhancing socioeconomic and non-market evaluation of Climate Change for Europe, for 2050 and beyond)
- **WP Leader** of the InterregMed project **PELAGOS** (Promoting innovative nEwworks and cLusters for mArine renewable energy synerGies in mediterranean cOasts and iSlands)
- **Coordinator (PI)** of two international projects selected by the Partnership for Advanced Computing in Europe (PRACE) programme: (1) **NEMERTE** - Numerical Experiment on the Mediterranean model response to Enhanced Resolution and TidE; (2) **MOTUS** - A High-Resolution Modelling Study of the Turkish Straits System Utilising HP. Partnership for Advanced Computing in Europe (DECI-10 call).

APPOINTMENTS TO NATIONAL AND INTERNATIONAL COMMISSIONS AND COMMITTEES

2021-present: Coordinator (Chair) of the Implementation Working Group 'Ocean Energy' of the European Commission's SET-Plan. The SET-Plan, the European Strategic Energy Technology Development Plan, aims to accelerate the development and deployment of low-carbon technologies, refine technologies and reduce costs by coordinating national research efforts and helping to fund projects.

2018-Present: National Representative at the Implementation Working Group 'Ocean Energy' of the SET-Plan of the European Commission.

2020-Present: Member of the **Italian Oceanographic Commission,** the national body of the Intergovernmental Oceanographic Commission (IOC) of UNESCO.

2017-Present: Member of the Scientific Technical Committee of the **National Technology Cluster 'Blue Italian Growth'.**

2014 - present: Member of **EuroGOOS** (European Global Ocean Observing System) **Executive Committee**.

2014 - present: Member of the Scientific Committee **"Mediterranean COordinated Regional climate Downscaling EXperiment (Med-CORDEX)".** Med-CORDEX is part of the international programme CORDEX (Coordinated Regional Downscaling Experiment) promoted by the United Nations World Climate Research Programme (WCRP).

2014-2021: Member representing ENEA on the Executive Committee of the **European Climate Research Alliance (ECRA).**

2014 -2021: Coordinator of the **ECRA Collaborative Programme: 'Sea Level and Climate Change'.**

2011-2022: Member of the **Executive Committee of the Joint Programme 'Marine renewable energy'** of the European Energy Research Alliance (EERA).

ORGANISATION OF CONFERENCES, SEMINARS, WORKSHOPS (as chair and co-chair)

- Session OS2.2 'Advances in Understanding of the Multi-Disciplinary Dynamics of the Southern European Seas (Mediterranean and Black Sea)' at the European Geosciences Union (EGU co-chair 2015, 2016, 2017, 2018, chair 2019, 2020, 2021) - Vienna (Austria)
- Session 'Sea level change and Coastal Impacts' at the General Assembly of the European Climate Research Alliance (ECRA GA 2015, 2017, 2019) - Brussels (Belgium) (Chair)
- Session "Computational Methods in Support of OceanEnergy Harvesting" at the 6th Conference on Computational Methods in Marine Engineering (MARINE 2015) – Rome. (Chair)
- Workshop "Joint regional climate system modelling for the European sea regions" at ENEA Headquarters. (Joint HyMex-Baltic Earth 2015) – Rome. (Chair)
- Workshop 'Analysis and mapping of the energy resource of our seas, development of innovative prototypes for the conversion of wave energy into electricity'. 7 July 2015. Enea Headquarters. (Chair)
- 2nd National Workshop on Energy from the Sea entitled: 'Energy from the Sea - New Technologies for the Italian Seas'. 1-2 July 2014. Enea Headquarters. (Chair)
- 1st National Workshop on Energy from the Sea entitled: "Prospects for the development of energy from the sea for electricity production in Italy". 16-17 June 2011. Enea Headquarters. (Chair)

TEACHING ACTIVITIES AND EXAMINATION COMMISSIONS

2022-Present: Member of the progress evaluation committee for PhD theses in oceanography/climatology at the Laboratoire d'Océanographie Physique et Spatiale (LOPS) - Université de Bretagne Occidentale

2021: Member of the Selection Committee for the PhD final examinations for the course in 'Physics' at Tor Vergata University (Rome)

2017: Member of the Selection Committee for the final examinations for the degree of PhD in Earth Sciences at the University of Trieste

2013: Member of the Examination Board for conferring the title of PhD in Marine Science and Engineering at the Federico II University of Naples

2012: Lecturer within the framework of the Master in "Numerical Computing" at the University of Rome "La Sapienza". Faculty of Mathematical Sciences. 10 hours of lecture

2007-2008: Professor of the course 'Mathematical Physical-Biological Models' at the University of Tuscia (Viterbo). Disciplinary Sector MAT/09. Master's degree course in Marine Environmental Sciences at the Faculty of Mathematical Sciences. (64 lecture hours)

2008: Member of the Examining Board for conferring the title of PhD at the University of Malaga (Spain)

TRAINING OF SCIENTIFIC PERSONNEL

Scientific supervisor of several foreign doctoral theses (Un. Trieste, Un. Malaga (Spain), CNRS (France), Un. Grenoble (France), Un. Parthenope, Uni. Pavia).

PROJECT COORDINATION AND WP LEADER

1. Project: **"Energy from the Sea"** pertaining to the 2022-2024 Three-Year Implementation Plan of the MASE-ENEA Programme Agreement on Electricity System Research
   Activity Period: **January 2022 - December 2024**
   Role**: Coordinator**
   Project funding: **2.2 million Euro**

2. Project: **OpERATE 'Ocean Energy Resources Assessment for Maldives' as** part of the international cooperation activities promoted by MATTM
   Activity Period: **July 2017 - July 2022**
   Role**: Coordinator**
   Project funding: **600,000 Euro**
   ENEA order: **M0AD**

3. Project: **SOCLIMPACT 'Downscaling CLImate imPACTs and decarbonisation pathways in EU islands, and enhancing socioeconomic and non-market evaluation of Climate Change for Europe, for 2050 and beyond'** under the European programme Horizon 2020.
   Activity Period: December 2017 - March 2021
   Role: **WP Leader and Scientific Manager ENEA**
   Project funding**: 4,481,340 Euro**, ENEA funding: 253,312

4. Project: **"Energy from the Sea"** pertaining to the 2019-2021 Three-Year Implementation Plan of the MiSE- ENEA Programme Agreement on Electricity System Research
   Activity period: **January 2019 - December 2021**
   Role**: Coordinator**
   Project funding: **1.5 million Euros**, ENEA funding**: 1.2 million Euros**
   Partner involved in the project: Politecnico di Torino

5. Project: **INTERREG-MED: "PELAGOS" Promoting innovative nEwERworks and cLusters for mArine renewable energy synerGies in mediterranean cOasts and iSlands**
   Activity Period: **November 2016 - July 2019**
   Role**: WP4 Leader and ENEA Scientific Officer**
   Project funding: **2.4 Million Euros**, ENEA funding**: 201,000 Million Euros**

6. Project: **NEMERTE - Numerical Experiment on the Mediterranean model response to Enhanced Resolution and TidE. Partnership for Advanced Computing in Europe (EU PRACE TIER0 9th call)** Activity Period: **September 2014 - September 2015**
   Role**: Coordinator**
   HPC resources: **17,860,000 cores/hour of CINECA's FERMI supercomputer**
   Partners involved in the project: Mediterranean Institute for Advanced Studies (IMEDEA)- Spain, Massachusetts Institute of Technology (MIT) - USA

7. Project: **"Studies and assessments on the production of electrical energy from sea currents and wave motion"** related to the 2014 Annual Implementation Plan of the MSE-ENEA Programme Agreement on Electrical System Research
   Activity Period: **October 2014 - September 2015**
   Role**: Coordinator**
   Project funding: **0.5 million Euros**, ENEA funding**: 0.4 million Euros**

8. Project: **'Evaluating the effects produced by tides on Mediterranean Thermohaline Circulation**'. Call ISCRA (Italian SuperComputing Resources Allocation) CINECA
   Activity Period: **October 2013 - September 2014**
   Role**: Coordinator**
   Project funding: **core/hour 4,000,000**

9. Project: **MOTUS 'A High-Resolution Modelling Study of the Turkish Straits System Utilising HP'. Partnership for Advanced Computing in Europe (EU DECI-10 call)**
   Activity Period: May 2013 - April 2014
   Role**: Coordinator**
   Project funding: **core/hour 2,625,000**

10. Project: **'Maritime spatial planning: coastal strip related to the MIUR RITMARE flagship project'.**
    Activity Period: 2011 - 2016
    Role**: Head of Action AZ1 'Process Modelling**
    Funding for Action No. 1: **150,000 Euro**

11. Project: **"Studies and assessments on the production of electricity from sea currents and wave motion" of the 2011-2013 Implementation Plan of the MiSE-ENEA Programme Agreement on Electricity System Research**
    Activity Period: **2011 - 2014**
    Role**: Coordinator**
    Project funding: **675,000 Euro**, ENEA funding**: 540,000 Euro**
    Partners involved in the project: Polytechnic of Turin, University of Reggio Calabria, University Federico II of Naples

12. Project: **"Studies and assessments on the production of electricity from sea currents and wave motion" of the 2011-2013 Implementation Plan of the MiSE-ENEA Programme Agreement on Electricity System Research**
    Activity Period: **2011 - 2014**
    Role**: Coordinator**
    Project funding: **675,000 Euro**, ENEA funding**: 540,000 Euro**
    Partners involved in the project: Polytechnic of Turin, University of Reggio Calabria, University Federico II of Naples
13. Project: **"Studies and assessments on the production of electricity from sea currents and wave motion" of the 2008-2009 Implementation Plan of the MSE-ENEA Programme Agreement on Electricity System Research**
    Activity Period: **October 2010 - September 2011**
    Role**: Coordinator**
    Project funding: **500,000 Euro**, ENEA funding**: 400,000 Euro**
    Partners involved in the project: University of Reggio Calabria, University Federico II of Naples, University of Bologna

14. Project: COCLICO '**COASTAL CLIMATE CORE SERVICES**' under the European Horizon 2020 programme.
    Activity Period: September 2021 - August 2025
    Role: **Scientific cooedinator for ENEA activities**
    Project funding: **5,999,641 Euro**, ENEA funding**: 297,125 Euro**

15. Project: TEOREMA "**Technological solutions for multi-objective offshore energy platforms**" within the framework of the Industrial Research and Experimental Development Cluster Project, specialisation area "Economics of the Sea", referred to in the application for assistance marked with identification code CTN02_00059 entitled "BIG - Blue Italian Growth", financed by MIUR
    Activity period: September 2019 - August 2022
    Role: **Scientific coordinator for ENEA activities**
    Project funding: **700,000 Euro**, ENEA funding**: 157,137 Euro**

16. Project: COPERNICUS C3S '**Regional climate projections (C3S_34b_lot1)**'.
    Activity period: January 2019 - April 2020
    Role: **Scientific coordinator for ENEA activities**
    ENEA funding: **47,266 Euro**

17. Project: SINGULAR '**Smart and Sustainable Insular Electricity Grids Under Large-Scale Renewable Integration**' under the European FP7 programme.
    Activity Period: 2012 -2016
    Role: **Scientific coordinator for ENEA activities**
    Project funding: **5,259,455 Euro**, ENEA funding**: 129,910 Euro**

INVITED LECTURES AT NATIONAL AND INTERNATIONAL CONFERENCES

1. CP Sea Level Change and Coastal Impacts. ECRA General Assembly 2015. Square Brussels Meeting Centre. 27 Febrary 2019
2. CP Sea Level Change and Coastal Impacts. ECRA General Assembly 2019. Square Brussels Meeting Centre. 2 March 2015
3. "Global Challenges'. Seminar of the Master's Degree 'Global Strategy and Security', jointly organised by La Sapienza University and the Ministry of Defence. Centro Alti Studi della Difesa, Rome. 19 March 2015
4. Marine energy resources present or potential in the Italian territory. Conference "Energy production from wave motion". University of Catania. 23 January 2015
5. Development strategies for the MITgcm, aversatile ocean regional model. School on Parallel Programming and Parallel Architecture for HPC and Developer School for HPC applications in Earth Sciences. International Centre for Theoretical Physics (ICTP). 27 October-14 November, 2014
6. Modelling the Mediterranean region under the Prace NEMERTE Project: towards enhanced resolution, accurate Strait of Gibraltar description and tidal forcing effects. Symposium on HPC and Data-Intensive Applications in Earth Sciences. International Centre for Theoretical Physics (ICTP). 13 November-14 November, 2014

7. Assessment of wave and tidal potential along the Italian coasts. Workshop, Update studies on offshore and marine engineering, Mediterranean University of Reggio Calabria. 4 and 5 June 2012
8. Overview of present or potential marine and coastal energy resources in Italy. Workshop, "Energy from the Sea" AGHAPE, Rome. June 2012
9. Assessment of wave energy around Pantelleria island. Workshop, "Pantelleria isola energetica", land, sea, sun and wind - scenarios for a sustainable future. Pantelleria, Italy. June 2012
10. Numerical study on the sensitivity of the Mediterranean thermohaline circulation to the resolution adopted at Gibraltar and tidal forcing. MedCLIVAR 2012 Conference Madrid - Spain.
11. Assessment of wave and tidal potential in the Mediterranean Sea. Workshop Energy Mediterranean Conference. Civitavecchia March 2012
12. Assessment of wave and tidal potential in the Mediterranean Sea. Renewable Energy Mediterranean Conference, Ravenna. February 2012
13. Climate Scenario for the Mediterranean Basin: Illustration of possible paths and operational teaching tools on the subject. Tridentine Museum of Natural Sciences. Trieste, Italy.
14. Different ways of modelling the Strait of Gibraltar: from high resolution non-hydrostatic local model, to regional Mediterranean climate model. Workshop on 'Unresolved issues in Mediterranean Sea Level', Palma de Mallorca, Spain. September 2012
15. Impact of a Two-Way Grid Refinement at the Strait of Gibraltar on the Thermohaline Circulation of the Mediterranean Sea. 3rd ESF MedCLIVAR workshop on 'Understanding the mechanisms responsible for the Mediterranean Sea circulation and for sea level trends' (Rhodes-Greece). October 2008

EDITORIAL AND REVIEW ACTIVITIES

He is author and co-author of more than 90 articles published in international journals or with international editorial board of refereed books and proceedings of international congresses.
SCOPUS bibliometric statistics: Citations: 2849; H index: 33 (data 05/05/2023)

Google Schoolar bibliometric statistics: Citations: 4041; H-index: 36, i10-index: 63
List of journals where most GS research is published:

- *Remote Sensing*
- *Ocean And Coastal Research*
- *Ocean Modelling*
- *Frontiers in Marine Science*
- *Journal Geophysical Research Oceans*
- *Progress in Oceanography*
- *Sustainability*
- *Ocean Science*
- *Science Of The Total Environment*
- *Ocean Dynamics*
- *Scientific Report*
- *Natural Hazards And Earth System Sciences*
- *Ocean Modelling*
- *Marine Pollution Bulletin*
- *Renewable Energy*
- *Frontier in Energy Research*
- *Climate Dynamics*
- *Deep Sea Research*
- *J. Of Atmospheric And Oceanic Technology*
- *Journal of Physical Oceanography*

Promoted the 'Med-CORDEX' special issue for the journal: Climate Dynamics - 2018

He served as a reviewer for several international journals including: *Geophysical Research Letters, Journal of Geophysical Research: Oceans, Continental Shelf, Annals Geophysicae, Frontiers in Marine Science, Geoscientific Model Development, Ocean Modelling, Scientific Reports, Science Of The Total Environment.*

LIST OF PUBLICATIONS IN ISI JOURNALS

YEAR 2023

[1] Piero Lionello, Gianmaria **Sannino**, Ivica Vilibić, Chapter 6 - Surface wave and sea surface dynamics in the Mediterranean, Editor(s): Katrin Schroeder, Jacopo Chiggiato, Oceanography of the Mediterranean Sea, Elsevier, 2023, Pages 161-207, ISBN 9780128236925, doi.org/10.1016/B978-0-12-823692-5.00007-8.

[2] Nicolas M. Gonzalez, Robin Waldman, Gianmaria **Sannino**, Hervé Giordani, Samuel Somot. Understanding tidal mixing at the Strait of Gibraltar: A high-resolution model approach, Progress in Oceanography, Volume 212, 2023, ISSN 0079-6611, doi.org/10.1016/j.pocean.2023.102980.

[3] Andrea Storto, YH Essa, V. de Toma, A. Anav, **G. Sannino**, R. Santoleri, and C. Yang. A new regional coupled climate model for downscaling, predictability, and data assimilation studies in the Mediterranean region. Geoscientific Model Development, in press.

YEAR 2022

[4] **Sannino**, G., Carillo A., Iacono R., Napolitano E., Palma M., Pisacane G., Struglia MV. Modelling present and future climate in the Mediterranean Sea: a focus on sea-level change. *Clim Dyn* (2022). Electronic ISSN 1432-0894, Print ISSN 0930-7575. https://doi.org/10.1007/s00382-021-06132-w

[5] M. Michetti, M. Gualtieri, A. Anav, M. Adani, B. Benassi, C. Dalmastri, I. D'Elia, A. Piersanti, G. **Sannino**, G. Zanini, R. Uccelli, Climate change and air pollution: Translating their interplay into present and future mortality risk for Rome and Milan municipalities, Science of The Total Environment, Volume 830, 2022, ISSN 0048-9697, doi.org/10.1016/j.scitotenv.2022.154680.

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