

CURRICULUM VITAE

1. PERSONAL DETAILS

Katrin Schroeder

Researcher at CNR-ISMAR, Venice

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https://scholar.google.com/citations?hl=it&user=1xluf_0AAAAJ&view_op=list_works&sortby=pubdate

2. EDUCATION

With a M.Sc. in Environmental Sciences (cum laude, University of Venice, 2003) and a PhD in Environmental Sciences (University of Venice, 2008), her major research interests are experimental studies in physical and biogeochemical oceanography of the Mediterranean Sea.

The PhD was done at the Doctoral School of Environmental Sciences of the University of Venice, (Tutors: Dr. Andrea Bergamasco, CNR-ISMAR; Dr. Gian Pietro Gasparini, CNR-ISMAR; Dr. Roberta Delfanti, ENEA) with a thesis about '*Variability of the physical and biogeochemical behaviour of the Mediterranean Sea during the past 30 years*' (January 2008).

3. EXPERTISE and TRAINING

Certification of OPITO BASIC OFFSHORE SAFETY INDUCTION & EMERGENCY TRAINING (Including HUET and EBS) obtained on 7th June 2023 (validity 4 years), Certificate Nr. 99045700070623002, issued by C.F.O. Ravenna (Centro Formazione Offshore)

CURRENT AND HYDROLOGICAL DATA ACQUISITION AND PROCESSING; BIOGEOCHEMICAL DATA ACQUISITION AND ANALYSIS; OCEANOGRAPHIC DATA ANALYSIS AND INTERPRETATION; INVERSE METHODS APPLICATION; SPECIFIC SOFTWARES USAGE; MATLAB AND PYTHON PROGRAMMING;

VERY GOOD GERMAN, ITALIAN AND ENGLISH KNOWLEDGE

4. ERC SECTOR

PE10 EARTH SYSTEM SCIENCE: PHYSICAL GEOGRAPHY, GEOLOGY, GEOPHYSICS, METEOROLOGY, OCEANOGRAPHY, CLIMATOLOGY, ECOLOGY, GLOBAL ENVIRONMENTAL CHANGE, BIOGEOCHEMICAL CYCLES, NATURAL RESOURCES MANAGEMENT.

PE10_8 OCEANOGRAPHY (PHYSICAL, CHEMICAL, BIOLOGICAL)

5. EXPERIENCE

Since November 2019 Senior Researcher (*primo ricercatore*) at **CNR - Institute of Marine Science** (Venice, Italy).

November 2011- Researcher at **CNR - Institute of Marine Science** (Venice, Italy).
November 2019

Scientific recognitions, roles and awards

--International

In May 2023 she is designed to be part of the Italian Delegation to participate to the IUGG General Assembly (letter Prot. N. 0164672 of 30/05/2023)

Since February 2023 she is member of the **Ocean Observations Physics and Climate Panel (OOPC)** sponsored by the Global Climate Observing System (GCOS), the Global Ocean Observing System (GOOS), and the World Climate Research Programme (WCRP).

Since October 2022 she is the **vice-chair of MedCLIVAR** (Mediterranean Climate Variability and Predictability)

Since May 2022 she is Member of the **GO-SHIP Science Committee** (go-ship.org)

In July 2022 she has been appointed to be part of the **COI** (Italian Oceanographic Commission) **Working Group** for the integrated organization of the **Launch Event of the Ocean Decade Programme “SciNMeet-The Science we need for the Mediterranean Sea we want”**.

In August 2021 she has been appointed as **Chair of the Early Career Scientists Award Committee** of the International Union of Geodesy and Geophysics (**IUGG**), for the ECSA Awards 2023 (to be assigned during the IUGG General Assembly 2023 in Berlin)

In October 2020 she has been **granted 10 days of shiptime** on the new Belgian RV BELGICA, by the **Eurofleets+ Project**

In May 2020 she has been elected member of the **Executive Committee** of the **EMB-European Marine Board** (<https://www.marineboard.eu/excom>)

Since October 2019 she is **Chair of the CIESM Committee** “Physics and Climate of the Ocean”

In 2019 she has been awarded by the **IUGG** with the **Early Career Scientist Award**.

Since January 2018 she is alternate delegate for CNR at the **European Marine Board (EMB)**

In 2015 she has been presented the **Arne Richter Award for Outstanding Young Scientists** by the **EGU** “for her achievements in the field of experimental oceanography, to which she has contributed original ideas on the understanding of the formation and spreading of Mediterranean deep waters”.

Since 2012 she is member of the **Steering Group** of the Research Network **MEDCLIVAR** “Mediterranean CLImate VARIability and Predictability” (<http://www.medclivar.eu/index.php/steering-group>).

From 2012 to 2020 she has been **Coordinator** of the CIESM HYDROCHANGES Programme (<http://www.ciesm.org/marine/programs/hydrochanges.htm>).

In June 2011 she has received the **MedCLIVAR Young Scientist Award** “for her important contribution to the understanding of the physical oceanography of the western Mediterranean, her leading role in the second MedCLIVAR book and active contribution to the MedCLIVAR activities”.

In December 2008 she has received the **Young Scientist's Travel Award** for Europeans (YSTA) for the participation to the EGU 2009 conference.

In 2008 she has been granted a **ESF-MedCLIVAR Exchange Grant**, thanks to which she spent 4 months at NOC, Southampton

---National

Since June 2019 she is the Italian National Correspondent at the **International Association for the Physical Sciences of the Oceans (IAPSO)**

In 2017 she has been nominated by the Accademia Nazionale dei Lincei to be the Italian **representative** within the **Working group on Climate Change and Education**, organized by the InterAcademy Partnership (IAP), which outcome was an IAP Statement that has been published and endorse at the Paris Conference “One Planet Summit”.

---Institutional

Since September 2022 she is part of the **CNR-ISMAR Working Group** for the coordination of the **CNR-ISMAR new website design**.

Since September 2022 she is part of the **CNR-ISMAR Working Group** for the coordination of the **CNR-ISMAR Research Activities in the Polar Environment**.

Since November 2021 she is part of the **CNR-ISMAR Working Group** for the development of the **CNR-ISMAR Ocean Observing Research Infrastructures**.

From July to September 2022 she is member of the **CNR Working Group** responsible for the organization of the **Eurofleets+ Floating University** on the R/V Dallaporta. She has also been **Lecturer** during the Floating University Course (17.09.2022-24.09.2022).

In February 2022 she has been nominated to be part of the **evaluation committee** for the assignment of the new **CNR R/V Gaia Blu to a shipping company**.

Between March and September 2021 she was part of the **evaluation panel** for the research projects submitted to the call “**Progetti di Ricerca@CNR**” – in the scientific focus “A. Capitale naturale e risorse per il futuro dell’Italia”.

Since 2017 she has been appointed to be a **member** of the **CNR Group for Ship Time Assignment** (Gruppo Istruttorio Navi, GIN).

---Editorial roles and other scientific recognitions

Book Editor of “**Oceanography of the Mediterranean Sea. An Introductory Guide**”. Elsevier, ISBN: 9780128236925, edited by Schroeder K. and Chiggiato J., 2023.

She is currently member of the **Editorial Board** for the **Journal of Marine Science and Engineering – Physical Oceanography**.

Since 2019 she is **co-convener** of **Session OS2.2** “**Advances in Understanding of the Multi-Disciplinary Dynamics of the Southern European Seas (Mediterranean and Black Sea)**” at the annual **EGU General Assemblies** in Vienna.

She is currently **Associate Editor** for **Frontiers in Marine Science – Physical Oceanography Section**

She is currently **Guest Editor** for **Ocean Science** within an inter-journal special issue about the “**Hydrological Cycle in the Mediterranean**”.

In 2015 she was **Guest Editor** for the special issue in the journal “**Marine Geology**”, Volume 375 (pp 1-160) “**Cascading Dense water Flow and its Impact on the Sea Floor in the Adriatic and Aegean Sea, Eastern Mediterranean**”.

Member of the **Editorial Board of the MedCLIVAR newsletter** from 2011 to 2014.

In 2015 she has been invited to the **EGU Conference** to give an **invited talk** entitled “**One decade of enhanced thermohaline variability in the deep western Mediterranean Sea (2004-2014)**” and the solicited **Medal Lecture** entitled “**Modern view of Western Mediterranean hydrography**”.

In May 2011 she has been **invited** to contribute to the **CIESM Research Workshop** n. 43 on Planning repeated basin-wide surveys for climatic studies in the Mediterranean Sea.

In June 2011 she has been invited as **Keynote Speaker** at the MedCLIVAR Final Conference, "Mediterranean Climate: From Past to Future".

In October 2010 she has received the "**Best Oral Presentation Award**" at the international congress *MREA 10: Maritime Rapid Environmental Assessment Conference - Quantifying, Predicting and Exploiting Uncertainties in Marine Environments* organized by the NATO Undersea Research Centre.

In June 2010 her paper Schroeder et al. (2010) entitled "Abrupt warming and salting of the Western Mediterranean Deep Water after 2005: atmospheric forcings and lateral advection" published in the Journal of Geophysical Research has been highlighted in the "**Research Highlights**" published by **Nature Geoscience** (vol. 3, 2010).

In May 2010 she has been invited as **Keynote Panel Speaker** at the 39th CIESM Congress.

In May 2009 she has been **invited** to contribute to the **CIESM Research Workshop** n. 38 on Dynamics of Mediterranean Deep Waters.

Participation to Research Projects and Networks

WP Co-Leader and **Task Leader** in the HORIZON Europe Research Project "**EuroGO-SHIP**: Developing a Research Infrastructure concept to support European Hydrography".

Participation to the EU H2020 Infrastructure Project "**MINKE**: Metrology for Integrated marine maNagement and Knowledge-transfer nEtwork".

Participation to the EU H2020 Infrastructure Project "**RELIANCE**: REsearch Lifecycle mAnagemeNt for Earth Science Communities and CopErnicus users in EOSC".

Participation to the EU H2020 Infrastructure Project "**EUROFLEETS+**: An alliance of European marine research infrastructure to meet the evolving needs of the research and industrial communities".

Participant to the CNR Departmental Project "Synoptic Assessment of Human Pressures on key Mediterranean Hot Spots - **SNAPSHOT**".

Co-PI for the **PRIN 2017** project "**PASS**: The Po-Adriatic Source-to-Sink system: from modern sedimentary processes to millennial-scale stratigraphic architecture" (2019-2022), funded by the Italian Ministry of Research.

Participation to the EU H2020 Infrastructure Project "**JERICO S3**: Joint European Research Infrastructure of Coastal Observatories: Science, Service, Sustainability".

Participation to the EU H2020 Infrastructure Project "**JERICO-NEXT**: Joint European Research Infrastructure network for Coastal Observatory – Novel European eXpertise for coastal observaTories".

WP leader in the Italian **Marine Strategy Framework Directive** Implementation Project (2017-2018)

Task Leader within the EU FP7 Research Project "**COMMON SENSE**: Cost-effective sensors, interoperable with international existing ocean observing systems, to meet EU policies requirements".

Participation to the EU FP7 Research Project “**OCEAN-CERTAIN**: Ocean Food-web Patrol – Climate Effects: Reducing Targeted Uncertainties with an Interactive Network”.

Subtask Leader and coordinator of the CNR-ISMAR activities within the EU FP7 Research Project “**PERSEUS**: Policy-oriented marine Environmental Research in the Southern EUropean Seas”.

Participation to the Interreg MED Research Project “**TOSCA**: Tracking Oil Spills and Coastal Awareness Network”.

Participation to the EU FP7 Infrastructure Project “**JERICO**: Towards a Joint European Research Infrastructure network for Coastal Observatories”.

Participation to the EU FP7 Infrastructure Project “**EUROFLEETS**: Towards an alliance of European Research Fleets”.

Research Project “**SOS-Bocche di Bonifacio**” coordinated by CNR-IAMC Oristano, in collaboration with the Coastal Guard of La Maddalena, financed by the Italian Ministry for Environmental Protection.

Participation to the EU FP6 Research Project “**SESAME** Southern European Seas: Assessing and Modelling Ecosystem Changes”.

Participation to the EU FP6 Research Project “**KM3net**: Design Study for a Deep Sea facility in the Mediterranean for Neutrino Astronomy and Associated Sciences”.

Supervision and reviews

Supervisor of the **PhD** student Alessandro Giordano, ongoing, University of Venice: “Long term monitoring of the Western Mediterranean water masses using autonomous vehicles”

Supervisor of the **PhD** student Lorenzo Pasculli, ongoing, University of Venice: “Variability of mass and nutrients exchanges between the western and the eastern Mediterranean Sea”

Supervisor of the **PhD** student Francesco De Rovere, ongoing, University of Venice: “Transition of Kongsfjorden’s climate from Arctic to Atlantic: water mass variability and atmospheric drivers”

Supervisor of the **PhD** student Malek Belgacem, 2021, University of Venice: “Spatial and temporal variability of the biogeochemical characteristics of the water masses in the Western Mediterranean Sea”

Supervisor of the **PhD** student Simona Aracri, 2018, University of Southampton: “Seasonal and interannual variability of circulation and water mass properties in the Ligurian Sea (NW-Mediterranean Sea)”

Supervisor of the **PhD** student Sara Durante, 2017, Università Parthenope Napoli: “Deep circulation and mixing in the Tyrrhenian Sea”.

Supervisor of the **master** student Davide Guerra, 2017, University of Venice, Faculty of Environmental Sciences: “Physical-chemical parameters used as tracers for western Mediterranean water masses: dissolved oxygen and salinity measurements for sensor calibration”.

Supervisor of the **master** student Luisa Gordillo, 2017, University of Venice, Faculty of Environmental Sciences: "Temporal and spatial dynamics of the nutricline along a repeated transect in the Western Mediterranean Sea"

Supervisor of the **master** student Giovanna Massucco, 2013, University of Genova, Faculty of marine Environmental Sciences: "Biogeochemical properties of the water masses in the Western Mediterranean Sea: distribution and interannual variability".

Supervisor of the **master** student Caterina Michelucci, 2007, University of Pisa, Faculty of Engineering: "Organization of oceanographic data by means of an ebXML repository".

Reviewer for *Deep Sea Research, Geophysical Research Letters, Journal of Marine Systems, Ocean Sciences, Journal of Geophysical Research, Ciencias Marinas, International Journal of Climatology, Continental Shelf Research, Scientia Marina, Climate Dynamics, Journal of Climate, Geology, Earth System Science Data, Ocean Modelling, Scientific Reports, Frontiers in Marine Sciences, Journal of Operational Oceanography, etc.*

Grant proposals reviewer for: Italian National Ministry of University and Research

Oceanographic Cruises

March-April 2023	EuroGO-SHIP2023 (24/03/23-04/04/23) in the Western Mediterranean on R/V DALLAPORTA
September 2022	Floating University (19/09/22-21/09/22) in the Sicily Channel on the R/V DALLAPORTA
May 2022	TALPRO22 (17/05/22-26/05/22, Chief Scientist) in the W- Mediterranean on the R/V BELGICA
March 2022	TRANSIT (03/03/22-10/03/22) in the Western Mediterranean on the R/V FALKOR
June 2020	SNAPSHOT 2 (09-10/06/20) in the northern Adriatic Sea on the R/V DALLAPORTA
March 2017	VENUS4 (25/03/17-04/04/17, co-PI) in the Western Mediterranean on the R/V MINERVAUNO
August 2016	TALPRO16 (18/08/16-29/08/16, co-PI) in the W-Mediterranean on the R/V ANGELES ALVARIÑO
June 2013	VENUS2 (04/06/13-17/06/13, Chief Scientist) in the W- Mediterranean on the R/V URANIA
April-May 2011	EUROFLEETS11 (21/04/11-07/05/11) in the Adriatic, Ionian and Tyrrhenian on the R/V URANIA
August 2010	VENUS1 (leg1, 31/07/10-17/08/10) in the Western Mediterranean Sea on the R/V URANIA
July 2010	LIDEX10 (02/07/10-06/07/10) in the Ligurian Sea on the R/V MARIA GRAZIA
May 2009	TYRRMOUNTS09 (leg1, 08/05/09-19/05/09) in the Ionian and Strait of Sicily on the R/V URANIA
March 2009	ADRIASEISMIC09 (03/03/09-16/03/09) in the southern Adriatic Sea on the R/V URANIA
April 2008	SESAME-IT4 (26/03/08-11/04/08) in the Western Mediterranean on the R/V URANIA
March 2008	SESAME-Km3 (11/03/08-25/03/08) in the Ionian Sea and the Strait of Sicily on the R/V URANIA
July 2007	Km3Net07 (18/07/07-31/07/07) in the Ionian Sea on the R/V URANIA
July 2006	SIRENA06/ZIFIO06 (17/07/06-26/07/06) in the Ligurian Sea on the NRV ALLIANCE of the NATO Undersea Research Centre (NURC)
June-July 2006	MEDOCC06 (08/06/06-03/07/06) in the Western Mediterranean Sea on the R/V URANIA
November 2005	MEDGOOS11 (16/11/05-03/12/05) in the Western Mediterranean Sea on the R/V URANIA
September 2005	MARMES (12/09/05-16/09/05) in the Ligurian Sea on the R/V ARETUSA of the Hydrographic Institute of the Italian Navy
April-May 2005	MEDOCC05 (24/04/05-16/05/05) in the Western Mediterranean Sea on the R/V URANIA

Total number of cruises 21

Total days at sea 266

6. PUBLICATIONS

She authored or co-authored 70 peer-reviewed scientific papers, 12 data products, 4 books, 5 book chapters, 13 monographs and other reports

Citation indices: Citations 3405, H-Index 34, i10-index 60

Please check here: https://scholar.google.com/citations?user=1xluf_0AAAAJ&hl=en

Peer-reviewed publications

2023

1. Schroeder K., et al.: The 2016 Med-SHIP high frequency transects in the Mediterranean Sea: seawater physics and chemistry. *Scientific Data*, in review, 2023.
2. Paladini de Mendoza F, Schroeder K, Langone L, Chiggiato J, Borghini M, Giordano P, Miserocchi S. Deep-Water Dynamics along the 2012–2020 Observations on the Continental Margin of the Southern Adriatic Sea (Mediterranean Sea). *Journal of Marine Science and Engineering*. 2023; 11(7):1364. <https://doi.org/10.3390/jmse11071364>.
3. Josey S.A. and Schroeder K.: Declining winter heat loss threatens continuing ocean convection at a Mediterranean dense water formation site. *Environ. Res. Lett.* 18, 024005 (2023). Doi: 10.1088/1748-9326/aca9e4.
4. Paladini de Mendoza, F., Schroeder, K., Miserocchi, S., Borghini, M., Giordano, P., Chiggiato, J., Trincardi, F., Amorosi, A., Langone, L.: Sediment resuspension and transport processes during dense water cascading events along the continental margin of the southern Adriatic Sea (Mediterranean Sea), *Marine Geology*, 459, 2023, 107030, <https://doi.org/10.1016/j.margeo.2023.107030>.

2022

5. Paladini de Mendoza, F., Schroeder, K., Langone, L., Chiggiato, J., Borghini, M., Giordano, P., Verazzo, G., and Miserocchi, S.: Deep-water hydrodynamic observations of two moorings sites on the continental slope of the southern Adriatic Sea (Mediterranean Sea), *Earth Syst. Sci. Data*, 14, 5617–5635, <https://doi.org/10.5194/essd-14-5617-2022>, 2022.
6. Margaritelli G, Lirer F, Schroeder K, Cloke-Hayes A, Caruso A, Capotondi L, Broggy T, Cacho I, Sierro FJ. Globorotalia truncatulinoides in the Mediterranean Basin during the Middle–Late Holocene: Bio-Chronological and Oceanographic Indicator. *Geosciences*. 2022; 12(6):244. <https://doi.org/10.3390/geosciences12060244>.
7. De Rovere F, Langone L, Schroeder K, Miserocchi S, Giglio F, Aliani S and Chiggiato J (2022) Water Masses Variability in Inner Kongsfjorden (Svalbard) During 2010–2020. *Front. Mar. Sci.* 9:741075. doi: 10.3389/fmars.2022.741075.
8. Montagna P., C. Colin, M. Frank, T. Störling, T. Tanhua, M.J.A. Rijkenberg, M. Taviani, K. Schroeder, J. Chiggiato, G. Gao, A. Dapoigny, S.L. Goldstein, Dissolved neodymium isotopes in the Mediterranean Sea, *Geochimica et Cosmochimica Acta*, 2022, <https://doi.org/10.1016/j.gca.2022.01.005>.

2021

9. Lo Bue N, Artale V and Schroeder K (2021) Editorial: Impact of Deep Oceanic Processes on Circulation and Climate Variability: Examples From the Mediterranean Sea and the Global Ocean. *Front. Mar. Sci.* 8:801479. doi: 10.3389/fmars.2021.801479.
10. von Schuckmann K., Pierre-Yves Le Traon, [...], Katrin Schroeder, [...]. 2021. Copernicus Marine Service Ocean State Report, Issue 5, *Journal of Operational Oceanography*, 14:sup1, 1-185, DOI: 10.1080/1755876X.2021.1946240.
11. Vladou A., P. Bouruet-Aubertot, Y. Cuypers, B. Ferron, K. Schroeder, M. Borghini, S. Leizour. Contrasted mixing efficiency in energetic versus quiescent regions: insights from microstructure measurements in the Western Mediterranean Sea, *Progress in Oceanography*, 102594.

12. Bonomo S., K. Schroeder, A. Cascella, I. Alberico, F. Lirer. Living coccolithophore communities in the Central Mediterranean Sea (Summer 2016): Relations between ecology and oceanography. *Marine Micropaleontology*, 101995.
13. Ferron B., P. Bouruet-Aubertot, K. Schroeder, H. Bryden, M. Borghini, Y. Cuypers. Contribution of thermohaline staircases to deep water mass modifications in the Western Mediterranean Sea from microstructure observation. *Frontiers in Marine Science* 8, 544.

2020

14. Margaritelli G., Lirer F., Schroeder K., Alberico I., Dentici M.P., Caruso A. 2020. Globorotalia truncatulinoides in Central - Western Mediterranean Sea during the Little Ice Age. *Marine Micropaleontology*, 161, 101921, doi: 10.1016/j.marmicro.2020.101921.
15. Schroeder, K., Cozzi S., Belgacem M., Borghini M., Cantoni C., Durante S., Petrizzo A., Poiana A. & Chiggiato J., 2020. Along-path evolution of biogeochemical and carbonate system properties in the Intermediate Water of the Western Mediterranean. *Frontiers in Marine Science* 7: 375. doi: 10.3389/fmars.2020.00375.
16. Belgacem, M., Chiggiato, J., Borghini, M., Pavoni, B., Cerrati, G., Acri, F., Cozzi, S., Ribotti, A., Alvarez, M., Lauvset, S. K., and Schroeder, K. 2020. Dissolved Inorganic Nutrients in the Western Mediterranean Sea (2004–2017), *Earth Syst. Sci. Data*, 12, 1985–2011, doi: 10.5194/essd-12-1985-2020.
17. Poulain, P.-M., E. Mauri, R. Gerin, J. Chiggiato, K. Schroeder, A. Griffa, M. Borghini, E. Zambianchi, P. Falco, P. Testor, L. Mortier, 2020. On the dynamics in the southeastern Ligurian Sea in summer 2010. *Continental Shelf Research*, 196, 104083, doi: 10.1016/j.csr.2020.104083.

2019

18. Schroeder, K., J. Chiggiato, S. Ben Ismail, M. Borghini, B. Patti, S. Sparnocchia (2019). Mediterranean deep and intermediate water mass properties. In: Copernicus Marine Service Ocean State Report, Issue 3, Journal of Operational Oceanography, 12:sup1, s26–s30; doi: 10.1080/1755876X.2019.1633075.
19. Tintoré, J., ... Schroeder K., ... (> 100 authors), 2019, Challenges for Sustained Observing and Forecasting Systems in the Mediterranean Sea. *Front. Mar. Sci.* | doi: 10.3389/fmars.2019.00568.
20. Testor, P., ... Schroeder K., ... (> 100 authors), 2019, OceanGliders: a component of the integrated GOOS. *Frontiers in Marine Science* 6, doi: 10.3389/fmars.2019.00422.
21. Vladoiu, A., Bouruet-Aubertot, P., Cuypers, Y., Ferron, B., Schroeder, K., Borghini, M., Leizour, S., Ben Ismail S.. Mixing efficiency from microstructure measurements in the Sicily Channel. *Ocean Dynamics* 1-21 (2019), <https://doi.org/10.1007/s10236-019-01274-2>.
22. Guerra, D., Schroeder, K., Borghini, M., Camatti, E., Pansera, M., Schroeder, A., Sparnocchia, S., and Chiggiato, J.: Zooplankton diel vertical migration in the Corsica Channel (north-western Mediterranean Sea) detected by a moored acoustic Doppler current profiler, *Ocean Sci.*, 15, 631-649, <https://doi.org/10.5194/os-15-631-2019>, 2019.
23. Durante, S., Schroeder, K., Mazzei, L., Pierini, S., Borghini, M., Sparnocchia, S. (2019). Permanent Thermohaline Staircases in the Tyrrhenian Sea. *Geophysical Research Letters*, 46. <https://doi.org/10.1029/2018GL081747>.

2018

24. Vladoiu A., Bouruet-Aubertot P., Cuypers Y., Ferron B., Schroeder K., Borghini M., Leizour S., Ben Ismail S., 2018. Turbulence in the Sicily Channel from microstructure measurements, *Deep Sea Research Part I: Oceanographic Research Papers*, 137, 97-112, doi: 10.1016/j.dsr.2018.05.006.

25. Testor, P., Bosse, A., Houpert, L., ... Schroeder, K., ... (2018). Multiscale observations of deep convection in the northwestern Mediterranean Sea During winter 2012–2013 using multiple platforms. *Journal of Geophysical Research: Oceans*, 123, 1745–1776. <https://doi.org/10.1002/2016JC012671>.

2017

26. Buffett, G. G., Krahmann, G., Klaeschen, D., Schroeder, K., Sallarès, V., Papenberg, C., C. R. Ranero, Zitellini, N. (2017). Seismic oceanography in the Tyrrhenian Sea: Thermohaline staircases, eddies, and internal waves. *Journal of Geophysical Research: Oceans*, 122, 8503–8523. <https://doi.org/10.1002/2017JC012726>.
27. Jordà G., K. Von Schuckmann, S.A. Josey, G. Caniaux, J. García-Lafuente, S. Sammartino, E. Özsoy, J. Polcher, G. Notarstefano, P.-M. Poulain, F. Adloff, J. Salat, C. Naranjo, K. Schroeder, J. Chiggiato, G. Sannino, D. Macías. The Mediterranean Sea heat and mass budgets: Estimates, uncertainties and perspectives. *Progress in Oceanography*, 156 (2017), 174–208.
28. Ferron, B., P. Bouruet Aubertot, Y. Cuypers, K. Schroeder, and M. Borghini (2017), How important are diapycnal mixing and geothermal heating for the deep circulation of the Western Mediterranean?, *Geophys. Res. Lett.*, 44, 7845–7854, doi:10.1002/2017GL074169.
29. Schroeder K., J. Chiggiato, S. A. Josey, M. Borghini, S. Aracri, S. Sparnocchia, 2017. Rapid response to climate change in a marginal sea. *Scientific Reports* 7, 4065, doi:10.1038/s41598-017-04455-5.

2016

30. Luna G.M., Chiggiato J., Quero G.M., Schroeder K., Bongiorni L., Kalenitchenko D. and Galand P.E. Dense water plumes modulate richness and productivity of deep-sea microbes. *Environmental Microbiology* (2016) 00(00), 00–00 doi:10.1111/1462-2920.13510.
31. Ravaioli M, C Bergami, F Riminucci, L Langone, V Cardin, A Di Sarra, S Aracri, M Bastianini, M Bensi, A Bergamasco, C Bommarito, M Borghini, G Bortoluzzi, R Bozzano, C Cantoni, J Chiggiato, E Crisafi, R D'Adamo, S Durante, C Fanara, F Grilli, M Lipizer, M Marini, S Miserocchi, E Paschini, P Penna, S Pensieri, A Pugnetti, F Raicich, K Schroeder, G Siena, A Specchiulli, G Stanghellini, A Vetrano, A Crise. The RITMARE Italian Fixed-Point Observatory Network (IFON) for marine environmental monitoring: a case study. *Journal of Operational Oceanography* Vol. 9 , Iss. sup1,2016.
32. Aracri S, M Borghini, D Canesso, J Chiggiato, S Durante, K Schroeder, S Sparnocchia, A Vetrano, T Honda, Y Kitawaza, H Kawahara, T Nakamura. Trials of an autonomous profiling buoy system. *Journal of Operational Oceanography* Vol. 9 , Iss. sup1,2016.
33. Schroeder K., J. Chiggiato, H. L. Bryden, M. Borghini and S. Ben Ismail. Abrupt climate shift in the Western Mediterranean Sea. *Sci. Rep.* 6, 23009; doi: 10.1038/srep23009 (2016).
34. Chiggiato J., Schroeder K., Trincardi F. Preface: Cascading dense shelf-water during the extremely cold winter of 2012 in the Adriatic, Mediterranean Sea: Formation, flow, and seafloor impact. *Marine Geology* 375 (1-4), doi: 10.1016/j.margeo.2016.03.002.

2015

35. Schroeder, K., T. Tanhua, H.L. Bryden, M. Álvarez, J. Chiggiato, and S. Aracri. 2015. Mediterranean Sea Ship-based Hydrographic Investigations Program (Med-SHIP). *Oceanography* 28(3), <http://dx.doi.org/10.5670/oceanog.2015.71>.
36. Chiggiato J., Bergamasco A., Borghini M., Falcieri F.M., Falco P., Langone L., Miserocchi S., Russo A., Schroeder K., Dense-water bottom currents in the Southern Adriatic Sea in spring 2012, *Marine Geology*, doi: 10.1016/j.margeo.2015.09.005.

37. Cantoni C., Luchetta A., Chiggiato J., Cozzi S., Schroeder K., Langone L., Dense water flow and carbonate system in the southern Adriatic: A focus on the 2012 event, *Marine Geology*, doi: 10.1016/j.margeo.2015.08.013.

2014

38. Ben Ismail S., K Schroeder, C Sammari, GP Gasparini, M Borghini, L Aleya: Interannual variability of water mass properties in the Tunisia–Sicily Channel. *Journal of Marine Systems* 135, 14-28
39. Álvarez, M., Sanleón-Bartolomé, H., Tanhua, T., Mintrop, L., Luchetta, A., Cantoni, C., Schroeder, K., and Civitarese, G.: The CO₂ system in the Mediterranean Sea: a basin wide perspective, *Ocean Sci.*, 10(1), 69-92, doi:10.5194/os-10-69-2014, 2014.
40. Borghini, M., Bryden, H.L., Schroeder, K., Sparnocchia, S., Vetrano, A.: The Mediterranean is becoming saltier. *Ocean Sci.*, 10(4), 693-700, doi:10.5194/os-10-693-2014, 2014.
41. Casella, E., Tepsich, P., Couvelard, X., Caldeira, R., Schroeder, K.: Ecosystem dynamics in the Liguro-Provençal Basin: the role of eddies in the biological production. *Mediterranean Marine Science*, doi: 10.12681/mms.520, 2014.
42. Malanotte-Rizzoli, P., Artale, V., Borzelli-Eusebi, G. L., Brenner, S., Civitarese, G., Crise, A., Font, J., Gacic, M., Kress, N., Marullo, S., Ozsoy, E., Ribera d'Alcalà, M., Roether, W., Schroeder, K., Sofianos, S., Tanhua, T., Theocharis, A., Alvarez, M., Ashkenazy, Y., Bergamasco, A., Cardin, V., Carniel, S., D'Ortenzio, F., Garcia-Ladona, E., Garcia-Lafuente, J. M., Gogou, A., Gregoire, M., Hainbucher, D., Kontoyannis, H., Kovacevic, V., Krasakapoulou, E., Krokos, G., Incarbona, A., Mazzocchi, M. G., Orlic, M., Pascual, A., Poulain, P.-M., Rubino, A., Siokou-Frangou, J., Souvermezoglou, E., Sprovieri, M., Taupier-Letage, I., Tintoré, J., and Triantafyllou, G.: Physical forcing and physical/biochemical variability of the Mediterranean Sea: a review of unresolved issues and directions for future research, *Ocean Sci.*, 10, 281-322, 2014.
43. Hainbucher, D., Rubino, A., Cardin, V., Tanhua, T., Schroeder, K., and Bensi, M.: Hydrographic situation during cruise M84/3 and P414 (spring 2011) in the Mediterranean Sea, *Ocean Sci.*, 10(4), 669-682, 2014.
44. Bryden H.L., Schroeder K., Sparnocchia S., Borghini M., Vetrano A.: Thermohaline staircases in the western Mediterranean Sea. *Journal of Marine Research* 73(1), 1-18.

2013

45. Tanhua T., D. Hainbucher, K. Schroeder, V. Cardin, M. Alvarez, G. Civitarese, 2013. The Mediterranean Sea system: a review and an introduction to the special issue. *Ocean Sci.*, 9, 789-803, doi:10.5194/os-9-789-2013.
46. Rice A.E., Book J.W., Carniel S., Russo A., Schroeder K., Wood W.T., 2013. Spring 2009 water mass distribution, mixing and transport in the Southern Adriatic after a low production in winter dense waters. *Continental Shelf Research*, 64, 33–50.
47. Placenti F., K. Schroeder, A. Bonanno, S. Zgozi, M. Sprovieri, M. Borghini, P. Rumolo, G. Cerrati, S. Bonomo, S. Genovese, G. Basilone, D.A. Haddoud, B. Patti, A. El Turki, M. Hamza, S. Mazzola, 2013. Water masses and nutrient distributions in the Gulf of Syrte and between Sicily- Libya area. *J. Mar. Sys.*, 121-122, 36-46.
48. Schroeder K., C. Millot, L. Bengara, S. Ben Ismail, M. Bensi, M. Borghini, G. Budillon, V. Cardin, L. Coppola, C. Curtill, A. Drago, B. El Moumni, J. Font, J.L. Fuda, J. García-Lafuente, G.P. Gasparini, H. Kontoyannis, D. Lefevre, P. Puig, P. Raimbault, G. Rougier, J. Salat, C. Sammari, J.C. Sánchez Garrido, A. Sánchez-Roman, S. Sparnocchia, C. Tamburini, I. Taupier-Letage, A. Theocharis, M. Vargas-Yáñez, and A. Vetrano, 2013. Long-term monitoring programme of the hydrological variability in the Mediterranean Sea: a first overview of the HYDROCHANGES network. *Ocean Sci.*, 9, 1-24, doi:10.5194/os-9-1-2013.

49. Gacic M., K. Schroeder, Civitarese G., S. Cosoli, A. Vetrano, G. L. Eusebi-Borzelli, 2013. Salinity in the Sicily Channel corroborates the role of the Adriatic–Ionian Bimodal Oscillating System (BiOS) in shaping the decadal variability of the Mediterranean overturning circulation. *Ocean Sci.*, 9, 83–90, doi:10.5194/os-9-83-2013.
50. Alvarez A., Chiggiato J., Schroeder K., 2013. Mapping sub-surface geostrophic currents from altimetry and a fleet of gliders. *Deep Sea Research Part I*, doi: 10.1016/j.dsr.2012.10.014.
51. Puig P., Durrieu De Madron X., Salat J., Schroeder K., Martin J., Karageorgis A.P., Palanques A., Roullier F., Lopez-Jurado J.L., Emelianov M., Moutin T., Houpert L., 2013. Thick bottom nepheloid layers in the Western Mediterranean generated by dense shelf water cascading. *Progress in Oceanography*, doi:10.1016/j.pocean.2012.10.003.
52. Griffa A., A. Haza, T. M. Özgökmen, A. Molcard, V. Taillandier, K. Schroeder, Y. Chang, P.M. Poulain, 2013. Investigating transport pathways in the ocean. *Deep Sea Research Part II*, 85, 81-95, doi:10.1016/j.dsr2.2012.07.031.

2012

53. Kovačević V., B.B. Manca, L. Ursella, K. Schroeder, S. Cozzi, M. Burca, E. Mauri, R. Gerin, G. Notarstefano, D. Deponte, 2012. Water mass properties and dynamical conditions of the Eastern Mediterranean in June 2007. *Progress in Oceanography*, 104, 59-79, doi:10.1016/j.pocean.2012.05.006.
54. Vargas-Yáñez M., P. Zunino, K. Schroeder, J.L. López-Jurado, F. Plaza, M. Serra, C. Castro, M.C. García-Martínez, F. Moya, 2012. Extreme Western Intermediate Water formation in winter 2010. *J. Mar. Syst.*, doi:10.1016/j.jmarsys.2012.05.010.
55. Schroeder K., J. Chiggiato, A. C. Haza, A. Griffa, T. M. Ozgökmen, P. Zanasca, A. Molcard, M. Borghini, P. M. Poulain, R. Gerin, E. Zambianchi, P. Falco, C. Trees, 2012. Targeted Lagrangian sampling of submesoscale dispersion at a coastal frontal zone. *Geophys. Res. Lett.*, Vol. 39, L11608, doi:10.1029/2012GL051879.
56. Cucco, A., Sinerchia, M., Ribotti, A., Olita, A., Fazioli, L., Sorgente, B., Perilli, A., Borghini, M., Schroeder, K, and Sorgente, R., 2012. A high resolution real time forecasting system for predicting the fate of oil-spills in the Strait of Bonifacio (western Mediterranean). *Marine Pollution Bulletin*, 64, 1186-1200.
57. Cucco, A., A. Ribotti, A. Olita, L. Fazioli, B. Sorgente, M. Sinerchia, A. Satta, A. Perilli, M. Borghini, K. Schroeder, R. Sorgente, 2012. Oil spills prediction in the Bonifacio strait area, western Mediterranean. *Ocean Sci.*, 8, 443-454, doi:10.5194/os-8-443-2012.
58. Zunino P., Schroeder K., Vargas-Yanez M., Gasparini G.P., Coppola L., García- Martínez M.C., Moya-Ruiz F., 2012. Thermohaline variability on isopycnal and isobaric surfaces associated to the Western Mediterranean Transition. *J. Mar. Syst.*, 96–97, 15–23, doi: 10.1016/j.jmarsys.2012.01.011.

2011

59. Schroeder, K., Haza, A. C., Griffa, A., Özgökmen, T. M., Poulain, P.-M., R. Gerin, G. Peggion, M. Rixen, 2011. Relative dispersion in the Liguro-Provencal basin: from submesoscale to mesoscale. *Deep Sea Research, Part I*, doi:10.1016/j.dsr.2010.11.004.
60. Bo M., M. Bertolini, M. Borghini, M. Castellano, A. Covazzi Harriague, C.G. Di Camillo, G.P. Gasparini, C. Misic, P. Povero, A. Pusceddu, K. Schroeder, G. Bavestrello, 2011. Characteristics of the Mesophotic Megabenthic Assemblages of the Vercelli Seamount (North Tyrrhenian Sea). *PLoS ONE* 6(2): e16357. doi:10.1371/journal.pone.0016357.
61. Sparnocchia S., Gasparini G.P., Schroeder K., Borghini M., 2011. Oceanographic conditions in the NEMO region during KM3NeT project (April 2006 - May 2009). *Nucl. Instr. And Meth. A*, doi:10.1016/j.nima.2010.06.231.

2010

62. Schroeder K., Josey S. A., Herrmann M., Grignon L., Gasparini G.P., Bryden H.L., 2010. Abrupt warming and salting of the Western Mediterranean Deep Water: atmospheric forcings and lateral advection. *J. Geophys. Res.*, doi: 10.1029/2009JC005749 (Research Highlights, *Nature Geoscience*, Vol.3, 2010).
63. Grignon L., Smeed D., Bryden H.L., Schroeder K., 2010. Importance of the Variability of Hydrographic Preconditioning for Deep Convection in the Gulf of Lion, NW Mediterranean. *Ocean Sci.*, 6, 573–586, doi:10.5194/os-6-573-2010.
64. Vetrano A., E. Napolitano, R. Iacono, K. Schroeder and G.P. Gasparini, 2010. Tyrrhenian Sea Circulation and water mass fluxes in Spring 2004: Observations and model results. *J. Geophys. Res.*, 115, C06023, doi:10.1029/2009JC005680.
65. Schroeder K., Gasparini G.P., Borghini M., Cerrati G., Delfanti R., 2010. Biogeochemical tracers and fluxes in the Western Mediterranean Sea, spring 2005. *J. Mar. Sys.*, doi: 10.1016/j.jmarsys.2009.08.002.

2006-2009

66. Budillon G., Gasparini G.P., Schroeder K., 2009. Persistence of an Eddy Signature in the Central Tyrrhenian Basin. *Deep Sea Research, Part II*, 56: 713-724. doi:10.1016/j.dsr2.2008.07.027.
67. Schroeder K., Ribotti A., Borghini M., Sorgente R., Perilli A., Gasparini G.P., 2008. An extensive Western Mediterranean Deep Water Renewal between 2004 and 2006. *Geophys. Res. Lett.*, 35, L18605, doi: 10.1029/2008GL035146.
68. Schroeder K., Taillardier V., Vetrano A., Gasparini G.P., 2008. The circulation of the Western Mediterranean Sea in spring 2005 as inferred from observations and from model outputs. *Deep Sea Research, Part I*, 55, 947-965.
69. Gasparini G.P., Bonanno A., Zgozi S., Basilone G., Borghini M., Buscaino G., Cutitta A., Essarbout N., Mazzola S., Patti B., Ramadan A.B., Schroeder K., Bahri T., Massa F., 2008. Evidence of a dense water vein along the Libyan continental margin. *Annales Geophysicae*, 26, 1-6.
70. Schroeder K., Borghini M., Cerrati G., Difesa V., Delfanti R., Santinelli C., Gasparini G.P., 2008. Multiparametric Mixing Analysis of the Deep Waters in the Western Mediterranean Sea. *Chemistry and Ecology*, 24(1), 47-56.
71. Schroeder K., Gasparini G.P., Tangherlini M., Astraldi M., 2006. Deep and Intermediate Water in the Western Mediterranean under the influence of the Eastern Mediterranean Transient. *Geophys. Res. Lett.* 33, doi: 10.1029/2006GL02712.

Datasets and Data products

1. Schroeder, K. (2023): LADCP current profiles collected during Med-SHIP cruise TAIPro2022. PANGAEA, <https://doi.org/10.1594/PANGAEA.957617>
2. Schroeder, K. (2022): Continuous thermosalinograph oceanography along MedSHIP cruise TAIPro2016 on RV Angeles Alvariño. PANGAEA, <https://doi.org/10.1594/PANGAEA.946435>
3. Schroeder, K. (2022): ADCP current measurements (75 kHz) during Med-SHIP cruise TAIPro2022 on RV BELGICA. PANGAEA, <https://doi.org/10.1594/PANGAEA.952440>
4. Schroeder, K. (2021): LADCP current profiles collected during MedSHIP cruise TAIPro2016. PANGAEA, <https://doi.org/10.1594/PANGAEA.932316>
5. Schroeder, K. (2021): Vessel-mounted ADCP data (current profiles) collected during MedSHIP cruise TAIPro2016. PANGAEA, <https://doi.org/10.1594/PANGAEA.933628>
6. Borghini, M.; Schroeder, K.; Chiggiato, J.; Sparnocchia, S. (2021): Thermohaline evolution at 400 m depth in the Sicily Channel, a choke point of the Mediterranean Sea. PANGAEA, <https://doi.org/10.1594/PANGAEA.932163>

7. Borghini, M.; Schroeder, K.; Chiggiato, J.; Sparnocchia, S. (2021): Thermohaline evolution at 400 m depth in the Sicily Channel, a choke point of the Mediterranean Sea, NetCDF. PANGAEA, <https://doi.org/10.1594/PANGAEA.932174>
8. Belgacem, M.; Schroeder, K.; Barth, A.; Troupin, C.; Pavoni, B.; Chiggiato, J. (2021): A climatological product of inorganic nutrient distributions on the Western Mediterranean Sea (BGC-WMED) derived from cruise-based measurements spanning 1981 to 2017. PANGAEA, <https://doi.org/10.1594/PANGAEA.930447>
9. Cantoni, C.; Durante, S.; Calesso, G.; Cipolla, A.; Poiana, A.; Borghini, M.; Schroeder, K.; Chiggiato, J. (2020): The carbonate chemistry of the Western Mediterranean during the OCEAN CERTAIN 2015 cruise. PANGAEA, <https://doi.org/10.1594/PANGAEA.911046>
10. Belgacem, M.; Chiggiato, J.; Borghini, M.; Pavoni, B.; Cerrati, G.; Acri, F.; Cozzi, S.; Ribotti, A.; Álvarez, M.; Lauvset, S. K.; Schroeder, K. (2019): Quality controlled dataset of dissolved inorganic nutrients in the western Mediterranean Sea (2004-2017) from R/V oceanographic cruises. PANGAEA, <https://doi.org/10.1594/PANGAEA.904172>
11. Borghini M., Durante S., Ribotti A., Schroeder K., Sparnocchia S. (2019). Thermohaline Staircases in the Tyrrhenian Sea Experimental data-set (2003-2016). SEANOE. <https://doi.org/10.17882/58697>
12. Buffet, G; Krahmann, G.; Klaeschen, D.; Schroeder, K.; Sallarès, V.; Papenberg, C.; Ranero, C. R; Zitellini, N. (2017): Seismic Oceanography in the Tyrrhenian Sea - Thermohaline Staircases, Eddies and Internal Waves. PANGAEA, <https://doi.org/10.1594/PANGAEA.875602>

Books and Book Chapters

1. Schroeder K. and Chiggiato J., eds. (2022). Oceanography of the Mediterranean Sea. An Introductory Guide. Elsevier, ISBN: 9780128236925.
2. Chiggiato, J., Artale, V., Durrieu de Madron, X., Schroeder, K., Taupier-Letage, I., Velaoras, D., Vargas-Yáñez, M.. Chapter 9 - Recent changes in the Mediterranean Sea, Editor(s): Katrin Schroeder, Jacopo Chiggiato, Oceanography of the Mediterranean Sea, Elsevier, 2023, Pages 289-334, ISBN 9780128236925, <https://doi.org/10.1016/B978-0-12-823692-5.00008-X>.
3. Schroeder, K., Tanhua, T., Chiggiato, J., Velaoras, D., Josey, S.A., García Lafuente, J., Vargas-Yáñez, M.. Chapter 4 - The forcings of the Mediterranean Sea and the physical properties of its water masses, Editor(s): Katrin Schroeder, Jacopo Chiggiato, Oceanography of the Mediterranean Sea, Elsevier, 2023, Pages 93-123, ISBN 9780128236925, <https://doi.org/10.1016/B978-0-12-823692-5.00005-4>.
4. Mourre, B., Clementi, E., Coppini, G., Coppola, L., Korres, G., Novellino, A., Alvarez-Fanjul, E., Daniel, P., Zodiatis, G., Schroeder, K., Tintoré, J.. Chapter 10 - Mediterranean observing and forecasting systems, Editor(s): Katrin Schroeder, Jacopo Chiggiato, Oceanography of the Mediterranean Sea, Elsevier, 2023, Pages 335-386, ISBN 9780128236925, <https://doi.org/10.1016/B978-0-12-823692-5.00001-7>.
5. Chiggiato, J., Schroeder, K., Mourre, B., Miramontes, E., Lionello, P., Marcos, M., Pinardi, N., Mason, E., Álvarez, M., Trincardi, F.. Chapter 1 - Introduction, Editor(s): Katrin Schroeder, Jacopo Chiggiato, Oceanography of the Mediterranean Sea, Elsevier, 2023, Pages 1-11, ISBN 9780128236925, <https://doi.org/10.1016/B978-0-12-823692-5.00002-9>.
6. Artale, V., Lo Bue, N., Schroeder, K., Zervakis, V., eds. (2022). Impact of Deep Oceanic Processes on Circulation and Climate Variability: Examples From the Mediterranean Sea and the Global Ocean. Lausanne: Frontiers Media SA. doi: 10.3389/978-2-88974-240-0.
7. Contributing author to: MedECC (2020) Climate and Environmental Change in the Mediterranean Basin – Current Situation and Risks for the Future. First Mediterranean Assessment Report [Cramer, W., Guiot, J., Marini, K. (eds.)] Union for the Mediterranean, Plan Bleu, UNEP/MAP, Marseille, France, 632pp. ISBN: 978-2-9577416-0-1.
8. Hayes D.R., K. Schroeder, P.M. Poulaing, P. Testor, L. Mortier, A. Bosse, X. du Madron. 2019. Review of the Circulation and Characteristics of Intermediate Water Masses of the Mediterranean: Implications for Cold-Water Coral Habitats. In: C. Orejas, C. Jiménez (eds.), Mediterranean Cold-

- Water Corals: Past, Present and Future, Coral Reefs of the World 9, https://doi.org/10.1007/978-3-319-91608-8_18.
9. Schroeder K., 2018. Current Systems in the Mediterranean Sea, In: Encyclopedia of Ocean Sciences – Vol. 3: Ocean Dynamics, edited by: Cochran J.K., Bokuniewicz H.J., Yager P.L., Elsevier, doi: 10.1016/B978-0-12-409548-9.11296-5.
 10. Bryden, H.L., Schroeder, K., Borghini, M., Vetrano, A., Sparnocchia, S.: Mixing in the deep waters of the western Mediterranean, In: The Mediterranean Sea: Temporal Variability and Spatial Patterns, edited by: Borzelli, G. L. E., Gacic M., Lionello P., Malanotte-Rizzoli P., American Geophysical Union Monograph Series 105, ISBN: 978-1-118-84734-3, 180 pages, 2014
 11. Schroeder K., J. García-Lafuente, S.A. Josey, V. Artale, B. Buongiorno Nardelli, A. Carrillo, M. Gačić, G.P. Gasparini, M. Herrmann, P. Lionello, W. Ludwig, C. Millot, E. Özsoy, G. Pisacane, J.C. Sánchez-Garrido, G. Sannino, R. Santoleri, S. Somot, M. Struglia, E. Stanev, I. Taupier-Letage, M.N. Tsimplis, M. Vargas-Yáñez, V. Zervakis, G. Zodiatis, 2012. Chapter 3: Circulation of the Mediterranean Sea and its variability. In: The Climate of the Mediterranean Region, from the past to the future. Ed. P. Lionello. Elsevier Insights, Amsterdam.
 12. Lionello P., Abrantes F., Congedi L., Dulac F., Gomis D., Goodess C., Hoff H., Kutiel H., Luterbacher J., Planton S., Reale M., Schroeder K., Struglia M.V., Toreti A., Tsimplis M., Ulbrich U., Xoplaki E., 2012. Introduction: Mediterranean Climate – Background Information. In: The Climate of the Mediterranean Region, from the past to the future. Ed. P. Lionello. Elsevier Insights, Amsterdam.

Other publications (monographs, reports, short articles...)

1. Schroeder, K.: TAIPro2022 CRUISE REPORT R/V BELGICA Cruise n. 2022/12 (Version 1). Zenodo. <https://doi.org/10.5281/zenodo.6918731>, 2022.
2. Schroeder K., Heslop E., 2015. Report on operation and data analysis from R/V monitoring for MSFD. PERSEUS Project. ISBN 978-960-9798-12-9, <http://dx.doi.org/10.13140/RG.2.1.1572.6169>.
3. Schroeder K., G.P. Gasparini, M. Borghini, S. Sparnocchia, A. Vetrano, F. Grilli, M. Marini, E. Paschini, 2012. The monitoring of thermohaline variability in the Mediterranean combining continuous strait measurements and periodic basin scale surveys. In: Designing Med-SHIP: a Program for repeated oceanographic surveys, CIESM Workshop Monographs, n.º 43, Supetar (Brac Island, Croatia) (<http://www.ciesm.org/online/monographs/Supetar.html>).
4. Malanotte-Rizzoli P. and the Pan-Med Group. 2012. Physical forcing and physical/biochemical variability of the Mediterranean Sea: A review of unresolved issues and directions of future research. Report of the Workshop “Variability of the Eastern and Western Mediterranean circulation and thermohaline properties: similarities and differences” Rome, 7-9 November, 2011, 48 pp.
5. Gasparini G.P., Schroeder K., Sparnocchia S., Borghini M., 2011. Interannual Variability in the Mediterranean Sea: a Long-Term Monitoring Strategy. In: Marine Research at CNR. Ed.: Consiglio Nazionale delle Ricerche - Roma, pg. 1487-1493.
6. Vetrano A., K. Schroeder, G.P. Gasparini, E. Napolitano, R. Iacono, 2011. Tyrrhenian Sea Circulation: Observations and Model Results. In: Marine Research at CNR. Ed.: Consiglio Nazionale delle Ricerche - Roma, pg. 1337-1348.
7. Ribotti A., M. Borghini, K. Schroeder, A. Satta, B. Sorgente, R. Gerin, A. Cucco, A. Olita, L. Fazioli, R. Giovannini, R. Sorgente, 2011. Current Measurements in the Bonifacio Mouths and La Maddalena Archipelago: First Analyses. In: Marine Research at CNR. Ed.: Consiglio Nazionale delle Ricerche - Roma, pg. 891-902.
8. Griffa A., K. Schroeder, S. Aliani, A. Doglioli, A. Molcard, V. Taillardier, P.M. Poulan, T. Ozgokmen, A. Haza, 2011. The Roads of the Sea - Can We Predict the Motion of Particles Carried by Ocean Currents? In: Marine Research at CNR. Ed.: Consiglio Nazionale delle Ricerche - Roma, pg. 1257-1268.

9. Bergamasco A., P. Del Negro, S. Aliani, K. Schroeder, M. Celussi, S. Carniel, M. Sclavo, 2011. Antarctic Shelf Slope Dynamics and Deep Ventilation of the Southern Ocean. In: Marine Research at CNR. Ed.: Consiglio Nazionale delle Ricerche - Roma, pg. 1303-1310.
10. Schroeder K., Gasparini G.P., Borghini M., Ribotti A., 2009. Experimental evidences of the recent abrupt changes in the deep Western Mediterranean Sea. In: Dynamics of Mediterranean Deep Waters, CIESM Workshop Monographs, n.^o 38, Qwara, Malta (<http://www.ciesm.org/online/monographs/Malta.html>).
11. Gasparini G.P., Schroeder K., Sparnocchia S., 2008. Straits and Channels as key regions of an integrated marine observatory of the Mediterranean: our experience on their long-term monitoring. In: Towards Integrated Mediterranean Marine Observatories, CIESM Workshop Monographs, n.^o 34, La Spezia, Italy.
12. Gasparini G.P., Schroeder K., Vetrano A., Astraldi M., 2007. Canali e stretti quali punti di osservazione privilegiata per lo studio della variabilità interannuale nel bacino Mediterraneo. In: Clima e cambiamenti climatici: le attività di ricerca del CNR. Ed.: Consiglio Nazionale delle Ricerche - Roma, pg. 521-524.
13. Schroeder K., 2004. Porewater Leakage im Hedwigenkooger Watt. In: Colijn F., Tischler T.. Annual Report 2002/2003, Forschungs- und Technologie-Zentrum Westküste Büsum. p. 11-14, Heide: Boyens Offset, ISBN/ISSN: 0943-3619 (<http://www.uni-kiel.de/ftzwest/archiv/FTZ-JB02+03-orig.pdf>).

Presentations at national and international congresses (small selection)

1. Schroeder K. et al., 2022. Towards a 4-D vision of the Mediterranean Sea: the crucial node of a sustained ship-based repeat hydrography program. 2nd GCOS Climate Observation Conference, 17-19 October 2022, Darmstadt, Germany.
2. Schroeder K. (**Invited**), 2022. Il riscaldamento del Mar Mediterraneo, cause e conseguenze. Festa di Scienza e di Filosofia-Virtute e Canoscenza, 21-24 April 2022, Foligno (Italy).
3. Schroeder K. (**Invited, Medal Lecture**), 2019. Rapid response to climate change in a marginal sea. IUGG General Assembly, July 2019 (Montreal).
4. Schroeder K. (**Invited, Medal Lecture**), 2015. Modern view of Western Mediterranean hydrography. EGU General Assembly, April 2015 (Vienna).
5. Schroeder K. (**Invited**), S. Ben Ismail, H. L. Bryden, M. Borghini, S. Sparnocchia, J. Chiggiato, A. Ribotti, 2015, One decade of enhanced thermohaline variability in the deep western Mediterranean Sea (2004-2014). EGU General Assembly, April 2015 (Vienna).
6. Schroeder K. (**Invited**), G. P. Gasparini, H. L. Bryden, M. Borghini, S. Sparnocchia, A. Vetrano, 2011, Thermohaline variability in the western Mediterranean Sea. Workshop on the Variability of the Eastern and Western Mediterranean Circulation and Thermohaline Properties; Similarities and Differences, on the occasion of 25 years of the project Physical Oceanography of the Eastern Mediterranean – POEM, 7-9 November 2011, Rome.
7. Schroeder K., (**Invited**), 2011, Thermohaline variability in the western Mediterranean Sea. MedCLIVAR Final Conference, Mediterranean Climate: From Past to Future, Lecce, Italy, 6-9 June 2011.
8. Schroeder K., (**Invited**), 2011, The monitoring of thermohaline variability in the Mediterranean combining continuous strait monitoring and periodic basin scale surveys. CIESM Research Workshop n. 43 on Planning repeated basin-wide surveys for climatic studies in the Mediterranean Sea, Croatia, 11-14 May 2011.
9. Schroeder K. (**Invited**), Josey S. A., Herrmann M., Grignon L., Gasparini G.P., Bryden H.L. (2010), Abrupt warming and salting of the Western Mediterranean Deep Water after 2005. 5th ESF-MedCLIVAR-ICTP Workshop "Scenarios of Mediterranean Climate Change under Increased Radiative Active Gas Concentration and the Role of Aerosols", September 2010, Trieste.

10. Schroeder K. (**Invited**), V. Cardin, J. Font, J. Fuda, J. Garcia Lafuente, P. Puig, I. Taupier-Letage, L. Bengara, S. Ben Ismail, M. Bensi, Borghini M., C. Curti, J. Delgado, C. Millot, B. El Moumni, J. G.P. Gasparini, D. Lefevre, J. Lopez-Jurado, P. Raimbault, G. Rougier, J. Salat, C. Sammari, A. Sanchez-Roman, C. Tamburini, A. Theocharis, M. Vargas-Yanez (2010), HYDROCHANGES network: latest observations and links between time series. 39th CIESM Congress, Venice, 10-14 May 2010.
11. Schroeder K. (**Invited**), G.P. Gasparini, Borghini M., Ribotti A. (2009), Experimental evidences of the recent abrupt changes in the deep Western Mediterranean Sea. 38th CIESM Workshop, Malta, 27th – 30th May 2009.
12. Schroeder K. (**Invited**), Borghini M., Sparnocchia S., Gasparini G.P. (2008), Abrupt Changes Observed in the Deep Western Mediterranean Sea between 2004 and 2006, 3rd ESF MedCLIVAR Workshop held in Rhodes, 29th September – 1st October 2008.

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