

# DANIELE PIAZZOLLA

[daniele.piazzolla@cmcc.it](mailto:daniele.piazzolla@cmcc.it)

## **EDUCATION**

**(JUNE 2017) PhD, UNIVERSITY OF TUSCIA DEPARTMENT OF ECOLOGICAL AND BIOLOGICAL SCIENCES (DEB).**

PhD course in "Ecology and sustainable management of environmental resources". Project title: Distribution of trace metals in coastal sediments of the physiographical unit Capo Linaro - Monte Argentario. Tutor: Prof. Marco Marcelli. Coordinator: Prof. Daniele Canestrelli.

**(DECEMBER 2013) MASTER DEGREE IN NATURE CONSERVATION, MARINE CURRICULUM (LM-75), UNIVERSITY OF TUSCIA, DEPARTMENT OF ECOLOGICAL AND BIOLOGICAL SCIENCES (DEB).**

Master's degree in Nature Conservation, marine curriculum (LM/75) "Sciences and technologies for the environment and the territory". Thesis title: Sedimentological study of the Lazio coastal platform between Santa Severa and Montalto di Castro: spatial and temporal distribution of the sandy fraction and pelitic contributions. Supervisor: Prof. Marco Marcelli. Co-supervisor: Dr. Sergio Scanu. Score: 110/110 *cum laude*.

**(DECEMBER 2011) DEGREE IN ENVIRONMENTAL SCIENCES, MARINE CURRICULUM (L-32), UNIVERSITY OF TUSCIA DEPARTMENT OF ECOLOGICAL AND BIOLOGICAL SCIENCES (DEB).**

Bachelor's degree in Environmental Sciences, marine curriculum (L / 32) "Sciences and technologies for the environment and nature". Thesis title: Granulometric characterization of the Tuscan-Lazio coastal platform from Tarquinia Lido to Capalbio and distribution of some metal tracers. Supervisor: Prof. Marco Marcelli. Co-supervisor: Dr. Francesco Manfredi Frattarelli. Score: 110/110 *cum laude*.

**(JULY 2008) HIGH SCHOOL DIPLOMA**

SCIENTIFIC HIGH SCHOOL "GALILEO GALILEI" TARQUINIA (VT). Score: 82/100.

## **WORK AND RESEARCH INTERESTS**

His research activity generally concerns the assessment of the impact of anthropogenic pressures on the marine environment and focuses on the effects of pollution on coastal marine ecosystems.

Aspects of particular interest in the research are the evaluation of the distribution and degree of chemical pollutants in the coastal marine environment, distribution and levels of marine litter pollution, dynamics of pollutants, bioaccumulation and biomagnification processes, technological development of cost-effective monitoring devices.

Daniele participates in various research projects and programs in which he carries out the collection and processing of observational data, laboratory and on-site tests of economically advantageous instrumentation useful for measuring the physico-chemical characteristics of the water column.

Research prolife:

Scholar - <https://scholar.google.it/citations?user=DPJ7j-YAAAAJ&hl=it>

Scopus - <https://www.scopus.com/authid/detail.uri?authorId=56667587000>

## **TECHNICAL, DIGITAL AND LANGUAGE SKILLS**

He has proven experience in:

- Sampling of marine sediments through the use of gravity corers, Van Veen, Shipek grabs, and box corers. Execution of grain size analysis, and analysis of the organic content in marine sediments, treatment and processing of data. Use of micro-XRF techniques and core scanners for the analysis of sediment cores, and data processing.
- Geochronology techniques for recent sediments ( $^{210}\text{Pb}$ ,  $^{137}\text{Cs}$ ,  $^{134}\text{Cs}$ ,  $^{241}\text{Am}$ ).
- Sampling of sea water through the use of a Niskin bottle. Measurement of the physical, chemical and bio-optical characteristics of the water column through the use of multi-parametric probes, treatment and data processing. Use of spectrophotometric techniques for the study of photosynthetic pigments, treatment and data analysis. Use of spectrofluorimetric techniques for the analysis of dissolved organic matter (CDOM), treatment and data analysis.
- Processing of data regarding environmental contaminants. Treatment and processing of data concerning the bioaccumulation and biomagnification processes of potentially toxic substances in marine organisms. Assessment of the degree of contamination of coastal marine areas.
- Evaluation of the presence of microlitter, including plastics, in marine sediments, sea water and biota, treatment and analysis of data.
- Evaluation of the impact of coastal works in the marine environment. Environmental characterization of areas to be dredged.
- Evaluation of underwater noise impact in coastal areas.
- Morphological study of the dry beach.
- Use of single beam systems for the study of the morphological characteristics of the seabed, treatment and data analysis.
- Use of ADCP (Acoustic doppler current profiler) and data analysis.
- Use of USV (Unmanned surface vehicles) platforms for the study of the coastal marine environment.
- Economic evaluation of ecosystem services in the coastal marine environment, in particular with regard to marine phanerogams.
- E.G., Microsoft and Linux operative systems; Microsoft Office: proficient user of Word, Excel and Powerpoint; Golden Software Surfer, Grapher, Digger; ArcGIS Desktop (ArcView) 9.3.1; QGIS - Quantum GIS; Mathcad, Matlab.
- Mother language: Italian, Other Language(s): English (Listening B2 , Reading B2, Speaking C1, Writing B2).

## **EXPERIENCE**

### **(JANUARY 2019 – CURRENT) RESEARCH COLLABORATOR - POST-DOC, EURO-MEDITERRANEAN CENTER ON CLIMATE CHANGE (CMCC); OCEAN PREDICTIONS AND APPLICATIONS (OPA) DIVISION.**

(AUGUST 2021- DECEMBER 2022) - "FIUMICINO" and "FIUMICINO-1" research programs relating to the "Environmental monitoring of the port and periport areas of Fiumicino, extended to the Physiography Unit". In these research programs, he carries out collection and processing of coastal marine data and support for the development of GIS maps.

(APRIL 2020 - JULY 2021) - "FIUMICINO" research program relating to the "Environmental monitoring of the port and periport areas of Fiumicino as part of the survey for the construction of the 1st functional lot of the new commercial port of Fiumicino". In this research program he carried out analysis of the collected observational data.

(JANUARY 2020 - FEBRUARY 2020) - Research program funded by the European Commission "EuroSea - Improving and Integrating European Ocean Observing and Forecasting System for Sustainable use of the Oceans". In this research program he carried out analysis of the collected observational data.

(JANUARY 2019 - JANUARY 2020) - Research program funded by the Puglia Region for participation in the Regional Cluster "SAGACE - Advanced environmental monitoring system". In this program he carried out support activities for environmental monitoring, model development, validation of the water monitoring and communication system.

### **(OCTOBER 2017 - JANUARY 2019) FELLOWSHIP, UNIVERSITY OF TUSCIA (VT); DEPARTMENT OF ECOLOGICAL AND BIOLOGICAL SCIENCES (DEB).**

"Study of the redox potential in marine sediments as a tracer of hydrodynamic processes and anthropic impact". Research activities carried out at the Laboratory of Experimental Oceanology and Marine Ecology (LOSEM). Molo Vespucci snc, Poro di Civitavecchia, Civitavecchia 00053 (RM). Supervisor: Prof. Marco Marcelli.

### **(JUNE 2016 - OCTOBER 2017) FELLOWSHIP, UNIVERSITY OF TUSCIA (VT); DEPARTMENT OF ECOLOGICAL AND BIOLOGICAL SCIENCES (DEB).**

"Study of the distribution of trace element concentrations in the Gulf of Gaeta: evaluation of hypothetical anthropogenic sources and effects of dredging activity". Research activities carried out at the Laboratory of Experimental Oceanology and Marine Ecology (LOSEM). Molo Vespucci snc, Poro di Civitavecchia, Civitavecchia 00053 (RM). Supervisor: Prof. Marco Marcelli.

## **PARTICIPATION IN RESEARCH PROJECTS AND PROGRAMS**

**(2020-2025)** Port System Authority of the Central-Northern Tyrrhenian Sea Research Project "Morphodynamic and solid transport, hydrodynamic and ecological characterization of the Capo Linaro- Capo d'Anzio physiographic unit".

**(2020-2021)** Project PO FEAMP "PISCES: Alien SpeCIE plastics and physiology: preliminary investigation of the impacts on fish fauna affected by fishing activities". In this project he deals with the sampling and analysis of microplastics in sea water and within the stomach contents of some fish species.

(2019-2020) Development and testing an integrated low-cost device for airborne PM monitoring. This research activity has been carried out in collaboration with the University of Roma Tre. The activity coordinator was Prof. Giancarlo Della Ventura.

(2019-2020) SAGACE Project - Advanced environmental monitoring system, identification code M7X3HL2 approved with Resolution no.135 of 15/10/2018 of the Puglia Region under the Public Notice "POR FESR-FSE 2014-2020 - Action 1.6 Innonetwork. In this project he was involved in the design, testing and installation of a station for measuring the chemical, physical and bio-optical characteristics of seawater.

(2019-2020) Project PO FEAMP "CAR: Study of the effects of the invasive alien species *Caulerpa racemosa* on Natura 2000 sites and repercussions on fishing activity". Within this project he deals with particle size analysis of the sampled substrates and data interpretation, in order to evaluate the relationship between anthropogenic sources and the presence of invasive alien algae.

(2013-2018) Portal Authority of Civitavecchia, Fiumicino and Gaeta "Addendum 4 to the Protocol of research activities - variant of the port regulatory plan of the port of Gaeta - marine component". In this project he deals with the sampling of marine sediments, the particle size analysis of these, and the processing of data regarding the concentrations of some chemical elements measured in sediments and sea water.

(2011-2018) Portal Authority of Civitavecchia, Fiumicino and Gaeta "Addendum 2 to the Protocol of research activities - I functional lot of strategic works Port of Civitavecchia - Marine component". Research and study activities necessary to undertake an innovative monitoring of the marine environment that also complies with the requirements set out in the Decree of V.I.A. 2935/97.

## **PARTICIPATION IN SCIENTIFIC SOCIETIES, ORGANIZATIONS AND CONFERENCE EXPERIENCES**

(2022) He is co-convener of the session " Effects of anthropogenic pressure on marine ecosystems" OS3.3, EGU2022, 23-27 May 2022, Wien.

(2015-ongoing) He is an active member of the European Geosciences Union (EGU).

## **EDUCATIONAL ACTIVITIES**

Since 2013 he has been providing tutoring and teaching assistance at the DEB (Department of Ecological and Biological Sciences), within the courses of "Biological Oceanography", "Marine Ecology and Biological Oceanography", "Applied Oceanography and Ecosystem Dynamics" , held by Prof. Marco Marcelli, as part of the degree courses in "Environmental Sciences" and "Biology and Marine Ecology", University of Tuscia, through exercises concerning the analysis of marine sediments and associated pollutants, nautical cartography and use of oceanographic instruments.

From 2014 to 2017 he carried out support teaching activities and exercises within the courses "Marine ecology and protection of the environment and sea resources" and "Management and protection of sea resources and fish resources", held by Prof. Marco Marcelli, degree course in "Sciences of the government and administration of the sea", Naval Academy of Livorno.

Since 2019 he has been member of the exam commission of the courses "Marine Ecology and Biological Oceanography", "Applied Oceanography and Dynamics of Ecosystems", held by Prof. Marco Marcelli, degree courses in "Environmental Sciences" and "Marine Biology and Ecology (BEM)".

He was co-supervisor of the following degree theses:

Geneva Iacobelli. A.a. 2020/2021. MORPHOLOGICAL AND SEDIMENTOLOGICAL CHARACTERIZATION OF THE BEACH SECTION BETWEEN MARINA DI CERVETERI AND CASTEL PORZIANO AND STUDY OF SEASONAL VARIATIONS OF THE COAST. Degree in Environmental Sciences. Department of Ecological and Biological Sciences. University of Tuscia (Vt). Supervisor: Marco Marcelli, Co-supervisor: **Daniele Piazzolla**, Francesco Manfredi Frattarelli.

Flavia De Muto. A.a. 2019/2020. ASSESSMENT OF THE ABUNDANCE AND DISTRIBUTION OF THE MARINE LITTER IN THE COASTAL WATERS OF NORTHERN LAZIO. Master's degree thesis. Degree Course in Marine Biology and Ecology (BEM). Department of Ecological and Biological Sciences. University of Tuscia (Vt). Supervisor: Marco Marcelli, Co-supervisor: **Daniele Piazzolla**.

G.M. (CP) Miriana Ligorio. A.y 2018/2019. IMPACT AND MANAGEMENT OF "GHOST SEA NET" IN THE MARINE ECOSYSTEM. Master's degree thesis. Degree Course in Government and Sea Administration Sciences. Naval Academy of Livorno. University of Pisa. Supervisor: Marco Marcelli. Co-supervisor: **Daniele Piazzolla**, CF (CP) Matteo Gragnani.

GM (CP) Davide Negro. A.y 2018/2019. THE EMERGING PROBLEM OF MICROPLASTICS: DISTRIBUTION, POSSIBLE IMPACTS AND REGULATORY APPLICATION RESOLVES. Master's degree thesis. Degree Course in Government and Sea Administration Sciences. Naval Academy of Livorno. University of Pisa. Supervisor: Marco Marcelli. Co-supervisor: **Daniele Piazzolla**, CF (CP) Matteo Gragnani.

Annalisa Delre. A.a. 2017/2018. POLLUTION BY MICROPLASTICS IN THE NORTH COASTAL MARINE AREA OF LAZIO. Master's degree thesis. Degree Course in Marine Biology and Ecology (BEM). Department of Ecological and Biological Sciences. University of Tuscia (Vt). Supervisor: Marco Marcelli, Co-supervisor: **Daniele Piazzolla**.

## **PEER-REVIEWED ARTICLES**

Sergio Scanu, **Daniele Piazzolla**, Simone Bonamano, Marina Penna, Viviana Piermattei, Alice Madonia, Francesco Manfredi Frattarelli, Simone Mellini, Tania Dolce, Riccardo Valentini, Giovanni Coppini, Giorgio Fersini, Marco Marcelli (2022). Economic Evaluation of *Posidonia oceanica* Ecosystem Services along the Italian Coast. Sustainability, 14(1), 489. DOI: 10.3390/su14010489.

Emanuele Mancini, Andrea Miccoli, **Daniele Piazzolla**, P.R. Saraceni, M. Lezzi, Francesco Tiralongo, A. Bonifazi, Simona Picchietti, Marco Marcelli (2021). Macrozoobenthic fauna associated with benthic marine litter (Northern Tyrrhenian Sea, Italy) and first report of two bryozoan species in Italian waters. Regional Studies in Marine Science, 47, 101912.

Simone Bonamano, **Daniele Piazzolla**, Sergio Scanu, Emanuele Mancini, Alice Madonia, Viviana Piermattei, Marco Marcelli. Modelling approach for the evaluation of burial and erosion processes on *Posidonia oceanica* meadows, Estuarine, Coastal and Shelf Science, 03/2021, DOI: <https://doi.org/10.1016/j.ecss.2021.107321>.

Gabriella Caruso, Alice Madonia, Simone Bonamano, Stefano Misericocchi, Federico Giglio, Giovanna Maimone, Filippo Azzaro, Franco Decembrini, Rosabruna La Ferla, Viviana Piermattei, **Daniele Piazzolla**, Marco

Marcelli, Maurizio Azzaro. Microbial Abundance and Enzyme Activity Patterns: Response to Changing Environmental Characteristics along a Transect in Kongsfjorden (Svalbard Islands). *Journal of Marine Science and Engineering*, 10/2020, 8, 824; DOI: 10.3390/jmse8100824.

Alice Madonia, Gabriella Caruso, **Daniele Piazzolla**, Simone Bonamano, Viviana Piermattei, Giuseppe Zappalà, Marco Marcelli. Chromophoric Dissolved Organic Matter as a Tracer of Fecal Contamination for Bathing Water Quality Monitoring in the Northern Tyrrhenian Sea (Latium, Italy). *Journal of Marine Science and Engineering*, 06/2020, 8(6), 430. DOI: 10.3390/jmse8060430

**Daniele Piazzolla**, Valentina Cafaro, Giuseppe Andrea de Lucia, Emanuele Mancini, Sergio Scanu, Simone Bonamano, Viviana Piermattei, Alvis Vianello, Giancarlo Della Ventura, Marco Marcelli. Microlitter pollution in coastal sediments of the northern Tyrrhenian Sea, Italy: microplastics and fly-ash occurrence and distribution. *Estuarine, Coastal and Shelf Science* 08/2020. DOI: 10.1016/j.ecss.2020.106819

**Daniele Piazzolla**, Valentina Cafaro, Emanuele Mancini, Sergio Scanu, Simone Bonamano, Marco Marcelli. Preliminary Investigation of Microlitter Pollution in Low-Energy Hydrodynamic Basins Using *Sabella spallanzanii* (Polychaeta: Sabellidae) Tubes. *Bulletin of Environmental Contamination and Toxicology* 01/2020. DOI: 10.1007/s00128-020-02797-x

Valentina Cafaro, **Daniele Piazzolla**, Cristiano Melchiorri, Calogero Burgio, Giorgio Fersini, Francesca Conversano, Viviana Piermattei, Marco Marcelli. Underwater noise assessment outside harbor areas: The case of Port of Civitavecchia, northern Tyrrhenian Sea, Italy. *Marine Pollution Bulletin* 08/2018, 133, 865 – 871. <https://doi.org/10.1016/j.marpolbul.2018.06.058>

Simone Bonamano, **Daniele Piazzolla**, Alice Madonia, Francesco Paladini de Mendoza, Viviana Piermattei, Sergio Scanu, Marco Marcelli, Giuseppe Zappalà. Water renewal time and trace metal concentration in Civitavecchia port (Rome), Italy. *International Journal of Environmental Impacts* 2018. Vol. 1, No. 4, 1–11.

Simone Bonamano, Alice Madonia, **Daniele Piazzolla**, Francesco Paladini de Mendoza, Viviana Piermattei, Sergio Scanu, & Marco Marcelli. Development of a Predictive Tool to Support Environmentally Sustainable Management in Port Basins. *Water* 2017, 9(11), 898.

Sergio Scanu, **Daniele Piazzolla**, Francesco Manfredi Frattarelli, Emanuele Mancini, Francesco Tiralongo, Maria Violetta Brundo, Daniele Tibullo, Roberta Pecoraro, Chiara Copat, Margherita Ferrante, Marco Marcelli: Mercury Enrichment in Sediments of the Coastal Area of Northern Latium, Italy. *Bulletin of Environmental Contamination and Toxicology* 03/2016, 96(4). DOI 10.1007/s00128-016-1776-9.

**Daniele Piazzolla**, Sergio Scanu, Francesco Manfredi Frattarelli, Emanuele Mancini, Francesco Tiralongo, Maria Violetta Brundo, Daniele Tibullo, Roberta Pecoraro, Chiara Copat, Margherita Ferrante, Marco Marcelli: Trace-Metal Enrichment and Pollution in Coastal Sediments in the Northern Tyrrhenian Sea, Italy. *Archives of Environmental Contamination and Toxicology* 06/2015, 69(4). DOI: 10.1007/s00244-015-0166-3.

Sergio Scanu, Francesco Paladini de Mendoza, **Daniele Piazzolla**, M. Marcelli: Anthropogenic impact on river basins: temporal evolution of sediment classes and accumulation rates in the northern Tyrrhenian Sea, Italy. *Oceanological and Hydrobiological Studies* 03/2015, 44(1). DOI: 10.1515/ohst-2015-0000.

Sergio Scanu, Sharon Soetebier, **Daniele Piazzolla**, Francesco Tiralongo, Emanuele Mancini, Nicla Romano, Marco Marcelli: Concentrations of As, Cd, Cr, Ni, and Pb in the echinoid *Paracentrotus lividus* on the coast of Civitavecchia, Northern Tyrrhenian Sea, Italy. *Regional studies in Marine Sciences* 02/2015. DOI: 10.1016/j.rsma.2015.02.001.

## **TECHNICAL REPORTS**

Emanuele Mancini, **Daniele Piazzolla** Marco Marcelli (2018) "Port district of Civitavecchia; addendum n.2 of 02.08.2011 (prot. AP. 9349 of 03.08.2011); Characterization of the benthic biocenoses of the Civitavecchia coast - Year 2017. REL-305-MON-0718-AP, 12/07/18 (Rev. 1.0) - DEB.

Marco Marcelli, Viviana Piermattei, Riccardo Martellucci, **Daniele Piazzolla**., Valentina Cafaro, Alice Madonia; Study of the potential effects of dredging activities on sensitive areas inside the Gulf of Gaeta. "Additional document to the research contribution addendum no. 4 of 03.04.2013 (Prot. Intesa of 10.12.2003), Report on research and study activities; Reference: 01.12.2015-31.05.2016; Dredging phase. REL-307 -MON-0918-AP, 09/19/18.

Riccardo Martellucci, Lorenzo Costanzo, **Daniele Piazzolla**, Marco Marcelli "Physical, chemical and ecotoxicological characterization of marine sediments collected in the coastal area of Civitavecchia, Italian Naval League (LNI)." REL-303-SED-ITALIAN NAVAL LEGA CIVITAVECCHIA, 11/05/2018 - DEB.

Sergio Scanu, **Daniele Piazzolla**, Marco Marcelli "Physical, chemical and ecotoxicological characterization of marine sediments collected in the coastal area of Santa Severa, ASD Il Moletto" REL-291-SED-ASD IL MOLETTTO, 05/05/2017 - DEB.

**Daniele Piazzolla**, Sergio Scanu, Marco Marcelli (2016-2018) Physico-chemical characterization of superficial sediments in the Gulf of Gaeta - Post Operam Phase. " addendum n.4 of 02.08.2011 (prot. AP.9350 of 03.08.2011). REL-296-MON-0917-AP.

Viviana Piermattei, Sergio Scanu, **Daniele Piazzolla**, Marco Marcelli "Chemical-physical characterization of the surface sites of the tourist port of Riva di Traiano" REL-279-SED-0616-SUB SEA SERVICES SNC, 20/06/2016 - DEB.

Simone Bonamano, Francesco Paladini de Mendoza, Sergio Scanu, **Daniele Piazzolla**, Viviana Piermattei, Riccardo Martellucci, Alberto Pierattini "Port district of Civitavecchia; addendum n.2 of 02.08.2011 (prot. AP. 9349 of 03.08.2011); P.E.D.A.S project report ". Reference: 15.02.2015 - 25.04.2015. REL-214-MON-0415-AP, 30/04/2015 (Rev. 1.0) - DEB.

Marco Marcelli, Simone Bonamano, Francesco Paladini de Mendoza, Alice Madonia, Valentina Gnisci, **Daniele Piazzolla**, Sergio Scanu "Description of the activities to support the study of the potential effects produced by dredging on priority species and habitats present in SICs IT6000005 and IT6000006", addendum n.2 of 02.08.2011 (prot. AP. 9349 of 03.08.2011); activity report. REL-204-MON-0115-AP, 26/01/15 (Rev 1.0) - DEB.

Marco Marcelli, Simone Bonamano, Francesco Paladini De Mendoza, Alice Madonia, Viviana Piermattei, **Daniele Piazzolla**, Sergio Scanu; Research project "P.E.D.A.S." (Potential Effects of Dredged Activities on SIC): analysis of the potential effects produced by dredging activities on priority species and habitats present in SIC IT6000005 and IT6000006 - Estimation of costs P.E.D.A.S. 48 pp., REL-209-MON-0315-AP, 17/03/15 (Rev. 1.0) - DEB

Marco Marcelli, Alberto Pierattini, Riccardo Martellucci, Filippo Maria Carli, Sergio Scanu, **Daniele Piazzolla**, Caterina Cicchinelli, Chiara Stefani, Marianna Santoriello "Project for the development of higher education activities" Report. REL-170-FOR-2014, 27/05/14 (Rev. 1.0) - DEB.

## **CONFERENCES**

**Daniele Piazzolla**, Giancarlo Della Ventura, Andrea Terribili, Alessandra Conte, Sergio Scanu, Simone Bonamano, Marco Marcelli, Federico Lucci, Cecilia Labella, Carlo Venettacci. Air pollution assessment using a cost-effective device: the case study of the northern Latium coastal area. Geophysical Research Abstracts, European Geosciences Union 2021; 04/2021.

Viviana Piermattei, Simone Bonamano, Giovanni Coppini, Ivan Federico, Salvatore Causio, Matteo Ulisse Parodi, Giorgio Fersini, Alice Madonia, Francesco Manfredi Frattarelli, Marco Marcelli, **Daniele Piazzolla**, and Sergio Scanu. Design and implementation of an integrated coastal observing system at regional scale. Geophysical Research Abstracts, European Geosciences Union 2021; 04/2021.

**Daniele Piazzolla**, Simone Bonamano, Alice Madonia, Viviana Piermattei, Giuseppe Zappalà, Sergio Scanu, Marco Marcelli - Sviluppo di un indice predittivo a supporto della gestione sostenibile di bacini semi chiusi: il caso del Porto di Civitavecchia. In: Chiocci F.L., Budillon F., Ceramicola S., Gamberi F., Loreto M.F., Senatore M.R., Spagnoli F., Sulli A. (eds) - Abstract Book della Società Geologica Italiana, "La geologia marina in Italia, Quarto Convegno dei Geologi Marini Italiani - Roma, 25-26 febbraio 2021", numero di pagina. <https://doi.org/10.3301/ABSGI.2021.01>

**Daniele Piazzolla**, Andrea Terribili, Simone Bonamano, Sergio Scanu, Marco Marcelli, Giancarlo Della Ventura, Alessandra Conte, Federico Lucci, Augusto Marcelli. Monitoring coastal pollution by using an integrated low-cost device. (Display presentation) Geophysical Research Abstracts, European Geosciences Union 2020, Wien; 05/2020.

Marco Boschi, Giulia Caporale, Lorenzo Pasculli, **Daniele Piazzolla**, Emanuele Mancini. Evaluation of the effects of *Caulerpa cylindracea* on *Posidonia oceanica* through the analysis of primary production and morphometric characteristics. (Display presentation) Geophysical Research Abstracts, European Geosciences Union 2020, Wien; 05/2020.

Sergio Scanu, Simone Mellini, **Daniele Piazzolla**, Simone Bonamano, Emanuele Mancini, Francesco Manfredi Frattarelli. Synoptic representation of *P. oceanica* ecosystem services in the Italian seas. (Display presentation) Geophysical Research Abstracts, European Geosciences Union 2020, Wien; 05/2020.

Valentina Cafaro, Jessica Alessi, Simone Bonamano, **Daniele Piazzolla**, Marco Marcelli. Bottlenose dolphins (*Tursiops truncatus*, Montagu, 1821) and underwater noise pollution: simulate the exposure of three Mediterranean groups. (POSTER session). WMMC'19 -World Marine Mammal Conference - Barcellona 2019

Marco Marcelli, Simone Bonamano, Marco Boschi, Calogero Burgio, Valentina Cafaro, Giulia Caporale, Gabriella Caruso, Giorgio Fersini, Alice Madonia, Emanuele Mancini, **Daniele Piazzolla**, Viviana Piermattei, Sergio Scanu, Giuseppe Zappalà. Integrated observing systems supporting Civitavecchia port development. (Conference Paper). Maritime transport 2019.

Sergio Scanu, **Daniele Piazzolla**, Simone Bonamano, Riccardo Martellucci, Lorenzo Costanzo, Davide Bonomo, and Viviana Piermattei. Sediment fluxes and trace metals concentration assessment in the Gaeta Gulf area, central Tyrrhenian Sea, Italy. (POSTER session) Geophysical Research Abstracts, European Geosciences Union 2019, Wien; 04/2019.

Marco Boschi, **Daniele Piazzolla**, Alessandro Neri, Michele Strizzi, Simone Bonamano, Andrea Bonifazi, Emanuele Mancini. Alien fauna associated with hard substrate of Civitavecchia harbour. (POSTER session) Geophysical Research Abstracts, European Geosciences Union 2019, Wien; 04/2019.



Valentina Cafaro, Jessica Alessi, Simone Bonamano, **Daniele Piazzolla**, Viviana Piermattei. Underwater noise pressure in exploited coastal environment and implication on dolphins communications. (ORAL PRESENTATION) Geophysical Research Abstracts, European Geosciences Union 2019, Wien; 04/2019.

**Daniele Piazzolla**, Valentina Cafaro, Giuseppe Andrea De Lucia, Emanuele Mancini, Annalisa Delre, Sergio Scanu, Viviana Piermattei, and Marco Marcelli. Microplastics pollution assessment in sediments of the northern Latium coastal area, Tyrrhenian sea, Italy. (POSTER session) Geophysical Research Abstracts, European Geosciences Union 2019, Wien; 04/2019.

**Daniele Piazzolla**, Sergio Scanu, Simone Bonamano, Francesco Paladini De Mendoza, Riccardo Martellucci, Giuseppe Zappalà. DREDGING WORKS MONITORING IN THE PORT OF Civitavecchia, Rome, Italy: SEDIMENTOLOGICAL AND GEOCHEMICAL INVESTIGATIONS. (Conference Paper). Water Pollution XIV. WIT Transactions on Ecology and the Environment, 228, 199-208.

Francesco Paladini de Mendoza, Simone Bonamano, Natalizia Consalvi, Riccardo Martellucci, **Daniele Piazzolla**, and Viviana Piermattei. Circulation during storms and dynamic of suspended matter in strongly anthropized coast. (POSTER session) Geophysical Research Abstracts, European Geosciences Union 2018, Wien; 04/2018.

Francesco Manfredi Frattarelli, **Daniele Piazzolla**, Emanuele Mancini, Sergio Scanu, Simone Bonamano, Viviana Piermattei, and Marco Marcelli. Benthic biocenosis as spatial unit to assess ecosystem services. (POSTER session) Geophysical Research Abstracts, European Geosciences Union 2018, Wien; 04/2018.

Sergio Scanu, Marco Vallesi, Riccardo Martellucci, **Daniele Piazzolla**, Lorenzo Costanzo, Francesco Paladini de Mendoza, Emanuele Mancini, Alice Madonia, Simone Bonamano, Viviana Piermattei, Marco Marcelli. Preliminary evaluation of antifouling properties of high temperature ceramic glaze coatings in marine environment. (POSTER session) Geophysical Research Abstracts, European Geosciences Union 2018, Wien; 04/2018.

Valentina Cafaro, **Daniele Piazzolla**, and Cristiano Melchiorri. Underwater noise assessment in Harbour areas: a case study of Port of Civitavecchia. (POSTER session) Geophysical Research Abstracts, European Geosciences Union 2018, Wien; 04/2018.

**Daniele Piazzolla**, Simone Bonamano, Alice Madonia, Francesco Paladini de Mendoza, Viviana Piermattei, Giuseppe Zappalà, and Sergio Scanu. Assessment of the effects of port structure changes on water quality through the development of a new predictive index. (Oral presentation) Geophysical Research Abstracts, European Geosciences Union 2018, Wien; 04/2018.

Alice Madonia, **Daniele Piazzolla**, Gabriella Caruso, Cristiano Melchiorri, Davide Giannini, and Simone Bonamano. Spectral characterization of chromophoric dissolved organic matter (CDOM) for the detection of wastewater discharges in bathing areas. (POSTER session) Geophysical Research Abstracts, European Geosciences Union 2018, Wien; 04/2018.

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