

EMANUELA FANELLI

PERSONAL INFORMATION



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🌐 https://www.researchgate.net/profile/Emanuela_Fanelli/

Metrics (last update on May 2020): *H-index* Google scholar: 27; 2077 citations.

PROFESSIONAL ADDRESS

Department of Life and Environmental Sciences
Polytechnic University of Marche
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ITALY
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CURRENT POSITION: Associate Professor (full-employed) Polytechnic University of Marche, Department of Life and Environmental Sciences.

RESEARCH FIELD:

Trophic webs; deep-sea ecosystems; biodiversity; trophic ecology of deep-sea species; stable isotopes analysis to elucidate trophic web structure and trophodynamics of marine ecosystems; effects of climate change on marine communities; biological invasions in the Mediterranean; cold-water corals; deep-sea conservation and monitoring.

EDUCATION & TRAINING

- Ph.D in Ecology and Management of Biological Resources (excellent) by the University of Viterbo, Italy (March 2007). PhD Thesis in English, available at http://dSPACE.unitus.it/bitstream/2067/569/1/efanelli_tesid.pdf.
- Doctoral Courses. University of Viterbo, Italy (February 2004-September 2006).
- Italian Master of Science in Biology (5 yrs, 110/110 *cum laude*) by the University of Rome “La Sapienza” (February 1999). MSc Thesis in Fishery Biology.

RESEARCH EXPERIENCE: CONTRACTS & FELLOWSHIPS

- **15th December 2017:** Associate professor (full employed) at Polytechnic University of Marche, Department of Life and Environmental Sciences.
- **3rd December 2012 –14th December 2017:** Researcher (full employed) at ENEA (L3F2).
- **January 2010-December 2012:** Three years Postdoctoral Fellowship *Juan de la Cierva* (Spanish Minister of Science and Innovation): Scientist in charge: Dr. J.E. Cartes at ICM.-CSIC, Barcelona.
- **December 2009-January 2008.** Two years Postdoctoral Fellowship of Spanish Minister of Education and Science. Scientist in charge: Dr. J.E. Cartes at ICM.-CSIC, Barcelona.

- **January-December 2007.** Research contract: "Characterization of the ichthyofauna associated to *P. oceanica* meadows and trophic interactions. Funded by IAMC-CNR of Mazara del Vallo. Scientists in charge: Dr. F. Badalamenti and Dr. M. Gristina.
- **January 2004-December 2006.** Three years Pre-doctoral fellowship (during the PhD E. Fanelli carried out part of her research at ICM-CSIC, Barcelona, and part at IAMC-CNR, Castellamare del Golfo, Trapani, Italy).
- **January-December 2003.** One-year research fellowship at ICM-CSIC improving techniques and knowledge on feeding behaviour of decapod crustaceans and deep-sea sharks, funded by University La Sapienza of Rome, Italy. Tutor Dr. J. E. Cartes.
- **May 2001-December 2002.** Research contracts at ICRAM (Central Institute for Marine Research, Rome), on the definition of methodologies to assess the impact of sand extraction for beach nourishment on demersal and benthic fauna". Scientist in charge: Dr. M. Gabellini.
- **April 2000-March 2001.** Research fellowship at the "Ispettorato Centrale per la Difesa del Mare ICDM - Ministero dell'ambiente": marine coastal water monitoring data analysis, institution and management of marine protected areas, protected species and biodiversity, beaching of marine mammals and sea turtles along the Italian coasts (data management with the software GIS Arcview), funded by Italian Ministry of Environment. Scientist in charge: Prof. E. Fresi.
- **February 1999-February 2000.** Internship at Department of Human and Animal Biology of the University of Rome "La Sapienza": Management and analysis of fishery data.

RESEARCH EXPERIENCE: PROJECTS (TITLE, FUNDING, DURATION OF PROF. FANELLI COLLABORATION TO THE PROJECT AND SCIENTIST IN CHARGE ARE ALSO INDICATED)

Project Title: MEDITS-IT (Mediterranean International Trawl Survey) U.O. University of Rome "La Sapienza" Dep.t of Human and Animal Biology; Funded by European Community (EC). Duration: one month survey (approximately May) from 1997 to 2000
 Scientist in charge: Prof. G.D. Ardizzone - University of Rome "La Sapienza"
 Personal Role: Participant

Project Title: GRUND (Assessment of Demersal Resources) General Investigation on Italian Demersal Resources U.O. University of Rome "La Sapienza" Dep. of Human and Animal Biology; Funded by Ministry of Agriculture and Forest. Duration: one month survey (approximately October) from 1997 to 2000
 Scientist in charge: Prof. G.D. Ardizzone - University of Rome "La Sapienza"
 Personal Role: Participant

Project Title: Studio pilota per l'impatto ambientale connesso allo sfruttamento di depositi sabbiosi sommersi ai fini di ripascimento (*Environmental impact following the extraction of marine sands for beach nourishment*); Funded by: Region of Latium. Duration: from 4.05.2001 to 4.08.2001
 Scientist in charge: Prof.G.D. Ardizzone - University of Rome "La Sapienza" and Dr. Massimo Gabellini - ICRAM (now ISPRA), Rome
 Personal Role: Participant

Project Title: Analisi dei dati biologici e della pesca per l'elaborazione di un piano di monitoraggio (*Analysis of biological and fishery data for developing a monitoring plan*); Funded by: Region of Latium. Duration: from 07.09.2001 to 31.10.2001
 Scientist in charge: Dr. Massimo Gabellini – ICRAM (now ISPRA), Rome
 Personal Role: Participant

Project Title: Esecuzione di attività finalizzate alla caratterizzazione di un'area di mare individuata per il prelievo di sabbie destinate al ripascimento dei tratti critici del litorale emiliano-romagnolo (*Site assessment of a sea area intended to sand extraction for beach nourishment*). Funded by: Region of Emilia Romagna. Duration: from 1.11.2001 to 31.12.2002.

Scientist in charge Dr. Massimo Gabellini - ICRAM (now ISPRA), Rome
Personal Role: Participant

Project Title: MEDITS ES 0503; Funded by EC. Duration: from 25.04.2003 to 10.05.2003.

Scientist in charge: Dr. Luis Gil de Sola- IEO Malaga
Personal Role: Participant

Project Title: IDEA (*Influence of oceanographic structure and dynamics on DEmersal populations in waters of the BAlearic Islands*); Funded by: Ministry of Science and Technology "Plan Nacional I+D+I" (Spain). Duration: from August 2003 to June 2004

Scientist in charge: Dr. Enric Massuti/Beatriz Morales Nin - IEO/UIB Mallorca
Personal Role: Participant and Responsible for suprabenthos and zooplankton sampling onboard.

Project Title: ECOPREST0304 (*Impact of Prestige oil spill on benthic communities of the Iberian continental shelf and on fishery resources*). Funded by: Ministry of Science and Technology "Plan Nacional I+D+I" (Spain). Duration: from 1.03.2004 to 1.09.2004

Scientist in charge: Dr. Francisco Sanchez Delgado - IEO Santander
Personal Role: Responsible for trophic ecology of decapods and stable isotopes analysis.

Project Title: DEMERSALES 2004 (Assessment of Demersal Resources of the Atlantic Spanish waters). Funded by: Ministry of Science and Technology "Plan Nacional I+D+I" (Spain). Duration: from 17.09.2004 to 23.10.2004

Scientist in charge: Dr. Francisco Sanchez Delgado - IEO Santander (Spain)
Personal Role: Responsible for trophic ecology of decapods.

Project Title: Ricostituzione delle risorse di pesca in un'area precedentemente soggetta ad intenso sfruttamento: dinamiche a larga scala del popolamento ittico e della struttura trofica della comunita' marina (*Re-establishment of fishery resource in a previously high-exploited area: large-scale dynamics of fish communities and trophic structure of the whole marine community*). Funded by: Ministry of University and Scientific Research (MIUR, Italy). Duration: from 1.12.2004 to 31.12.2006

Scientist in charge: Dr. Fabio Badalamenti, IAMC-CNR Lab. Marine Ecology of Castellammare del Golfo (TP, Italy)

Personal Role: Participant and responsible for suprabenthos sampling and analysis

Project Title: Assessment of the efficacy of trawl fishery exclusion zones by means of the study of prey and predators of red mullet *Mullus barbatus* L. Funded by Italian Ministry of Agriculture and Forest. Duration from 1.05.2005 to 30.06.2005

Scientist in charge: Dr. Fabio Badalamenti-IAMC-CNR Lab. Marine Ecology of Castellammare del Golfo (TP, Italy)

Personal Role: Participant and responsible for suprabenthos sampling and analysis

Project Title: Assessment of *Posidonia oceanica* meadows, of fish fauna associated and their trophic relationships. Funded by: Special Funds of European Community (FESR-POR) for

Regional Development, Operative Program of Sicilian Region. Duration from 2nd January 2007 to 31st December 2007

Scientist in charge: Dr. Fabio Badalamenti, Dr. Michele Gristina- IAMC-CNR Lab. Marine Ecology of Castellammare del Golfo (TP, Italy)

Personal Role: Participant and responsible for fish fauna sampling and analysis

Project Title: BIOMARE (Identification of Biomarkers of the anthropogenic impact on Marine communities: an Ecosystemic approach). Funded by Spanish Ministry of Science and Technology. Duration from 1st January 2007 to 31st December 2009

Scientist in charge: Dr. J.E. Cartes ICM-CSIC Barcelona (Spain)

Personal Role: Responsible for WP3 “stable isotope analysis and trophic ecology”

Project Title: ANTROMARE (Effects of natural variability and anthropogenic impact on diversity and bathyal trophic webs of the deep sea Mediterranean)

Funded by Spanish Ministry of Science and Technology

Duration from 1st January 2010 to 31st December 2012 (extended to 31st Dec, 2013)

Scientist in charge: Dr. J.E. Cartes ICM-CSIC Barcelona (Spain)

Personal Role: Responsible for WP2 “stable isotope analysis and trophic ecology”

Project Title: RITMARE (WP1-AZ2, Trophic webs). Funded by Italian Ministry of University and Research. Duration from 1st January 2013 to 31st December 2015

Scientist in charge of WP1-AZ2: Dr. F. Badalamenti (IAMC-CNR), Italy

Personal Role: Participant and responsible for stable isotope analysis and trophic ecology

Project Title: FISHAUT (TNA FixO3). Funded by EU FP7. Duration from 21st May 2015 to 20th May 2016

Scientist in charge: Dr. E. Fanelli (ENEA), Italy

<http://www.upc.edu/cdsarti/OBSEA/fixo3/fishaut.php>

Project Title: RITMARE-Marine Litter. Funded by MIUR. Duration from April 2016 to December 2016

Scientist in charge: Dr. M. Sprovieri, Responsible of ENEA activities (40k€): E. Fanelli

Project Title: IDEM. Funded by DG-Environment. Duration from April 2017 to March 2019

Scientist in charge: Prof. R. Danovaro, Responsible of ENEA activities (110k€): E. Fanelli; Responsible of Action 2

Project Title: ADVANCE (TNA Jerico-Next). Funded by EU FP7. February 2018-March 2019

Co-PIs: Prof. E. Fanelli (UNIVPM) and Dr. S. Marini (ISMAR-CNR)

<http://www.jerico-ri.eu/tna/selected-projects/second-call/advance/>

Project Title: PLACE ARS01_00891. Funded by PON (FESR). Duration from June 2018 to January 2021

Scientist in charge: Prof. A. Dell'Anno (UNIVPM)

Personal Role: Responsible of OR5 activities

Other projects:

- Responsible for UNIVPM of the ENI contract no. 2500032813, coordinator IRBIM-CNR (UNIVPM 65k€);

- Responsible of the Agreement ISPRA-CONISMA (Marine Strategy Nazionale III) for descriptor 4-Adriatic sub-region (Fanelli E. 15k€)

TEACHING EXPERIENCE

- Since 2020:** Teacher of “Marine Biology and Ecology” (BIO/07) for International Master IMBRSea in Marine Biology, Polytechnic University of Marche;
- Since 2018:** Teacher of “Marine Biology and Ecology” (BIO/07) for MSc Degree in Marine Biology, Polytechnic University of Marche;
- 2017-2018:** Teacher of “Fishery Biology” (BIO/07) for MSc Degree in Marine Biology, Polytechnic University of Marche;
- Since 2017:** Teacher of “Ecology” (BIO/07) for 1° level Degree in Biological Sciences, Polytechnic University of Marche;
- Since 2017:** Supervisor of students for BSc and MSc (12) theses in Ecology and Marine Biology, Polytechnic University of Marche;
- 2016:** II semester: Integrative course on “Food webs and deep-sea environments” for the course of Marine Biology (2° level degree in marine Biology) at the Polytechnic University of Marche, responsible Prof. R. Danovaro;
- 2016:** Supervisor of students for BSc (3) and MSc (2) theses in Marine Biology from the University of Pisa;
- 2015:** II semester: course of “Biology of deep-sea ecosystems and of water-column” at the University of Pisa, Dep. of Earth Sciences for the Degree in Environmental Sciences: code 357EE, BIO/05; <http://www.dst.unipi.it/elenco2deicorsi.html>;
- 2015:** Co-supervisor of a PhD student (Ilaria Conese) from the University of Bologna (Italy).
- 2013-2015:** Supervisor of Undergraduate students from the University of Pisa for traineeships.
- 2013:** Lecturer Polytechnic University of Marche (Ancona, IT) “Stable isotopes in ecology and environmental studies”;
- 2012:** Supervisor of Undergraduate students from Autonomous University of Barcelona (UAB).
- 2009-2007:** Supervisor of the BSc Students and tutor of MSc Theses for the University of Palermo and Padua.
- 2007:** Lecturer University of Trapani (IT) “The impact of trawling on benthic communities”;
- 2007:** Lecturer University of Palermo (IT) “Adaptations of marine organisms to deep-sea conditions”;
- 2006:** Lecturer University of Palermo (IT) “Life in the deep-sea”;
- 2005:** Lecturer University of Trapani (IT) “Benthic communities of the Mediterranean sea”.

PUBLICATIONS IN PEER-REVIEWED JOURNALS (WITH REPORTED IMPACT FACTOR, IF)

Submitted/under revision

- **Fanelli E.**, Bianchelli S., Foglini F. et al. Guidelines for the protection of the deep Mediterranean Sea. *Conservation letters* (submitted).
- Aguzzi J., López-Romero D., Marini S., Costa C., Berry A., Chumbinho R., Ciuffardi T., **Fanelli E.**, Pieretti N., Del Río J., Stefanni S., Mirimin L., Doyle J., Lordan C. Gaughan P. Multiparametric monitoring of fish activity rhythms in a coastal Atlantic cabled observatory. *Journal of Sea Research* (submitted)
- Alonso-Hernández C.M.; **Fanelli E.**; Diaz-Asencio M.; Santamaría J.M.; Morera-Gómez Y. Carbon and nitrogen isotopes to distinguish sources of sedimentary organic matter in a Caribbean estuary. *Isotopes in Environmental & Health Studies* (minor revisions)

- Da Ros Z., Dell'Anno A., **Fanelli E.***, Angeletti L., Taviani M., Danovaro R. Food preference of Mediterranean cold-water corals in captivity. *Deep-sea research (submitted)* *corresponding author
- Danovaro R., **Fanelli E.** et al. Small matters, but large organisms remain the highest priority in current deep-sea monitoring and conservation efforts. *Nat. Ecol. Evol.* (submitted) *all authors with equal contribution*

2020

79. Costa C., **Fanelli E.**, Marini S., Danovaro R., Aguzzi J. (2020). Global deep-sea biodiversity research trends highlighted by science mapping approach. *Frontiers in marine science* (in press) <https://doi.org/10.3389/fmars.2020.00384>. *All authors with equal contribution*
78. Aguzzi J., Iveša N., Geli M., Costa C., Gavrilovic A., Cukrov N., Cukrov M., Cukrov Nu., Omanovic D., Štifanić M., Marini S., Piria M., **Fanelli E.**, Azzurro E., Danovaro R. Video based ecological monitoring for the purposes of Natura 2000: The Adriatic observatory. *Marine Policy* (in press).
77. **Fanelli E.**, Aguzzi J., Marini S., Del Rio J., Nogueras M., Stefanni S., Canese S., Danovaro R., Conversano F. Towards Naples Ecological REsearch for Augmented Observatories (NEREA): The NEREA-Fix Module, a Stand-Alone Platform for Long-Term Deep-Sea Ecosystem Monitoring. *Sensors* 20(10), 2911. <https://doi.org/10.3390/s20102911>
76. Lopez-Vazquez V., Lopez-Guede J.M., Marini S., **Fanelli E.**, Johnsen E., Aguzzi J., 2020. Video Image Enhancement and Machine Learning Pipeline for Underwater Animal Detection and Classification at Cabled Observatories. *Sensors* 20: 726.
75. Manea E., Bianchelli S., **Fanelli E.**, Danovaro R., Gissi E., 2020. Towards an Ecosystem-Based Marine Spatial Planning in the deep Mediterranean Sea. *Science of Total Environment* 715: 136884.
74. Mecho A., Francescangeli M., Ercilla G., **Fanelli E.**, Estrada F., Valencia J., Costa C., Sobrino I., Danovaro R., Company J.B., Aguzzi J. (2020). Deep-sea litter in the Gulf of Cadiz (North-Eastern Atlantic, Spain). *Marine Pollution Bulletin*, 153, 110969. <https://doi.org/10.1016/j.marpolbul.2020.110969>
73. Aguzzi J., Flexas M., Flögel S., Thomsen L., Lo Iacono C., **Fanelli E.**, Bahamon N., Danovaro R., Tangherlini M. (2020). Exo-oceans exploration with deep-sea sensor and platform technologies. *Astrobiology* 20(7), DOI: 10.1089/ast.2019.212
72. Danovaro R., **Fanelli E.** et al., 2020. Towards a marine strategy for the deep Mediterranean Sea. *Marine Policy* 112: 103781. *First six authors with equal contribution*
71. Danovaro R., **Fanelli E.**, Aguzzi J. et al., 2020. Ecological indicators for a global deep-ocean monitoring and conservation strategy. *Nature Ecology and Evolution* 4: 181–192. *All authors equally contributed.*
70. Rountree R.A., Aguzzi J., Marini S., **Fanelli E.**, De Leo F.C., Juanes F., Del Rio J. Towards an optimal design for ecosystem-level ocean observatories. *Oceanography and Marine Biology: an Annual Review* (in press)

2019

69. Aguzzi J., Chatzievangelou D., Marini S., **Fanelli E.**, et al. New high-tech interactive and flexible networks for the future monitoring of deep-sea ecosystems. *Environmental Science and Technology* DOI: 10.1021/acs.est.9b00409
68. Conese I.*, **Fanelli E.***, Miserocchi S., Langone L. (2019). Food web structure and trophodynamics of deep-sea plankton from the Bari Canyon and adjacent slope (Southern Adriatic, central Mediterranean Sea). *Progress in Oceanography* 175, 92–104 **first two authors with equal contribution*
67. Azzurro E., Sbragaglia V., Cerri J., Bariche M., Bolognini L., Ben Souissi J., Busoni G., Chryssanthi A., Coco S., **Fanelli E.** et al. (2019). Climate change, biological invasions, and

the shifting distribution of Mediterranean fishes: A large-scale survey based on local ecological knowledge. *Global climate change*, 25(8): 2779-2792.

66. Sbragaglia V., Nuñez J.D., Dominoni D., Coco S., **Fanelli E.**, Azzurro E., Marini S., Nogueras M., Ponti M., del Rio J., Aguzzi J. (2018). Annual rhythms of temporal niche partitioning in the Sparidae family are correlated to different environmental variables. *Scientific Report* 9, 1708

2018

65. **Fanelli E.**, Bianchelli S., Danovaro R. (2018). Deep-sea mobile megafauna of Mediterranean submarine canyons and open slopes: analysis of spatial and bathymetric gradients. *Progress in Oceanography* 168, 23-24 <https://doi.org/10.1016/j.pocean.2018.09.010>
64. Marini S., **Fanelli E.**, Azzurro E., Sbragaglia V., Del Rio J., Aguzzi J. (2018) Automatic fish counting from underwater video images: performance estimation and evaluation. *Scientific report* (2018) 8:13748, DOI:10.1038/s41598-018-32089-8
63. Marini S., Corgnati L., Mantovani C., Bastianini M., Ottaviani E., **Fanelli E.**, Aguzzi J., Griffa A., Poulain P.-M. (2018). Automated estimate of fish abundance through the autonomous imaging device GUARD1. *Measurement* 126: 72-75
62. Bussotti S., Di Franco A., Bianchi C.N., Chevalloné P., Egea L., **Fanelli E.**, et al. (2018). Fish mitigate marine caves oligotrophy. *Scientific report*, 8: 9193.
61. Aguzzi J., **Fanelli E.**, Ciuffardi T., Doya C., Kawato M., Miyazaki M., Furushima Y., Costa C., Fujiwhara Y. (2018). Faunal activity rhythms influencing early community succession of an implanted whale carcass offshore Sagami Bay, Japan. *Scientific Report*, 8: 11163.
60. Azzurro E., Bolognini L., ..., **Fanelli E.** et al. (2018). Detecting the occurrence of indigenous and non-indigenous megafauna through fishermen knowledge: A complementary tool to coastal and portsurveys. *Marine Pollution Bulletin* DOI: 10.1016/j.marpolbul.2018.01.016

2017

59. Papiol V., **Fanelli E.***, Cartes J.E., López-Pérez C., Rumolo P. Effect of lipid extraction on the isotopic composition of deep-sea megafauna. *J. Exp. Mar. Biol. Ecol.* 497:230-242
*corresponding author
58. Alonso-Hernandez C.M., Garcia-Moya A., Tolosa I., Diaz-Asencio M., Corcho-Alvarado J.A., Morera-Gomez Y., **Fanelli E.** Tracing organic matter sources in a tropical lagoon of the Caribbean Sea. *Continental Shelf Research*, <https://doi.org/10.1016/j.csr.2017.08.001> **IF 2016: 2.064**
57. Rumolo P., **Fanelli E.**, Barra M. Bonanno A. et al. Trophic relationships of zooplankton in the Central Mediterranean sea: a stable isotopes approach. *Hydrobiologia Special issue*, DOI 10.1007/s10750-017-3334-9 **IF 2016: 2.056**
56. **Fanelli E.**, Rumolo P., Barra M., Basilone G., Genovese S., Bonanno A. Mesoscale variability in the trophic ecology of the European hake *Merluccius merluccius* in the Strait of Sicily. *Hydrobiologia*, 821(1), 57-72. DOI: 10.1007/s10750-017-3268-2 **IF 2016: 2.056**
55. Danovaro R., Aguzzi J., **Fanelli E.**, et al. An international new ecosystem-based monitoring and assessment strategy for the global deep ocean. *Science* 355 (6324): 452-454. **IF 2015: 34.661 (first three authors with equally contribution)**
54. Rumolo P., Basilone G., **Fanelli E.**, Barra M., Calabrò M., Genovese S., Gherardi S., Ferreri R., Mazzola S., Bonanno A. (2017) Linking spatial distribution and feeding behavior of Atlantic horse mackerel (*Trachurus trachurus*) in the Strait of Sicily (Central Mediterranean sea). *Journal of Sea Research* 121: 47-58
<http://dx.doi.org/10.1016/j.seares.2017.01.002> **IF 2015: 2.148**

53. Suaria G., Pierucci A., Zanello P., **Fanelli E.**, Chiesa S., Azzurro E. On the occurrence of *Percon gibbesi* (H. Milne Edwards, 1853) and *Callinectes sapidus* (Rathbun, 1896) in the Ligurian Sea: two more IAS detections made by sensitive citizens. *Marine Biodiversity records* 6(2): 147–151.
52. **Fanelli E.**, Delbono I, Cocito S., Ivaldi R., Peirano A. Cold water coral *Madrepora oculata* in the eastern Ligurian Sea (NW Mediterranean): historical banks and recent findings. *Aquatic Conservation: Mar Freshw Ecosyst.* 27(5): 965-975. DOI [10.1002/aqc.2751](https://doi.org/10.1002/aqc.2751) **IF 2015: 2.415**
51. Aguzzi J., **Fanelli E.**, Ciuffardi T., Schirone A., Craig J., Riccobene G, Viola S., Capone A. and KM3NeT consortium (2017). Inertial bioluminescence rhythms at the Central Mediterranean KM3NeT deep-sea neutrino telescope. *Scientific Reports* 7, 44938 doi:10.1038/srep44938 **IF 2015: 5.228**

2016

50. Romano C., **Fanelli E.***, Badalamenti F., D'Anna G., Pipitone C., Vizzini S., Mazzola A. Spatial variability of soft-bottom macrobenthic communities of Northern Sicily (Western Mediterranean): contrasting trawled vs. untrawled areas. *Marine Environmental Research* 122: 113–125 **IF 2015: 2.769** *corresponding author
49. Rumolo P., Bonanno A., Barra M., **Fanelli E.**, Calabrò M., et al. (2016) Spatial variations in feeding habits and trophic levels of two small pelagic fish species in the central Mediterranean Sea. *Marine Environmental Research* 115: 65-67. **IF 2015: 2.769**
48. **Fanelli E.**, Cartes J.E., Papiol V., López-Pérez C., Carrassón M. (2016) Long-term decline in the trophic level of megafauna in the deep Mediterranean Sea: a stable isotopes approach. *Climate Research* 67: 191–207. **IF 2015: 2.496**
47. Azzurro E., Franzitta G., Milazzo M., Bariche M., **Fanelli E.** (2016) Abundance patterns at the invasion front: the case of *Siganus luridus* in Linosa (Strait of Sicily, Central Mediterranean Sea). *Marine and Freshwater Research* 68: 697-702 <http://dx.doi.org/10.1071/MF16024>. **IF 2015: 1.583**

2015

46. **Fanelli E.**, Azzurro E., Bariche M., Cartes J.E., Maynou F. (2015) Widening out native food webs: A stable isotopes study after Lessepsian fish invasion. *Biological Invasions* 17(7): 2163-2178 doi:10.1007/s10530-015-0868-5 **IF=2.72**
45. Rumolo P., Cartes J.E., **Fanelli E.**, Mirto S., Papiol V., Gherardi S., Sprovieri M. (2015) Dynamics of particulate matter reaching the seafloor over shelf and slope off the coasts of Catalonia (northwestern Mediterranean) based on stable isotope results. *Journal of Oceanography* 71: 325-343 DOI: 10.1007/s10872-015-0291-7 **IF=1.7**
44. Bayhan K.Y., Cartes J.E., **Fanelli E.** (2014). Biological condition and trophic ecology of the deep-water shrimp *Aristaeomorpha foliacea* in the Levantine Sea (SW Turkey). *Mediterranean Marine Science* 16/1: 103-116 doi: [10.12681/mms.867](https://doi.org/10.12681/mms.867) **IF 2013: 1.734**
43. Cartes J.E., Maynou F., **Fanelli E.**, Papiol V., Lopez-Perez C., Mamouridis V. (2015) Changes in deep-sea fish and crustacean communities at 1000-2200 m in the Western Mediterranean after 25 years: relation to hydro-climatic conditions (2014). *Journal of Marine Systems* 143: 138-153 doi:[10.1016/j.jmarsys.2014.10.015](https://doi.org/10.1016/j.jmarsys.2014.10.015) **IF 2013=2.476**

2014

42. Bozzano R., **Fanelli E.**, Pensieri S., Picco P., Schiano M.E. (2014). Temporal variations in zooplankton biomass in the Ligurian Sea inferred from long time series of ADCP data. *Ocean Science* 10: 93-105. **IF 2013=2.164**
41. Cartes J.E., **Fanelli E.**, Kapiris K., Bayhan Y.K., Ligas A., López-Pérez C., Murenu M., Papiol V., Rumolo P., Scarcella G. (2014). Spatial variability in the trophic ecology and

biology of the deep-sea shrimp *Aristaeomorpha foliacea* in the Mediterranean Sea. *Deep-sea Research I* 87: 1-13. **IF 2013=2.82**

40. **Fanelli E.**, Cartes J.E., Papiol V., Rodriguez-Romeu O. (2014). Trophic ecology of the lanternfish *Lampanyctus crocodilus* in NW Mediterranean in relation to reproductive cycle and environmental variables. *J. Fish Biology* 84: 1654–1688. **IF 2013=1.734**
39. Papiol V., Cartes J.E., **Fanelli, E.** (2014). Regulation of the reproductive cycles of benthopelagic fish on northwest Mediterranean continental slopes by food availability and prey partitioning among species. *Limnology & Oceanography* 59(5): 1779–1794. **IF 2013=3.545**

2013

38. Cartes J.E., **Fanelli E.**, Lopez-Perez C., Lebrato M. (2013). The distribution of deep-sea macroplankton (over 400 to 2300 m) at intermediate and near bottom waters: relationships with hydrographic factors. *Journal of Marine System* 113-114: 75-87. **IF 2012: 2.66**
37. Cartes J.E., **Fanelli E.**, Matallanas J., Lloris D. (2013) Effects of environmental variables on sharks and other top predators in the deep Mediterranean Sea over the last 60 years. *Climate Research* 55: 239-251. **IF 2013: 2.68**
36. Papiol V., Cartes J.E., **Fanelli E.**, Rumolo P. (2013) Food web structure and trophodynamics of megafauna off the Catalan sea slope (Western Mediterranean). *Journal of Sea Research* 77: 53-69. **IF 2013: 2.598**
35. **Fanelli E.**, Cartes J.E., Papiol V., López-Pérez C. (2013) Environmental drivers of megafaunal assemblage composition and biomass distribution over mainland and insular slopes of the Balearic Basin (Western Mediterranean). *Deep-sea Research I* 78: 79-94. **IF 2013=2.82**
34. **Fanelli E.**, Papiol V., Cartes J.E., López-Pérez C., Rumolo P. Trophic webs of deep-sea megafauna on mainland and insular slopes of the NW Mediterranean: a comparison by stable isotope analysis. *Marine Ecology Progress Series* 490:199-221. **IF 2013=2.55**
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15. Cartes, J.E., Maynou F., **Fanelli E.**, Papiol V., Lloris D. (2009) Long-term changes in the composition and diversity of deep-slope megabenthos and trophic webs off Catalonia (Western Mediterranean): Are trends related to climatic oscillations? *Progress in Oceanography* 82(1): 32-46. **IF 2008: 3.166**
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 11. Cartes, JE, Maynou F., **Fanelli E.**, Romano C., Mamouridis V., Papiol V. (2009). The distribution of megabenthic, invertebrate epifauna in the Balearic Basin (Western Mediterranean) between 400 and 2300 m: Environmental gradients influencing assemblages composition and biomass trends. *Journal of Sea Research* 61(4), 244-257 **IF 2008 = 2.065**
 10. **Fanelli E.**, Cartes JE, Badalamenti F., Rumolo P., Sprovieri M. (2009). Trophodynamics of suprabenthic fauna on coastal muddy bottoms of southern Tyrrhenian Sea (western Mediterranean). *Journal of Sea Research* 61(3), 174-187 **IF 2008 = 2.065**

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9. **Fanelli E.**, Cartes J.E. (2008). Spatio-temporal variability in the diet of two pandalid shrimps in the western Mediterranean: evidence from gut-contents and stable isotope analysis. *Mar. Ecol. Prog. Ser.* 355, 219-233. **IF 2008: 2.63**
8. Cartes J.E., Madurell T., **Fanelli E.**, Lopez-Jurado J.L. (2008). Dynamics of suprabenthos-zooplankton communities around the Balearic Islands (NW Mediterranean): influence of environmental variables and on the biology of higher trophic levels. *J.Mar. Syst.* 71, 316-335. **IF 2008 = 2.25**
7. Madurell T., **Fanelli E.**, Cartes J. E. (2008). Isotopic composition of carbon and nitrogen of suprabenthos fauna in the NW Balearic Islands (western Mediterranean). *J. Mar. Syst.* 71, 336-345. **IF 2008 = 2.25**
6. **Fanelli E.** (2008). Trophic relationships in demersal communities of western Mediterranean: Case studies from coastal and deep-sea ecosystems. *Cybium* 32(3): 210 **IF 2008 = 0.403**

2004-2007

5. Azzurro E., **Fanelli E.**, Mostarda E., Catra M., Andaloro F. (2007). Resource partitioning among early colonizing *Siganus luridus* and two native herbivorous fishes at Linosa Island. Evidence from gut-content analysis and stable isotope signatures. *J. Mar. Biol. Ass. UK*, 87: 991-998. **IF 2007 = 1.056**
4. **Fanelli E.**, Colloca F., Ardizzone G.D. (2007). Decapod crustacean assemblages off the West coast of Central Italy (Western Mediterranean). *Sci. Mar.* 71(1): 19-28. **IF 2007 = 1.075**
3. Sánchez, F, J. E. Cartes, I. Olaso, F. Velasco, F. Saborido, **Fanelli E.** & J. Zabala (2006). Monitoring the Prestige Impacts on some Commercial Species (hake, four-spot megrim, Norway lobster and Pandalid shrimps) of the North of Spain Shelf. *Mar. Poll. Bull.* 53: 332-347. **IF 2006 = 2.562**
2. **Fanelli E.**, Lattanzi L., Nicoletti L., Tomasetti P. (2006). Decapod crustaceans of Tyrrhenian Sea soft bottoms (central Mediterranean). *Crustaceana* 78(6): 641-651. **IF 2006 = 0.45**
1. **Fanelli E.**, Cartes J.E. (2004). Feeding habits of pandalid shrimps in the Alboran sea (SW Mediterranean): influence of biological and ecological factors. *Mar. Ecol. Prog. Ser.* 280: 227-238. **IF 2004 = 2.32**

OTHER PUBLICATIONS

Prof. Fanelli published more than 30 papers in both indexed and not journals, without impact factor. She also published technical books and guidelines, book chapters and a book for children.

- “Quality of Italian marine-coastal environments – 1996/1999. Preliminary assessment of the monitoring program carried out in agreement with Italian coastal Countries. *Italian Ministry of Environment – Service for Sea Defense/ICRAM*. (<http://www.icram.org/pubblicazioni.htm>).
- “Relazione sullo stato dell’ambiente 2000”. *Italian Ministry of Environment*.
- “Monitoring program to control the coastal – marine environment (2001-2003). Analytic methodologies”. *Italian Ministry of Environment - Service for Sea Defense/ ICRAM, collaboration with ANPA*. (http://www.icram.org/Acrobat/Libro/Metodologie_analitiche/00-ingressi%20e%20presentazioni.pdf).
- Valutazione di impatto ambientale dopo l’estrazione di sabbia al largo della costa dell’Emilia-Romagna a scopo di rinascimento del litorale (2004). In *Pesca e ambiente in Laguna di Venezia e nell’alto Adriatico. Quaderni ICRAM no. 2 Giovanardi O. & Cornello M. Eds.:* 99-105. (<http://www.icram.org/pubblicazioni.htm>).
- “Il mare” in “La sostenibilità ambientale: un manuale per prendere buone decisioni”. Ed. Gaetano Borrelli. ISBN 978-88-8286-313-5
- “Occhi di mare” Un viaggio nella biologia marina per i più piccoli. An illustrated book on marine biology for children. Authors E. Fanelli and E. Azzurro, illustrations by M. troise and E. Azzurro. ENEA Edition

MEMBERS OF EDITORIAL BOARDS

Prof. Fanelli is member of the editorial boards of

- *Food Webs* Elsevier: <https://www.journals.elsevier.com/food-webs/editorial-board>
- *Oceans* MDPI: <https://www.mdpi.com/journal/oceans/editors>

SYMPOSIUMS & CONFERENCES

Prof. Fanelli participated to more than 40 symposia and conferences, where in some cases she was invited speaker, chair of session and organizer of special session.

She organized the WGFBIT meeting in Ancona on October 2019.

FIELDWORK EXPERIENCE

Prof. Fanelli participated to several scientific surveys in the Mediterranean (ca. 30 surveys) and the Atlantic Sea (2 surveys). Strong skills in the identification of demersal megafauna onboard. She is expert in the collection and identification of suprabenthos and zooplankton by suprabenthic sledges (Macer-GIROQ) and WP2 plankton nets.

LABORATORY EXPERIENCE

- Dissection of fish, decapods and cephalopods for stomach contents analysis;
- Stomach contents analysis of all megafaunal groups from coastal and deep sea soft-bottom environments (see publications);
- Sorting and identification of suprabenthos-zooplankton samples and of benthic crustaceans (Prof. Fanelli is a taxonomist of peracarid, decapod and euphausiid crustaceans);
- Stable isotope analysis and HPLC.

LANGUAGES

Mother tongue	Italian				
Other languages	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
Spanish	C2	C2	C2	C2	C2
English	C1	C1	C1	C1	C1
Catalan	B2	B2	B1	B1	B1

RELEVANT RECEIVED COURSES:

- October **2015**, 5-9: 2nd Stable isotope course in ecology and environmental sciences held at Estación Biologica Doñana, Seville (Spain); the course was taught by Prof. K. Hobson, Dr. G. Bowen, Dr. B. Semmens and Dr. L. Wassenaar: 5 days.
- December **2010**: Course of meta-analysis “Introduction to meta-analysis in ecology” held in Lecce at the University of Salento (Italy); the course was taught by Prof. F. Micheli, Prof. C.W. Osemberg and Dr. J. Claudet, 3 days.
- September **2006**: Course of Statistical analysis, “Detecting change in biodiversity: experimental design and data analysis”, given by Prof. M.J Anderson, Prof. L. Benedetti-Cecchi, Dr. K.R. Clarke and Dr. R.N. Gorley at the University of Pisa, 2 weeks.
- May **2006**: SYNTAX 2000. A program package for the analysis of multivariate biological data. Prof. Podani Janos de la Eotvos University of Budapest Department of Plant Taxonomy and Ecology. University of Viterbo “la Tuscia” Department DECOS, Viterbo (IT), 16 hours.
- November **2004**: Course of Statistical analysis, using the Broadgar software, by A. Zuur, held at CNR of Ancona, Italy, 1 week.
- February **2003**: Course of Image analysis using the Image Pro 6.0 software, held at Imago of Barcelona, Spain, 8 hours.
- September **2001**: Course on “Ecological Modelling and Ecodynamics”. Sabaudia (LT), organized by Dr. V. Hull, 2 weeks.

OTHER RELEVANT INFORMATION

- **In 2012** she obtained a permanent position as **Researcher at IAMC-CNR TP2/4** (http://www.urp.cnr.it/copertine/formazione/form_concorsi/concorsi2009/364-100grad_E2_Ambiente.pdf), denying for personal reasons (http://www.urp.cnr.it/copertine/formazione/form_concorsi/concorsi2009/364-100grad_E2_Ambiente_Idoneo.pdf).
- **In 2014** she was enabled for the qualification of **Associate professor** (“Professore associato II fascia”) in Ecology (05/C1) according to the ASN (Abilitazione Scientifica Nazionale=National Scientific Qualification);
- **2016-19**: Member of the Board of Examiners for Temporal and fixed-term Researcher, Senior Researcher, Technologist and Senior Technologist Positions at the Zoological Station of Naples. Member of the Board of Examiners for Temporal Research contracts (“Assegno di Ricerca”) at ISPRA Sts Livorno, UNIVPM and CNR-IRBIM. Member of the Board of Examiners for Temporal Researcher Positions at the University of Venezia (RTD-B).

- **2017:** Member of the Board of Examiners for PhD candidates for the University of Oviedo (candidate Lucia Lopez-Lopez and Sonia Romero-Romero).
- Reviewer for international projects (France, Netherlands, Germany, Austria, Isrel) and COST actions.
- Reviewer for the following journals: *Scientia Marina* (7), *Environmental Biology of Fish* (1), *Marine and Freshwater Research* (2), *Journal of Marine Biological Association UK* (3), *Journal of Marine Systems* (4), *Journal of Sea Research* (4), *Journal of Applied Ichthyology* (1), *Journal of Fish Biology* (4), *Journal of Turkish Zoology* (1), *African Journal of Marine Science* (1), *Biogeochemistry* (1), *Hydrobiologia* (2), *Journal of Experimental Marine Biology and Ecology* (1), *Rapid Communications in Mass Spectrometry* (2), *Water Research* (1), *Marine Ecology Progress Series* (5), *Mediterranean Marine Science* (2), *ICES Journal of Marine Science* (1), *Deep-sea Research I* (7) and *II* (3), *Marine Biology* (1), *Analytical Letters* (1), *Science of Total Environment* (2); *Progress in Oceanography* (5); *Marine Biology Research* (1); *Frontiers in Marine Science* (3).
- In **2007 she won a prize of 5000 € funded by “Luigi and Francesca Brusarosco” Foundation** for the best project presented in the field of ecology by a young researcher within the framework of the joined congress SITE-AIOL (Italian Society of Ecology-Italian Association of Limnology and Oceanography).
- In **2005-2006 the project “Trophic structure of Benthic Boundary layer fauna in two areas of Western Mediterranean” was funded by the bilateral collaborations between CNR (Italy) and CSIC (Spain).** With this funding Dr. Fanelli did two stages of two weeks each at ICM-CSIC of Barcelona under the supervision of Dr. Cartes for suprabenthos identification and the estimation of secondary production.
- Member of the Italian Society of Marine Biology.
- Member of the Deep-sea Biology Society.
- Member of the Italian WG for the Implementation of the marine strategy in the deep sea.
- Member of the Working Group on “Vulnerable Marine Ecosystems” of GFCM.
- Member of the ICES Working Group on Fisheries Benthic Impact and Trade-offs (*WGFBIT*). Organizer of the second meeting of WGFBIT in Ancona, October 7-11 2019.
- Reviewer of the activity of the ICES WGDEC since 2017, in 2019 chair of the review group.
- Member of the JRU-EMSO IT Secretariat for coordinating research and development activities in marine sciences as an Italian contribution to the European infrastructure EMSO ERIC.
- Organizer of the Special Session “High-Tech Flexible Networks of Augmented Observatories for the Monitoring of Marine Ecosystems” at 2019 IMEKO TC-19 International Workshop on METROLOGY FOR THE SEA October 3 - 5, 2019, Genova, Italy

Ancona, 26.05.2020