



Biosketch Isabella Buttino

Since I moved to ISPRA-Experimental Section for Ecological Risk Assessment in Marine Coastal Areas located in Livorno, I have never stopped the researches on the physiology and ecology of zooplanktonic organisms and to collaborate with my colleagues from the SZN. In Livorno I promoted the new Plankton Biology Laboratory in order to conduct research in the field of marine ecotoxicology using marine planktonic organisms as a model. The cultivation of marine organisms has been one of the priority for obtaining planktonic organisms to be used for practical and reproducible biological tests and for standardizing protocols. My main interest is to evaluate the effects of emerging contaminants (such as nanomaterials) on the development and reproduction of marine copepods and sea urchin larvae, which in turn may have an impact on the productivity at sea. Now, it is time to investigate in depth on the toxico-genomic effects induced by contaminants, which will help to understand the impact on marine planktonic organisms.

Five relevant publications:

1. Buttino I., Vitiello V., Macchia S., Scuderi A., Pellegrini D. (2018). Larval development ratio test with the calanoid copepod *Acartia tonsa* as a new bioassay to assess marine sediment quality. *Ecotox. and Environ. Safety* 149: 1-9. <https://doi.org/10.1016/j.ecoenv.2017.10.062>.
2. Gallo A., Boni R., Buttino I., Tosti E. (2016). Spermioxicity of nickel nanoparticles in the marine invertebrate *Ciona intestinalis* (ascidians). *Nanotoxicology* DOI: 10.1080/17435390.2016.1177743.
3. Vitiello V., Zhou C., Scuderi A., Pellegrini D., Buttino I. (2016). Cold storage of *Acartia tonsa* eggs: a practical use in ecotoxicological studies. *Ecotoxicology* 25: 1033-1039 DOI 10.1007/s10646-016-1660-8.
4. Zhou C., Vitiello V., Pellegrini D., Changwen W., Morelli E., Buttino I. (2016). Toxicological effects of CdSe/ZnS quantum dots on marine planktonic organisms. *Ecotoxicology and Environmental Safety* 123: 26-31. <http://dx.doi.org/10.1016/j.ecoenv.2015.09.020>.
5. Zhou C., Vitiello V., Casals E., Puntès V.F., Iamunno F., Pellegrini D., Changwen W., Benvenuto G., Buttino I. (2016). Toxicity of nickel in the marine calanoid copepod *Acartia tonsa*: Nickel chloride versus nanoparticles. *Aquatic Toxicology* 170: 1-12. DOI: 10.1016/j.aquatox.2015.11.