



Effects of Gamma Irradiation in Different Species of Fish

Guest Editor:

Dr. Simon Olivier

IRSN, PSE-ENV/SRTE, Laboratory
for Radionuclide Ecotoxicology
(LECO), Cadarache, 13115 Saint
Paul-lez-Durance, France

Deadline for manuscript
submissions:

closed (20 January 2022)

Message from the Guest Editor

Gamma radiation represents a potential health risk to biota, due to its ability to ionize molecules in tissue. Ionizing radiation is known to induce oxidative stress, DNA damage, and apoptosis, which, therefore, constitute usual molecular markers for evaluating toxicity mechanisms. Radiological protection criteria are largely based on data from acute exposure experiments of adult organisms; thus, information on the effects of ionizing radiation during sensitive life stages and after chronic exposure is lacking. Differences in sensitivity between fish, in situ exposure, and nonlinear dose/effect relationship also deserve our attention.

The specific emphasis is on novel approaches to the following: (i) gamma effects induced by gamma irradiation with a focus on fish; (ii) hereditary effects in offspring; (iii) effects of low doses and chronic exposure conditions; and (iv) multi-and transgenerational exposures.

We particularly invite contributions concerning toxic action mechanisms at different levels of biological organization and consequences on these effects on ecological risk assessments.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Sergio Ulgiati

1. Department of Science and
Technology, Parthenope
University of Naples, Centro
Direzionale, Isola C4, 80143
Napoli, Italy
2. State Key Joint Laboratory of
Environment Simulation and
Pollution Control, School of
Environment, Beijing Normal
University, No. 19 Xijiekouwai
Street, Beijing 100875, China

Message from the Editor-in-Chief

Environmental issues are quickly becoming central political, economic and academic topics of the twenty-first century. A large number of modern challenges are directly or indirectly caused by complex interactions between environmental issues. Such issues require interdisciplinary research, knowledge and insights to understand and, ultimately, for solutions to be found. Through the journal *Environments*, we strive to create a platform for meaningful discourse by accepting contributions from a wide range of fields. We sincerely hope you will consider publishing your distinguished work in this highly-accessible, peer-reviewed journal.

Author Benefits

Open Access: free for readers, with **article processing charges (APC)** paid by authors or their institutions.

High Visibility: indexed within **Scopus, ESCI (Web of Science), PubAg, AGRIS, GeoRef,** and **other databases.**

Journal Rank: JCR - Q2 (*Environmental Sciences*) / CiteScore - Q1 (Ecology, Evolution, Behavior and Systematics)

Contact Us

Environments Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/environments
environments@mdpi.com
✉@Environ_MDPI