



Detectors for Assessment of Natural Radioactivity in Drinking Water: Materials and Method

Guest Editors:

Prof. Dr. Francesco Caridi

Department of Mathematics and Informatics, University of Messina, Physics and Earth Sciences (MIFT), Viale F. Stagno d'Alcontres, 31-98166 Messina, Italy

Dr. Michele Guida

Laboratory "Ambients and Radiations (AmbRa)", Department of Computer Engineering, Electrical Engineering and Applied Mathematics (DIEM), University of Salerno, 84084 Fisciano, Italy

Deadline for manuscript submissions:
closed (20 November 2021)

Message from the Guest Editors

Dear Colleagues,

The presence of radionuclides in water constitutes a health risk to the population because the consumption of such water increases the likelihood of cancer. Experimental analysis will enhance the detection of significant radionuclides that cause harm to the population and stimulate remediation.

Among the various analytical techniques for assessment of natural radioactivity in drinking water, alpha and gamma spectrometry are employed to obtain the specific activity of alpha and gamma radionuclides, respectively; liquid scintillation counting (LSC) can be used to quantify the activity concentration of tritium, radon, and gross alpha and beta; total alpha/beta counting, with the thick source method, can be used for the gross alpha and beta specific activity evaluation; and emanometry, in the H₂O setup configuration, can be employed to estimate the gas radon activity concentration.

Dr. Francesco Caridi
Guest Editor





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada

2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

Author Benefits

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

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank: JCR - Q2 (*Metallurgy & Metallurgical Engineering*) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

Materials Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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

mdpi.com/journal/materials
materials@mdpi.com
[X@Materials_Mdpi](https://twitter.com/Materials_Mdpi)