Special Issue

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

Message from the Guest Editors

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.

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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.

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