

Most Citation Award 2024 を受賞しました (2025/4/12)

テーマ：放射線被ばく防護、線量測定、放射線災害

会場：パシフィコ横浜

URL：https://link.springer.com/article/10.1007/s12194-025-00884-4?utm_source=getftr&utm_medium=getftr&utm_campaign=getftr_pilot&getftr_integrator=scopus

災害放射線医学分野の千田浩一教授の論文が Radiological Physics and Technology 誌 (Springer Nature) の「Most Citation Award 2024」を受賞し、2025 年 4 月 12 日にパシフィコ横浜にて表彰式がありました。

受賞論文：

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「Most Citation Award 2024」は、Radiological Physics and Technology 誌の第 15 巻 (2022 年) に掲載されたすべての論文のなかで最も被引用数の多い論文に対して与えられます。

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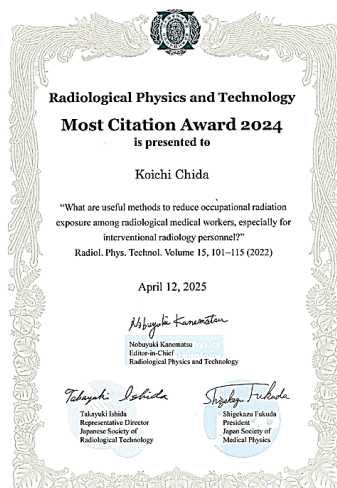
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Most Citation Award 2024 表彰式



記念撮影



賞状

Radiological Physics and Technology (2022) 15:101-115
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REVIEW ARTICLE

What are useful methods to reduce occupational radiation exposure among radiological medical workers, especially for interventional radiology personnel?

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Abstract

Protection against occupational radiation exposure in clinical settings is important. This paper clarifies the present status of medical occupational exposure protection and possible additional safety measures. Radiation injuries, such as cataracts, have been reported in physicians and staff who perform interventional radiology (IVR); thus, it is important that they use shielding devices (e.g., lead glasses and ceiling-suspended shields). Currently, there is no single perfect radiation shield; combinations of radiation shields are required. Radiological medical workers must be appropriately educated in terms of reducing radiation exposure among both patients and staff. They also need to be aware of the various methods available for estimating/reducing patient dose and occupational exposure. When the optimizing the dose to the patient, such as eliminating a patient dose that is higher than necessary, is applied, exposure of radiological medical workers also decreases without any loss of diagnostic benefit. Thus, decreasing the patient dose also reduces occupational exposure. We propose a novel four-point policy for protecting medical staff from radiation: patient dose Optimization, Distance, Shielding, and Time (pDOST). Patient dose optimization means that the patient never receives a higher dose than is necessary, which also reduces the dose received by the staff. The patient dose must be optimized; shielding is critical, but it is only one component of protection from radiation used in medical procedures. Here, we review the radiation protection/reduction basics for radiological medical workers, especially for IVR staff.

Keywords Interventional radiology (IVR) · Radiation safety · Occupational exposure dose · Radiation protection and shielding · Radiation injury (Cataracts) · As low as reasonably achievable (ALARA)

受賞論文

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