Special Issue

Synchrotron Radiation for Medical Applications

Message from the Guest Editor

X-ray radiation is widely used in medical physics and for diagnostic medical imaging. Synchrotrons have the power to produce very bright x-ray beams, and therefore these radiation beams are very attractive for medical methods developments. One of the most known research techniques in medical physics, in which synchrotron radiation usage plays an important role, is microbeam radiotherapy (MRT). MRT research has been carried out for three decades in several synchrotron facilities, and many papers have been published and reported MRT method progress. Synchrotron x-ray imaging developments include several subjects: methodological developments; detection improvements; and targeted, organ-related progress. Monte Carlo simulation codes for radiation transport have been proven to be valuable tools for evaluations of medical application capacities, and several papers have presented simulated synchrotron radiation for this purpose.

Guest Editor

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Deadline for manuscript submissions

closed (20 January 2023)

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/84248

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