**RADIATION PHYSICS AND CHEMISTRY**
The Journal for Radiation Physics, Radiation Chemistry and Radiation Processing

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**DESCRIPTION**

*Radiation Physics and Chemistry* is a multidisciplinary journal that provides a medium for publication of substantial and original papers, reviews, and short communications which focus on research and developments involving ionizing radiation in radiation physics, radiation chemistry and radiation processing.

*Radiation Physics and Chemistry* aims to publish articles with significance to an international audience, containing substantial novelty and contributions to science. We expect that articles present new insight or hypothesis testing, that they focus on radiation effects or applications of ionizing radiation, provide uncertainties and statistical analysis where relevant, and present their findings in context with discussion of past and recent literature. The editors reserve the right to reject, with or without external review, articles which do not meet these criteria. This could include articles which are very similar to previous publications, except that target substrates, materials, analyzed sites or experimental methods have been changed.

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- Cherenkov effect
- Polarization
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- Mathematical methods in radiation physics, reference data

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- Radiation fields from point and extended sources
- Detector response functions
- Basic physics of Dosimetry
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- Buildup factors
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- Kinetics and mechanism of radiolysis reactions
- Pulse radiolysis technique and measurements
- Nanoparticle production by ionizing radiation
- Radiation induced chain reactions, polymerization
- Irradiation effects on polymers
- Dose and dose rate effects
- LET effects on chemical reactions
- Pollutant removal by ionizing radiation
- Computational models on radiation chemical reactions

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- Validation

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- Nutrition
- Detection induced radioactivity

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- Polymerization
- Curing
- Grafting
- Crosslinking
- Degradation
- Composites

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- Waste water
- Water purification
- Toxin reduction
- Sludge
- Recycling of wastes

Radiation effects
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- Gemstones
- Crystals
- Ceramics

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- Dosimeter systems
- Analytical instrumentation
Environmental influence
Measurement uncertainty

Radiation sources and facilities for radiation processing
Electron Accelerators
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