

## Special Issue

# Cancer Cell Biology, Radiation and Radiomimetic Therapy

### Message from the Guest Editor

The clinical control of cancer remains an ongoing challenge globally due to aging and growing populations. Research into cancer cell biology and therapeutics thus remains essential. Radiotherapy and radiomimetic agents continue to play a central role in cancer therapy, but narrow therapeutic windows and dose-limiting toxicities remain problematic. Novel insights into cancer cell biology, particularly stress response, Target of Rapamycin (TOR), and AMP-activated protein kinase (AMPK) signaling pathways in DNA damage detection and repair, provide avenues for novel approaches to cancer therapy and management. This current Special Issue, featured in *Applied Sciences*, invites submissions of novel research, reviews, and commentaries on findings related to the effect of radiation and radiomimetic drugs on cancer cell biology, including, but not limited to, novel findings on mechanisms of action, genotoxic next-generation medicines, adenine and cellular metabolism in the context of DNA damage, cell cycle regulation, free radicals' DNA damage detection and repair, cell death, and DNA damage resistance in healthy and cancer cells.

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### Guest Editor

Dr. John Patrick Alao

School of Health, Sports and Bioscience, University of East London, London, UK

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### Deadline for manuscript submissions

20 August 2026



## Applied Sciences

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*Applied Sciences*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[applsci@mdpi.com](mailto:applsci@mdpi.com)

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## About the Journal

### Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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### Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo  
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,  
20133 Milano, Italy

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