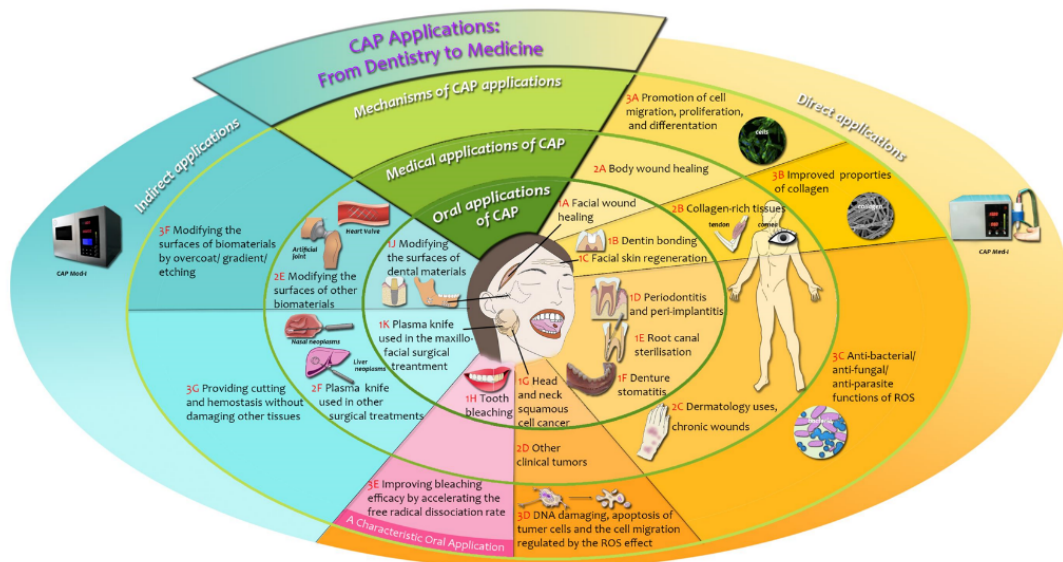


# Announcing the Special Issue of IEEE Transactions on Radiation and Plasma Medical Sciences

on

## Role of cold atmospheric plasma for medical applications

Over the past half century, research in cold atmospheric plasmas (CAPs) have made significant progress, both in fundamental plasma physicochemical research and applications of various fields, e.g., waste gas/liquid treatment, material synthesis and surface modification, mutation breeding in biotechnology for fermentation and agriculture, surface disinfection and sterilization, and medical therapy. As a result, plasma medicine has emerged to be an independent but interdisciplinary field that encompasses plasma science interacting with biological effects as well as biotechnology based on CAPs for clinical uses, either indirect applications for bio-materials/instruments disinfection or direct clinical therapies, e.g., wound healing or tumor apoptosis. More recently, plasma medicine has become one of the focuses in many international conferences (e.g., IEEE International Conference on Plasma Science, International Symposium on Plasma Chemistry, and Gaseous Electronics Conference) and academic journals (e.g., IEEE Transactions on Plasma Science, Plasma Sources Science and Technology, Journal of Physics D: Applied Physics, Journal of Applied Physics, Plasma Processes and Polymers, Plasma Science and Technology, and High Voltage).



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For this Special Issue, we invite scientists and engineers to submit original research or review contributions in this important area. The interesting topics to this special issue, but not limited to,

are listed in the following:

(1) Research on plasma sources used for plasma-based biotechnology and medicine, e.g., design of various plasma generators, physical characteristics, dosage characterization, etc.;

(2) Research discussing plasma-induced biological effects in various applications and at different tissue/ cellular/ molecular levels;

(3) Report on clinical trials using CAPs, or other relevant case studies.

All manuscripts should be submitted no later than **February 28, 2022** to the IEEE Manuscript Central website <https://mc.manuscriptcentral.com/trpms>. Please specify in the letter to the editor to be uploaded with the manuscript that the paper is intended for this special issue. Any questions regarding this Special Issue on Plasma medicine may be addressed to any of the Guest Editors:

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