

Interaction of cold atmospheric plasmas with cellmembranes in plasma medicine studies

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Abstract:

This paper discusses the mechanisms by which a low-temperature plasma produced at atmospheric pressure and low power level interacts with the cell membrane of living matter, within the context of the so-called plasma medicine. The different mechanisms of interaction with the cell membrane and cell wall in bacteria are reviewed, with considerations on the possibility of giving rise to resistance to the plasma action. The interaction with animal cells is also considered, from the perspective of exploiting the ability of the plasma to allow the insertion of large molecules, in particular genetic material, into the cells, in the so-called transfection process.heat load environment are discussed.