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(57) Abstract :

In this present invention, a dielectric barrier discharge plasma based atmospheric pressure plasma jet generating system has been developed using floating helix and floating end ring electrode design. This novel electrode design can generate longer plasma jet lengths while reducing the power consumption from Watts to mill Watts which is essential for biomedical applications. Also, since this electrode can produce longer plasma jet lengths, hence, it is very effective in distancing the cells/tissues from the plasma source. This atmospheric pressure plasma can be translated into portable device as it operates without the need for low pressure/vacuum.

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