Abstract Submitted
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Development of a Compact Atmospheric Pressure Plasma Source[1] ALEXANDER HYDE, RICHARD KAMIENESKI, OLEG BATISHCHEV, Northeastern University, Boston, MA — Open plasma sources working at atmospheric pressure have a variety of uses, including applications in both the medical [1] and industrial realms [2]. We will be reporting on the development of a compact RF-driven plasma source. Operation of the system will utilize common mono- and diatomic atmospheric gases [3]. Further diagnostics, including UV-VIS emission spectra and in-situ probing, will be performed and presented.

[1] Plasma Medicine: Applications of Low-Temperature Gas Plasmas in Medicine and Biology, Ed. M. Laroussi, M. G. Kong, G. Morfill, and W. Stolz, Cambridge Press, 2012.
[2] A. Fridman, Plasma Chemistry, Cambridge Press, 2008.
[3] M. Capitelly, C.M. Ferreira, B.F. Gordiets, and A.I. Osipov, Plasma Kinetics in Atmospheric Gases, Springer Series on Atomic, Optical, and Plasma Physics, 2000.

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