

Abstract Submitted
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Spectroscopic Analysis and Optimization of Krypton X-ray Emission from a Dense Plasma Focus Device in Singapore.¹ E.E. PETKOV, Univ of Nevada - Reno, R.S. RAWAT, K.S. TAN, National Institute of Education, V.L. KANTSYREV, V.V. SHLYAPSTEVA, K.A. SCHULTZ, A.S. SAFRONOVA, Univ of Nevada - Reno — The study of x-ray emission from a dense plasma focus (DPF) device is of significant interest due to its wide range of applications (scientific, industrial, medical, etc). In the past, extensive research has been conducted on x-ray emission from noble gases such as Neon and Argon from a DPF device, but almost no investigation has been done on higher Z molecular gases. Winning the National Science Foundation's EAPSI award has allowed for the opportunity of international scientific collaboration on this topic, and thus we present, for the first time, a comprehensive analysis of L-shell Krypton radiation including optimization of Krypton x-ray emission from a 3 kJ DPF device in Singapore. The advantages of using Krypton as the operating gas are also discussed.

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