

Abstract Submitted
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Design And First Use of the NIF Opacity Spectrometer¹ J.A. KING, P.W. ROSS, E.J. HUFFMAN, Y.P. OPACHICH, NSTec, R.F. HEETER, M. AHMED, D.A. LIEDAHL, M.B. SCHNEIDER, LLNL, E. DODD, K.A. FLIPPO, J.L. KLINE, F.E. LOPEZ, T.N. ARCHULETA, T.S. PERRY, LANL — Recent experiments at the Sandia Z facility have raised questions about models used in calculating L-shell opacities of mid-Z elements. A platform is being developed to check these results at the National Ignition Facility (NIF). The NIF experiments require a new X-ray opacity spectrometer (OpSpec) for the iron L-shell X-ray band, spanning photon energies from 540 eV – 2100 eV with a resolving power $E/\Delta E > 700$. The design of the OpSpec and photometric calculations based on expected opacity data are also presented. First use on NIF is expected in September 2016.

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