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Cooling Dynamics in Multi-fragmentation processes¹ WILLIAM LYNCH, T.X. LIU, M.J. VAN GOETHEM, X.D. LIU, R. SHOMIN, W.P. TAN, M.B. TSANG, G. VERDE, A. WAGNER, H.F. XI, H.S. XU, Michigan State University, W.A. FRIEDMAN, University of Wisconsin, S.R. SOUZA, R. DONAN-GELO, Universidade Federal do Rio de Janeiro, B. DAVIN, Y. LAROCHELLE, R.T. DE SOUZA, V.E. VIOLA, Indiana University, R.J. CHARITY, L.G. SOBOTKA, Washington University, LASSA COLLABORATION — The energy spectra of the isotopes from Z=1-8 have been measured in the multifragmentation of Sn+Sn isotopes at E/A=50 MeV. Fragment energy spectra of neutron deficient isotopes are significantly more energetic than those of neutron rich isotopes of the same element. This trend is well beyond what can be expected for the bulk multi-fragmentation of an equilibrated system. It can be explained, however, if many of these fragments are evaporated from the surface of the system while it is expanding and cooling.

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