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Pengfei Guan and **Lei Ni***, 9500 Gilman Driver, La Jolla, CA 92093. *Entropy and Gauss curvature flow.*

Gauss curvature flow as initiated by Firey to model the tumbling of the stone. For dimension two the limiting shape was determined by the work of B. Andrews. Here we obtain a new C^2 -estimate which implies the convergence to a soliton for the normalized flow in high dimension. The key is to obtain a lower estimate on the Gauss curvature, which in turn depends on a lower estimate of the support function. The lower bound on the support function is obtained via the estimates on the entropy. (Received August 11, 2014)