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**Guoping Zhang\*** (hyzgp73@yahoo.com), Morgan State University, Department of Mathematics, 1700 E Cold Spring Lane, Baltimore, MD 21251, and **Alexander Pankov**, Morgan State University, Department of Mathematics. *Standing Wave of the discrete nonlinear Schroedinger equations with growing potentials*. Preliminary report.

We investigate the existence of nontrivial standing wave solution of the discrete nonlinear Schroedinger equation with the growing potential at infinity. First of all, we derive a compact embedding theorem by using functional analysis theory. Then we combine the variational methods such as Nehari manifold and minimax methods and the compact embedding theorem to show the existence of nontrivial standing wave solution. The exponential decay of the standing wave solutions has also been studied. Finally prove the existence of infinitely many standing wave solutions corresponding to an unbounded sequence of critical values. (Received September 10, 2008)