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Akram Aldroubi* (akram.aldroubi@vanderbilt.edu). *Bases and frames from iterates of operators.*

Let $\mathcal{A} = \{A_k : k = 0, \dots, N\}$ be a set of operators in $\ell^2(\mathbb{N})$ and S a subset of $\ell^2(\mathbb{N})$. We consider the problem of finding conditions on \mathcal{A} and S so that the set $E = \{A_k^j S : k = 0, \dots, N, j = 0, \dots, L\}$ form a bases/frame for $\ell^2(\mathbb{N})$. (Received January 13, 2015)