

Every g-Riesz Basis is a Riesz Basis

Authors : Mehdi Rashidi-Kouchi, Asghar Rahimi

Abstract : Sun introduced a generalization of frames and showed that this includes more other cases of generalizations of frame concept and proved that many basic properties can be derived within this more general context. Another generalization of frames is frames in Hilbert C^* -module. It has been proved that every g -frame in Hilbert space H respect to Hilbert space K is a frame for $B(H;K)$ as Hilbert C^* -module. We show that every g -Riesz basis for Hilbert space H respect to K by add a condition is a Riesz basis for Hilbert $B(K)$ -module $B(H;K)$. Also, we investigate similar result for g -orthonormal and orthogonal bases.

Keywords : frame, g -frame, Riesz basis, g -Riesz basis, Hilbert C^* -module

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