عنوان مقاله:
On two-dimensional Cayley graphs

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خلاصه مقاله:
A subset W of the vertices of a graph G is a resolving set for G when for each pair of distinct vertices u,v in V (G) there exists w in W such that d(u,w)≠d(v,w). The cardinality of a minimum resolving set for G is the metric dimension of G. This concept has applications in many diverse areas including network discovery, robot navigation, image processing, combinatorial search and optimization. The problem of finding metric dimension is NP-complete for general graphs but the metric dimension of trees can be obtained using a polynomial time algorithm. In this paper, we investigate the metric dimension of Cayley graphs on dihedral groups and we characterize a family of them.

کلمات کلیدی:
Resolving set, Metric dimension, Cayley graph, Dihedral group