Abstract

In a graph $G = (V,E)$, a set $M \subseteq V$ is called a monopoly set of $G$ if every vertex $v \in V - M$ has at least $d(v)/2$ neighbors in $M$. The monopoly size $mo(G)$ of $G$ is the minimum cardinality of a monopoly set among all monopoly sets in $G$. In this paper, the minimum monopoly distance energy $E_{Md}$
The Minimum Monopoly Distance Energy of a Graph

of a connected graph

is introduced and minimum monopoly distance energies of some standard graphs are computed. Some properties of the characteristic polynomial of the minimum monopoly distance matrix of

are obtained. Finally. Upper and lower bounds for

are established.

References

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**Index Terms**

Computer Science

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**Keywords**

Minimum monopoly set, minimum monopoly distance matrix, minimum monopoly distance eigenvalues, minimum monopoly distance energy