عنوان مقاله:

A note on some lower bounds of the Laplacian energy of a graph

محل انتشار:

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خلاصه مقاله:

For a simple connected graph G of order n and size m, the Laplacian energy of G is defined as $LE(G)=\sum_{i=۱}^n|\mu_i-\frac{۲m}{n}|$ where $\mu_۱, \mu_۲,\ldots,\mu_{n-۱}, \mu_{n}$ are the Laplacian eigenvalues of G satisfying $\mu_۱\ge \mu_۲\ge\cdots \ge \mu_{n-۱}> \mu_{n}=۰$. In this note, some new lower bounds on the graph invariant $LE(G)$ are derived. The obtained results are compared with some already known lower bounds of $LE(G)$.

کلمات کلیدی:

Laplacian eigenvalue, Laplacian energy (of a graph), first Zagreb index