عنوان مقاله:
On linear combinations between Zagreb indices/coindices of a line graph

محل انتشار:
مجله ریاضیات گسسته و کاربردهای آن, دوره 8, شماره 2 (سال: 1402)

تعداد صفحات اصل مقاله: 10

نویسندگان:
Stefan Stankov
Marjan Matejic - *Faculty of Electronic Engineering, University of Nis, Nis, Serbia*

Igor Milovanovic
Emina Milovanovic

خلاصه مقاله:
Let G=(V,E), V=\left\{ v_{۱},v_{۲},\ldots ,v_{n}\right\}, be a simple graph of order n and size m.Denote by \Delta = d_۱\ge d_۲ \ge \cdots \ge d_n= \delta, d_i=d(v_i), and \Delta_e=d(e_۱)\ge d(e_۲)\ge \cdots \ge d(e_m)=\delta_e, sequences of vertex and edge degrees, respectively. The first reformulated Zagreb index (coindex) is defined as \displaystyle EM_۱(G)=\sum_{i=۱}^m d(e_i)^۲ = \sum_{e_i\sim e_j}(d(e_i)+d(e_j)) \Big(\displaystyle \overline{EM}_۱(G) = \sum_{e_i\nsim e_j}(d(e_i)+d(e_j))\Big).We consider relationship between reformulated Zagreb indices/coindices and determine their bounds in terms of some basic graph parameters.

کلمات کلیدی:
Topological indices, Zagreb indices, Line graph