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ON THE MULTIPLICATIVE SUM ZAGREB INDEX OF GRAPHS WITH SOME GIVEN PARAMETERS

JIANWEI DU AND XIAOLING SUN

Abstract. The multiplicative sum Zagreb index of a graph G is the product of the sums of degrees of pairs of adjacent vertices. In this work, we obtain the maximum values of the multiplicative sum Zagreb indices with fixed number of cut edges, or cut vertices, or edge connectivity, or vertex connectivity of graphs. Furthermore, we characterize the corresponding extremal graphs.

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