

[Došlic, Tomislav](#); [Saheli, Mahboubeh](#)

Eccentric connectivity index of composite graphs. (English) Zbl 1312.05072
[Util. Math.](#) 95, 3-22 (2014).

The eccentric connectivity index of a connected graph is defined as the sum of the product of the degree and eccentricity of the vertices of the graph. In this paper, the authors study the eccentric connectivity index of six types of composite graphs, they present explicit formulas for the eccentric connectivity index of the Cartesian product, disjunction, symmetric difference, composition, sum and corona of two graphs in terms of some parameters of the factor graphs. As applications, the eccentric connectivity index of some special graphs such as grids and C_4 nanotubes are determined.

Reviewer: [Elkin Vumar \(Urumqi\)](#)

MSC:

[05C40](#) Connectivity
[05C76](#) Graph operations (line graphs, products, etc.)
[05C90](#) Applications of graph theory

Cited in **8** Documents

Keywords:

[eccentric connectivity index](#); [product graph](#); [composite graph](#)