The expected values for the Gutman index, Schultz index, multiplicative degree-Kirchhoff index and additive degree-Kirchhoff index of a random cyclooctatetraene chain

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Abstract

In this paper, we mainly solve the explicit analytical expressions for the expected values of the Gutman index, Schultz index, multiplicative degree-Kirchhoff index and additive degree-Kirchhoff index of a random cyclooctatetraene chain with n octagons. We also obtain the average values of these four indices with respect to the set of all these cyclooctatetraene chains.

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