

Saturation number of fullerene graphs

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The saturation number of a graph G is the cardinality of any smallest maximal matching of G , and it is denoted by $s(G)$. Fullerene graphs are cubic planar graphs with exactly twelve 5-faces; all the other faces are hexagons. They are used to capture the structure of carbon molecules. We show that the saturation number for fullerenes on n vertices is essentially $n/3$.