

On graphs in which every maximal induced matching is of the same size

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An induced matching is a set of edges no two of which meet at a node or are joined by an edge. For an arbitrary graph it is difficult to determine a maximum induced matching. On the other hand if one is given a graph in which every maximal induced matching is actually maximum it is a simple exercise to do so. For graphs of sufficient girth a characterization of these special graphs is given.