

**عنوان مقاله:**

A new construction for vertex decomposable graphs

**محل انتشار:**

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**خلاصه مقاله:**

Let  $G$  be a finite simple graph on the vertex set  $V(G)$  and let  $S \subset V(G)$ . Adding a whisker to  $G$  at  $x$  means adding a new vertex  $y$  and edge  $xy$  to  $G$  where  $x \in V(G)$ . The graph  $G \cup W(S)$  is obtained from  $G$  by adding a whisker to every vertex of  $S$ . We prove that if  $G \setminus S$  is either a graph with no chordless cycle of length other than  $4$  or  $\Delta$ , chordal graph or  $C_4$ , then  $G \cup W(S)$  is a vertex decomposable graph

**کلمات کلیدی:**

vertex decomposable, shellable, Cohen-Macaulay

**لینک ثابت مقاله در پایگاه سیویلیکا:**

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