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STRONG f-STAR FACTORS OF GRAPHS

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Abstract

Let G be a graph and $f : V(G) \to \{2, 3, \ldots\}$. A spanning subgraph F is called strong f-star of G if each component of F is a star whose center x satisfies $\deg_F(x) \leq f(x)$ and F is an induced subgraph of G. In this paper, we prove that G has a strong f-star factor if and only if $oddca(G - S) \leq \sum_{x \in S} f(x)$ for all $S \subset V(G)$, where $oddca(G)$ denotes the number of odd complete-cacti of G.

Keywords: f-star factor, strong f-star factor, complete-cactus, factor of graph.

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