

On Square Graceful Graphs

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A (p, q) -graph $G(V, E)$ is said to be a square graceful graph if there exists an injection $f: V(G) \rightarrow \{0, 1, \dots, q^2\}$ such that the induced mapping $f^*: E(G) \rightarrow \{1, 4, 9, \dots\}$ defined by $f^*(uv) = |f(u)f(v)|$ is a bijection of $\{1^2, 2^2, 3^2, \dots, q^2\}$. The function f is called a square labeling of G . Some square graceful graphs, forbidden subgraphs and the star square graceful deficiency number s of some graphs are determined.