

On rings with divided prime Nilradical: A Survey

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Abstract:

Let R be a commutative ring with $1 \neq 0$ and $Nil(R)$ be its set of nilpotent elements. Recall that a prime ideal of R is called a divided prime if $P \subset xR$ for every $x \in R \setminus P$; thus a divided prime ideal is comparable to every ideal of R . In many articles, the author investigated the class of rings $\mathcal{H} = \{R \mid R \text{ is a commutative ring and } Nil(R) \text{ is a divided prime ideal of } R\}$ (Observe that if R is an integral domain, then $R \in \mathcal{H}$.) If $R \in \mathcal{H}$, then R is called a ϕ -ring. In this talk, we will state recent developments on ϕ -rings.

Keywords: ϕ -rings, ϕ -Prüfer rings, ϕ -Dedekind rings.

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