SOME FINITENESS CONDITIONS ON THE SET OF INTERMEDIATE RINGS OF A RING EXTENSION WITH ZERO DIVISORS

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Abstract:
Many recent works have obtained new and interesting results on the set of intermediate rings in extensions of integral domains satisfying several finiteness conditions. Such results are still in need when we consider rings that are not integral domains. The main aim of this work is to extend such studies for ring extensions R⊆S with nontrivial zero divisors. This study focuses mainly on the cardinality and the length of the sets under investigation. Several equations related to the studied conditions are established. The obtained results generalize several related recent results on the field, however many problems are still open.

Keywords: ring extension, intermediate ring, normal pair.

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References