

## عنوان مقاله:

Characterization of zero-dimensional rings such that the clique number of their annihilating-ideal graphs is at most four

## محل انتشار:

دوفصلنامه ساختارهای جبری و کاربرد آنها، دوره 10، شماره 2 (سال: 1402)

تعداد صفحات اصل مقاله: 28

## نویسندگان:

Subramanian Visweswaran - *Retired Faculty, Department of Mathematics, Saurashtra University, Rajkot, ۳۶۰۰۰۵, India*

.Premkumar Lalchandani - *Department of Mathematics, Dr. Subhash University, Junagadh, ۳۶۲۰۰۱, India*

## خلاصه مقاله:

The rings considered in this article are commutative with identity which are not integral domains. Let  $R$  be a ring. An ideal  $I$  of  $R$  is said to be an annihilating ideal of  $R$  if there exists  $r \in R \setminus \{0\}$  such that  $Ir = (0)$ . Let  $\mathbb{A}(R)$  denote the set of all annihilating ideals of  $R$  and let  $\mathbb{A}(R)^* = \mathbb{A}(R) \setminus \{0\}$ . Recall that the annihilating-ideal graph of  $R$ , denoted by  $\mathbb{AG}(R)$ , is an undirected graph whose vertex set is  $\mathbb{A}(R)^*$  and distinct vertices  $I$  and  $J$  are adjacent in this graph if and only if  $IJ = (0)$ . The aim of this article is to characterize zero-dimensional rings such that the clique number of their annihilating-ideal graphs is at most four.

## کلمات کلیدی:

Annihilating-ideal graph, Clique number, Special principal ideal ring, Zero-dimensional ring

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1680705>

