

## RECENT RESULTS ON ABSORBING IDEALS OF COMMUTATIVE RINGS

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ABSTRACT. Let  $R$  be a commutative ring with  $1 \neq 0$ . Recall that a proper ideal  $I$  of  $R$  is called a *2-absorbing ideal* of  $R$  if  $a, b, c \in R$  and  $abc \in I$ , then  $ab \in I$  or  $ac \in I$  or  $bc \in I$ . A more general concept than 2-absorbing ideals is the concept of *n-absorbing ideals*. Let  $n \geq 1$  be a positive integer. A proper ideal  $I$  of  $R$  is called an *n-absorbing ideal* of  $R$  if  $a_1, a_2, \dots, a_{n+1} \in R$  and  $a_1 a_2 \cdots a_{n+1} \in I$ , then there are  $n$  of the  $a_i$ 's whose product is in  $I$ . The concept of *n-absorbing ideals* is a generalization of the concept of prime ideals (note that a prime ideal of  $R$  is a 1-absorbing ideal of  $R$ ). In this talk, we will state recent developments on the study of absorbing ideals of commutative rings.

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