

## ON L-IDEAL-BASED L-ZERO-DIVISOR GRAPHS

S. EBRAHIMI ATANI AND M. SHAJARI KOHAN

*Faculty of Mathematical Science*  
*University of Guilan*  
*P.O. Box 1914 Rasht, Iran*

### Abstract

In a manner analogous to a commutative ring, the L-ideal-based L-zero-divisor graph of a commutative ring  $R$  can be defined as the undirected graph  $\Gamma(\mu)$  for some L-ideal  $\mu$  of  $R$ . The basic properties and possible structures of the graph  $\Gamma(\mu)$  are studied.

**Keywords:**  $\mu$ -Zero-divisor, L-zero-divisor graph,  $\mu$ -diameter,  $\mu$ -girth,  $\mu$ -nilradical ideal,  $\mu$ -domainlike ring.

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