

SOME FINITE PROPERTIES OF GENERALIZED LOCAL COHOMOLOGY MODULES

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TÓM TẮT:

Let (R, \mathfrak{m}) be a commutative Noetherian local ring, I an ideal of R and M, N finitely generated R -modules. In this paper we prove some finite properties of generalized local cohomology modules $H^i_I(M, N)$. Set $I_M = \text{ann}(M/IM)$ and $r = \text{depth}(I_M, N)$. We show that $\text{Ass}(H^r_I(M, N)) = \text{Ass} \text{Ext}^r_R(M/IM, N)$. We also characterize the least integer i such that $H^i_I(M, N)$ is not Artinian by using the notion of filter regular sequences.