ON THE VANISHING AND THE FINITENESS OF SUPPORTS OF GENERALIZED LOCAL COHOMOLOGY MODULES (SCI)

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TÓM TẮT:

Let (R,m) be a Noetherian local ring, I an ideal of R and M, N two finitelygenerated R-modules. The first result of this paper is to prove a vanishing theorem forgeneralized local cohomology modules which says that $H^j_I(M, N) = 0$ for all $j > \dim(R)$, provided M is of finite projective dimension. Next, we study and give characterizations for the least and the last integer r such that $\mathrm{Supp}(H^r_I(M, N))$ is infinite.