This is a review text file submitted electronically to MR.

Reviewer: Gomez Lozano, Miguel Angel

Reviewer number: 038954

Address:
Departamento de Algebra, Geometria y Topologia
Facultad de Ciencias
Universidad de Malaga
29071 Malaga (Spain)
miggl@uma.es

Author: Albu, Toma

Short title: Goldie dimension, dual Krull dimension and subdirect irreducibility.

MR Number: 2669092

Primary classification: 16P60

Secondary classification(s): 16S90;18E15;06C05;06B35

Review text:

In the survey-paper under review the author focuses his attention on a result of Carl Faith [Communications in Algebra **27** (1999),1807–1810], in which Noetherian modules are characterized as those that have finite Goldie dimension in all its quotient modules and satisfy the ascending chain condition on their subdirectly irreducible submodules, and presents a series of results that generalize both this theorem and its dual version. These generalizations are not only in the module setting, but also in upper continuous modular lattices with applications to torsion theories and Grothendieck categories.