CORR 2001-67

Polynomial Functions on Finite Galois Rings

Zong-duo Dai*, Guang Gond*, Ding-feng Ye*

Abstract In this paper, the polynomial functions on $R$ are determined, and some special polynomial functions such as those which factor through the natural map: $R \to R/(p)$ and those which take the values in any given sub-Galois ring of $R$ including $Z/(p^f)$ are determined separately.

Keywords Galois ring, sub-Galois ring, polynomial function on Galois ring