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On Polynomial Functions Over Finite Commutative Rings

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关键词 [Polynomial function](#) [Finite commutative local ring](#) [Generalized Witt polynomial](#)

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On Polynomial Functions Over Finite Commutative Rings

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Abstract Let R be an arbitrary finite commutative local ring. In this paper, we obtain a necessary and sufficient condition for a function over R to be a polynomial function. Before this paper, necessary and sufficient conditions for a function to be a polynomial function over some special finite commutative local rings were obtained.

Key words [Polynomial function](#) [Finite commutative local ring](#) [Generalized Witt polynomial](#)

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