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摘要

关键词 [Mahler type numbers](#) [Generalized Mahler type numbers](#) [Algebraic independence](#) [Multiplicative dependence](#)

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Algebraic Independence of Certain Generalized Mahler Type Numbers

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Abstract In this paper the generalized Mahler type number $M_h(g;A,T)$ is defined, and in the case of multiplicatively dependent parameters $g_i, h_i (1 \leq i \leq s)$ the algebraic independence of the numbers $M_{h_i}(g_i;A,T) (1 \leq i \leq s)$ is proved, where A and T are certain infinite sequences of non-negative integers and of positive integers, respectively. Furthermore, the algebraic independence result on values of a certain function connected with the generalized Mahler type number and its derivatives at algebraic numbers is also given.

Key words [Mahler type numbers](#) [Generalized Mahler type numbers](#) [Algebraic independence](#) [Multiplicative dependence](#)

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