Zhu, Jie; Liao, Qunying
On positive integer solutions for the equation $Z(n) = \varphi_e(SL(n))$. (Chinese. English summary)

Summary: Based on the computing formula for some generalized Euler functions and elementary methods and techniques, this paper studies the solvability of the equation $Z(n) = \varphi_e(SL(n))$ for the case $e \in \{p^t, pq\}$, and then gives some sufficient conditions for its non-solvability, where $p$ and $q$ are distinct primes and $t$ is a positive integer. Furthermore, for any positive integer $e$, all solutions for the equation $Z(n) = \varphi_e(SL(n))$ are determined.

MSC:
11A25 Arithmetic functions; related numbers; inversion formulas
11B68 Bernoulli and Euler numbers and polynomials

Keywords:
pseudo-Smarandache function; Smarandache LCM function; generalized Euler function

Full Text: DOI