APPLICATIONS OF DZIOK-SRIVASTAVA LINEAR OPERATOR TO A CLASS OF MEROMORPHIC FUNCTIONS

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Abstract

In this paper, using Dziok-Srivastava linear operator, we define a new class $S^*(m, k, A, \alpha, \beta)$ of the functions

$$F(z) = \frac{1}{z^p} + \sum_{n=1}^{\infty} a_{p+n} z^{p+n}, \quad p \in I\!\!N, a_{p+n} \geq 0$$

which are meromorphic and p-valent in the punctured unit disc $E = \{z : 0 < |z| < 1\}$ and obtain numerous sharp results. We discuss some properties like coefficient estimates, distortion bounds, integral representations, closure theorems and inclusion property. Also we discuss the class is closed under convolution.

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