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COEFFICIENT ESTIMATES FOR A SUBCLASS OF BI-UNIVALENT FUNCTIONS ASSOCIATED WITH THE AGHALARY-EBADIAN-WANG OPERATOR*

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Abstract

In this paper, we introduce and investigate a new subclass of analytic and bi-univalent functions defined in the open unit disk $\mathbb{U}$, which is associated with the Aghalary-Ebadian-Wang operator. Furthermore, we find estimates on the Taylor-Maclaurin coefficients $|a_2|$ and $|a_3|$ of functions in the new class and improve some recent works.

MSC: 30C45; 30C50.

keywords: Univalent functions, Bi-univalent functions, Coefficient estimates, Aghalary-Ebadian-Wang operator.

1 Introduction

Let $\mathcal{A}$ be a class of functions of the form

$$f(z) = z + \sum_{n=2}^{\infty} a_n z^n, \tag{1}$$

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