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Abstract:

The Littlewood–Paley conjecture hardly holds for any subclass of univalent functions except the class of starlike functions as verified, in general, by the researchers until now. Therefore, it is interesting to consider the classes where the Littlewood–Paley conjecture holds completely or partially. For such investigation, the classes of normalized strongly α -close-to-convex functions and α -quasiconvex functions of order β are considered in this paper. In the main, bounds on the initial coefficients and related Fekete–Szegö inequalities are derived in this paper. Furthermore, it is seen that the Littlewood–Paley conjecture holds for all values of the parameter γ >0 in case of the first coefficient. However for the second coefficient, it holds for large positive values of γ . Relevant connections of our results with the existing results are also pointed out.