

NEW GENERALIZATIONS OF BAZILEVIČ MAPS

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Abstract. In this work we study, via Caratheodory maps with normalization by other than unity, a generalization of certain well-known subfamily of Bazilevič functions using the also well-known Salagean derivative operator.

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REFERENCES

- [1] S. ABDULHALIM, *On a class of analytic functions involving the Salagean differential operator*, Tamkang J. Math., **23** (1) (1992), 51–58.
- [2] K. O. BABALOLA, *Some new results on a certain family of analytic functions defined by the Salagean derivative*, Unpublished Doctoral Thesis, University of Ilorin, Nigeria, 2005.
- [3] K. O. BABALOLA AND T. O. OPOOLA, *Radius problem for a certain family of analytic and univalent functions*, Advances in Inequalities for Series, Nova Science Publishers (2008), 19–24.
- [4] K. O. BABALOLA, *On n -starlike integral operators*, Kragujevac Journal of Mathematics, **34** (2010), 61–71.
- [5] K. O. BABALOLA, *New insights into Bazilevič maps*, Analele Universitatii Oradea, Fasc. Matematica. Tom XXIII, Issue I (2016), 5–10.
- [6] I. E. BAZILEVIČ, *On a case of integrability by quadratures of the equation of Loewner-Kufarev*, Mat. Sb., **37** (79) (1955), 471–476 (in Russian).
- [7] P. N. CHICHRA, *Regular functions $f(z)$ for which $zf'(z)$ is α -spiral-like*, Proc. Amer. Math. Soc., **49** (1) (1975), 151–160 (in Russian).
- [8] S. S. MILLER AND P. T. MOCANU, *Second order differential inequalities in the complex plane*, J. Math. Anal. Appl., **65** (1978), 289–305.
- [9] G. S. SALAGEAN, *Subclasses of univalent functions*, Lecture Notes in Math. **1013** (1983), 362–372, Springer-Verlag, Berlin, Heidelberg and New York.
- [10] R. SINGH, *On Bazilevič functions*, Proc. Amer. Math. Soc., **38** (2) (1973), 261–271.
- [11] L. ŠPAČEK, *Přespěvek k teorii funkci prostých*, Časopis Pěst. Mat. Fys. **62** (1933), 12–19.