O. Dovhopiatyi, E. Sevost'yanov. On Distortion Estimates of Mappings with the Poletsky Condition in Domains with Poincare Inequality. In: Ebert, M.R., Kähler, U., Sabadini, I., Toft, J. (eds) New Tools in Mathematical Analysis and Applications. ISAAC 2023. Trends in Mathematics. – Cham: Birkhäuser, 2025. – P. 133–143.

https://link.springer.com/chapter/10.1007/978-3-031-77050-0 12

Abstract. The article is devoted to the study of mappings that distort the modulus of families of paths according to the Poletsky inequality type. At the boundary points of the domain, we have obtained an estimate of the distance distortion for such mappings provided that their characteristic has finite integral averages over the balls, and the image domain of mappings is Ahlfors regular and such that the Poincare inequality holds. The manuscript considers the cases of homeomorphisms and mappings with branching.

