Saigo, Megumi; **Maeda, Nobuyuki**

More generalization of fractional calculus. (English) Zbl 0926.26003

Rusev, P. (ed.) et al., Transform methods and special functions. Proceedings of the 2nd international workshop, Varna, Bulgaria, August 23–30, 1996. Sofia: Bulgarian Academy of Sciences, Institute of Mathematics and Informatics. 386-400 (1998).

In this paper a generalization of operators of fractional integration introduced by the first author in the eighteeth containing the Appell function F_3 in the kernel is investigated. Mapping properties in McBride spaces $F_{p,\mu}$ and index laws are proved.

For the entire collection see [Zbl 0914.00065].

Reviewer: H.-J.Glaeske (Jena)

MSC:

26A33 Fractional derivatives and integrals
33C45 Orthogonal polynomials and functions of hypergeometric type (Jacobi, Laguerre, Hermite, Askey scheme, etc.)

Keywords:

fractional integrals and derivatives; Appell function F_3; McBride spaces; index laws