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Weighted estimates for the Hankel-, \underline{K} - and Y - transformations. (English) Zbl 0808.44008
Arch. Math., Brno 30, No. 1, 29-43 (1994).

The author derives sufficient conditions on the pair of nonnegative functions u and v for the validity of the inequality

$$\left[\int_0^\infty |u(x)(Tf)(x)|^q dx \right]^{1/q} \leq C \left[\int_0^\infty |v(x)f(x)|^p dx \right]^{1/p},$$

for $0 < q < p$ and $p > 1$, where T is the Hankel-, the \underline{K} -, or the Y -transformation.

Reviewer: K.N.Srivastava (Bhopal)

MSC:

44A15 Special integral transforms (Legendre, Hilbert, etc.)

26D10 Inequalities involving derivatives and differential and integral operators

Keywords:

\underline{K} -transform; Y -transform; Hankel transform; nonnegative functions; inequality

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