NORMS OF MATRIX OPERATORS ON bv_p

R. LASHKARIPOUR AND J. FATHI

Abstract. In this paper we consider the problem of finding norms of certain matrix operators on sequence space bv_p. In fact, we consider these problems for weighted mean, and generalized Cesaro matrices on sequence space bv_p.

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REFERENCES

[1] A. M. AKHMEDOV, F. BASAR, *The fine spectra of Cesaro operator C_1 over the sequence space bv_p*, Math. J. Okayama Univ. **50** (2008), 135–147.
[2] G. BENNETT, *Lower bounds for matrices*, Linear Algebra and Appl. **82**(1986), 81–98.
[3] G. BENNETT, *Factorizing the classical inequalities*, Mem. Amer. Math. Soc.(120), **576** (1996), 1–130.
[4] G. H. HARDY, J. E. LITTLEWOOD AND G. POLYA, *Inequalities*, 2nd edition, Cambridge University press, Cambridge, 1967.
[5] G. J. O. JAMESON, *Lower bounds and norms of operators on Lorentz sequence space $d(w, 1)$*, Illinois J. Math. **43**(1999), 79–99.
[6] G. J. O. JAMESON AND R. LASHKARIPOUR, *Lower bounds of operators on weighted ℓ_p spaces and Lorentz sequence spaces*, Glasgow Math. J. **42** (2000), 211–223.
[7] G. J. O. JAMESON AND R. LASHKARIPOUR, *Norm of certain operators on weighted ℓ_p spaces and Lorentz sequence spaces*, J. Inequalities in Pure and Applied Mathematics. Volume 3, Issue 1, Article 6(2002).
[8] K. KNOPP, *Infinite sequences and series*, Dover Publication Inc. New York, 1956.
[9] K. KNOPP, *Theory and Application of Infinite series*, Dover Publication Inc. New York, 1990.
[10] R. LYONS, *A lower bounds for the Cesaro operator*, Proc. Amer. Math. Soc. **86** (1982), 694.
[11] A. WILANSKY, *Summability through Functional Analysis*, North Holland, 1984.

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