On Orlicz-Power Series Spaces

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Abstract

Djakov an Ramanujan [1] proved that the space $\mathcal{D}(l_M, l_N)$ of all diagonal operators acting between Orlicz sequence spaces coincides with Orlicz sequence space $l_{M_N^*}$, where M_N^* is the Orlicz function defined by $M_N^*(s) := \sup\{N(st) - M(t), t \in [0,1]\}$. Using this fact, we consider quasidiagonal isomorphisms of Cartesian products of Orlicz-power series spaces. Also, in [2], Djakov, Önal, Terzioğlu, Yurdakul proved that for different p and q, isomorphism of $K^{l_p}(A)$ and $K^{l_q}(B)$ implies that these Köthe spaces are nuclear. Considering the generalization of the definition of "nuclearity" of the sequence spaces introduced in [3], and taking in account [2] and [4], we get some general result for quasidiagonally isomorphic Orlicz-Köthe sequence spaces.

References

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