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Discrete Ahlfors-Beurling transform and its properties. (English) Zbl 1468.44003
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Summary: The Ahlfors-Beurling transform has been well studied on classical Lebesgue, Morrey, Sobolev, Besov, Campanato, etc. spaces. However, its discrete version is still not studied well. In this paper, we study the properties of the discrete Ahlfors-Beurling transform on discrete Lebesgue spaces.

MSC:

44A15 Special integral transforms (Legendre, Hilbert, etc.)
39A12 Discrete version of topics in analysis
46B45 Banach sequence spaces
42B35 Function spaces arising in harmonic analysis

Cited in 1 Document

Keywords:

discrete Ahlfors-Beurling transform; Lebesgue spaces; boundedness

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