

Öcalan, Özkan; Akin, Ömer

Oscillation properties for advanced difference equations. (English) Zbl 1224.39017

[Novi Sad J. Math.](#) 37, No. 1, 39-47 (2007).

The authors provide some sufficient conditions for the oscillation of every solution of the difference equation $x_{n+1} - x_n + p_n x_{n-k} = 0$, $n = 0, 1, 2, \dots$ whenever $k \in \{\dots, -3, -2\}$ and $p_n \leq 0$, and also $x_{n+1} - x_n + \sum_{i=1}^m p_{in} x_{n-k_i} = 0$, $n = 0, 1, 2, \dots$ whenever $k \in \{\dots, -3, -2, -1\}$ and $p_{in} \leq 0$ for $i = 1, 2, \dots, m$. They also obtain some alternative results for the oscillation of all solutions of these equations.

Reviewer: [Miloš Čanak \(Beograd\)](#)

MSC:

[39A21](#) Oscillation theory for difference equations

[39A10](#) Additive difference equations

Cited in 7 Documents

Keywords:

[difference equation](#)

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