Title: Locally graded Bell groups

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For any integer $n \neq 0, 1$, a group is said to be n-Bell if it satisfies the law $[x^n, y] = [x, y^n]$. In this paper we prove that every finitely generated locally graded n-Bell group embeds into the direct product of a finite n-Bell group and a torsion-free nilpotent group of class ≤ 2. We prove that n-Bell groups which are not locally graded always have infinite simple sections of finite exponent. Additionally, we obtain similar results for varieties of n-Levi groups and n-abelian groups defined by the laws $[x^n, y] = [x, y]^n$ and $(xy)^n = x^n y^n$, respectively. We give characterizations of these groups in the locally graded case.

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