Florian Luca and Alain Togbé
On the Diophantine equation $x^2 + 7^{2k} = y^n$,
Fibonacci Quart. **45** (2007), no. 4, 322–326.

Abstract

In this note, we find all the solutions of the Diophantine equation $x^2 + 7^{2k} = y^n, \;\; x \geq 1, \;\; y \geq 1, \;\; k \in \mathbb{N}, n \geq 3.$