Pascal Ochem and Michaël Rao
Another remark on the radical of an odd perfect number,
Fibonacci Quart. **52** (2014), no. 3, 215–217.

Abstract

Ellia recently proved that if N is an odd perfect number such that $\mathrm{rad}(N) > \sqrt{N}$, then its special prime p satisfies $p > 148207$ if $3 \nmid N$ and $p > 223$ otherwise. He also suggested that these bounds can be improved with some computation. We obtain that if N is an odd perfect number such that $\mathrm{rad}(N) > \sqrt{N}$, then $p > 10^{60}$.