Summary: We consider strong at-subsets of the Euclidean space $\mathbb{R}^n$ and estimate from below the growth of the maximal cardinality of such subsets (our method essentially differs from that of P. Erdős and Z. Füredi [Ann. Discrete Math. 17, 275–283 (1983; Zbl 0534.52007)]. We then apply some properties of strong at-sets to the illumination problem.

MSC:
- 52B05 Combinatorial properties of polytopes and polyhedra (number of faces, shortest paths, etc.)
- 52B11 $n$-dimensional polytopes
- 52C10 Erdős problems and related topics of discrete geometry

Keywords:
- at-set; illumination problem; strong at-set

Full Text: Link

References: