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**Short title:** Generalized quantum isotonic nonlinear oscillator in  $d$  dimensions.

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**Review text:**

Although the idea of the so called supersymmetry (SUSY) connecting bosons and fermions disappointed its proponents in the domain of experimental particle physics heavily, its use proved, subsequently, truly rewarding in the context of our understanding of bound states in certain one-dimensional confining exactly solvable potentials of quantum mechanics (review [5] may be consulted for more details).

Without a reference to SUSY, the serendipitous Ref. [1] revealed the existence of one of such potentials purely empirically, but it did not last too long before the authors of Ref. [2] revealed its SUSY-mediated correspondence to harmonic oscillator. On this background the present authors generalized this correspondence - the job neatly done by having started from a three-parametric ansatz for superpotential of Eq. (25).