Review of: "Designing light-element materials with large effective spin-orbit coupling"

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Potential competing interests: The author(s) declared that no potential competing interests exist.

Focusing on 3d and 4d systems, they demonstrate that the interplay between crystal symmetry and electronic correlation can significantly enhance the SOC effect in some partially occupied orbital multiplet states, which is achieved by self-consistently strengthened orbital polarization as key points to achieve. Their study provides an efficient and straightforward approach to predict promising SOC active materials that ease the use of heavy elements in next-generation spin-orbit electronic materials and devices.