This manuscript by Moritz Hoesch et al. describes the investigation of multiple dopant configurations of Te impurities in close vicinity in silicon. The description is accompanied by experimental techniques such as photoelectron spectroscopy and photoelectron diffraction thanks to state-of-the-art time-of-flight momentum microscope as well as theoretical Bloch wave calculations. Several different dopant concentrations (high above the solubility limit of Te in silicon) were investigated to get better overview of the observed effect and nicely contribute to understanding the exceptional activation of free charge carriers in hyperdoping of chalcogens in silicon. This manuscript is certainly suitable for publication in ACS-Nanoletters.

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