

Atomic structure and dynamics of unusual and wide-gap phase-change chalcogenides : a GeTe₂ case

Usuki, Takeshi; Benmore, Chris J.; Tverjanovich, Andrey; **Bereznev, Sergei**; Khomenko, Maxim; Sokolov, Anton; Fontanari, Daniele; Ohara, Koji; Bokova, Maria; Kassem, Mohammad; Bychkov, Eugene Physica status solidi - rapid research letters 2024 / art. 2300482 <https://doi.org/10.1002/pssr.202300482> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Atomic structure, dynamics, changes in chemical bonding and semiconductor-metal transition in Sb₂Se₃ : A remarkable material for quantum networks and energy applications

Kassem, Mohammad; Benmore, Chris J.; Tverjanovich, Andrey; Bokova, Maria; Khomenko, Maxim; Usuki, Takeshi; Sokolov, Anton; Fontanari, Daniele; **Bereznev, Sergei**; Ohara, Koji ACS applied materials & interfaces 2025 / p. 17075-17095 <https://doi.org/10.1021/acsami.5c00008>

Decoding the atomic structure of Ga₂Te₅ pulsed laser deposition films for memory applications using diffraction and first-principles simulations

Tverjanovich, Andrey; Benmore, Chris J.; Khomenko, Maxim; Sokolov, Anton; Fontanari, Daniele; **Bereznev, Sergei**; Bokova, Maria; Kassem, Mohammad; Bychkov, Eugene Nanomaterials 2023 / art. 2137 <https://doi.org/10.3390/nano13142137> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)