

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>

Atypical phase-change alloy Ga₂Te₃ : atomic structure, incipient nanotectonic nuclei, multilevel writing

Tverjanovich, Andrey; Khomenko, Maksym; Benmore, Chris; **Bereznev, Sergei**; Sokolov, Anton; Fontanari, Daniele; Kiselev, Aleksei; Lotin, Andrey; Bychkov, Eugene Journal of materials chemistry C 2021 / p. 17019-17032 <https://doi.org/10.1039/d1tc03850h> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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](#)

Glassy GaS: transparent and unusually rigid thin films for visible to mid-IR memory applications

Tverjanovich, Andrey; Khomenko, Maksym; **Bereznev, Sergei**; Fontanari, Daniele; Sokolov, Anton; Usuki, Takeshi; Ohara, Koji; Le Coq, David; Masselin, Pascal; Bychkov, Eugene Physical chemistry chemical physics 2020 / p. 25560–25573 <https://doi.org/10.1039/D0CP04697C> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)