

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>

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](#)

CuInSe₂ thin films deposited by UV laser ablation

Tverjanovich, Andrey; Borisov, Evgeny N.; Vasilieva, E.S.; Tolochko, O.V.; Vahhi, I.E.; **Bereznev, Sergei**; Tveryanovich, Yuri S. Solar energy materials & solar cells 2006 / p. 3624-3632 : ill

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

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

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High vacuum evaporation of n-CuIn₃Se₅ photoabsorber films for hybrid PV structures with conductive polymers

Adhikari, Nirmal; Bereznev, Sergei; Laes, Kristjan; Kois, Julia; Volobujeva, Olga; Raadik, Taavi; Öpik, Andres; Traksmaa, Rainer; Tverjanovich, Andrey Baltic Polymer Symposium 2010 : Palanga, September 8-11, 2010 : programme and abstracts 2010 / p. 124 https://www.researchgate.net/publication/257710082_High-Vacuum_Evaporation_of_n-CuIn3Se5_Photoabsorber_Films_for_Hybrid_PV_Structures

High-vacuum evaporation of n-CuIn₃Se₅ photoabsorber films for hybrid PV structures

Adhikari, Nirmal; Bereznev, Sergei; Laes, Kristjan; Kois, Julia; Volobujeva, Olga; Raadik, Taavi; Traksmaa, Rainer; Tverjanovich, Andrey; **Öpik, Andres; Mellikov, Enn** Journal of electronic materials 2011 / p. 2374-2381 : ill

Interaction of CuCl₂ with poly(ethylene glycol) under microwave radiation

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Microwave assisted synthesis of CuInSe₂ nanopowder

Gertsin, A.; Muradova, Galina; Shoka, A.; Kim, Dongsoo; **Bereznev, Sergei**; Tverjanovich, Andrey; **Kois, Julia; Öpik, Andres**; Tveryanovich, Yuri S. Hybrid and Organic Photovoltaic Conference (HOPV09) : 10-13 May 2009, Benidorm, Spain : book of abstracts 2009 / p. 79

One-stage pulsed laser deposition of conductive zinc oxysulfide layers

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Photo-assisted electrodeposition of polypyrrole back contact to CdS/CdTe solar cell structures

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Polycrystalline CuIn₃Se₅ thin film photoabsorber deposited by the pulsed laser deposition technique

Tverjanovich, Andrey; **Bereznev, Sergei**; Borisov, Evgeny N.; Kim, Dongsoo; **Kois, Julia; Laes, Kristjan; Volobujeva, Olga; Öpik, Andres; Mellikov, Enn**; Tveryanovich, Yuri S. Proceedings of the Estonian Academy of Sciences 2009 / 1, p. 24-28 : ill

PVD of N-CuIn₃Se₅ photoabsorber films

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PVD of n-CuIn5Se8 photoabsorber films for hybrid solar cells

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Synthesis of CuInSe2 nanopowder in polyethylene glycol

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The impedance spectroscopy of CuIn3Se5 photoabsorber films prepared by high vacuum evaporation technique

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