

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](#)

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

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>

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](#)

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

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

Tverjanovich, Andrey; Grevtsev, A. S.; **Bereznev, Sergei** Materials research express 2017 / art. 015006, p. 1-6 : ill <https://doi.org/10.1088/2053-1591/aa52d0>

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

Bereznev, Sergei; Kocharyan, Hrachya; **Maticiu, Natalia; Naidu, Revathi; Volobujeva, Olga**; Tverjanovich, Andrey; **Kois, Julia** Applied surface science 2017 / p. 722-727 : ill <https://doi.org/10.1016/j.apsusc.2017.07.078>

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

Jarkov, Aleksandr; Bereznev, Sergei; Volobujeva, Olga; Traksmaa, Rainer; Tverjanovich, Andrey; **Öpik, Andres; Mellikov, Enn** Thin solid films 2013 / p. 198-201 : ill

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

Adhikari, Nirmal; Bereznev, Sergei; Kois, Julia; Volobujeva, Olga; Raadik, Taavi; Traksmaa, Rainer; Tverjanovich, Andrey; **Öpik, Andres** Materials and applications for sensors and transducers 2012 / p. 339-342 https://www.researchgate.net/publication/272070024_PVD_OF_n-CuIn3Se5_photoabsorber_films

PVD of n-CuIn₅Se₈ photoabsorber films for hybrid solar cells

Adhikari, Nirmal; Bereznev, Sergei; Kois, Julia; Volobujeva, Olga; Raadik, Taavi; Traksmaa, Rainer; Dahal, R.K.; Tverjanovich, Andrey; **Öpik, Andres** Baltic Polymer Symposium 2012 : Liepaja, Latvia, September 19-22 : programme and proceedings 2012 / p. 29

Shallow defect density determination in CuIn₃Se₅ thin film photoabsorber by impedance spectroscopy

Laes, Kristjan; Bereznev, Sergei; Tverjanovich, Andrey; Borisov, Evgeny N.; **Varema, Tiit; Volobujeva, Olga; Öpik, Andres** Thin

Synthesis of CuInSe₂ nanopowder in polyethylene glycol

Tverjanovich, Andrey; **Bereznev, Sergei**; Gertsin, Andrejs; Muradova, Galina; Shoka, Andrejs; Kim, Dongsoo; **Kois, Julia; Öpik, Andres**; Tveryanovich, Yuri S. Scientific journal of Riga Technical University. Series 1, Material science and applied chemistry 2010 / p. 79-83 : ill <https://ortus.rtu.lv/science/en/publications/8070>

Synthesis of CuInSe₂ nanopowder in polyethylene glycol

Tverjanovich, Andrey; **Bereznev, Sergei**; Gertsin, A.; Muradova, Galina; Shoka, A.; Kim, Dongsoo; **Kois, Julia; Öpik, Andres**; Tveryanovich, Yuri S. Baltic Polymer Symposium 2009 : Ventspils, Latvia, September 22-25, 2009 : programme and proceedings 2009 / p. 102

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

Laes, Kristjan; Bereznev, Sergei; Land, Raul; Tverjanovich, Andrey; **Volobujeva, Olga; Traksmas, Rainer; Raadik, Taavi; Öpik, Andres** Energy procedia 2010 / 1, p. 119-131 : ill

The impedance spectroscopy of well-oriented CuIn₃Se₅ films prepared by high vacuum evaporation technique

Laes, Kristjan; Bereznev, Sergei; Tverjanovich, Andrey; **Öpik, Andres** EMRS-2009 Spring Meeting, Strasbourg, France, 8-12 of June 2009, Symposium B 2009 / p. 46