

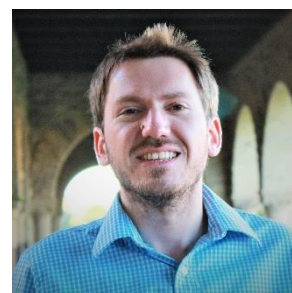
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## **Burak Guzelturk**

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**Burak Guzelturk** is a Physicist in the X-ray Science Division of Argonne National Laboratory, IL, USA. Dr. Guzelturk serves as a Beamline Scientist at the Advanced Photon Source, a user facility at the Argonne lab run by the US Department of Energy. Between January 2020 and September 2023, Dr. Guzelturk was as an Assistant Physicist at the Argonne lab. Dr. Guzelturk received Ph. D. degree from Bilkent University (Prof. Hilmi Volkan Demir's group, 2011-2016). He was then a Postdoctoral Fellow at Stanford University and SLAC National Laboratory (Prof. Aaron Lindenberg's group, 2016-2020). At the Advanced Photon Source, Dr. Guzelturk is developing time-resolved X-ray tools to better understand nano and quantum materials, and help uncover new structure-function relationships. Dr. Guzelturk specializes in pump-probe X-ray diffraction microscopy and total X-ray scattering techniques. In addition, Dr. Guzelturk develops multi-modal tools to correlate structure and optoelectronic properties of materials. Dr. Guzelturk is expert in studying in photoinduced phase transformations in quantum materials, polaronic lattice deformations in solar energy systems and photoinduced manipulation of ferroic domains in complex quantum materials. Dr. Guzelturk also develops next-generation nanocrystalline scintillators for X-ray imagers.

Up to date, Dr. Guzelturk has published over 65 articles (more than 8 cover articles), and holds 7 international patents. Dr. Guzelturk has been recipient of various awards, including Ten Outstanding Persons Award (TOYP) of Turkey, Photonics<sup>21</sup> Student Innovation Award, IEEE Photonics Society Graduate Fellowship, and Green Talents Award by the Federal Ministry of Education and Research of Germany.