

Resource Summary Report

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Coherent X-Ray Imaging Data Bank (CXIDB)

RRID:SCR_014722

Type: Tool

Proper Citation

Coherent X-Ray Imaging Data Bank (CXIDB) (RRID:SCR_014722)

Resource Information

URL: <http://cxidb.org>

Proper Citation: Coherent X-Ray Imaging Data Bank (CXIDB) (RRID:SCR_014722)

Description: Database of Coherent X-ray Imaging (CXI) experiments. This data is widely accessible to researchers worldwide.

Abbreviations: CXIDB

Synonyms: Coherent X-ray Imaging Data Bank (CXIDB), CXIDB, Coherent X-ray Imaging Data Bank

Resource Type: data or information resource, data repository, database, service resource, storage service resource

Keywords: coherent xray imaging, cxi, experiment, database, reproducibility

Availability: Available to the research community

Resource Name: Coherent X-Ray Imaging Data Bank (CXIDB)

Resource ID: SCR_014722

Alternate IDs: DOI:10.11577, r3d100011554

Alternate URLs: <https://doi.org/10.11577/>, <https://dx.doi.org/10.11577/>

Record Creation Time: 20220129T080322+0000

Record Last Update: 20260821T194007+0000

Ratings and Alerts

No rating or validation information has been found for Coherent X-Ray Imaging Data Bank (CXIDB).

No alerts have been found for Coherent X-Ray Imaging Data Bank (CXIDB).

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 23 mentions in open access literature.

Listed below are recent publications. The full list is available at [NIF](#) .

Shenoy J, et al. (2025) Scalable 3D reconstruction for X-ray single particle imaging with online machine learning. *Nature communications*, 16(1), 6812.

Gasparotto P, et al. (2024) TORO Indexer: a PyTorch-based indexing algorithm for kilohertz serial crystallography. *Journal of applied crystallography*, 57(Pt 4), 931.

Bhowmick A, et al. (2023) Structural evidence for intermediates during O₂ formation in photosystem II. *Nature*, 617(7961), 629.

Kroon-Batenburg LMJ, et al. (2023) Making your raw data available to the macromolecular crystallography community. *Acta crystallographica. Section F, Structural biology communications*, 79(Pt 10), 267.

Simonne D, et al. (2022) Gwaihir: Jupyter Notebook graphical user interface for Bragg coherent diffraction imaging. *Journal of applied crystallography*, 55(Pt 4), 1045.

Nass K, et al. (2021) Pink-beam serial femtosecond crystallography for accurate structure-factor determination at an X-ray free-electron laser. *IUCrJ*, 8(Pt 6), 905.

Im D, et al. (2020) Structure of the dopamine D₂ receptor in complex with the antipsychotic drug spiperone. *Nature communications*, 11(1), 6442.

Morgan AJ, et al. (2020) speckle-tracking: a software suite for ptychographic X-ray speckle tracking. *Journal of applied crystallography*, 53(Pt 6), 1603.

Echelmeier A, et al. (2020) Segmented flow generator for serial crystallography at the European X-ray free electron laser. *Nature communications*, 11(1), 4511.

Shapiro DA, et al. (2020) An ultrahigh-resolution soft x-ray microscope for quantitative analysis of chemically heterogeneous nanomaterials. *Science advances*, 6(51).

Helliwell JR, et al. (2019) Findable Accessible Interoperable Re-usable (FAIR) diffraction data are coming to protein crystallography. *Acta crystallographica. Section D, Structural biology*, 75(Pt 5), 455.

Helliwell JR, et al. (2019) Findable Accessible Interoperable Re-usable (FAIR) diffraction data are coming to protein crystallography. *Acta crystallographica. Section F, Structural biology communications*, 75(Pt 5), 321.

Brändén G, et al. (2019) Coherent diffractive imaging of microtubules using an X-ray laser. *Nature communications*, 10(1), 2589.

Giewekemeyer K, et al. (2019) Experimental 3D coherent diffractive imaging from photon-sparse random projections. *IUCrJ*, 6(Pt 3), 357.

Helliwell JR, et al. (2019) Findable Accessible Interoperable Re-usable (FAIR) diffraction data are coming to protein crystallography. *Journal of applied crystallography*, 52(Pt 3), 495.

Helliwell JR, et al. (2019) Findable Accessible Interoperable Re-usable (FAIR) diffraction data are coming to protein crystallography. *IUCrJ*, 6(Pt 3), 341.

Helliwell JR, et al. (2019) FACT and FAIR with Big Data allows objectivity in science: The view of crystallography. *Structural dynamics (Melville, N.Y.)*, 6(5), 054306.

Tosha T, et al. (2017) Capturing an initial intermediate during the P450_{nor} enzymatic reaction using time-resolved XFEL crystallography and caged-substrate. *Nature communications*, 8(1), 1585.

Sugahara M, et al. (2017) Hydroxyethyl cellulose matrix applied to serial crystallography. *Scientific reports*, 7(1), 703.

Daurer BJ, et al. (2017) Experimental strategies for imaging bioparticles with femtosecond hard X-ray pulses. *IUCrJ*, 4(Pt 3), 251.