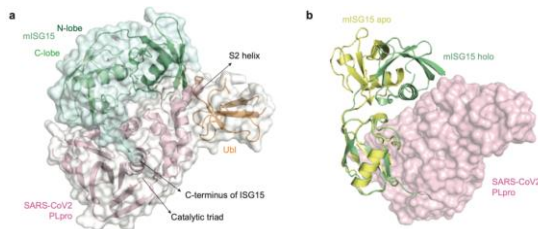


## SLS COVID-19 Rapid Access Experiments

### First MX results of the priority COVID-19 call



Scientists from the Goethe University in Frankfurt am Main, Germany have published results on the papain-like protease (PLpro), an essential enzyme of SARS-CoV-2. The structural biology work was performed at the macromolecular crystallography beamline X06SA-PXI at SLS following the opening of the "PRIORITY COVID-19 Call". The paper was submitted within one month after

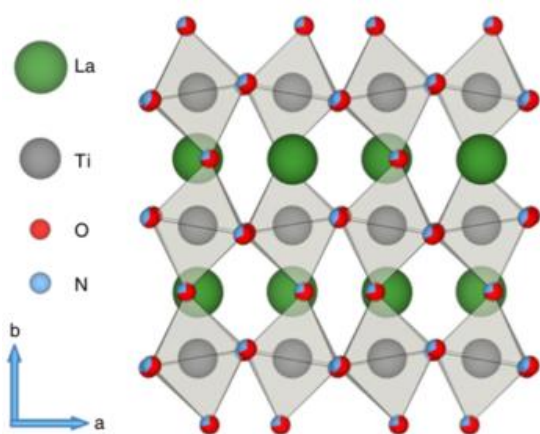
answering the proposal call. The crystallographic data collection happened on the 9<sup>th</sup> of April after the planned Easter shutdown of the SLS was cancelled for this specific experiment.

Read more: <https://www.psi.ch/en/macromolecular-crystallography/scientific-highlights/first-mx-results-of-the-priority-covid-19-call>

Media release: <https://www.biochem2.com/newsentry/2020-05-05>

## Joint X-ray and Neutron Experiment

**SINQ, SLS** – Examining the surface evolution of  $LaTiO_xN_y$  an oxynitride solar water splitting photocatalyst



$LaTiO_xN_y$  oxynitride thin films are employed to study the surface modifications at the solid- liquid interface that occur during photoelectrocatalytic water splitting. Neutron reflectometry and grazing incidence x-ray absorption spectroscopy were utilised to distinguish between the surface and bulk signals, with a surface sensitivity of 3 nm. Here we show, contrary to what is typically assumed, that the A cations are active sites that undergo oxidation at the surface as a consequence of the water splitting process. Whereas, the B cations undergo local dis- ordering with the valence state remaining unchanged. This surface modification reduces the overall water splitting efficiency, but is suppressed when

the oxynitride thin films are decorated with a co-catalyst. With this example we present the possibilities of surface sensitive studies using techniques capable of operando measurements in water, opening up new opportunities for applications to other materials and for surface sensitive, operando studies of the water splitting process.

Read more: <https://www.psi.ch/en/num/scientific-highlights/examining-the-surface-evolution-of-latioxny-an-oxynitride-solar-water>

## CALIPSOplus - I3 Access Program for SMEs

**Announcement: Rapid access for SMEs and COVID-19 projects – Call is open until July 29, 2020**

CALIPSOplus, a European Horizon2020 funded research and innovation program, provides access support for SMEs to light sources. SMEs companies working with covid-19 projects are encouraged to apply access to light sources in an easy, rapid and confidential way. Companies interested can send the proposals using the wayforlight portal: <http://wayforlight.eu/en/industries/sme-access-proposal>