

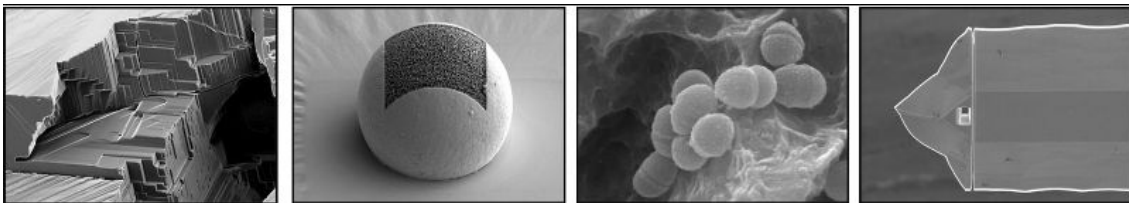
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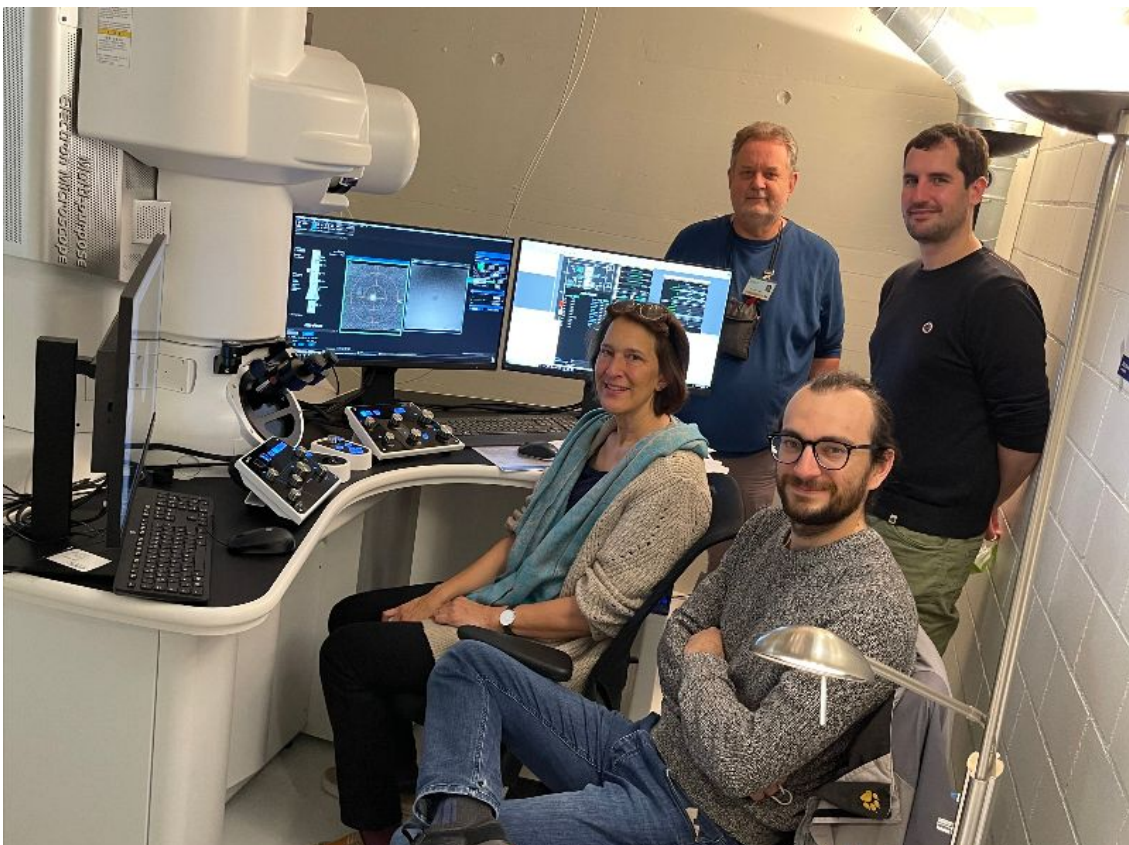
# NANO IMAGING LAB

Newsletter

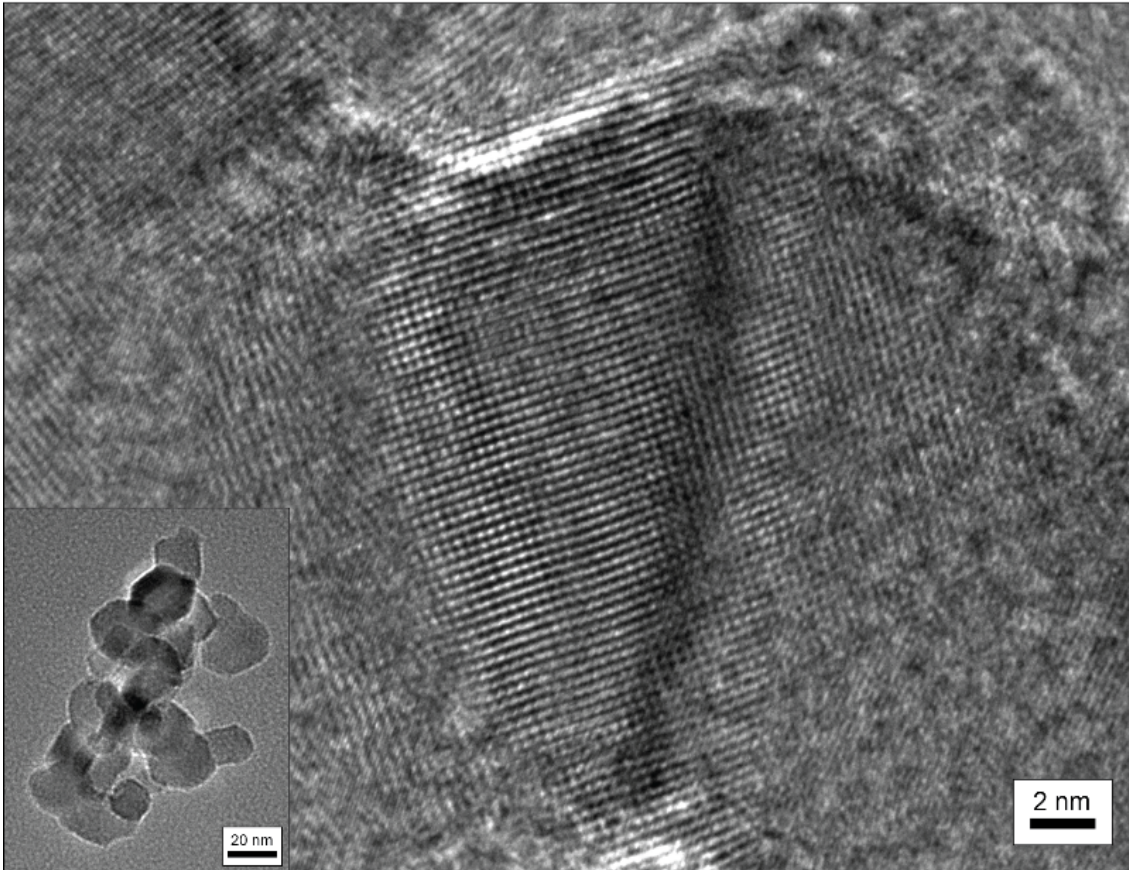
March 9, 2022



## Crystalline Structures are made visible - our new TEM/STEM

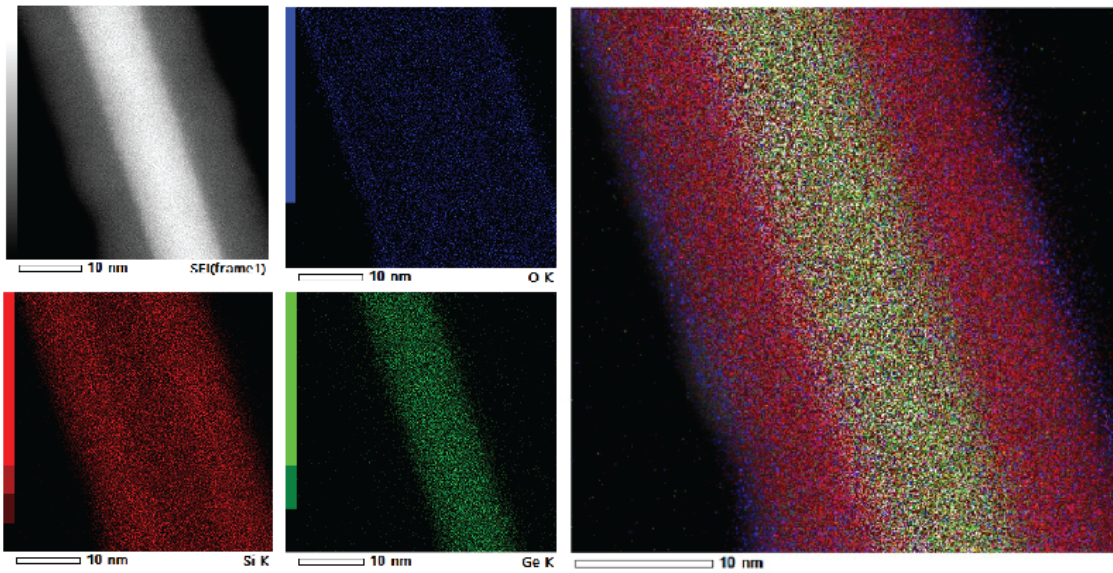


We proudly present our new scanning transmission electron microscope “Jeol JEM-F200 cFEG”. It has a cold field emission source and an acceleration voltage that is more than twice as high as the previous TEM in our laboratory. This, as well as the ability to scan the wafer-thin sample with the electron beam, make the STEM / TEM in combination with EDX a unique analysis device, which enables the imaging of the smallest crystal structures in condensed matter with atomic resolution and element analysis. A suitable sample preparation with the help of the FIB / SEM is added to the previous options. TEM lamellas are produced.



High resolution of a sample of titanium oxide nanoparticles using STEM. The crystal structures of the nanoparticle are clearly visible (large picture).





EDX measurement of a nanowire



Please contact Dr. Marcus Wyss ([marcus.wyss@unibas.ch](mailto:marcus.wyss@unibas.ch)), if you wish to know more about our FIB and TEM services or put a request on <https://www.nanoimaging1.unibas.ch>.

Jeol JEM-F200 cFEG

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## Preview: the old NOVA NanoSEM 230 will be replaced by a ZEISS GeminiSEM 460

Our NOVA NanoSEM 230 has been retired and was already disassembled on February 23 2022.