What doesn’t break you makes you stronger – optimal steels for impact

Researchers from Tampere University investigated the effects of deformation speed on the phases that steels might assume during deformation at DanMAX beamline. What they learn could be used to improve the design of the next generation of materials. Read the full story

Nano solutions for future supercomputers: the von-Neumann bottleneck

Lund University researchers have tackled a long-standing technological challenge: the von-Neumann bottleneck. After nearly a year, they successfully integrated a processor and memory onto a single vertical nanowire in a 3D configuration while showcasing in-memory computing with a minimal footprint. Read the full story

Salts of the Earth aid understanding of Martian salt chemistry

At HIPPIE beamline, an international research group studied the surface solvation of salts from Earth’s Qaidam Basin, which bear close resemblance to Martian salts and how these influence the respective planet’s surface. The research could improve our knowledge of salt aerosol particles, for example, relating to climate change. Read the full story

4th gen X-ray brilliance and nanoscale microscopy reveal clearest form

Scientists have revealed 3D images of a complex crystalline star structure using Bragg ptychography and advanced analysis tools at NanoMAX beamline. The results demonstrate the possibility of unprecedented data quality beyond experimental limitations from new synchrotron sources. Read the full story

New eyes on forest-based materials – ForMAX comes online

ForMAX is the 15th beamline to come online at MAX IV Laboratory. A large part of the research to be conducted at the beamline will promote the development of new materials and speciality chemicals from renewable forest resources. Read the full story

Welcome 2023

Happy New Year! SCIENTÍfika, the MAX IV scientific seminar series returns with renewed energy and research insights for our user communities. Visit our website for information on the latest scheduled talks, and tune-in Mondays at 13:45 CET!