

CRC/TRR 270 HoMMage





Offen im Denken

Hysteresis Design of Magnetic Materials for Efficient Energy Conversion

Friday, March 13, 2020, 12:30 s.t., UDE, MD349



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Tailoring electrical properties of MAX phases and MXene transition metal carbide systems

The presentation will highlight the research in the MAX phase solid solutions in Ti-Al-C system and present the opportunities given through its tailoring ability. After a brief discussion of the properties of new solid solutions, ion-implantation as a technique of well-designing doping and chemical disorder in lamellar structures of ternary (MAX phases) and double (MXenes) transition metal carbide systems will be presented. The prospects of defect/doping approaches in developing semiconducting and magnetic MXenes will be shown.