



CM

Computational Materials Design

Prof. J. Neugebauer

Computational Phase Studies

Dr. T. Hickel

Computer Center

Dr. C. Freysoldt

Defect Chemistry and Spectroscopy

Dr. C. Freysoldt

Electrochemistry and Corrosion

Dr. M. Todorova

Materials Informatics

Dr. J. Janßen

Microstructure and Mechanics

Prof. E. Bitzek

Complex Concentrated Alloys

Dr. F. Körmann
(guest group leader)

GO

Interface Chemistry and Surface Engineering

N.N./Provisional Head: Prof. J. Neugebauer

Atomistic Modelling

Prof. S. Wippermann
(guest group leader)

Corrosion

Dr. M. Rohwerder

RUB-MPI Junior Research Group
Spectroscopy at Electrochemical Interfaces
Dr. M. Rabe

Surface Science for Future Materials

Dr. P. Jovičević-Klug

MA

Microstructure Physics and Alloy Design

Prof. D. Raabe

Atom Probe Tomography

Prof. B. Gault
Dr. A. Saksena

Mechanism-based Alloy Design

Dr. D. Ponge

Microscopy and Diffraction

Dr. S. Zaefferer

Microstructure and Interfaces of Battery Materials

Dr. Y. Joshi

Theory and Simulation

Dr. F. Roters

SusMax:
Sustainable Materials for a Circular Economy
Dr. T. Beyazay

Funded by ERC Advanced Grant
Sustainable Synthesis of Materials
U. Manzoor

SN

Structure and Nano-/Micromechanics of Materials

Prof. G. Dehm

Environmental & Analytical Electron Microscopy
Dr. L. M. Vogl

Hydrogen Mechanics and Interfaces

Dr. M. J. Duarte Correa

Intermetallic Materials

Dr. F. Stein

Thermo-Chemomechanics and Interfaces

Dr. A. Kanjilal

Nanomechanical Instrumentation and Extreme Nanomechanics

Dr. R. Ramachandramoorthy

Quantitative Transmission Electron Microscopy

Dr. P. Schweizer

ERC Starting Grant
Additive Micromanufacturing
Dr. R. Ramachandramoorthy

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Atomistic Modelling of Material Interfaces
Dr. T. Brink

I

Independent research groups, members and schools

Independent Max Planck Research Group
Nanoanalytics and Interfaces
Prof. C. Scheu

Max Planck Fellow Group
Electrochemistry and Nanoscale Materials
Prof. K. Tschulik

International Max Planck Research School for Sustainable Metallurgy

Prof. E. Bitzek
E. Lorenz

Emeritus Group Electrochemical Surface Science

Prof. M. Stratmann

External Members

Prof. R. Kirchheim

Interdepartmental Groups

Funded by EIC
Artificial Intelligence for Materials Science
Dr. A. Bajpai

Atomic Scale Dynamics of Sustainable Materials
Dr. X. Zhou

Computational Energy Storage Materials
Dr. C. Liu

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High-Entropy Materials
Dr. L. Han

Hydrogen Embrittlement in High-Performance Alloys
Prof. B. Sun

Hydrogen at Interfaces
Dr. A. Saksena

Interfacial Processes/ Reactions at Atomic Scale
Dr. T. Schwarz

Materials Science of Additive Manufacturing
Dr. R. Ramachandramoorthy & Prof. H. Springer

Sustainable Magnets and Recycling
Dr. M. Jovičević-Klug

Partner Groups

Max Planck Partner Group
Combinatorial Design of Permanent Magnets
Prof. K. G. Pradeep

Max Planck Partner Group
Extreme mechanics of 3D nano-architected oxides
Prof. S.-G. Kang

Max Planck Partner Group
Degradation of High Temperature Materials
Prof. S. K. Makineni

Max Planck Partner Group
High Performance Materials for Harsh Energy Applications
Dr. J. Zavasnik

Max Planck Partner Group
Properties of Decorated Grain Boundaries
Dr. H. Bishara

Max Planck Partner Group
Stress and Defects Driven Phase Transformations
Prof. R. S. Meka

University Duisburg-Essen
Sustainable Materials Science and Technology
Prof. H. Springer

MPG Groups

MPG Group
De Magnete Designing Magnetism
Prof. O. Gutfleisch

MPG Group
High Temperature Materials
Prof. G. Eggeler

MPG Group
Thin Film Materials Design
Prof. J. Schneider

Scientific Service Groups

Hydrogen Laboratory
• Electrochemical and gas-phase hydrogen charging
• Thermal desorption spectroscopy
Dr. M. Rohwerder

Materials Testing
• Mechanical & physical properties
• Varying environments
Dr. D. Ponge

Metallography
• Light microscopy • Metallographic sample preparation
• Scanning Electron Microscopy
Dr. S. Zaefferer

Synthesis and Processing
• Alloy production • Annealing and welding
• Thermomechanical treatments
Dr. D. Ponge

X-Ray Diffraction
• XRD phase analysis • Advanced XRD techniques
• Pole figure and residual stress measurements
B. Breitbach

Administration & Non-Scientific Service Groups – Dr. K. de Weldige

Accounting and Third Party Funds
B. Kloß

Human Resources
M. Schmitz

Procurement
A. Moll

Electronics
I. Gonzalez

IT Services
M. Mietzner

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P. Siegmund

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Dr. K. Hübel
Events & Internal Communication T. Krause
Int. Max Planck Research School E. Lorenz
International Office H. Titchener
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