Lecture Notes:

MSc Course

Titles:

- Shape Memory Alloys
- Piezoelectric Materials
- Electrorheological Fluids
- Magnetorheological Fluids
- Austenite-Martensite Transformation
- Thermoelasticity and Superelasticity Effects
- Rhombohedral Phase Transformation
- Two Way Shape Memory Effect

Metals and their applications in medical engineering

- Biocompatible Materials and Alloys

References:
1. Joon Park and R. S. Lakes, "Biomaterials: An Introduction", Springer, (2007), ISBN 978-0387378794.
2. H.R. Chen, "Shape Memory Alloys: Manufacture, Properties and Applications", Nova Science Publishers, (2010), ISBN 978-1607417897.
3. Teoh Swee Hin, "Engineering Materials for Biomedical Applications", World Scientific Publishing Company, (2004), ISBN 978-9812560612.

Introduction (
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Smart Materials ( )

NiTi Behavior ( )

SMA Work ( )