Functional Materials
From fundamentals to applications

Hauptseminar (April – July)
Organizational meeting:
Date: 07.02/Thursday
Time: starting at 14:00
Place: Pfaffenwaldring 57, third floor, seminar room (3.531)

Planned first talk:
11.04.2019

Correspondance:
✓ Prof. Dr. Martin Dressel
✓ Dr. Artem Pronin
✓ Dr. Ece Uykur
✓ Dr. Yohei Saito
Spintronics

Optical materials

Multiferroics

Functional materials from fundamentals to applications

Interfaces

Topological materials
1. Spintronics
   a. Giant magnetoresistance (GMR)
   b. Colossal magnetoresistance (CMR)
   c. Skyrmions

2. Topological materials
   a. Graphene
   b. Weyl semimetals

3. Multiferroics
   a. Ferroic polarizations
   b. Magnetic nanoparticles

4. Optical functional materials
   a. Photo-induced phase transitions in strongly correlated electron systems
   b. Linear and Nonlinear optics

5. 2 - Dimensional electron gas
   a. in MOSFETs
   b. at LaAlO3/SrTiO3 interfaces