

Survey of Materials

Team project 3, due dates are set in Course schedule and Canvas LMS

Topic: Functional materials

Present a class of functional materials: definition, structure and properties, applications. Course lectures serve as an example. Here is an exemplary list of choices:

- Electronic conductors
- Ionic conductors
- Thermoelectric materials
- Photovoltaic materials
- Dielectrics
- Materials for nonlinear optics
- Piezoelectric
- Ferroelectrics
- Hydrogen storage materials
- Me-ion storage materials
- Explosives
- Glasses
- Clays
- Lubricants

Reminder: This is a scientific project whose more or less complete solution has a complexity scale of a peer-reviewed publication. That is why a precise exhaustive solution is not required. But try to do your best, spending a reasonable amount of time (about 2 hours per week per team member). It is expected that you will take TA's advisory on team-projects. Prepare 10 min oral presentation and be ready for additional 10 min of discussion. Very short written report is also required and should contain the information on participation of each team member. Assessed are science, technical level, presentation (both oral and slides), discussion, and written report.