

Thermally Triggered Motion of Pyrolytic Graphite on a Magnet Array

Austermann, Katharina (School: Humboldt-Gymnasium Berlin)

Klar, Charlotte (School: Humboldt-Gymnasium Berlin)

When hydrocarbon is heated to its decomposition temperature pyrolytic graphite can be crystalized in ordered layers. This material has an unusual characteristic. It can levitate above a chequerboard arrangement of magnets due to its diamagnetic property. We delved into the reason for this phenomenon. One question in particular interested us: can the levitation process be manipulated by applying heat or cold?