

### **Cubic iron core-shell nanoparticles functionalized to obtain high-performance MRI contrast agents**

**Volokhova, Maria**; Shugai, Anna; Tsujimoto, Masahiko; Kubo, Anna-Liisa; Telliskivi, Sven; Nigul, Mait; Uudeküll, Peep; Vija, Heiki; Bondarenko, Olesja; Adamson, Jasper; Kahru, Anne; Stern, Raivo; Seinberg, Liis Materials 2022 / art. 2228

<https://doi.org/10.3390/ma15062228> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Deep oxidative desulfurization of planar compounds over functionalized metal-organic framework UiO-66(Zr): An optimization study**

**Barghi, Bijan; Möistlik, Tanel; Raag, Anastassia**; Volokhova, Maria; Reile, Indrek; Seinberg, Liis; **Mikli, Valdek; Niidu, Allan** ACS omega 2024 / p. 23329-23338 <https://doi.org/10.1021/acsomega.3c09971> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Electrocatalytic oxidation of hydroxide ions by Co<sub>3</sub>O<sub>4</sub> and Co<sub>3</sub>O<sub>4</sub>@SiO<sub>2</sub> nanoparticles both at particle ensembles and at the single particle level**

Xie, Ruo-Chen; Volokhova, Maria; Boldin, Aleksei; Seinberg, Liis; Tsujimoto, Masahiko; Yang, Minjun; Rasche, Bertold; Compton, Richard G. ChemElectroChem 2020 / p. 1261– 1276 : ill <https://doi.org/10.1002/celec.202000230>

### **Magnetic nanomaterials synthesis and functionalization for biomedical applications = Magnetiliste nanomaterjalide süntees ja funktsionaliseerimine biomeditsiiniliste rakenduste jaoks**

**Volokhova, Maria** 2022 <https://doi.org/10.23658/taltech.39/2022> <https://digikogu.taltech.ee/et/Item/49b92f4b-d0cd-4544-8a64-83ca27bf2aa3> [https://www.ester.ee/record=b5507318\\*est](https://www.ester.ee/record=b5507318*est)

### **Performance of UiO-66-NH<sub>2</sub> on oxidation of debenzothiophene from a model fuel : optimization using response surface methodology**

Barghi, Bijan; Niidu, Allan; Raag, Anastassia; Jürisoo, Martin; Volokhova, Maria; **Mikli, Valdek** Graduate School of Functional Materials and Technology (GSFMT) Scientific Conference : abstracts 2022 / 8 I. [Graduate School of Functional Materials and Technology \(GSFMT\) Scientific Conference 2022](#)

### **Process optimization for catalytic oxidation of dibenzothiophene over UiO-66-NH<sub>2</sub> by using a response surface methodology**

**Barghi, Bijan; Jürisoo, Martin**; Volokhova, Maria; Seinberg, Liis; Reile, Indrek; **Mikli, Valdek; Niidu, Allan** ACS omega 2022 / p. 16288-16297 : ill <https://doi.org/10.1021/acsomega.1c05965> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Synthesis of Ni@SiO<sub>2</sub> and Co@SiO<sub>2</sub> nanomagnets after formation of NiO and Co<sub>2</sub>O<sub>3</sub> nanoparticles at low temperatures using CaH<sub>2</sub>**

**Volokhova, Maria**; Boldin, Aleksei; Link, Joosep; Tsujimoto, Masahiko; Stern, Raivo; Seinberg, Liis Journal of materials research and technology 2022 / p. 988-992 : ill <https://doi.org/10.1016/j.jmrt.2021.12.042> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Synthesis of zwitterionic dopamine sulfonate coated cubic core $\alpha$ -Fe@SiO<sub>2</sub> nanoparticles and their magnetic properties analysis**

**Volokhova, Maria**; Boldin, Aleksei; Link, Joosep; Shugai, Anna; Pehk, Tõnis; Stern, Raivo; Seinberg, Liis Materials 2023 / 6 p. : ill