

Syntéza Nps

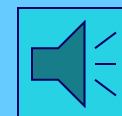


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Audio test:



Start



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Office: UKB A12/M231

Ústav chemie: <http://ustavchemie.sci.muni.cz/>

Au-nano

Rozdělení Reakce Liquid → solid

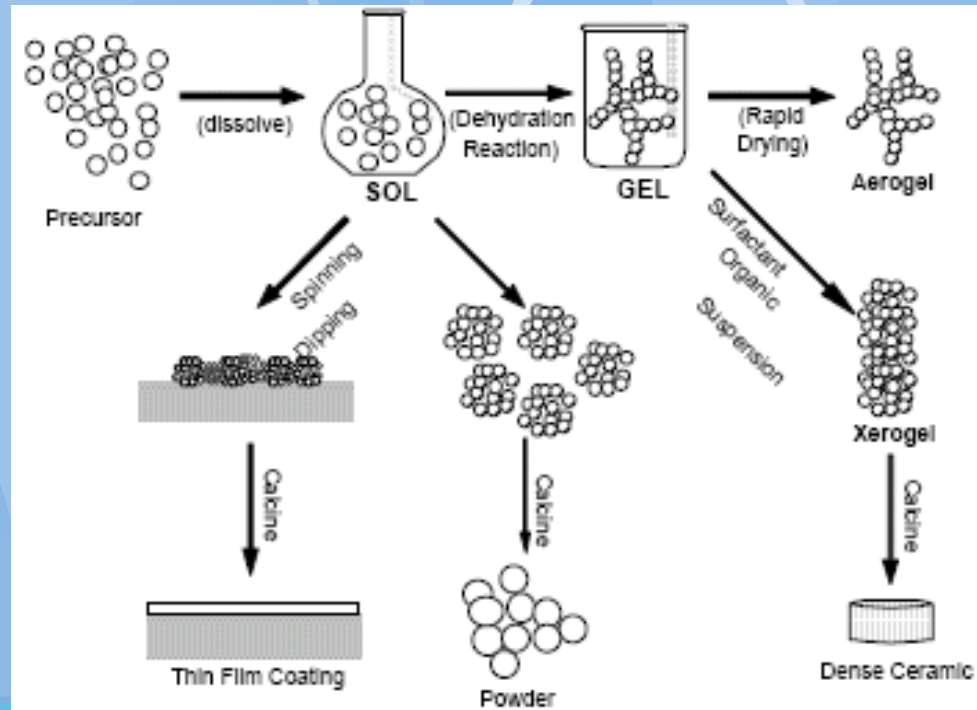
Ultrafine particles are produced by precipitation from a solution, the process being dependent on the presence of the desired nuclei. For example, TiO₂ powders have been produced with particle sizes in the range 70-300 nm from titanium tetraisopropoxide. The ZnS powders were produced by reaction of aqueous zinc salt solutions with thioacetamide (TAA). Precursor zinc salts were chloride, nitric acid solutions, or zinc salts with noncommon associated ligands (i.e., acetylacetonate, trifluorocarbonsulfonate, and dithiocarbamate). The 0.05 M cation solutions were heated in a thermal bath maintained at 70° or 80 °C in batches of 100 or 250 ml. Acid was added dropwise to bring it to a pH of 2. The reaction was started by adding the TAA to the zinc salt solution, with the molar ratio of TAA and zinc ions being set to an initial value of either 4 or 8. In intervals, aliquots were collected from the reacting solution.

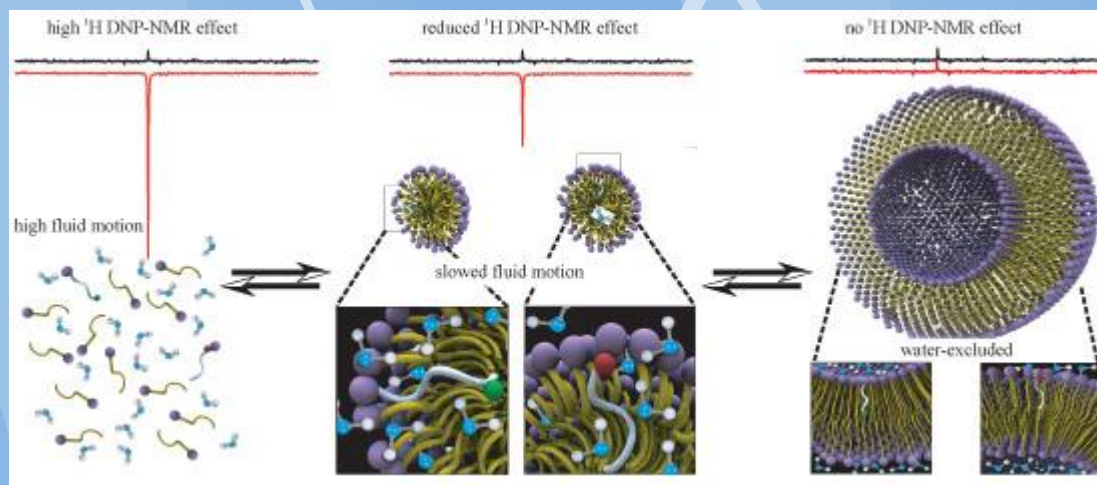
Synatéza nukleace NPs:

http://www.zeepeedia.com/read.php?synthesis_of_materials_based_on_solubility_principle_synthetic_strategies_in_chemistry&b=132&c=4

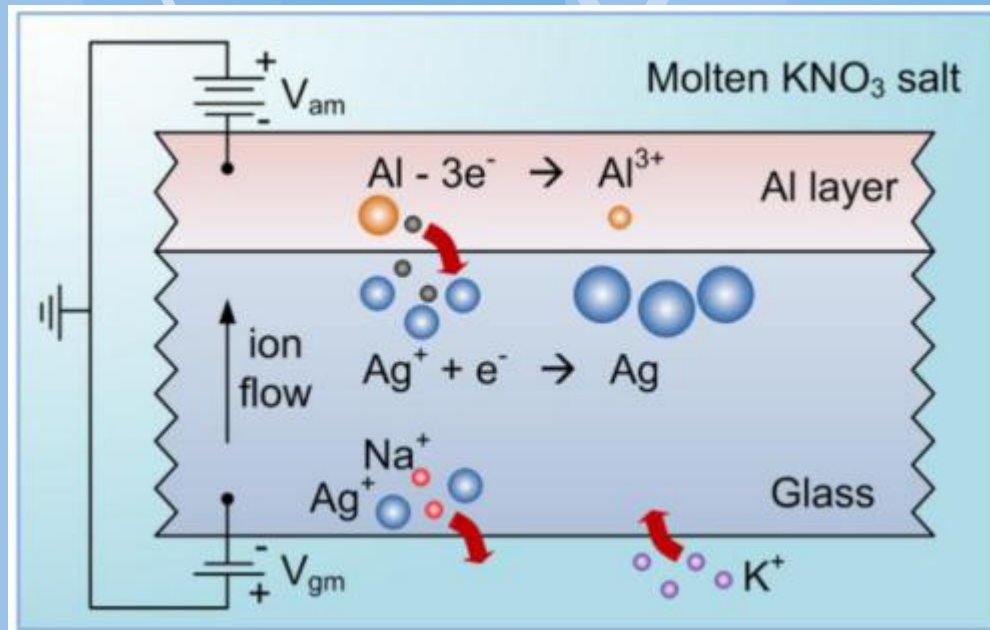
Wet Chemical Synthesis of nanomaterials (Sol-gel process)

Použití:
Příprava
oxidů



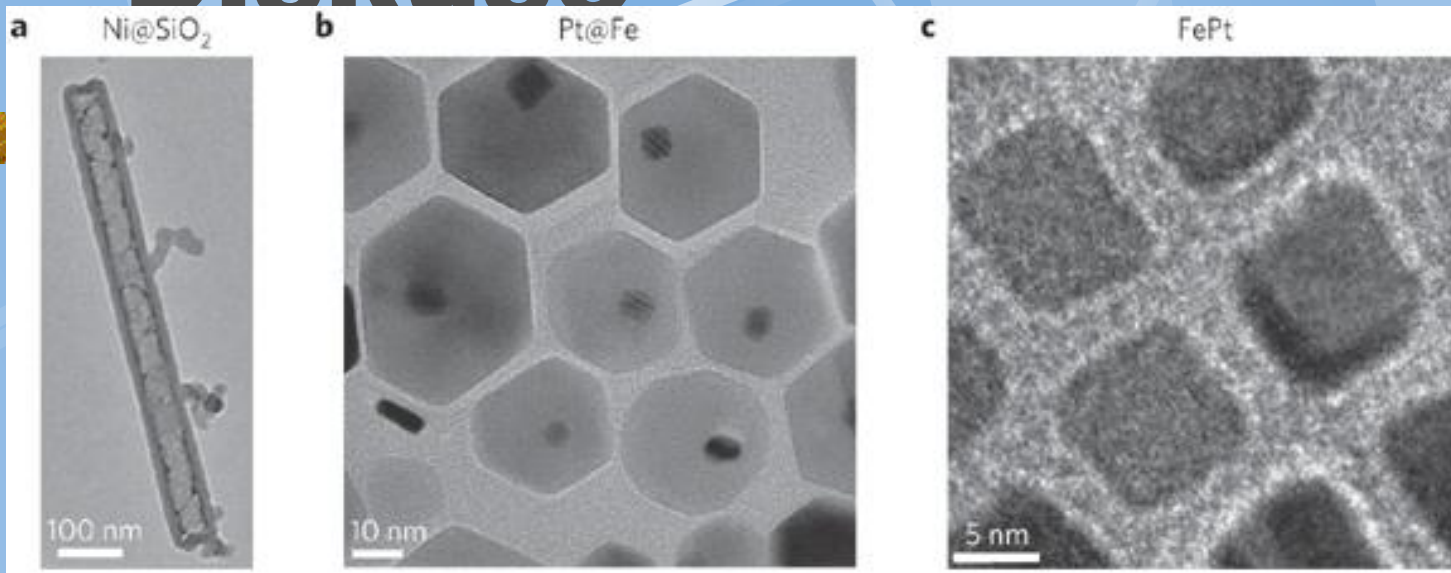


http://web.chem.ucsb.edu/~hangroup/research_lipids.html



<http://www.opticsinfobase.org/ome/fulltext.cfm?uri=ome-1-2-164&id=213567>

Diskuse



a, Size-controlled Ni nanorods coated with SiO₂. b, Pt nanoparticles embedded in hexagonally shaped Fe nanoparticles. c, Self-assembled cubic FePt nanoparticles with their (100) planes parallel to the substrate.

Syntéza MeO NPs: <http://cnx.org/content/m23038/latest/>

http://www.nature.com/nmat/journal/v8/n2/fig_tab/nmat2363_F1.html