

Title (en)

SYNTHESIS OF AU, PD, PT OR AG NANO- OR MICROCRYSTALS VIA REDUCTION OF METAL SALTS BY CELLULOSE IN THE IONIC LIQUID 1-BUTYL-3-METHYL IMIDAZOLIUM CHLORIDE

Title (de)

SYNTHESE VON AU-, PD-, PT- ODER AG-NANO- BZW. MIKROKRISTALLEN MITTELS METALLSALZREDUKTION DURCH CELLULOSE IN DER IONISCHEN FLÜSSIGKEIT 1-BUTYL-3-METHYLMIDAZOLIUMCHLORID

Title (fr)

SYNTHÈSE DE NANO OU MICROCRISTAUX DE AU, PD, PT OU AG PAR LA RÉDUCTION DES SELS MÉTALLIQUES PAR LA CELLULOSE DANS LE LIQUIDE IONIQUE CHLORURE DE 1-BUTYL-3-MÉTHYL-IMIDAZOLIUM

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Application

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Abstract (en)

[origin: WO2009080522A1] The invention refers to a preparation method for nano- or microcrystals of Au, Pd, Pt or Ag comprising the steps of: a) preparing an ionic liquid mixture of cellulose and at least one metal salt selected from the group consisting of Au, Pd, Pt and Ag in 1-butyl-3-methylimidazolium chloride; and b) (i) thermally inducing a reduction of the metal salt with cellulose by heating of the mixture to a temperature in the range of 50 to 250 °C; or (ii) photoreduction of the metal salt by irradiation of the mixture with light having a wave length in the range of 200 to 800 nm.

IPC 8 full level

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