

Triton X-100/C10H21OH/H2O体系层状液晶中超微粒子材料PbS的合成

郭荣,宋根萍,严鹏权,沈明

扬州大学师范学院化学系

收稿日期 修回日期 网络版发布日期 接受日期

摘要 将Pb(NO₃)₂和Na₂S分别溶于Triton X-100/C10H₂₁OH/H₂O体系层状液晶溶剂层中,混和即可在溶剂层中生成PbS粒子,并以层状液晶中溶剂层厚度的大小,限定所合成PbS粒子的尺寸小于10nm,改变有关组分含量对PbS超微粒子大小无显著影响,所合成PbS超微粒子的平均粒径均小于10nm.

关键词 [表面活性剂](#) [水](#) [液晶](#) [硫化钠](#) [硫化铅](#) [超微粒子](#) [TRITON X-100](#) [硝酸铅](#)

分类号 [064](#)

The synthesis of fine particles PbS in Triton X-100/C10H21OH/H2O lamellar liquid crystal

GUO RONG,SONG GENPING,YAN PENGQUAN,SHEN MING

Abstract Pb(NO₃)₂ and Na₂S were respectively dissolved in solvation layer of Triton X-100/C10H₂₁OH/H₂O lamellar liquid crystal. Mixing up the two liquid crystal systems could synthesize fine particles PbS in the solvation layer. The synthesis was based on the limitation of the change of thickness of solvation layer in the lamellar liquid crystal. The size of fine particle PbS thus synthesized was less than 10nm, and changing the related composition concentration didn't much affect the size of fine particles PbS.

Key words [SURFACTANTS](#) [WATER](#) [LIQUID CRYSTAL](#) [SODIUM SULFIDE](#) [LEAD SULFIDE](#) [ULTRAMICRON](#) [LEAD NITRATE](#)

DOI:

通讯作者

扩展功能

本文信息

- ▶ [Supporting info](#)
- ▶ [PDF\(766KB\)](#)
- ▶ [\[HTML全文\]\(0KB\)](#)
- ▶ [参考文献](#)

服务与反馈

- ▶ [把本文推荐给朋友](#)
- ▶ [加入我的书架](#)
- ▶ [加入引用管理器](#)
- ▶ [复制索引](#)
- ▶ [Email Alert](#)
- ▶ [文章反馈](#)
- ▶ [浏览反馈信息](#)

相关信息

- ▶ [本刊中 包含“表面活性剂”的 相关文章](#)
- ▶ [本文作者相关文章](#)

- [郭荣](#)
- [宋根萍](#)
- [严鹏权](#)
- [沈明](#)