
[Skip to Main Content](#) if(true) { document.getElementById("skipNavigationLink").onclick =function skipElement () { var element = document.getElementById('article__content'); if(element == null || element == undefined) { element = document.getElementsByClassName('article__content').item(0); } element.setAttribute('tabindex','0'); element.focus(); } }



[Access byCAS - National Science Library](#)

[Access byCAS - National Science Library](#)

- [This Journal](#)
- [Anywhere](#)

-
-

[Login / Register](#)

The full text of this article hosted at iucr.org is unavailable due to technical difficulties.

googletag.cmd.push (function () { googletag.display ('advert-leaderboard'); }); _

[Bulletin of the Korean Chemical Society](#)

[Volume 38, Issue 10](#)

Hydrothermal Synthesis and Characterization of $\text{Sm}_2\text{O}_2\text{SO}_4$ Nanoplates

[Sung Woo Lee](#)

Center for Research Facilities & Department of Materials Science and Engineering, Chungnam National University, Daejeon 34134, Republic of Korea

[Search for more papers by this author](#)

[Jong-Ah Ryul Jeong](#)

Department of Materials Science and Engineering and Graduate School of Energy Science and Technology, Chungnam National University, Daejeon 34134, Republic of Korea

[Search for more papers by this author](#)

[Choon Sup Ra](#)

Corresponding Author

E-mail address: csra@ynu.ac.kr

Department of Chemistry, Yeungnam University, Gyeongsan 38541, Republic of Korea

[Search for more papers by this author](#)

[Youngku Sohn](#)

Corresponding Author

E-mail address:youngkusohn@cnu.ac.kr

Department of Chemistry, Yeungnam University, Gyeongsan 38541, Republic of Korea

Department of Chemistry, Chungnam National University, Daejeon 34134, Republic of Korea

[Search for more papers by this author](#)

[Sung Woo Lee](#)

Center for Research Facilities & Department of Materials Science and Engineering, Chungnam National University, Daejeon 34134, Republic of Korea

[Search for more papers by this author](#)

[Jong-Ac, A€A, A•Ryul Jeong](#)

Department of Materials Science and Engineering and Graduate School of Energy Science and Technology, Chungnam National University, Daejeon 34134, Republic of Korea

[Search for more papers by this author](#)

[Choon Sup Ra](#)

Corresponding Author

E-mail address:csra@ynu.ac.kr

Department of Chemistry, Yeungnam University, Gyeongsan 38541, Republic of Korea

[Search for more papers by this author](#)

[Youngku Sohn](#)

Corresponding Author

E-mail address: youngkusohn@cnu.ac.kr

Department of Chemistry, Yeungnam University, Gyeongsan 38541, Republic of Korea

Department of Chemistry, Chungnam National University, Daejeon 34134, Republic of Korea

[Search for more papers by this author](#)

First published: 06 September 2017

<https://doi.org/10.1002/bkcs.11238>

[Read the full text](#)

[About](#)

[PDF](#)

[PDF](#)

[Tools](#)

- [Request permission](#)
- [Export citation](#)
- [Add to favorites](#)
- [Track citation](#)

[Share](#)

Give access

[Share full text access](#)

Share full text access

Share a link

- [Email to a friend](#)
- [Facebook](#)
- [Twitter](#)
- [Linkedin](#)
- [Google+](#)
- [Reddit](#)
- [CiteULike](#)

Abstract

Developing a material with a new morphology is very important for improving the functional performance and finding new applications. Monoclinic samarium oxysulfate ($\text{Sm}_2\text{O}_2\text{SO}_4$) nanoplates were first prepared using a hydrothermal process followed by a post-annealing treatment of an as-synthesized $\text{Sm}_2(\text{OH})_4\text{SO}_4 \cdot 2\text{H}_2\text{O}$ plate at 450°C . The fundamental physicochemical properties were examined by scanning electron microscopy, high-resolution transmission electron microscopy, Rietveld X-ray diffraction crystallographic data analysis, thermogravimetric analysis/differential scanning calorimetry, Fourier transform infrared spectroscopy, Raman spectroscopy, ultraviolet-visible-NIR absorption, and X-ray photoelectron spectroscopy.

[Volume38, Issue10](#)

October 2017

Pages 1149-1154

googletag.cmd.push (function () { googletag.display ('advert-rail-1'); }); _

- [Related](#)
- [Information](#)

•

•

googletag.cmd.push (function () { googletag.display ('advert-rail-2'); }); _

-
-

```
var articleRef = document.querySelector('.article__body:not(.show-references) .article__references');  
if (articleRef) { articleRef.style.display = "none"; }
```

[Caption](#)

Additional links

About Wiley Online Library

- [Privacy Policy](#)
 - [Terms of Use](#)
-

-
- [Cookies](#)
 - [Accessibility](#)

Help & Support

- [Contact Us](#)

Opportunities

- [Subscription Agents](#)
- [Advertisers & Corporate Partners](#)

Connect with Wiley

- [The Wiley Network](#)
- [Wiley Press Room](#)

Log in to Wiley Online Library

[NEW USER >](#) [INSTITUTIONAL LOGIN >](#)

Change Password

Congrats!

Your password has been changed

Create a new account

[Returning user](#)

Forgot your password?

Enter your email address below. If your address has been previously registered, you will receive an email with instructions on how to reset your password. If you don't receive an email, you should register as a new user

Please check your email for your password reset instructions.

Request Username

Can't sign in? Forgot your username?

Enter your email address below and we will send you your username

If the address matches an existing account you will receive an email with instructions to retrieve your username

```
if(window._satellite) { _satellite.pageBottom(); }
```

```
var _prum=[['id','59e8fecb3847311aab7b23c6'],['mark','firstbyte',(new Date()).getTime()]];function(){var s=document.getElementsByTagName('script')[0],p=document.createElement('script');p.async='async';p.src='//rum-static.pingdom.net/prum.min.js';s.parentNode.insertBefore(p,s);})();
```