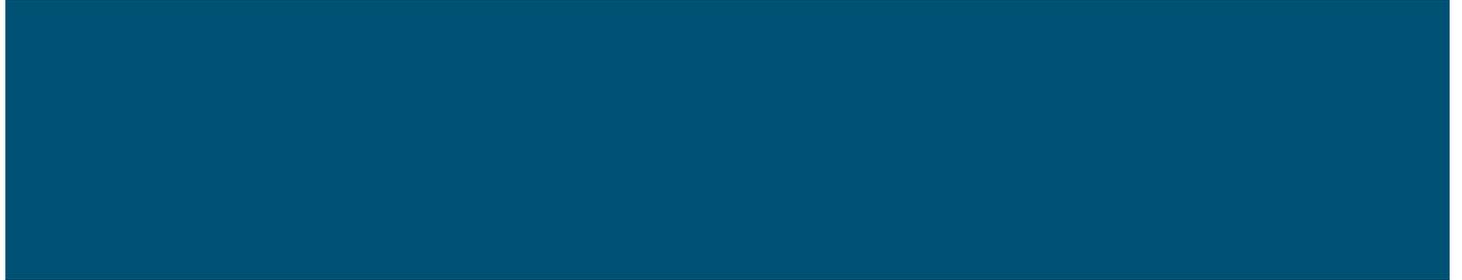


---

[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 36, Issue 3](#)

---

# Simple Morphological Control of ZnPc Thin Films Grown on SubPc Underlayer<sup>#</sup>

[Dasom Park](#)

Department of Chemistry, Kookmin University, Seoul, South Korea

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

[Sanggyu Yim](#)

Corresponding Author

E-mail address:[sgyim@kookmin.ac.kr](mailto:sgyim@kookmin.ac.kr)

Department of Chemistry, Kookmin University, Seoul, South Korea

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

[Dasom Park](#)

Department of Chemistry, Kookmin University, Seoul, South Korea

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

[Sanggyu Yim](#)

Corresponding Author

---

---

E-mail address: [sgyim@kookmin.ac.kr](mailto:sgyim@kookmin.ac.kr)

Department of Chemistry, Kookmin University, Seoul, South Korea

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

First published: 20 February 2015

<https://doi.org/10.1002/bkcs.10136>

#This paper is dedicated to Professor Kwan Kim on the occasion of his honorable retirement.

[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**

Morphological templating in molecular double-layer thin films, *i.e.*, the phenomenon

---

where the surface morphology of the top layer is strongly influenced by that of the underlying layer, was investigated to control the surface nanomorphology of zinc phthalocyanine (ZnPc) thin films. Three types of molecular thin films, ZnPc single layer, chloro[subphthalocyaninato]boron(III) (SubPc) single layer, and ZnPc on SubPc (SubPc/ZnPc) double layer thin films were grown on glass substrates and post-annealed at 250 °C. While the changes in surface roughness and morphology of the ZnPc single layer were negligible during post-annealing, the roughness of the SubPc/ZnPc double layer significantly increased, similar to that of the SubPc single layer film. However, the lateral size of the surface crystallites of the SubPc/ZnPc film did not change apparently. Consequently, the fabricated regular, nanopillar-like surface morphology obtained by this simple treatment is expected to provide desirable interdigitated donor-acceptor interface with large contact area for small-molecule organic photovoltaic device applications. In addition, the ZnPc and SubPc single layer thin films showed absorption maxima in different spectral regions; hence, the double layer film absorbed the incident light effectively in a broader spectral range.

[Volume36, Issue3](#)

March 2015

Pages 748-751

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);})();
```