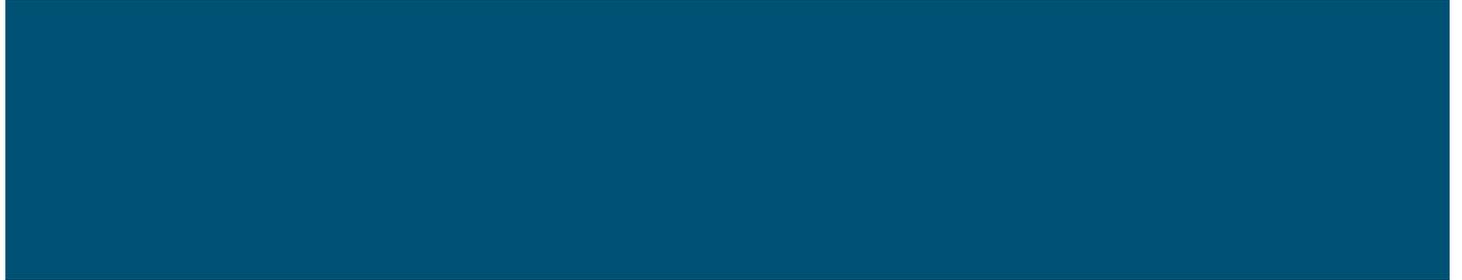

[Skip to Main Content](#) if(true) { document.getElementById("skipNavigationLink").onclick =function skipElement () { var element = document.getElementById('article__content'); if(element == null || element == undefined) { element = document.getElementsByClassName('article__content').item(0); } element.setAttribute('tabindex','0'); 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 37, Issue 8](#)

Comparison of Semiconducting and Metallic Carbon Nanotubes Incorporating $\text{In}_2\text{S}_3/\text{In}_2\text{O}_3$ Photoelectrochemical Cells

[Heesoo Kim](#)

Department of Chemistry, Hanyang University, Seoul, Korea

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

[Jongtaek Lee](#)

Department of Chemistry, Hanyang University, Seoul, Korea

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

[Taehee Park](#)

Department of Chemistry, Hanyang University, Seoul, Korea

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

[Junyoung Lee](#)

Department of Chemistry, Hanyang University, Seoul, Korea

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

[Jonghee Yang](#)

Department of Chemistry, Hanyang University, Seoul, Korea

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

[Sang Jung Ahn](#)

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

[Whikun Yi](#)

Corresponding Author

E-mail address: wkyi@hanyang.ac.kr

Department of Chemistry, Hanyang University, Seoul, Korea

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

[Heesoo Kim](#)

Department of Chemistry, Hanyang University, Seoul, Korea

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

[Jongtaek Lee](#)

Department of Chemistry, Hanyang University, Seoul, Korea

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

[Taehee Park](#)

Department of Chemistry, Hanyang University, Seoul, Korea

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

[Junyoung Lee](#)

Department of Chemistry, Hanyang University, Seoul, Korea

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

[Jonghee Yang](#)

Department of Chemistry, Hanyang University, Seoul, Korea

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

[Sang Jung Ahn](#)

Center for Advanced Instrumentation, Korea Research Institute of Standards and Science, Daejeon 34113, Korea

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

[Whikun Yi](#)

Corresponding Author

E-mail address: wkyi@hanyang.ac.kr

Department of Chemistry, Hanyang University, Seoul, Korea

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

First published: 21 July 2016

[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

We fabricate photoelectrochemical cells (PECs) using $\text{In}_2\text{S}_3/\text{In}_2\text{O}_3$ double-layer composite as a working electrode in the presence of single-walled carbon nanotubes (SWCNTs). Simple solution methods, such as spray-coating and chemical bath deposition, were used to assemble each layer in the PECs. We apply pristine SWCNTs, semiconducting SWCNTs (s-SWCNTs), and metallic SWCNTs (m-SWCNTs) to the PECs, and measure their solar performances, incident photon to charge carrier efficiency, and electroimpedance spectra. Field emission is also measured to explain the enhanced electric field of each cell.

[Supporting Information](#)

[Volume37, Issue8](#)

August 2016

Pages 1185-1190

```
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](#)

Copyright © 1999-2018 [John Wiley & Sons, Inc.](#) All rights reserved

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)}})();
```