

[Log In](#)[Register](#)

ACS

ACS Publications

C&EN CAS



ACS Journals

ACS ChemWorx

ACS Books

ACS Style Guide

C&EN Archives

Subscribe

Help

NANO LETTERS

Search text

Anywhere

Search

 Nano Lett. All Publications/Website

Subscriber access provided by UNIV OF PITTSBURGH

Most Read Articles

Most Read articles are updated on a monthly basis and available as 1 month and 12 month lists. Below are the journal's Top 20 most downloaded articles for the previous month.

Choose a timeframe: [1 Month](#) [12 months](#)

Low-Temperature Processed Electron Collection Layers of Graphene/TiO₂ Nanocomposites in Thin Film Perovskite Solar Cells

Jacob Tse-Wei Wang, James M. Ball, Eva M. Barea, Antonio Abate, Jack A. Alexander-Webber, Jian Huang, Michael Saliba, Iván Mora-Sero, Juan Bisquert, Henry J. Snaith, and Robin J. Nicholas

2014, 14 (2), pp 724-730

Publication Date (Web): December 16, 2013 ([Letter](#))

DOI: 10.1021/nl403997a



Electrochemical, Radiational, and Thermal Energy Technology

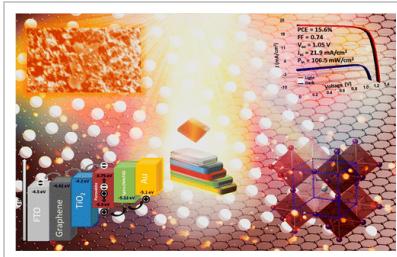
[Abstract](#) | [Supporting Info](#)[ACS ActiveView PDF](#)Hi-Res Print, Annotate, Reference QuickView[PDF \[3930K\]](#)[PDF w/ Links \[396K\]](#)[Full Text HTML](#)[Add to ACS ChemWorx](#)[Subscriber Access](#)

Figure 1 of 6

Nanocrystalline Rutile Electron Extraction Layer Enables Low-Temperature Solution Processed Perovskite Photovoltaics with 13.7% Efficiency

Aswani Yella, Leo-Philipp Heiniger, Peng Gao, Mohammad Khaja Nazeeruddin, and Michael Grätzel

Articles ASAP (As Soon As Publishable)

Publication Date (Web): March 14, 2014 ([Letter](#))

DOI: 10.1021/nl500399m



Electrochemical, Radiational, and Thermal Energy Technology

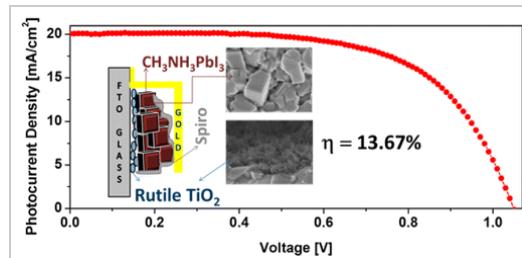
[Abstract](#) | [Supporting Info](#)[ACS ActiveView PDF](#)Hi-Res Print, Annotate, Reference QuickView[PDF \[7420K\]](#)[PDF w/ Links \[360K\]](#)[Full Text HTML](#)[Add to ACS ChemWorx](#)[Subscriber Access](#)

Figure 1 of 6

Transport Properties of Monolayer MoS₂ Grown by Chemical Vapor Deposition

Hennrik Schmidt, Shunfeng Wang, Leiqiang Chu, Minglin Toh, Rajeev Kumar, Weijie Zhao, A. H. Castro Neto, Jens Martin, Shaffique Adam, Barbaros Özyilmaz, and Goki Eda

2014, 14 (4), pp 1909-1913

Publication Date (Web): March 18, 2014 (Letter)

DOI: 10.1021/nl404692z

 **Section:** Electric Phenomena

[Abstract](#) | [Supporting Info](#)

[ACS ActiveView PDF](#)

Hi-Res Print, Annotate, Reference QuickView

[PDF \[2228K\]](#)

[PDF w/ Links \[321K\]](#)

[Full Text HTML](#)

[Add to ACS ChemWorx](#)

[Subscriber Access](#)

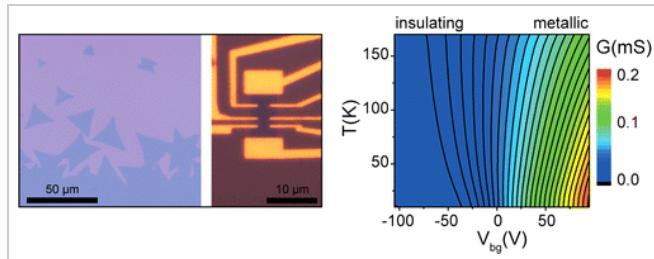


Figure 1 of 5

General Working Principles of CH₃NH₃PbX₃ Perovskite Solar Cells

Victoria Gonzalez-Pedro, Emilio J. Juarez-Perez, Waode-Sukmawati Arsyad, Eva M. Barea, Francisco Fabregat-Santiago, Ivan Mora-Sero, and Juan Bisquert

2014, 14 (2), pp 888-893

Publication Date (Web): January 7, 2014 (Letter)

DOI: 10.1021/nl404252e

 **Section:** Electrochemical, Radiational, and Thermal Energy Technology

[Abstract](#) | [Supporting Info](#)

[ACS ActiveView PDF](#)

Hi-Res Print, Annotate, Reference QuickView

[PDF \[1106K\]](#)

[PDF w/ Links \[311K\]](#)

[Full Text HTML](#)

[Add to ACS ChemWorx](#)

[Subscriber Access](#)

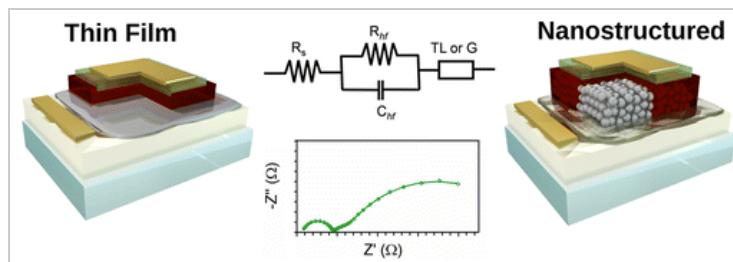


Figure 1 of 4

Stark Effect in Perovskite/TiO₂ Solar Cells: Evidence of Local Interfacial Order

Vittoria Roiati, Edoardo Mosconi, Andrea Listorti, Silvia Colella, Giuseppe Gigli, and Filippo De Angelis

2014, 14 (4), pp 2168-2174

Publication Date (Web): March 17, 2014 (Letter)

DOI: 10.1021/nl500544c



Section: **Electrochemical, Radiational, and Thermal Energy Technology**

[Abstract](#) | [Supporting Info](#)

[ACS ActiveView PDF](#)

Hi-Res Print, Annotate, Reference QuickView

[PDF \[2683K\]](#)

[PDF w/ Links \[423K\]](#)

[Full Text HTML](#)

[Add to ACS ChemWorx](#)

[Subscriber Access](#)

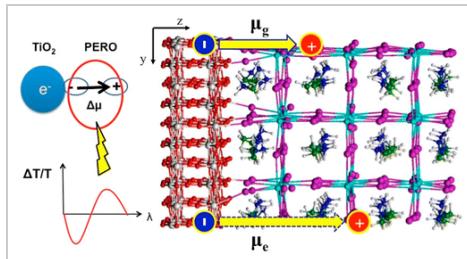


Figure 1 of 8

Efficient Photoelectrochemical Water Splitting with Ultrathin films of Hematite on Three-Dimensional Nanophotonic Structures

Yongcai Qiu, Siu-Fung Leung, Qianpeng Zhang, Bo Hua, Qingfeng Lin, Zhanhua Wei, Kwong-Hoi Tsui, Yuegang Zhang, Shih-Yang, and Zhiyong Fan

2014, 14 (4), pp 2123-2129

Publication Date (Web): March 6, 2014 (Letter)

DOI: 10.1021/nl500359e



Section: **Electrochemical, Radiational, and Thermal Energy Technology**

[Abstract](#) | [Supporting Info](#)

[ACS ActiveView PDF](#)

Hi-Res Print, Annotate, Reference QuickView

[PDF \[3836K\]](#)

[PDF w/ Links \[427K\]](#)

[Full Text HTML](#)

[Add to ACS ChemWorx](#)

[Subscriber Access](#)

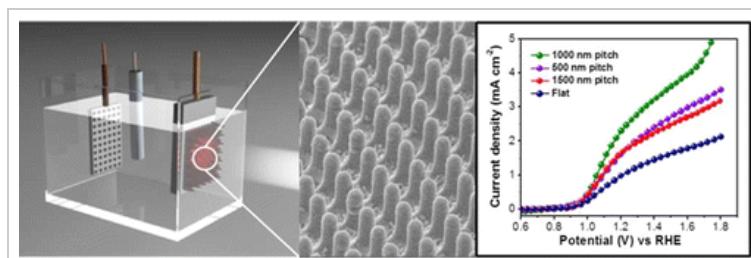


Figure 1 of 6

Band Offset and Negative Compressibility in Graphene-MoS₂ Heterostructures

Stefano Larentis, John R. Tolsma, Babak Fallahazad, David C. Dillen, Kyoungwan Kim, Allan H. MacDonald, and Emanuel Tutuc

2014, 14 (4), pp 2039-2045

Publication Date (Web): March 10, 2014 (Letter)

DOI: 10.1021/nl500212s

 Section: [Electric Phenomena](#)

[Abstract](#)

[ACS ActiveView PDF](#)

Hi-Res Print, Annotate, Reference QuickView

[PDF \[2826K\]](#)

[PDF w/ Links \[446K\]](#)

[Full Text HTML](#)

[Add to ACS ChemWorx](#)

[Subscriber Access](#)

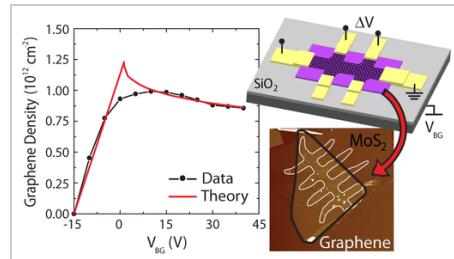


Figure 1 of 7

Oriented Assembled TiO₂ Hierarchical Nanowire Arrays with Fast Electron Transport Properties

Xia Sheng, Dongqing He, Jie Yang, Kai Zhu, and Xinjian Feng

2014, 14 (4), pp 1848-1852

Publication Date (Web): March 14, 2014 (Letter)

DOI: 10.1021/nl404626z

 Section: [Electric Phenomena](#)

[Abstract | Supporting Info](#)

[ACS ActiveView PDF](#)

Hi-Res Print, Annotate, Reference QuickView

[PDF \[5717K\]](#)

[PDF w/ Links \[343K\]](#)

[Full Text HTML](#)

[Add to ACS ChemWorx](#)

[Subscriber Access](#)

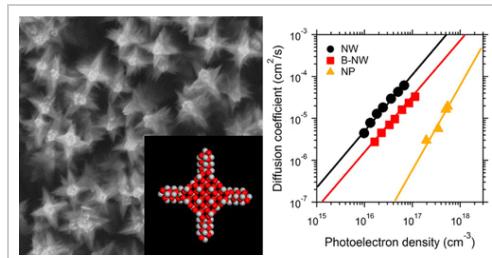


Figure 1 of 6

Thermal Properties of Graphene–Copper–Graphene Heterogeneous Films

Pradyumna Goli, Hao Ning, Xuesong Li, Ching Yu Lu, Konstantin S. Novoselov, and Alexander A. Balandin

2014, 14 (3), pp 1497-1503

Publication Date (Web): February 20, 2014 (Letter)

DOI: 10.1021/nl404719n



Thermodynamics,
Thermochemistry, and Thermal
Properties

[Abstract](#) | [Supporting Info](#)

[ACS ActiveView PDF](#)

Hi-Res Print, Annotate, Reference QuickView

[PDF \[1345K\]](#)

[PDF w/ Links \[472K\]](#)

[Full Text HTML](#)

[Add to ACS ChemWorx](#)

[Subscriber Access](#)

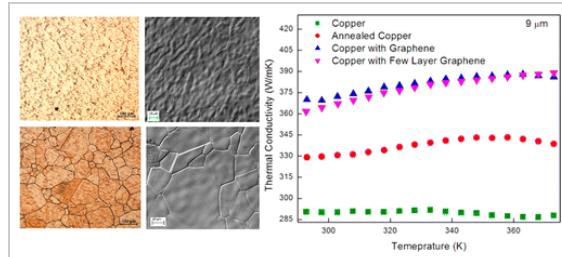


Figure 1 of 4

Mono- and Bilayer WS₂ Light-Emitting Transistors

Sanghyun Jo, Nicolas Ubrig, Helmuth Berger, Alexey B. Kuzmenko, and Alberto F. Morpurgo

2014, 14 (4), pp 2019-2025

Publication Date (Web): March 26, 2014 (Letter)

DOI: 10.1021/nl500171v



Optical, Electron, and Mass
Spectroscopy and Other Related
Properties

[Abstract](#)

[ACS ActiveView PDF](#)

Hi-Res Print, Annotate, Reference QuickView

[PDF \[2112K\]](#)

[PDF w/ Links \[428K\]](#)

[Full Text HTML](#)

[Add to ACS ChemWorx](#)

[Subscriber Access](#)

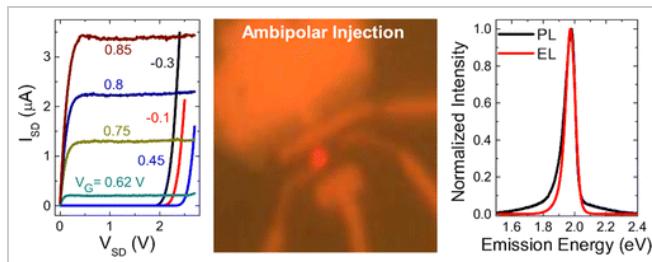


Figure 1 of 7

Uniform and Ordered Copper Nanomeshes by Microsphere Lithography for Transparent Electrodes

Tongchuan Gao, Baomin Wang, Bo Ding, Jung-kun Lee, and Paul W. Leu

2014, 14 (4), pp 2105-2110

Publication Date (Web): March 6, 2014 (Letter)

DOI: 10.1021/nl500307s

 Section: [Electric Phenomena](#)

[Abstract](#) | [Supporting Info](#)

[ACS ActiveView PDF](#)

Hi-Res Print, Annotate, Reference QuickView

[PDF \[6610K\]](#)

[PDF w/ Links \[396K\]](#)

[Full Text HTML](#)

[Add to ACS ChemWorx](#)

[Subscriber Access](#)

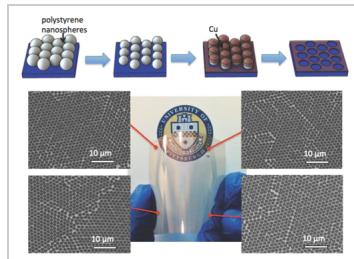


Figure 1 of 6

Au-Seeded Growth of Vertical and in-Plane III–V Nanowires on Graphite Substrates

Jesper Wallentin, Dominik Kriegner, Julian Stangl, and Magnus T. Borgström

2014, 14 (4), pp 1707-1713

Publication Date (Web): March 4, 2014 (Letter)

DOI: 10.1021/nl403411w

[Abstract](#)

[ACS ActiveView PDF](#)

Hi-Res Print, Annotate, Reference QuickView

[PDF \[6689K\]](#)

[PDF w/ Links \[463K\]](#)

[Full Text HTML](#)

[Add to ACS ChemWorx](#)

[ACS AuthorChoice](#)

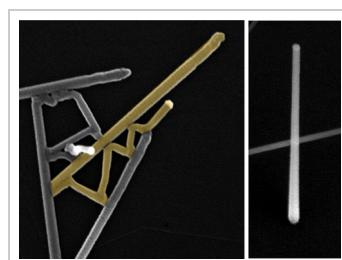


Figure 1 of 6

Three-Dimensional Nanoelectrode by Metal Nanowire Nonwoven Clothes

Makoto Kawamori, Takahiro Asai, Yoshimasa Shirai, Shunsuke Yagi, Masatsugu Oishi, Tetsu Ichitsubo, and Eiichiro Matsubara

2014, 14 (4), pp 1932-1937

Publication Date (Web): March 10, 2014 (Letter)

DOI: 10.1021/nl404753e

 **Section:** [Electric Phenomena](#)

[Abstract](#) | [Supporting Info](#)

[ACS ActiveView PDF](#)

[Hi-Res Print, Annotate, Reference QuickView](#)

[PDF \[6481K\]](#)

[PDF w/ Links \[473K\]](#)

[Full Text HTML](#)

[Add to ACS ChemWorx](#)

[Subscriber Access](#)

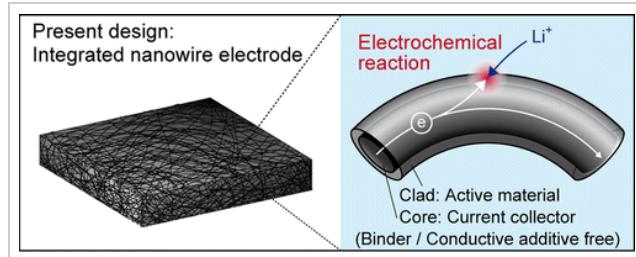


Figure 1 of 6

Shape-Selective Deposition and Assembly of Anisotropic Nanoparticles

Yu Zhou, Xiaozhu Zhou, Daniel J. Park, Korosh Torabi, Keith A. Brown, Matthew R. Jones, Chuan Zhang, George C. Schatz, and Chad A. Mirkin

2014, 14 (4), pp 2157-2161

Publication Date (Web): March 24, 2014 (Letter)

DOI: 10.1021/nl500471g

 **Section:** [Surface Chemistry and Colloids](#)

[Abstract](#) | [Supporting Info](#)

[ACS ActiveView PDF](#)

[Hi-Res Print, Annotate, Reference QuickView](#)

[PDF \[3891K\]](#)

[PDF w/ Links \[271K\]](#)

[Full Text HTML](#)

[Add to ACS ChemWorx](#)

[Subscriber Access](#)

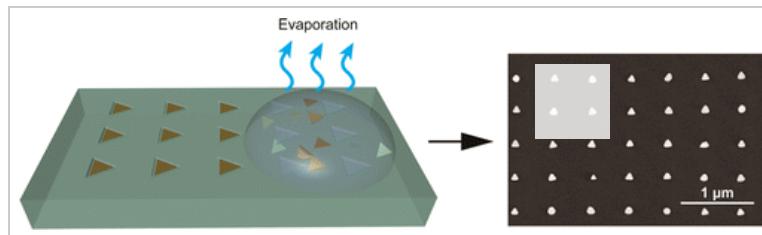


Figure 1 of 6

Plasmon-Enhanced Raman Scattering by Carbon Nanotubes Optically Coupled with Near-Field Cavities

Sebastian Heeg, Antonios Oikonomou, Roberto Fernandez-Garcia, Christian Lehmann, Stefan A. Maier, Aravind Vijayaraghavan, and Stephanie Reich

2014, 14 (4), pp 1762-1768

Publication Date (Web): March 7, 2014 (Letter)

DOI: 10.1021/nl404229w



Section: Optical, Electron, and Mass Spectroscopy and Other Related Properties

[Abstract](#) | [Supporting Info](#)

[ACS ActiveView PDF](#)

Hi-Res Print, Annotate, Reference QuickView

[PDF \[3819K\]](#)

[PDF w/ Links \[353K\]](#)

[Full Text HTML](#)

[Add to ACS ChemWorx](#)

[Subscriber Access](#)

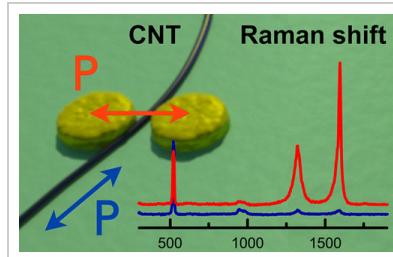


Figure 1 of 6

Anomalous Capacitive Behaviors of Graphene Oxide Based Solid-State Supercapacitors

Qing Zhang, Kathryn Scrafford, Mingtao Li, Zeyuan Cao, Zhenhai Xia, Pulickel M. Ajayan, and Bingqing Wei

2014, 14 (4), pp 1938-1943

Publication Date (Web): March 3, 2014 (Letter)

DOI: 10.1021/nl4047784



Section: Electric Phenomena

[Abstract](#) | [Supporting Info](#)

[ACS ActiveView PDF](#)

Hi-Res Print, Annotate, Reference QuickView

[PDF \[3826K\]](#)

[PDF w/ Links \[416K\]](#)

[Full Text HTML](#)

[Add to ACS ChemWorx](#)

[Subscriber Access](#)

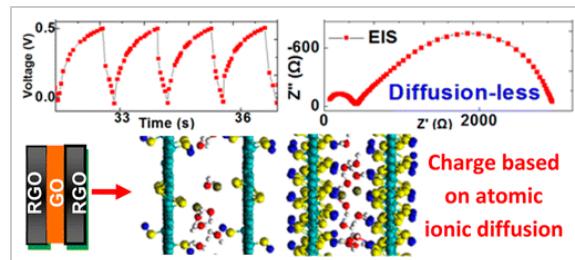


Figure 1 of 5

A Facile Methodology for the Production of In Situ Inorganic Nanowire Hydrogels/Aerogels

Sung Mi Jung, Hyun Young Jung, Wenjing Fang, Mildred S. Dresselhaus, and Jing Kong
2014, 14 (4), pp 1810-1817
 Publication Date (Web): March 28, 2014 (Letter)
 DOI: 10.1021/nl404392j

 **Section:** Electrochemical, Radiational, and Thermal Energy Technology

[Abstract](#) | [Supporting Info](#)

[ACS ActiveView PDF](#)

Hi-Res Print, Annotate, Reference QuickView

[PDF \[6470K\]](#)

[PDF w/ Links \[532K\]](#)

[Full Text HTML](#)

[Add to ACS ChemWorx](#)

[Subscriber Access](#)

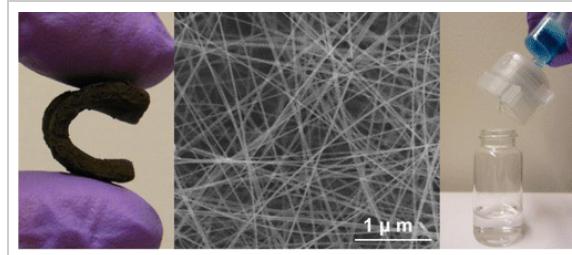


Figure 1 of 5

Large-Area Synthesis of Monolayer and Few-Layer MoSe₂ Films on SiO₂ Substrates

Xin Lu, M. Iqbal Bakti Utama, Junhao Lin, Xue Gong, Jun Zhang, Yanyuan Zhao, Sokrates T. Pantelides, Jingxian Wang, Zhili Dong, Zheng Liu, Wu Zhou, and Qihua Xiong
 Articles ASAP (As Soon As Publishable)
 Publication Date (Web): March 28, 2014 (Letter)
 DOI: 10.1021/nl5000906

 **Section:** Electric Phenomena

[Abstract](#)

[ACS ActiveView PDF](#)

Hi-Res Print, Annotate, Reference QuickView

[PDF \[7352K\]](#)

[PDF w/ Links \[503K\]](#)

[Full Text HTML](#)

[Add to ACS ChemWorx](#)

[Subscriber Access](#)

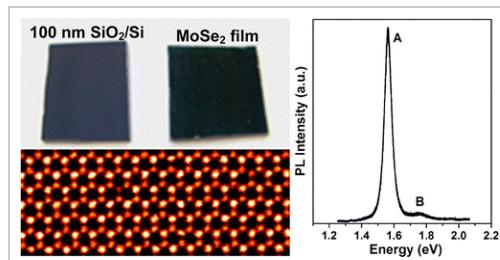


Figure 1 of 6

Boron Nitride–Graphene Nanocapacitor and the Origins of Anomalous Size-Dependent Increase of Capacitance

Gang Shi, Yuranan Hanlumyuang, Zheng Liu, Yongji Gong, Weilu Gao, Bo Li, Junichiro Kono, Jun Lou, Robert Vajtai, Pradeep Sharma, and Pulickel M. Ajayan

2014, 14 (4), pp 1739-1744

Publication Date (Web): March 18, 2014 (Letter)

DOI: 10.1021/nl4037824

 **Section:** Electric Phenomena

[Abstract](#) | [Supporting Info](#)

[ACS ActiveView PDF](#)

Hi-Res Print, Annotate, Reference QuickView

[PDF \[5495K\]](#)

[PDF w/ Links \[427K\]](#)

[Full Text HTML](#)

[Add to ACS ChemWorx](#)

[Subscriber Access](#)

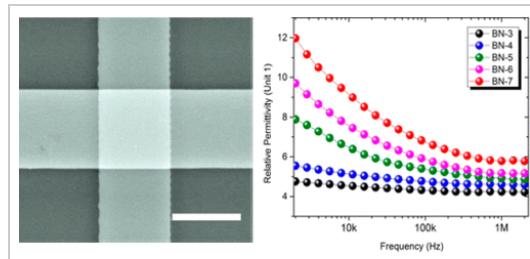


Figure 1 of 5

Metal-Free Ketjenblack Incorporated Nitrogen-Doped Carbon Sheets Derived from Gelatin as Oxygen Reduction Catalysts

Gyutae Nam, Joohyuk Park, Sun Tai Kim, Dong-bin Shin, Noejung Park, Youngsik Kim, Jang-Soo Lee, and Jaephil Cho

2014, 14 (4), pp 1870-1876

Publication Date (Web): March 17, 2014 (Letter)

DOI: 10.1021/nl404640n

 **Section:** Electrochemical, Radiational, and Thermal Energy Technology

[Abstract](#) | [Supporting Info](#)

[ACS ActiveView PDF](#)

Hi-Res Print, Annotate, Reference QuickView

[PDF \[4497K\]](#)

[PDF w/ Links \[483K\]](#)

[Full Text HTML](#)

[Add to ACS ChemWorx](#)

[Subscriber Access](#)

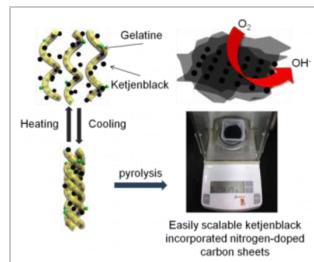


Figure 1 of 6

1155 Sixteenth Street N.W.
Washington, DC 20036

京ICP备13047075

Copyright © 2014
American Chemical Society

Products

[Journals A-Z](#)

[Books](#)

[C&EN](#)

[C&EN Archives](#)

[ACS Legacy Archives](#)

[ACS Mobile](#)

[Video](#)

User Resources

[About Us](#)

[ACS Members](#)

[Librarians](#)

[Authors & Reviewers](#)

[Website Demos](#)

Support

[Get Help](#)

[For Advertisers](#)

[Institutional Sales](#)

[Live Chat](#)

Partners



COUNTER

crossref

cross
check

ORCID Open Researcher & Contributor ID

PORTICO