

PUBLICATIONS

Photoanodic behavior of vapor-liquid-solid-grown, lightly doped, crystalline Si microwire arrays. E. Santori, J. Maiolo III, M. Bierman, N. Strandwitz, M. Kelzenberg, B. Brunschwig, H. Atwater, N. Lewis. *Energy Environ. Sci.*, 2012

Wafer-Scale Growth of Silicon Microwire Arrays for Photovoltaics and Solar Fuel Generation. A. Tamboli, C. Chen, E. Warren, D. Turner-Evans, M. Kelzenberg, N. Lewis, H. Atwater. *IEEE Journal of Photovoltaics*, 2012

High-performance Silicon Microwire Photovoltaics. M. Kelzenberg, D. Turner-Evans, S. Boettcher, M. Putnam, C. Baek, R. Briggs, N. Lewis, and H. Atwater. *Energy & Environmental Science*, 2011

Optoelectronic design of multijunction wire-array solar cells. D. Turner-Evans, M. Kelzenberg, C. Chen, E. Warmann, A. Tamboli, and H. Atwater. *37th IEEE Photovoltaic Specialists Conference, Seattle, WA*, 2011

Photoelectrochemical Hydrogen Evolution Using Si Microwire Arrays. S. Boettcher, E. Warren, M. Putnam, E. Santori, D. Turner-Evans, M. Kelzenberg, M. Walter, J. McKone, B. Brunschwig, H. Atwater, and N. Lewis. *Journal of the American Chemical Society*, 2011

Enhanced Absorption and Carrier Collection in Si Wire Arrays for Photovoltaic Applications. M. Kelzenberg, S. Boettcher, J. Petykiewicz, M. Putnam, D. Turner-Evans, E. Warren, J. Spurgeon, R. Briggs, N. Lewis, and H. Atwater. *Nature Materials*, February 2010 (cover article)

Energy Conversion Properties of Vapor-Liquid-Solid-Grown Silicon Wire Array Photocathodes. S. Boettcher, J. Spurgeon, M. Putnam, E. Warren, D. Turner-Evans, M. Kelzenberg, J. Maiolo, H. Atwater, and N. Lewis. *Science*, 2010

Flexible, Polymer-Supported, Silicon Wire Array Photoelectrodes. J. Spurgeon, S. Boettcher, M. Kelzenberg, B. Brunschwig, H. Atwater, and N. Lewis. *Advanced Materials*, 2010

Silicon Microwire Array Solar Cells. M. Putnam, S. Boettcher, M. Kelzenberg, D. Turner-Evans, J. Spurgeon, E. Warren, R. Briggs, N. Lewis, and H. Atwater. *Energy & Environmental Science*, 2010

Effects of bulk and grain boundary recombination on the efficiency of columnar-grained crystalline silicon film solar cells. M. Deceglie, M. Kelzenberg, and H. Atwater. *35th IEEE PVSC*, 2010

GaP/Si wire array solar cells. A. Tamboli, D. Turner-Evans, M. Malhotra, M. Kelzenberg, and H. Atwater. *35th IEEE PVSC*, 2010

Predicted Efficiency of Si Wire-Array Solar Cells. M. Kelzenberg, M. Putnam, D. Turner-Evans, N. Lewis, and H. Atwater. *34th IEEE Photovoltaic Specialists Conference, Philadelphia, PA*, June 2009

10 µm Minority-Carrier Diffusion Lengths in Si Wires Synthesized by Cu-catalyzed Vapor-Liquid-Solid Growth. M. Putnam, D. Turner-Evans, M. Kelzenberg, S. Boettcher, N. Lewis, H. Atwater. *APL*, 2009

Radial PN junction, wire array solar cells. B. Kayes, M. Filler, M. D. Henry, J. Maiolo, M. Kelzenberg, M. Putnam, J. Spurgeon, K. Plass, A. Scherer, N. Lewis, and H. Atwater. *33rd IEEE PVSC*, 2008

Single-Nanowire Si Solar Cells. M. Kelzenberg, M. Filler, B. Kayes, M. Putnam, D. Turner-Evans, N. Lewis, and H. Atwater. *33rd IEEE Photovoltaic Specialists Conference, San Diego, CA*, June 2008

Photovoltaic Measurements in Single-Nanowire Silicon Solar Cells. M. Kelzenberg, D. Turner-Evans, M. Filler, M. Putnam, B. Kayes, and H. Atwater. *Nano Letters*, 2008

Growth of Vertically Aligned Si Wire Arrays Over Large Areas ($>1 \text{ cm}^2$) With Au and Cu Catalysts. B. Kayes, M. Filler, M. Putnam, M. Kelzenberg, N. Lewis, H. Atwater. *Appl. Phys. Lett.*, 2007

High Aspect Ratio Silicon Wire Array Photoelectrochemical Cells. J. Maiolo, B. Kayes, M. Filler, M. Putnam, M. Kelzenberg, H. Atwater, and N. Lewis. *J. Am. Chem. Soc.*, 2007