Jianlin Li

Education

2009 Ph.D, Materials Science and Engineering, University of Florida, Gainesville, FL

2004 M.S., Materials Science and Engineering, University of Science and Technology of China (USTC), Hefei, China

2001 B.S., Materials Science and Engineering, USTC, Hefei, China

2001 B.E., Electronic information Engineering, USTC, Hefei, China

Professional Experience

12/09-present **Postdoctoral Research Associate**, Material Processing Group, Oak Ridge National Laboratory, Oak Ridge, TN

08/09-12/09 **Postdoctoral Research Associate**, Department of Materials Science and Engineering (MSE), University of Florida, Gainesville, FL

08/04-08/09 **Graduate Research Assistant**, University of Florida-US Department of Energy High Temperature Electrochemistry Center, Florida Institute for Sustainable Energy, MSE, University of Florida, Gainesville, FL

09/01-06/04 **Graduate Research Assistant**, MSE, USTC, Hefei, China

09/01-06/02 **Teaching Assistant**, MSE, USTC, Hefei, China

Journal Reviewer

- Ionics
- Materials Letters
- Journal of Membrane Science
- Microporous and Mesoporous Materials

Profession Affiliations

- Electrochemical Society

Selected Peer Reviewed Publications

- **J. L. Li,** D. Wood, C. Daniel, "Processing in Lithium-ion Batteries", to be submitted.

- **J. L. Li**, H. S. Yoon, and E. D. Wachsman, "Carbon dioxide reforming of methane in a high temperature $SrCe_{0.7}Zr_{0.2}Eu_{0.1}O_{3-\delta}$-based proton conducting membrane reactor", to be submitted.

- **J. L. Li**, H. S. Yoon, and E. D. Wachsman, "High temperature $SrCe_{0.7}Zr_{0.2}Eu_{0.1}O_{3-\delta}$ proton conducting membrane reactor for hydrogen production using steam reforming of methane", *International Journal of Hydrogen Energy*, submitted.

- **J. L. Li**, H. S. Yoon, and E. D. Wachsman, "Sr$Ce_{0.7}$$Zr_{0.2}$$Eu_{0.1}$$O_{3-\delta}$-based hydrogen transport membrane water gas shift reactor", *Applied Catalysis B. Environmental*, submitted.

- **J. L. Li**, H. S. Yoon, and E. D. Wachsman, "Fabrication and hydrogen permeation of thin supported Sr$Ce_{0.7}$$Zr_{0.2}$$Eu_{0.1}$$O_{3-\delta}$ membrane under different oxygen partial pressure", *Journal of Membrane Science*, submitted.

- **J. L. Li**, H. S. Yoon, T. K. Oh and E. D. Wachsman, "Stability of Sr$Ce_{0.7}$$Zr_{0.2}$$Eu_{0.1}$$O_{3-\delta}$ under water gas shift reaction conditions", *Journal of Electrochemical Society*, 157(3) (2010), B383-B387.

- T. K. Oh, H. S. Yoon, **J. L. Li**, and E. D. Wachsman, "Hydrogen permeation through thin supported Sr$Zr_{0.2}$$Ce_{0.8-x}$$Eu_x$$O_{3-\delta}$ membranes", *Journal of Membrane Science*, 345(2009), 1-4.

- T. K. Oh, **J. L. Li**, H. S. Yoon,and E. D. Wachsman, "Stability of Sr$Ce_{0.9}$$Eu_{0.1}$$O_{3-\delta}$ and Sr$Zr_{0.2}$$Ce_{0.7}$$Eu_{0.1}$$O_{3-\delta}$ under H_2 atmosphere", *Ionics*, 15(2009), 525-530.

- **J. L. Li**, H. S. Yoon, T. K. Oh and E. D. Wachsman, "High temperature Sr$Ce_{0.9}$$Eu_{0.1}$$O_{3-\delta}$ proton conducting membrane reactor for hydrogen production using water gas shift reaction", *Applied Catalysis B. Environmental*, 92(2009), 234-239.

- H. S. Yoon, T. K. Oh, **J. L. Li**, K. L. Duncan and E. D. Wachsman, "Permeation through Sr$Ce_{0.9}$$Eu_{0.1}$$O_{3-\delta}$/Ni-SrCe$O_{3-\delta}$ tubular hydrogen separation membrane", *Journal of the Electrochemical Society*, 156 (2009) (7), B791-B794.

- H. S. Yoon, S. J. Song, T. K. Oh, **J. L. Li**, K. L. Duncan and E. D. Wachsman, "Fabrication of thin Film Sr$Ce_{0.9}$$Eu_{0.1}$$O_{3-\delta}$ Hydrogen Separation Membrane on Ni-$SrCeO_3$ Porous Supports", *Journal of the American Ceramic Society*, 92 (2009)(8), 1849-1852.

Proceedings

- **J. L. Li**, H. S. Yoon, T. K. Oh and E. D. Wachsman, "Stability of Zr-doped $SrCeO_3$ under wet CO/CO_2 atmosphere", *ECS Transactions*, **11**(33), 81 (2008).

Patents

- E. D. Wachsman, H. S. Yoon, T. K. Oh, and **J. L. Li**, "Proton conducting membranes for hydrogen production and separation", worldwide patent, WO 2009/152255, December, 2009.

Books and Book Chapters

- **J. L. Li,** D. Wood, C. Daniel, Cathode Processing for Lithium-ion Batteries, in: C.

Daniel (Ed.), Handbook of Battery Materials, 2nd edition, Wiley-VCH, Weinheim, Germany (scheduled to be published summer 2010)

Presentations

- **J. L. Li** and E. D. Wachsman, "$SrCeO_{3-\delta}$-based proton conductors for H_2 production and separation by carbon dioxide reforming of methane", the 34th International Cocoa Beach Conference and Exposition on Advanced Ceramics and Composites, Daytona, FL, January 24-29, 2010.

- **J. L. Li**, H. S. Yoon, T. K. Oh, and E. D. Wachsman, "Stability and hydrogen permeation of $Sr\mathit{Ce}_{0.7}Zr_{0.2}\mathit{Eu}_{0.1}\mathit{O}_{3-\delta}$/Ni-$SrCe_{0.8}Zr_{0.2}\mathit{O}_{3-\delta}$ membrane under water gas shift reaction and methane steam reforming conditions", the 215th meeting of the Electrochemical Society, San Francisco, CA, May 24-29, 2009.

- T. K. Oh, **J. L. Li**, and E. D. Wachsman, "Effect of dopant concentration on hydrogen permeability of $Sr\mathit{Ce}_{1-x-y}Zrx\mathit{EuyO}_{3-\delta}$", the 215th meeting of the Electrochemical Society, San Francisco, CA, May 24-29, 2009.

- **J. L. Li**, T. K. Oh, H. S. Yoon and E. D.Wachsman, "Fabrication and hydrogen permeation properties of tubular Ni-$SrCe_{0:8}Zr_{0:2}O_{3-\delta}$/$SrCe_{0:7}Zr_{0:2}Eu_{0.1}O_{3-\delta}$ hydrogen membrane", the 33rd International Cocoa Beach Conference and Exposition on Advanced Ceramics and Composites, Daytona, FL, January 18-23, 2009.

- **J. L. Li**, T. K. Oh, H. S. Yoon and E. D. Wachsman, "Hydrogen transport water gas shift membrane reactor". the 33rd International Cocoa Beach Conference and Exposition on Advanced Ceramics and Composites, Daytona, FL, January 18-23, 2009.

- **J. L. Li**, T. K. Oh, H. S. Yoon and E. D.Wachsman, "Hydrogen tTransport steam reforming membrane reactor". the 32nd International Cocoa Beach Conference and Exposition on Advanced Ceramics and Composites, Daytona, FL, January 27-February 1, 2008.

- **J. L. Li**, H. S. Yoon, T. K. Oh and E. D. Wachsman, "Stability of $SrCe_{1-x}Zr_xO_{3-\delta}$ under wet CO/CO_2 atmospheres", the 212th Meeting of the Electrochemical Society, Washington DC, October 7-12, 2007.

- **J. L. Li**, H. S. Yoon, T. K. Oh and E. D. Wachsman, "Hydrogen transport water gas shift membrane reactor". the 31st International Cocoa Beach Conference and Exposition on Advanced Ceramics and Composites, Daytona, FL, January 21-26, 2007.

- H. S. Yoon, T. K. Oh, **J. L. Li** and E. D. Wachsman, ”Phase stability and hydrogen permeation properties of $SrCeO_{3-\delta}$ for methane steam reforming”, the 31st International Cocoa Beach Conference and Exposition on Advanced Ceramics and Composites, Daytona, FL, January 21-26, 2007.