

## **Further Reading:**

### Chapter 1:

Sustainability: E. Davies, 2011. Endangered Elements. *Chemistry World*, Jan 2011, 50.

Sustainability: D. Apelian, 2012. Materials science and engineering's pivotal role in sustainable development for the 21st century. *MRS Bulletin*, 37(4), 318.

Sustainability: Special Issue of *MRS Bulletin*, 2012. Materials for sustainable development. M. L. Green, L. Espinal, E. Traversa and E. J. Amis, Editors. April 2012.

Sustainability: J.-F. Tremblay, 2012. Managing a Dearth of Rare Earths. *Chemical & Engineering News*, April 2, 2012, p. 14.

Sustainability: D.J. Hanson, 2011. Concern Grows over Rare-Earths Supply. *Chemical & Engineering News*, May 16, 2011, p. 28.

### Chapter 3:

Solid-state Lighting: P. Patel, 2011. Solid-state lighting: The future looks bright. *MRS Bulletin*, 36(9), 678.

Light-emitting Diodes: N. Stafford, 2010. LEDs to Light up the World. *Chemistry World*, April 2010, p. 42.

### Chapter 4:

Antireflection coatings: D. J. Poxson, M.-L. Kuo, F. W. Mont, Y.-S. Kim, X. Yan, R. E. Welser, A.K. Sood, J. Cho, S.-Y. Lin and E. F., 2011. [High-performance antireflection coatings utilizing nanoporous layers. \*MRS Bulletin\*, 36 \(6\), 434.](#)

### Chapter 5:

Iridescence: H. Birch, 2010. How to disappear completely. *Chemistry World*, June 2010, 42.

### Chapter 6:

Glass: M. Jacoby, 2012. 1,001 Uses for Glass. *Chemical & Engineering News*, June 18, 2012, p. 34.

### Chapter 10:

Atomic Microscopy: Special Issue of *MRS Bulletin*, 2012. Scanning probes for new energy materials: Probing local structure and function. N. Balke, D. Bonnell, D. S. Ginger and M. Kemerink, Editors. July 2012.

Surfaces: M.M. Bomgardner, 2012. Serious Surfaces. *Chemical & Engineering News*, March 26, 2012, p. 28.

#### Chapter 12:

Transparent Electrodes: Special Issue of *MRS Bulletin*, 2011. Solution-processed transparent electrodes. D. S. Hecht and R..B. Kaner, Editors. October 2011.

Superconductivity: Special Issue of *MRS Bulletin*, 2012. Superconductivity at 100. D. Larbalestier and P. C. Canfield, Editors, August 2011.

Molecular Materials: S.K. Ritter, 2011. Electrochromics Hit a Color Milestone. *Chemical & Engineering News*, June 13, 2011, p. 34.

Thermoelectrics: M. Jacoby, 2011. Thermoelectrics Make a Comeback. *Chemical & Engineering News*, June 20, 2011, p. 33.

#### Chapter 13:

Magnetic Devices: M.L. Plumer, J. van Ek, and W. C. Cain, 2011. New Paradigms in Magnetic Recording. *Physics in Canada*, 67(1), 25.

Magnetocaloric Effect: A. Turley, 2012. The Future of Cool. *Chemistry World*, February 2012, p. 49.

#### Chapter 14:

Spider Silk: S. Trohalaki, 2012. Spider webs rely on nonlinear material behavior and architecture. *MRS Bulletin*, 37(3), 182.

Spider Silk: M. Jacoby, 2012. Learning from Spider Silk. *Chemical & Engineering News*, March 26, 2012, p. 48.

Strength: T. Zhu, J. Li, S. Ogata, S. Yip, 2009. Mechanics of Ultra-Strength Materials. *MRS Bulletin*, 34(3), 167.

Toughness: R.O. Ritchie, M.J. Buehler and P. Hansma, 2009. Plasticity and toughness in bone. *Physics Today*, June 2009, p. 41.