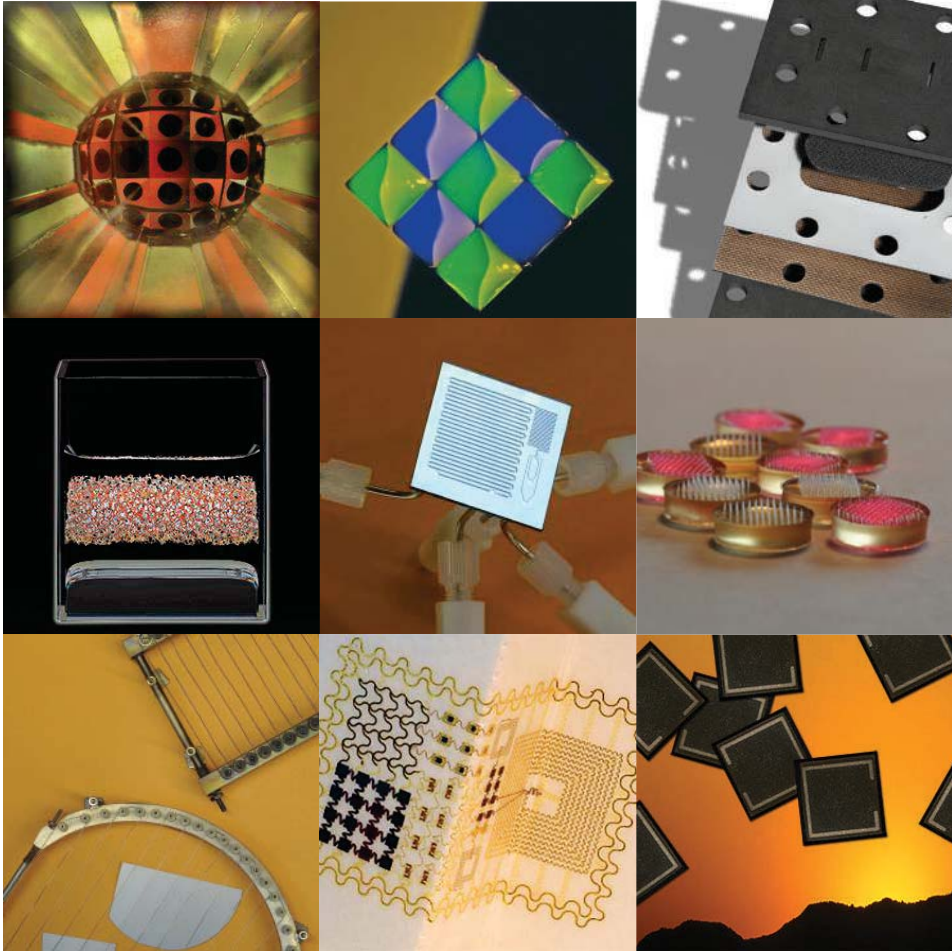


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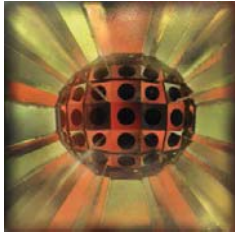
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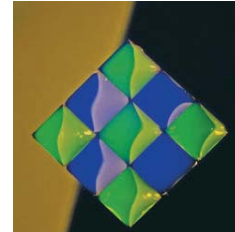
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nanophotonic solar thermophotovoltaic device

E. Wang, Department of Mechanical Engineering
Massachusetts Institute of Technology

Lenert, A., Bierman, D.M., Nam, Y., et al. "A Nanophotonic Solar Thermophotovoltaic Device." *Nature Nanotechnology* 9, no. 2 (February 2014).



patterned drops of water

G. Whitesides, Department of Chemistry and Chemical Biology; Whitesides Research Group
Harvard University

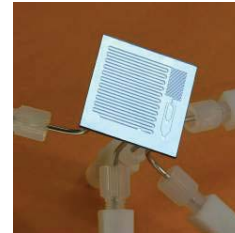
Abbott, N.L., Folkers, J.P., and Whitesides, G.M. "Manipulation of the Wettability of Surfaces on the 0.1 to 1-Micrometer Scale through Micromachining and Molecular Self-Assembly." *Science* 257, no. 5075 (September 4, 1992).



liquid metal battery

D. Sadoway, Department of Materials Science and Engineering; Group Sadoway
Massachusetts Institute of Technology

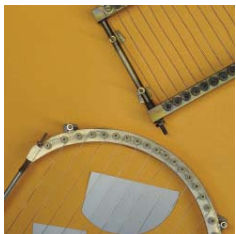
Wang, K., Jiang, K., Chung, B., et al. "Lithium-antimony-lead liquid metal battery for grid-level energy storage" *Nature* 514, no. 7522 (October 16, 2014).



silicon microfluidic microreactor

K. Jensen, Department of Chemical Engineering; Jensen Research Group
Massachusetts Institute of Technology

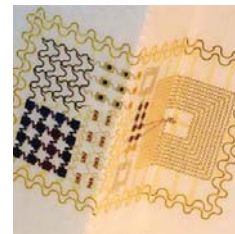
Ratner, D.M., Murphy, E.R., Jhunjhunwala, M., et al. "Microreactor-Based Reaction Optimization in Organic Chemistry—Glycosylation as a Challenge." *Chemical Communications* 5 (2005).



chemical vapor deposition

K. Gleason, Department of Chemical Engineering; Gleason Group
Massachusetts Institute of Technology

Yang, R., Buonassisi, T., and Gleason, K.K. "Organic Vapor Passivation of Silicon at Room Temperature." *Advanced Materials* 25, no. 14 (April 11, 2013).



soft sensors

J. Rogers, Department of Materials Science and Engineering; Rogers Research Group
University of Illinois at Urbana-Champaign

<http://www.mc10inc.com>

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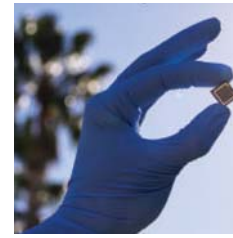
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**rechargeable
flow batteries**

Department of
Mechanical Engineering
Massachusetts Institute
of Technology

Braff, W.A., Bazant,
M.Z. and Buie., C.R.
"Membrane-Less
Hydrogen Bromine
Flow Battery." *Nature
Communications* 4, no.
2346 (August 16,
2013).



solar cells

R. Cheacharoen / Stanford University

T. Buonassisi, MIT
Photovoltaic Research
Laboratory; M.
McGehee, Stanford
McGehee Group

Massachusetts Institute
of Technology and
Stanford University

Chandler, D.L. "New
Kind of 'Tandem' Solar
Cell Developed:
Researchers Combine
Two Types of
Photovoltaic Material to
Make a Cell That
Harnesses More
Sunlight." *MIT News*.
March 25, 2015.
<http://mitei.mit.edu/news/new-kind-tandem-solar-cell-developed>.



microneedles

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of Biological
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Lab, Koch Institute for
Integrative Cancer
Research; The
Hammond Lab, Koch
Institute for Integrative
Cancer Research

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of Technology

DeMuth, P.C., Min, Y.,
Irvine, D.J., et al.
"Implantable Silk
Composite
Microneedles for
Programmable Vaccine
Release Kinetics and
Enhanced
Immunogenicity in
Transcutaneous
Immunization."
*Advanced Healthcare
Materials* 3, no. 1
(January 2014).



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Felice Frankel

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