

INTERFACE™

41

Solar Fuels

by Nianqiang Wu

43

An Integrated, Systems Approach to the Development of Solar Fuel Generators

by Nathan S. Lewis

51

Recent Aspects of Photocatalytic Technologies for Solar Fuel, Self-Cleaning, and Environmental Cleanup

by Akira Fujishima, Kazuya Nakata, Tsuyoshi Ochiai, A. Manivannan, and Donald A. Tryk

57

Photocatalytic Water Splitting Using Oxynitride and Nitride Semiconductor Powders for Production of Solar Hydrogen

by Jun Kubota and Kazunari Domen

63

Plasmon-Enhanced Solar Energy Harvesting

by Scott K. Cushing and Nianqiang Wu

69

Solar Fuel Production for a Sustainable Energy Future: Highlights of a Symposium on Renewable Fuels from Sunlight and Electricity

by Heli Wang, Deryn Chu, and Eric L. Miller

Vol. 22, No. 2
Summer 2013



3 From the Editor:
The Law of
Sigmoidal Growth

7 From the President:
A Turning Point for ECS

9 Toronto, ON, Canada
Meeting Highlights

18 Society News

28 People News

35 *Currents*—The G. S.
Yuasa-Boeing 787 Li-ion
Battery: Test It at a Low
Temperature and Keep It
Warm in Flight

36 *ECS Classics*—
Beginnings of Gold
Electroplating

39 Tech Highlights

72 Section News

75 Awards

77 New Members

79 Student News

85 225th ECS Meeting
Orlando, FL

91 2012 ECS Annual Report

On the cover . . .

Plasmonic nanostructures increase solar energy harvesting efficiency; see article starting on page 63.

Picture designed by Scott Cushing, West Virginia University.