The Shadow Knows: Inferring the Density Distribution of a Nonuniform Medium from its Standing Wave Pattern.  
*Philippe Binder and Ian Cunnyngham.*

The Physics of a Simple Camera Stabilizer.  
*Albert A. Bartlett.*

Teaching Quantum Nonlocality.  
*Art Hobson.*

Removing the Mystery of Entropy and Thermodynamics — Part V.  
*Harvey S. Leff.*

Using Phun to Study “Perpetual Motion” Machines.  
*Jaroslav Koreš.*

About the International System of Units (SI) Part VII. Numerical issues, unit conversions, and basic handling of data.  
*Gordon J. Aubrecht II, Anthony P. French, and Mario Iona.*

Fizz-ball Fizzics.  
*Murray Moinester, Lars Gerland, Gérard Liger-Belair, and Aharon Ocherashvili.*

*James Brain Hancock II and Marco Fornari.*

Moment of Inertia od a Ping-Pong Ball.  
*Xian-Sheng Cao.*

Simple Activities to Improve Students’ Understanding of Microscopic Friction.  
*Edgar de Guzman Corpuz and N. Sanjay Rebello.*

A Collaboration Between University and High School in Preparing Physics Teachers: Chicago State University’s Teacher Immersion Institute.  
*Mel S. Sabella, Andrea G. Van Duzor, Jennie Passehl, and Kara Weisenburger.*
Online Prelectures: An Alternative to Textbook Reading Assignments.  
*Homeyra R. Sadaghiani.*

On the Definition of Mass in Mechanics: Why Is It So Difficult?  
*Ricardo Lopes Coelho.*

**COLUMNS**

**Letters to the Editor.**

**Editorial.**  
Thank you to our 201-2012 referees.  
*Karl Mamola.*

**Figuring Physics.**  
New wire resistance.  
*Paul Hewitt.*

**Trick of the Trade.**  
iPad & weightlessness.  
*Taoufik Nadji.*

**PhyscisLabs.**  
Determining the speed of sound with stereo headphones.  
*Jochen Kuhn and Patrik Vogt.*

**Fermi Questions.**  
*Larry Weinstein.*

**Physics Challenge for Teachers and Students.**  
*Boris Korsunsky.*  
The effect of reflectors on light intensity.  
*John Roeder.*

**YouTube Physics.**  
*Diane Reindeau.*

**Little Gems.**  
Another way to experiment with images formed by lenses.  
*Gordon R. Gore;*  
Alternating-current demonstration using Christmas tree lights.  
*John Carlson.*

**For the New Teacher.**  
“People get ready, there’s a train a-comin”.  
*Patricia Blanton.*

**WebSights.**  
*Dan Maclsaac.*
318  **Book Reviews**  
*Physics: The First Science.* by Peter Lindenfeld and Suzanne White Brahmia, John Roeder, reviewer.

320  **What’s Happening!**

**This Month’s Cover…**
I his paper beginning on p. 292, Xian-Sheng Cao describes a simple method for measuring the moment of inertia of a Ping-Pong ball.