

Review of articles for FY2M class
J. Erhart

Scopus – **electromagnetic induction, transient currents**

Németh, V., Barsy, A., Jenei, P., Chinh, N.Q.
Systematic study on the size effect of the copper tube used in the demonstration of Lenz's law
(2025) *Physics Education*, 60 (6), art. no. 065033

Mat Daud, A.N., Jaafar, R.
EM-In: a simple electromagnetic induction experiment kit
(2025) *Physics Education*, 60 (6), art. no. 065022

Wong, D., Lee, P.
Making sense of the induced emf in a coil using sensors and visualisation of the voltage-force parametric plot
(2024) *Physics Education*, 59 (2), art. no. 025035

Banerjee, A., Saha, S.
Study of electromagnetic damping of an oscillating bar magnet and its energy budget
(2024) *Physics Education*, 59 (2), art. no. 025034

Pal, S.K., Sarkar, S., Panchadhyayee, P.
Determination of the magnetic moment of a magnet by letting it fall through a conducting pipe
(2024) *Physics Education*, 59 (1), art. no. 015022

Schiavon, G.J., Pittner, V.D., Dos Santos, O.R., Batista, M.C., Braga, W.S.
Experimental activities for the study of transformation of electrical energy into thermal
(2023) *Physics Education*, 58 (5), art. no. 055020

Barnard, A.O., Reeder, S., Kelly, T.J.
Falling magnets through coils in series: design and activities
(2023) *Physics Education*, 58 (2), art. no. 025008

Ha, H.J., Jang, T., Sohn, S.H.
Currents induced in a circular loop by an oscillating magnet
(2022) *Physics Education*, 57 (6), art. no. 065013

Moon, S.J., Chen, Yu., Lee, J., Jung, P.K., Cho, Y., Kim, J.B.
Visualization of the transient current during electrostatic induction in a conductor
(2021) *Physics Education*, 56 (5), art. no. 055025

Chen, Yu., Lee, J., Moon, S.J., Jung, P.K., Cho, Y., Kim, J.B.
Charge transfer occurring in the electrostatic induction process in the conductor connected through the LED
(2021) *Physics Education*, 56 (5), art. no. 055026

Reeder, S., Wilkie, K., Kelly, T.J., Bouillard, J.S.
Insights into the falling magnet experiment

(2019) *Physics Education*, 54 (5), art. no. 055017

Pili, U., Violanda, R.

Measuring a spring constant with a magnetic spring-mass oscillator and a telephone pickup
(2019) *Physics Education*, 54 (4), art. no. 043001

Mayer, V.V., Varaksina, E.I.

Experimental confirmation of Lenz's law
(2017) *Physics Education*, 52 (6), art. no. 065001

Munguía Aguilar, H.

Experiments with a differential transformer
(2016) *Physics Education*, 51 (6), art. no. 065001

Torzo, G., D'Anna, M., Pecori, B.

Playing with a bulb lamp: RTL measurements and modelling
(2016) *Physics Education*, 51 (5), art. no. 055004

Binder, P.-M., Holub, E.M., Roberts, M.F., Wasser, V.K.

Faraday induction when a loop grazes a magnet
(2016) *Physics Education*, 51 (4), art. no. 043004

Najiya Maryam, K.M.

EM induction experiment to determine the moment of a magnet
(2014) *Physics Education*, 49 (3), pp. 319 - 325

Bonanno, A., Bozzo, G., Camarca, M., Sapia, P.

Using a PC and external media to quantitatively investigate electromagnetic induction
(2011) *Physics Education*, 46 (4), pp. 385 - 394

Atram, D.B.

Universal 'imaginary closed circuit method' and formula for determination of direction of induced emf/current
(2011) *Physics Education*, 46 (1), pp. 100 - 107

Kraftmakher, Y.

Rotational viscometers-a subject for student projects
(2010) *Physics Education*, 45 (6), pp. 622 - 628

Wong, D., Lee, P., Foong, S.K.

A datalogger demonstration of electromagnetic induction with a falling, oscillating and swinging magnet
(2010) *Physics Education*, 45 (4), pp. 394 - 401

Ng, P.-H., Wong, S.-L., Mak, S.-Y.

Efficiency measurement using a motor-dynamo module
(2009) *Physics Education*, 44 (6), pp. 639 - 643

Borghi, L., de Ambrosis, A., Mascheretti, P.

Microscopic models for bridging electrostatics and currents

(2007) *Physics Education*, 42 (2), art. no. 003, pp. 146 - 155

Kraftmakher, Y.

Demonstration of Lenz's law with an induction motor

(2005) *Physics Education*, 40 (3), pp. 281 - 284

Dixon, M.

Datalogger demonstrates electromagnetic induction

(2005) *Physics Education*, 40 (2), pp. 125 - 126

Sakaki, M., Moriwaki, Y., Anzou, H.

Electromagnetic induction: Computer hard drive transforms into the most basic of speakers

(2004) *Physics Education*, 39 (5), pp. 394 - 395

Jones, C.

Understanding and using the minus sign in faraday's law

(2003) *Physics Education*, 38 (6), pp. 526 - 530

Trumper, R., Gelbman, M.

Investigating electromagnetic induction through a microcomputer-based laboratory

(2000) *Physics Education*, 35 (2), pp. 90 - 95

Liu, T., Wu, X., Liu, Y.

Using LEDs to demonstrate induced current

(1992) *Physics Education*, 27 (1), art. no. 012, pp. 36 - 38

Adams, S.F.

Energy flux in A-level electromagnetism

(1988) *Physics Education*, 23 (3), art. no. 001, pp. 184 - 190

Roche, J.

Explaining electromagnetic induction: A critical re-examination. The clinical value of history in physics

(1987) *Physics Education*, 22 (2), art. no. 004, pp. 91 - 99

Archenhold, W.F.

The teaching of electromagnetic induction at sixth form level

(1974) *Physics Education*, 9 (1), art. no. 001, pp. 5 - 8

Sumner, D.J., Thakkrar, A.K.

Experiments with a 'jumping ring' apparatus (undergraduate exercise)

(1972) *Physics Education*, 7 (4), art. no. 009, pp. 238 - 242

Michelson, D.

Faraday's laws of electromagnetic induction

(1969) *Physics Education*, 4 (6), art. no. 313, pp. 379

Archenhold, W.F.

Electromagnetism using S.I. units

(1966) *Physics Education*, 1 (3), art. no. 305, pp. 171 - 179

Lincoln, J.

Labs and demos with a one-farad capacitor
(2023) *Physics Teacher*, 61 (5), pp. 408 - 409

Berger, R., Lensing, P.

A Qualitative Approach to the Electromagnetic Induction Fostered by Augmented Reality
(2023) *Physics Teacher*, 61 (1), pp. 34 - 35

Eff-Darwich, A.

The Electric Monochord: A Musical Demonstration about Electromagnetic Induction
(2021) *Physics Teacher*, 59 (9), pp. 694 - 695

Fontes, D.T.M., Rodrigues, A.M.

Faraday's Law Low-Cost Experiment without Permanent Magnets
(2021) *Physics Teacher*, 59 (5), pp. 345 - 347

Behroozi, F.

Rotation of Spherical Magnet Falling through a Slit Copper Pipe
(2021) *Physics Teacher*, 59 (4), pp. 243 - 246

Tompkins, N.

Miniature Tesla Coil Teaching Lab
(2019) *Physics Teacher*, 57 (6), pp. 390 - 392

Behroozi, F.

Electromagnetic Induction and Lenz's Law Revisited
(2019) *Physics Teacher*, 57 (2), pp. 102 - 104

Behroozi, F.

Weighing a Magnet as it Falls with Terminal Velocity Through an Aluminum Pipe
(2018) *Physics Teacher*, 56 (7), pp. 474 - 477

Moya, A.A.

Connecting time and frequency in the RC circuit
(2017) *Physics Teacher*, 55 (4), pp. 228 - 230

Haugland, O.A.

A well-known but still surprising generator
(2014) *Physics Teacher*, 52 (9), pp. 532 - 533

Wood, D., Sebranek, J.

Electromagnetic induction with neodymium magnets
(2013) *Physics Teacher*, 51 (6), pp. 344 - 345

Alden, E., Kennedy, M., Lorenzon, W., Smith, W.

An electromagnetic induction flashlight experiment
(2007) *Physics Teacher*, 45 (8), pp. 492 - 495

Brahmia, B., Horton, G.
Induction or hysteresis: That is the cooktop question
(2001) *Physics Teacher*, 39 (2), pp. 80

Mak, S.-Y.
From electromagnetic induction to electromagnetic radiation
(2000) *Physics Teacher*, 38 (7), pp. 428 - 429

Gibson, F.M., MacInnes, I.
Symmetry in electromagnetism-A new magnetic needle
(2000) *Physics Teacher*, 38 (5), pp. 316 - 317