

## IEEE SENSORS LETTERS

The IEEE SENSORS LETTERS is published by the IEEE Sensors Council, which is sponsored by 26 IEEE societies (see the inside back cover). For information please visit <http://www.ieee-sensors.org>. *Member copies of Transactions/Journals are for personal use only.*

### Editor-in-Chief

ANDREI M. SHKEL  
University of California, Irvine,  
USA

### Associate Editor-in-Chief

DEEPAK UTTAMCHANDANI  
Strathclyde University, Glasgow,  
UK

### Associate Editor-in-Chief

FRANCISCO FALCONE  
Univ. Publica de Navarra, Spain

### Founding Editor-in-Chief (2017-2022)

SRINIVAS TADIGADAPA  
Northeastern University, USA

## Editorial Board

### *Sensor Phenomena and Modeling*

#### Topical Editor

DAVID ELATA  
Technion, Haifa, Israel

### *Sensor/Electronic Interfaces*

#### Topical Editor

MICHAEL KRAFT  
University of Liège, Belgium

### DORUK SENKAL, Associate Editor

Reality Labs, Meta, USA

### CHIA-CHAN CHANG, Associate Editor

National Chung-Cheng University,  
Taiwan

### KARTHIK SHANKAR, Associate Editor

University of Alberta, Edmonton, Canada

### SHENG-SHIAN LI, Associate Editor

National Tsing Hua University, Taiwan

### SAAKSHI DHANEKAR, Associate Editor

Indian Institute of Technology, Jodhpur, India

### *Wireless Sensors*

#### Topical Editor

TROY OLSSON  
University of Pennsylvania, USA

### *Physical Sensors*

#### Topical Editor

GIACOMO LANGFELDER  
Politecnico de Milano, Italy

### SARAH OSTADABBAS, Associate Editor

Northeastern University, USA

### IAN PAPAUSKY, Associate Editor

University of Illinois, Chicago, USA

### LEYRE AZPILICUETA, Associate Editor

Public University of Navarre, Spain

### SRI-RAJASEKHAR KOTHAPALLI, Associate Editor

The Pennsylvania State University, USA

### DIMITRIE C. POPESCU, Associate Editor

Old Dominion University,  
Norfolk, VA

### *Sensors Applications*

#### Topical Editor

OLIVER BRAND  
Georgia Tech  
USA

### *Optical Sensors*

#### Topical Editor

HUIKAI XIE  
Beijing Institute of Technology, China

### FABIEN JOSSE, Associate Editor

Marquette University, Milwaukee, USA

### JESUS CORRES, Associate Editor

Public University of Navarra,  
Pamplona, Spain

### XUEWEN SHU, Associate Editor

Huazhong University of Science and Technol-  
ogy, China

### *Sensor Power and Energy Harvesting*

#### Topical Editor

YUJI SUZUKI  
Univ of Tokyo, Japan

### *Chemical and Biosensors*

#### Topical Editor

CHRISTIAN ZORMAN  
Case Western Reserve Univ., USA  
FILIPPO COSTA, Associate Editor  
Universita di Pisa, Italy

### JULIAN GARDNER, Associate Editor

University of Warwick, Coventry, UK

### ROLLAND VIDA, Associate Editor

Budapest University of Technology  
and Economics, Hungary

### YVAN DUROC, Associate Editor

University of Lyon, France

### JULIAN GARDNER, Associate Editor

University of Warwick, Coventry, UK

### LEYRE AZPILICUETA, Associate Editor

Public University of Navarre,  
Spain

### MATTEO RINALDI, Associate Editor

Northeastern University, Boston, USA

### SHENG-SHIAN LI, Associate Editor

National Tsing Hua University, Taiwan

### SRI-RAJASEKHAR KOTHAPALLI, Associate Editor

The Pennsylvania State University, USA

## IEEE Publishing Operations

Senior Director, Publishing Operations: DAWN MELLEY

Director, Editorial Services: KEVIN LISANKIE      Director, Production Services: PETER M. TUOHY

Associate Director, Editorial Services: JEFFREY E. CICHOCKI      Associate Director, Information Conversion and Editorial Support: NEELAM KHINVASARA

Senior Manager Journals Production: PATRICK J. KEMPF      Journals Production Manager: CHRISTOPHER PERRY

IEEE SENSORS LETTERS (ISSN 2475–1472) is published monthly by The Institute of Electrical and Electronics Engineers, Inc. Responsibility for the contents rests upon the authors and not upon the IEEE, the Society/Council, or its members. **IEEE Corporate Office:** 3 Park Avenue, 17th Floor, New York, NY 10016. **IEEE Operations Center:** 445 Hoes Lane, Piscataway, NJ 08854. **NJ Telephone:** +1 732 981 0060. **Copyright and Reprint Permissions:** Abstracting is permitted with credit to the source. Libraries are permitted to photocopy for private use of patrons, provided the per-copy fee of \$31.00 is paid through the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923. For all other copying, reprint, or republication permission, write to Copyrights and Permissions Department, IEEE Publications Administration, 445 Hoes Lane, Piscataway, NJ 08854. Copyright © 2023 by The Institute of Electrical and Electronics Engineers, Inc. All rights reserved. IEEE prohibits discrimination, harassment, and bullying. For more information, visit <http://www.ieee.org/nondiscrimination>.