

Special Issue on
Electromagnetic Metamaterials and Metasurfaces

CALL FOR PAPERS

Recently, research on metamaterials and metasurfaces has received increased attention because of their various unique properties not found in nature. Recent advances in electromagnetic (EM) metamaterials have shown how to purposefully control the EM fields and EM waves by carefully engineered resonant inclusions. Several exotic EM properties of metamaterials have been demonstrated and applied to many practical fields like perfect lens, slow light propagation, invisibility cloaks, polarization control, perfect absorbers, sensing, hyperlens, and many others. The advances in understanding metamaterials will bring new opportunities and challenges demanding more research to explore their EM properties and customize metamaterials for future applications.

This special issue focuses on the latest research on metamaterials and metasurfaces. It aims to publish high-quality research articles as well as reviews to provide an overview on theoretical research and emerging technologies and applications of EM metamaterials and metasurfaces.

Potential topics include but are not limited to the following:

- ▶ Numerical simulation and theoretical analysis of metamaterials
- ▶ Active and tunable metamaterials
- ▶ All-dielectric metamaterials
- ▶ Nonlinear metamaterials
- ▶ Plasmonic metamaterials
- ▶ Semiconductor metamaterials
- ▶ Hyperbolic metamaterials
- ▶ Metasurfaces
- ▶ Metamaterials for electromagnetic wave propagation control
- ▶ Metamaterials for wave propagation applications
- ▶ Metamaterial-based polarization control
- ▶ Metamaterial-based antennas
- ▶ Metamaterial-based microwave devices
- ▶ Metamaterial-based microwave and RF circuits
- ▶ Metamaterial-based RF front-end designs
- ▶ Advanced fabrication methods for metamaterials
- ▶ Optical metamaterials and applications
- ▶ Metamaterial-inspired sensors
- ▶ Metamaterials in electromagnetic compatibility (EMC) engineering
- ▶ Hyperlensing for biological and medical applications

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/ijo/emms/>.

Lead Guest Editor

Lei Zhu, Qiqihar University, Qiqihar, China
zhuzhubutterfly@163.com

Guest Editors

Qingsheng Zeng, Communications Research Centre Canada, Ottawa, Canada
qzeng@eecs.uottawa.ca

Fan-Yi Meng, Harbin Institute of Technology, Harbin, China
blade@hit.edu.cn

Xi Zhu, University of Technology Sydney, Sydney, Australia
xi.zhu@uts.edu.au

Jing Guo, North University of China, Taiyuan, China
guojing19861229@163.com

Manuscript Due

Friday, 4 August 2017

First Round of Reviews

Friday, 27 October 2017

Publication Date

Friday, 22 December 2017