# **Special Issue**

## **Tunable Materials**

## Message from the Guest Editor

Reconfigurable and adaptable systems are highly desirable in RF and microwave technologies to maximize system performance in a changing scenario, to accommodate different needs, or to handle higher information densities and speeds. For example, frequency agility can be used to dynamically shift the operating frequency of electromagnetic filters as part of antenna or radar systems; in wireless communications, tunable circuits and reconfigurable transceivers are used to minimize the dimensions and increase the bandwidth; in antenna systems, phase shifters can be used to electronically steer the beam. Tunable devices can adapt to a dynamic environment and correct for minor deviations due to manufacturing fluctuations, thus reducing system complexity and cost. Reconfigurable, adaptive, and agile systems employ tunable devices such as filters, phase shifters, matching networks, voltage controlled oscillators (VCO), etc. Frequency selective surfaces (FSS), metamaterials, or electromagnetic filters in general are another category where tunability leads to agility in performance.

### Guest Editor

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### Deadline for manuscript submissions

closed (30 November 2020)



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## Message from the Editor-in-Chief

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