

Special Issue

Research and Applications of Acoustic Metamaterials

Message from the Guest Editors

Acoustic metamaterials (AMMs) are a form of synthetic material that can be specifically developed to have a sub-wavelength periodic structure with extraordinary characteristics not found in nature. Acoustic metamaterials have a broad range of applications, including sound absorption/isolation, noise control, medical imaging, architectural acoustics, defense and security, energy management, earthquake resistance, and underwater applications. Although acoustic metamaterials have tremendous ability for the field of sound control, AMMs present challenges such as frequency-dependent operation, optimization requirements, and material costs. Some interdisciplinary theories on acoustic metamaterials have been proposed in this field, such as intelligence, nonlinearity, topology, and bound state in the continuum (BIC). These challenges and multidisciplinary theories are current and relevant topics. This Special Issue, entitled “Research and Applications of Acoustic Metamaterials”, will report the progress achieved over the past several years.

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Welcome to *Crystals*, the journal dedicated to the fascinating world of crystallographic research! Crystals are more than mere decorative elements; they hold the key to understanding the fundamental structure of matter. Our mission is to explore the crucial significance of this research across various fields. From medicine to technology, chemistry to geology, crystals play a vital role. Their structure provides insights into new advanced materials, innovative drugs, and groundbreaking technologies. Through *Crystals*, we delve into the microscopic world to discover solutions that will shape the future. Join us on a journey through the *Crystals*, where science merges with beauty and innovation.

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