

Acoustic Metamaterials



Technology

HKUST has developed a family of effective noise remediation solutions based on the pioneering acoustic metamaterials technology. Coupling applied physics with intelligent design, soundproofing for noise with wide spectrum can be realized with this breakthrough technology, especially in the low frequency range where applications of conventional soundproofing materials are either inadequate or otherwise extremely expensive. The new technology focused towards to a new era of lighter, thinner and more affordable sound absorption metamaterials.



Potential Applications

Acoustic absorption for wide range of applications:

- Buildings
- Vehicles
- Aircraft
- Large-scale infrastructure



Intellectual Properties

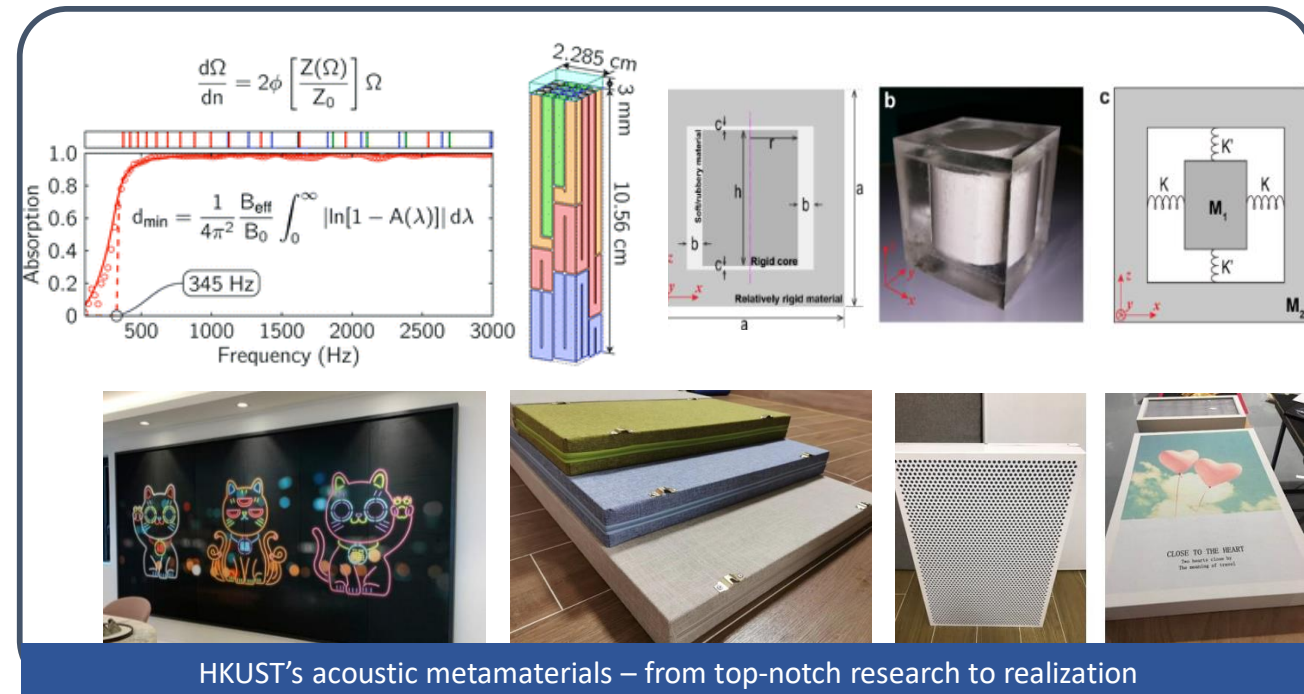
US Application/Patent No. 14/889151, 15/402470, 62/937512, 16/731376, 63/103470, 63/147763

Chinese Application/Patent No. 201480040763.7, 201580037497.7, 2019/127482, 201911416118.1



Advantages

- Low frequency range absorption
- Tunable spectrum
- Compact and light in weight
- Simple in structural design
- Cost effective



HKUST's acoustic metamaterials – from top-notch research to realization



Talk to Us

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