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Vibro-acoustic metamaterial for longitudinal vibration suppression in a low frequency range

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Highlights

- A vibro-acoustic metamaterial proposed for longitudinal vibration suppression
- Blocking of longitudinal vibration in an extremely low frequency range
- Theoretical approaches developed to predict the stop band of the proposed metamaterial
- Explanation of the physical behavior of the metamaterial with negative mass density
- Experimental validation of the vibration attenuation of the proposed metamaterial

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