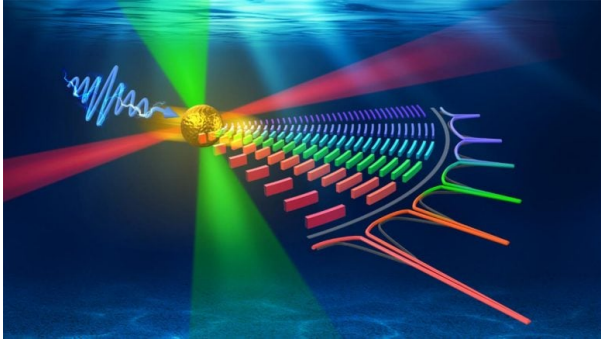


Chinese Researchers Reveal the Most Potent Sound Laser in the World

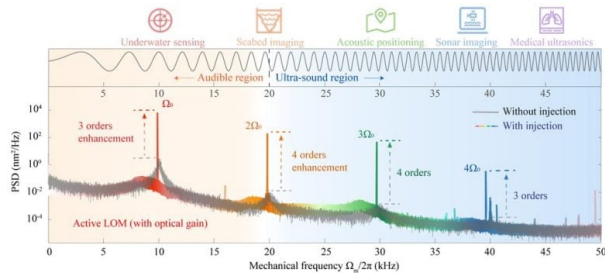
Posted by [Okachinepa](#) 10/04/2024



Courtesy of SynEvol
Credit: Chanchung Institute of Optics

Chinese scientists have made great progress toward creating lasers that operate on sound waves rather than light. These "phonon lasers" have the potential to improve deep-sea research, medical imaging, and other fields.

With the new method, the laser's sound waves are produced with much more power and accuracy thanks to a tiny electronic prod. This opens the door for more advanced gadgets that could use sound in a wider variety of ways in the future.



Courtesy of SynEvol
Credit: Chanchung Institute of Optics

In the past, the poor fidelity and inaccurate sound waves of phonon lasers composed of small objects limited their practical applications. The novel technique gets around this problem by basically "locking" the sound waves into a stronger, more stable form.

This development opens the door for strong and accurate phonon lasers that may be used in practical settings like deep-sea exploration and medical imaging. Deep-sea vehicles could use enhanced communication and navigation, while phonon lasers could lead to more sensitive and safe medical imaging methods.



Courtesy of SynEvol
Credit: Chanchung Institute of Optics

In addition, phonon lasers may find use in quantum computing, material science, and other domains.

The development of phonon lasers has advanced significantly with this research, which could lead to the creation of several new technologies.