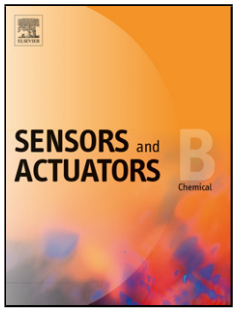

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Novel Method for the Detection of the Facial Nerve Using Electrical Impedance Spectroscopy during Otologic Surgery

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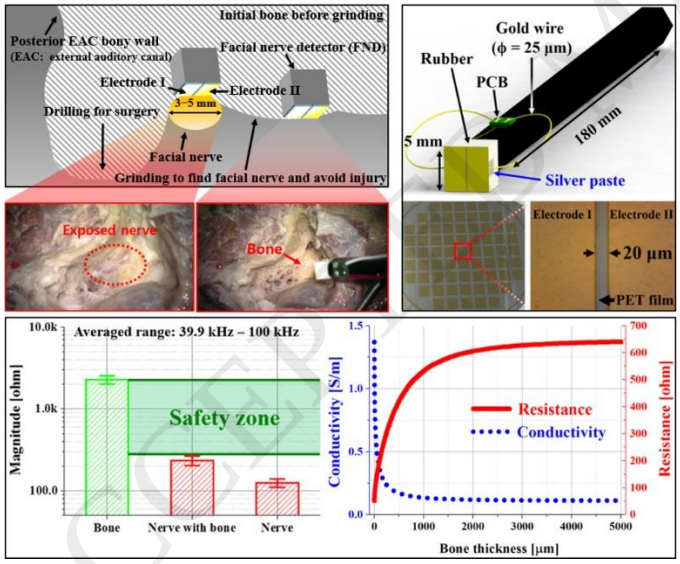
Graphical Abstract



Highlights

- To avoid iatrogenic facial nerve injuries during otologic surgery.
- Electrical impedances of bone and facial nerve of a cadaver were investigated.
- Safe ranges in electrical impedance were suggested at the optimal frequencies.
- Resistance and conductivity changes were investigated according to bone thickness.