Heterogeneously Integrated Impedance Measuring System with Disposable Thin-film Electrodes
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■ Introduction
- An integrated impedance measuring system with disposable electrodes.
- Reusable CMOS chip for data retrieval from remote controlled thin-film electrodes.

■ Results and Discussions
- Schematic of the integrated impedance measurement system.

  ▪ Simulation and measured results of the system validation test.

  ▪ Measured and fitted results of the three-element circuit indicated in the subplot.

  ▪ Cole-Cole and Bode plots for measurement of DNA concentration.

■ Conclusion
- The system keeps the CMOS processor reusable in order to reduce the measurement cost.
- The setup also provides additional freedom on electrodes design.

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