

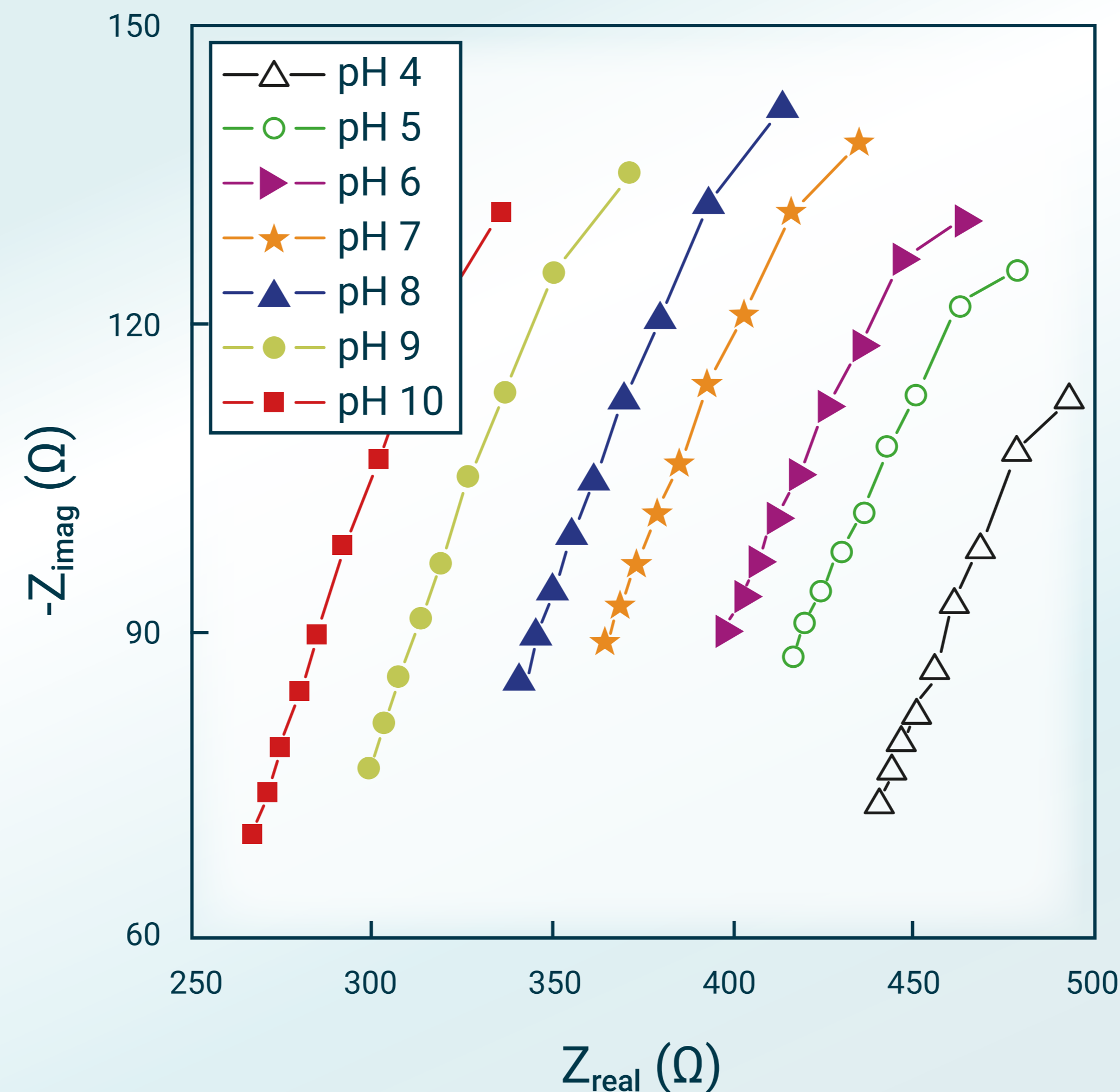
SCREEN PRINTED TiO₂ THICK FILM ON AN ALUMINA SUBSTRATE FOR CONDUCTIMETRIC pH SENSING

1. pH sensing without reference electrode.

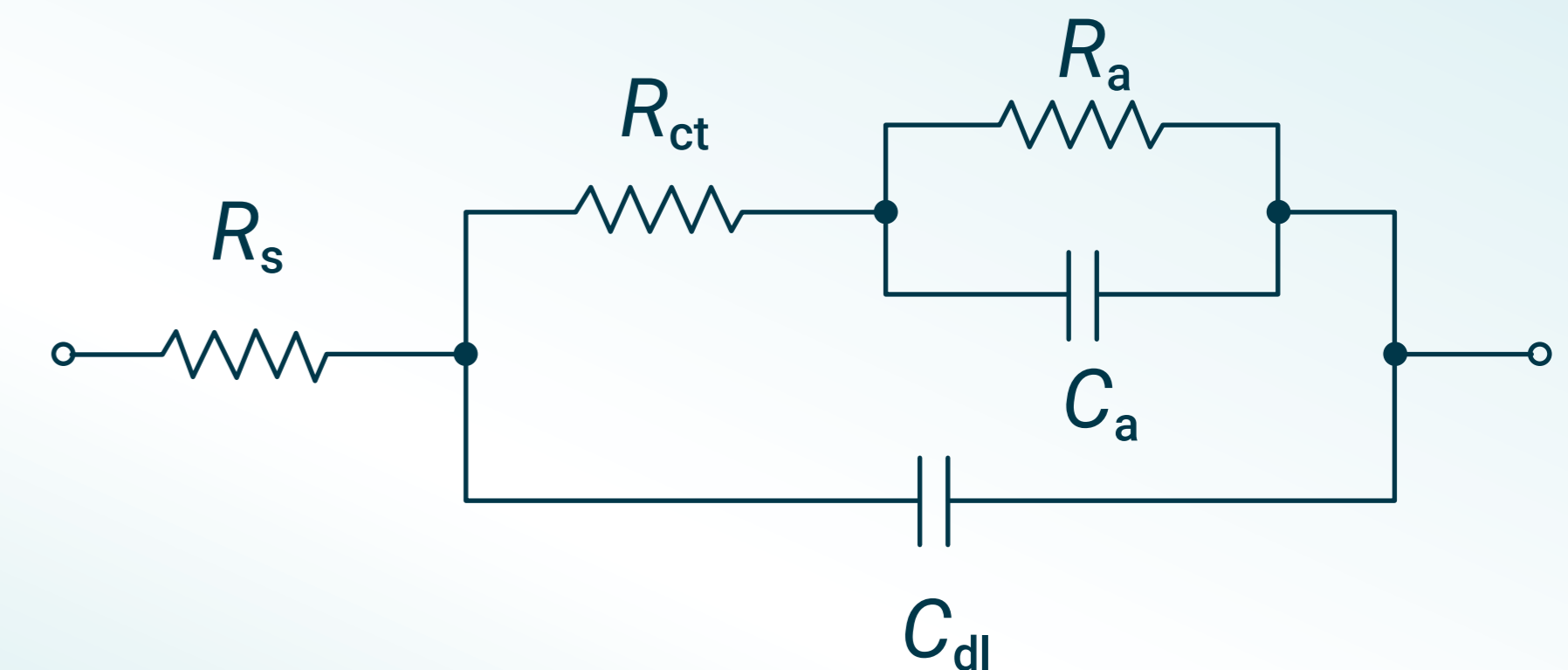
2. Sensors are manufactured in the IDE form.

3. Characterization methods: Raman spectroscopy, EIS and SEM.

4. Analysed pH range: 4 - 10



Proposed equivalent electrical circuit reveals sensing mechanisms



RMSE errors between estimated and measured values are lower than 5%.