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# Organic antifreeze discrimination by pattern recognition using nanoparticle array

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## Highlights

- A colorimetric sensor array for differentiating five organic antifreezes is successfully developed.
- Five organic antifreezes have been successfully discriminated at a low concentration of 50 mM.
- A high accuracy (100%) examination of 30 unknown samples is achieved.
- The sensor array also performs well in real water sample.

## Abstract

We report a colorimetric nanoparticle array for discrimination of five organic

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