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Room-temperature-operated organic-based acetone gas sensor for breath analysis

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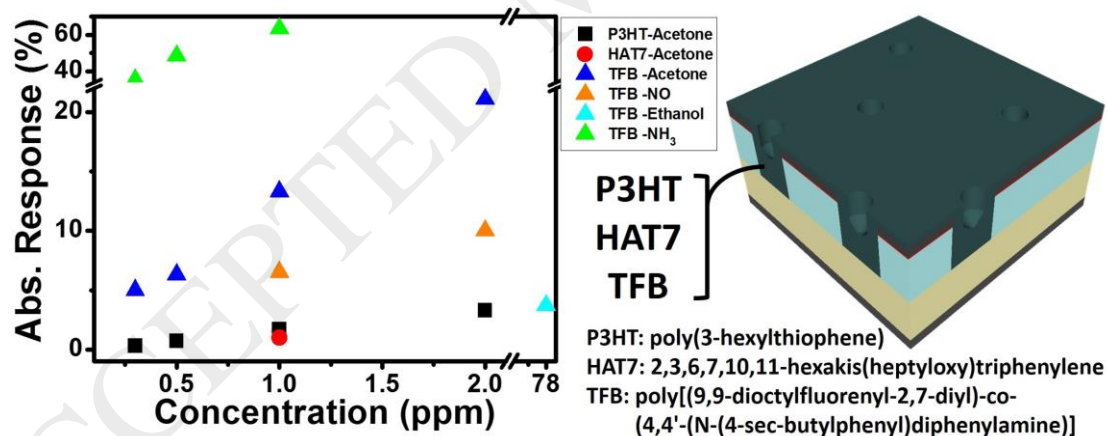
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Graphical abstract



Highlights

- The sensing performance of sensors based on conducting polymers is greatly affected by the presence of water vapor.
- The TFB sensor exhibited high sensitivity to acetone, down to ppb levels in ambient air.
- A humidification tube was designed as an ammonia filter to improve selectivity.

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