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Solution-based process with thermal UV treatment for fabrication of piezoelectric PZT films for an actuator array at temperatures under 450 °C

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Highlights

- PZT film was fabricated at 450 °C by introducing thermal UV/O₃ treatment.
- The obtained electrical characteristics of low-temperature processed PZT film were comparable with conventional processed ones.
- The actuator using low-temperature processed PZT film was demonstrated.
- Dependence of displacements change on the applied voltage was very consistent with that of the simulation.

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