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Lead-free piezoelectrics; Raman delineation of phase boundaries
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— There is a need to identify ferroelectrics with strong temperature-independent piezoelectric responses to replace the ubiquitous $PbZr_xTi_{1-x}O_3$ (PZT). It is central in this search to establish the phase diagram of candidate materials, especially the existence of a temperature-independent phase boundary similar to that in PZT. We will report Raman investigations of a number of target materials, and report clear evidence of such a boundary in one of them and weaker, as yet incomplete evidence in another.

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