

Development of PMN-PT based Single Crystals

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Significant progress has been made in the growth of PMN-PT and PIN-PMN-PT single crystals. Boules with diameter up to 4 inches and usable segment of 2 inches long becomes routine for production. Improvements in crystal quality, property, and cost promote the application of single crystals in both medical ultrasound and underwater applications. To further reduce the cost of single crystals and expand crystal application, different approaches in crystal growth, including double melt and continuous feed growth, have been investigated to grow crystals more efficiently. Progress and results will be presented at the conference.