Table SI. A comparison of [001] texture quality and piezoelectric coefficients (d33) of bismuth-layered structure ceramics as a function of texturing approach.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Composition | Template | Process | Texture Fraction (%) | Piezoelectric Coefficient d33 (pC/N) | Degree of Enhancement |
| Ca0.85(LiCe)0.15Bi4Ti4O15 (LCCBT)139 | 10 wt% CBT | Tape cast (TGG) | 86.5 | 27 | 1.8x |
| SrBi4Ti4O15 (SBT)141 | 20 vol% BIT | Tape cast (TGG) | 87 | --- | --- |
| Ca0.5Eu0.5Bi2Nb2O9140 | 10 wt% CaBi2Nb2O9 | Tape cast (TGG) | 92 | 20.5 | 3.3x |
| (Sr0.7Ca0.3)2Bi4Ti5O18 (SCBT)135 | --- | Hot Forging | 96 | 33.7 | 1.7x |
| Sr0.9Nd0.1Bi2Nb2O9 (SNBN)138 | 20 wt% SNBN | Tape cast (TGG) | 96 | 32\* | 2.3x |
| Ca0.85(LiCe)0.075Bi4Ti4O15 (LCCBT)142 | 40 mol% BIT | Tape cast (RTGG) | 98 | 33\* | 1.7x |
| Bi4Ti3O12 (BIT)143 | --- | SPS | 99 | --- | --- |
| Bi3.15Nd0.85Ti3O12 (BNdT)136 | --- | SPS | --- | 18.3 | 4.0x |

\*Value reported as d15 piezoelectric coefficient