

Abstract Submitted
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Temperature effects on the low strain rate behaviour and piezoelectric charge production of PZT¹ AMNAH KHAN, JENS BALZER, WILLIAM PROUD, Institute of Shock Physics, Imperial College London — This presentation looks at the effect of varying strain rates and temperatures on the production of charge and fracture of the piezoceramic PZT. The samples are studied in the range of -80C to +200C; whilst a range of strain rates (10^{-4} s^{-1} to 10^{+3} s^{-1}) is achieved using quasi-static Instron equipment, drop weight machines and compression Split Hopkinson Pressure Bars. Stress-strain data is obtained, and further analysis is made possible by the use of high-speed images.

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