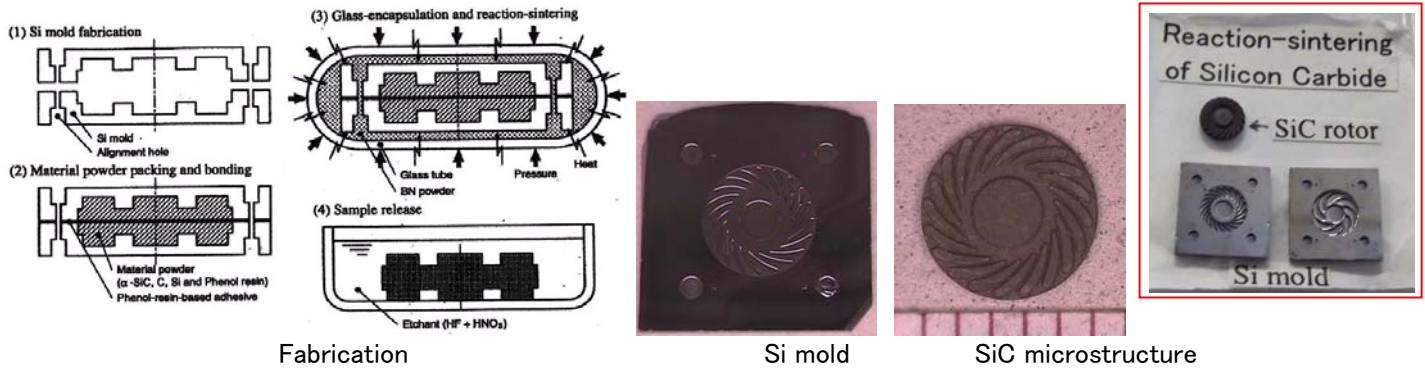
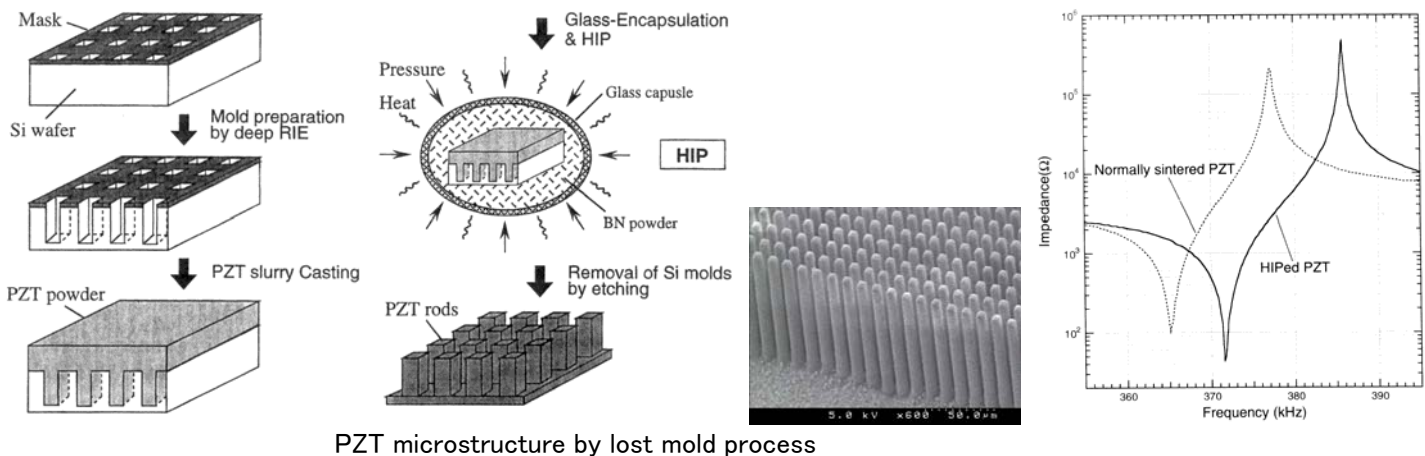


SiC and PZT by Lost-mold Process, Si_3N_4 by Reaction Sintering



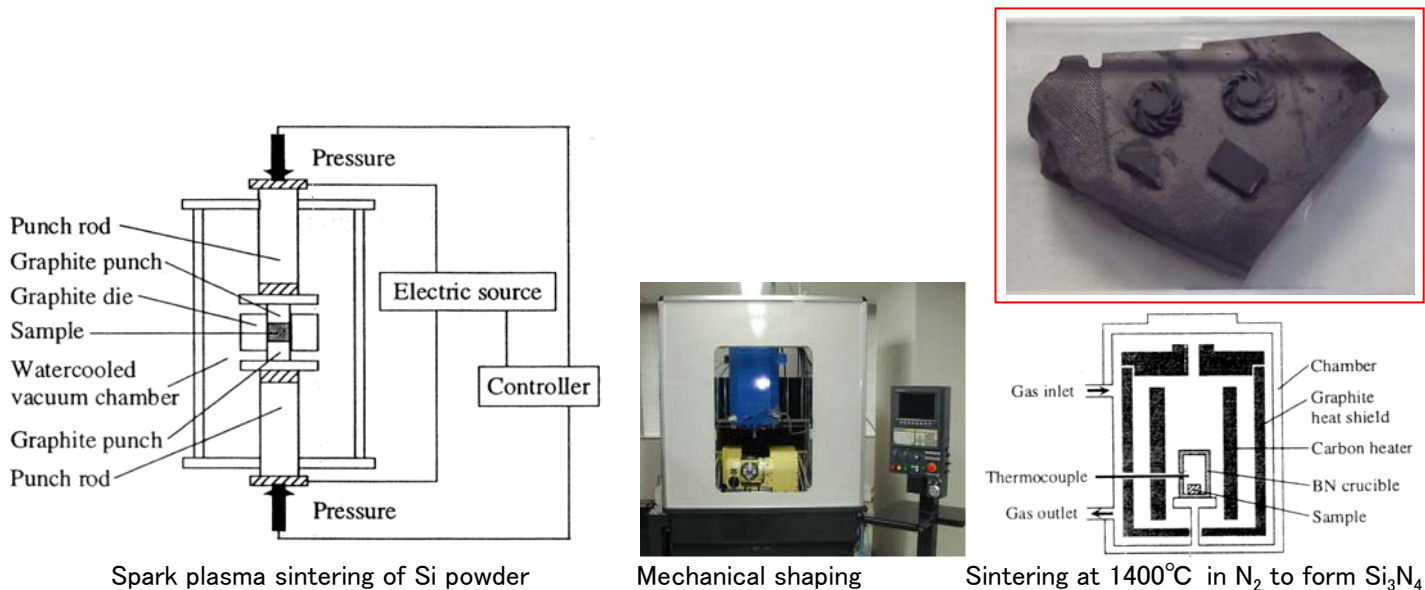
SiC microstructure by lost mold process

Reference : S.Tanaka, S.Sugimoto, J.F.Li, R.Watanabe and M.Esashi, Silicon Carbide Micro-Reaction-Sintering Using Micromachined Silicon Molds, J. of Microelectromechanical Systems, 10 (2001) pp.55-61



PZT microstructure by lost mold process

Reference : J.-F.Li, S.Wang, K.Wakabayashi, M.Esashi and R.Watanabe, Properties of Modified Lead Zirconate Titanate Ceramics Prepared at Low Temperature (800°C) by Hot Isostatic Pressing, J.American Ceramic Soc., 83 (2000) pp.955-957



Si_3N_4 structure by sintering in N_2 of porous Si made by spark plasma sintering of Si powder and mechanical shaping

Reference : S.Sugimoto, S.Tanaka, J.-F.Li, T.Yamada, R.Watanabe and M.Esashi, Three-Dimensional Micromachining of Silicon Nitride for Power Microelectromechanical Systems, Technical Digest of the Transducers' 01 (2001) pp.1140-1143