LAW OF VARIATION OF PARTICLE SIZE WITH TIME IN SOL-GEL POWDER FABRICATION PROCESS

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Abstract: We present some results on particle growth and the variation of particle radius with time, in the case of alumina-zirconia powder. Particle growth occurs in three phases: a fast initial growth of the "condensation nuclei", a linear growth and the fusing of smaller particles into bigger ones. All three phases may be approximated by a third degree polynomial.

Key words: ceramics, ceramic powder, particle growth, sol-gel technology

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