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解説論文  
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## 電子セラミックスの製造プロセスの省エネルギー

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Energy Saving about the Manufacturing Process of Electronic Ceramics

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The necessity for energy saving has been pointed out since the Great East Japan Earthquake. In the manufacturing process of electronic ceramics, there are heat treatment processes, such as calcination and sintering, and temperature is also 1300°C or more and is using many energies. We considered energy saving about the manufacturing process of electronic ceramics. Some techniques of leading to energy saving about the sintering process which is the highest temperature in a manufacturing process and has most energy consumed, use a small particles of raw material, use of a liquid phase method, and addition of sintering aid are described.

Furthermore, the low temperature sintering material containing many lead oxides is also described.

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**Key Words** : Energy saving, Electronic ceramics, Manufacturing process, Low temperature sintering