

**Contributions, Geophysical Institute, Kyoto University, No. 13, 1973**

**List of Publications (Revised)**

**(1972-1973)**

**1972**

- \*Hujita, A. and T. Ogawa; Patterns of electric field variations due to thunderstorm clouds, *Taiki Denki Kenkyu*, **6**, 59-62.
- Kubotera, A.; On the gravity anomaly eliminating the effect of the low density deposit at the atrio and the structure of Aso caldera, *Bull. Volcanol. Soc. Japan*, **17**, 9-17.
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- Ogawa, T.; Analyses of measurement techniques of electric fields and currents in the atmosphere *Contr. Geophys. Inst., Kyoto Univ.*, **13**, 111-137.
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