

Emergency Condition Discrimination for Single People Using a CO₂ Sensor and Body Detectors

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Abstract : The purpose of this research is to construct a watching system that monitors human activity in a room and detects abnormalities at an early stage to prevent unattended deaths of people living alone. In this article, we propose a method whereby highly urgent abnormal conditions of a person are determined by changes in the concentration of CO₂ generated from activity and respiration in a room. We also discussed the effects the amount of activity has on the determination. The results showed that this discrimination method is not dependent on the amount of activity and is effective in judging highly urgent abnormal conditions.

Keywords : abnormal conditions, multiple sensors, people living alone, respiratory arrest, unattended death, watching system

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