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Behavior of multiple bubbles in a row under ultrasonic pressure field ICHIRO UENO, Tokyo University of Science, TATSUNORI KOJO, Graduate School at Tokyo University of Science — The present paper discusses behaviors of a single or multiple bubbles exposed to ultrasonic vibration in water under isothermal condition. In the single bubble case, excitation of the surface wave over the free surface or shape oscillation with high-order mode is indicated through the observation by use of the high-speed camera. The behavior depends upon the amplitude of the vibration. In the case of multiple bubbles, the authors focus upon a system in which the ultrasonic pressure field is irradiated to the bubbles in a row from the top; the propagation direction of the pressure field is parallel to the row. The effect of the preceding bubble upon the behavior of the following bubbles is presented.

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