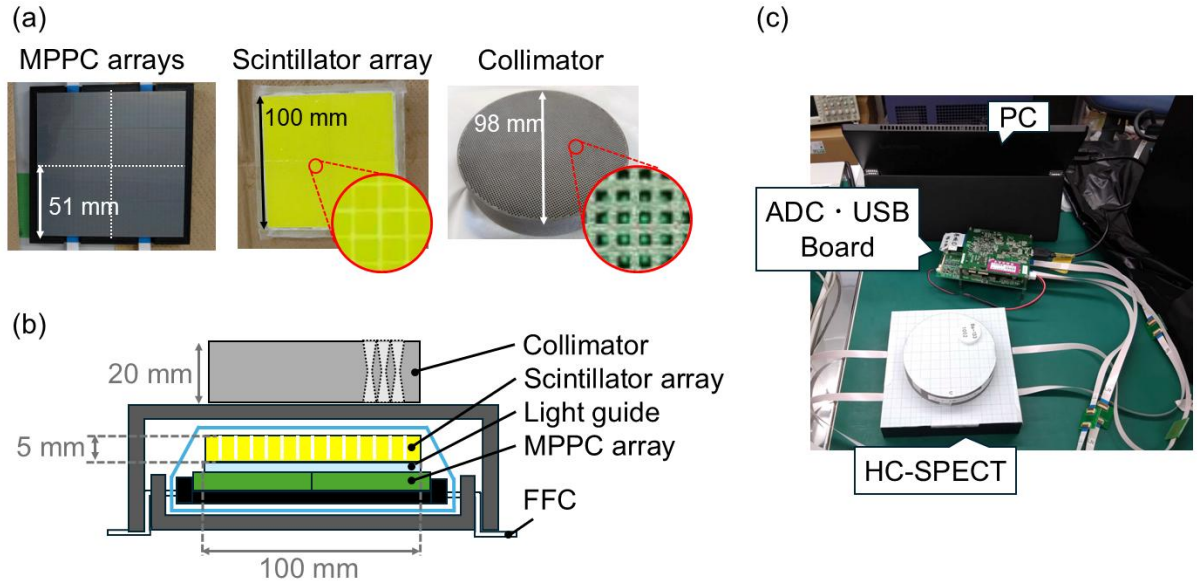

Fig. 1 (a) Photographs of MPPC arrays, scintillator arrays, and tungsten collimator used for HC-SPECT. (b) Configuration of the 10×10^2 cm^2 HC-SPECT. (c) Overview of the measurement setup.

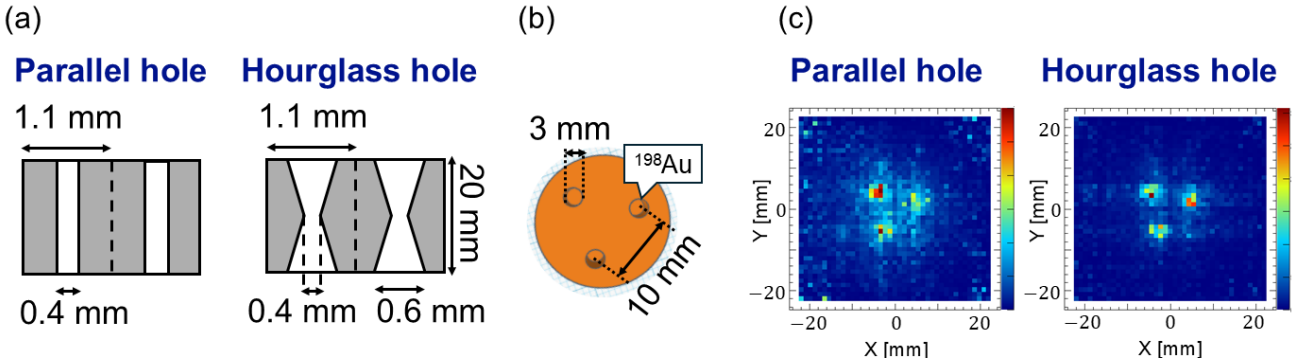

Fig. 2 (a) Configuration of the hourglass-hole collimator used in HC-SPECT and the conventional parallel-hole collimator used for comparison. (b) Radioactive gold (^{198}Au, 412 keV) source imaged with parallel/hourglass hole collimators. (c) Images obtained with parallel-hole and hourglass-hole collimators.

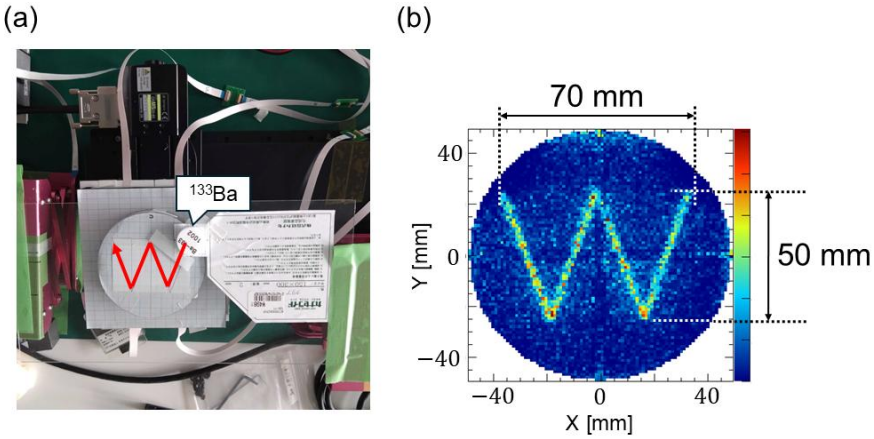

Fig. 3 (a) Measurement geometry. A “W”-shaped source pattern was formed using a ^{133}Ba source emitting 356-keV gamma rays. (b) Image obtained with HC-SPECT. Sufficient field of view for small animal imaging and seamless connection across the four MPPCs were demonstrated.