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### Alpha-Particle Imaging Device with Super-Resolution Technique

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In this study, we propose an alpha-particle imaging device in conjunction with a super-resolution technique. A high-resolution image is recovered using the four images obtained by moving the device along the x- and y-directions. The results show that, using the device with a pre-defined pixel resolution, the proposed technique produces the images of alpha-particles with an improved resolution of approximately 16%. We conclude that the proposed technique has potential in the development of radiopharmaceuticals for targeted alpha therapy.

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