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Fabrication of THz corrugated structure using X-ray based lithography

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In a preceding study, the wakefield accelerator, which is being actively researched worldwide, was successfully developed by the die stamping method. In order to realize smaller and more precise structure for future wakefield accelerators, X-ray based lithography is successfully implemented to fabricate micro-meter scale wakefield structure. The fabricated structure is half mm radius and 400 GHz wakefield structure. As a result, compared with currently demonstrated structure, higher power generation and extension of RF pulse duration can be possible by help of X-ray lithography scheme. In this paper, novel fabrication scheme based on X-ray lithography will be described.

Footnotes

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Asia

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