

Future laser and beam driven high gradient accelerator technology

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Recent high gradient accelerator technologies will be introduced. Most popular high gradient accelerator is the laser plasma wakefield accelerator and it reaches up to 100 GV/m level. However it is currently low repetition rate and difficult for the cascading acceleration. On the other hand, there are another accelerator technologies to realize the high repetition and the cascading acceleration based on the THz wave. The main issue for the THz accelerator is the efficient THz generation driven by high power laser or the electron beam. Further recent high power laser technologies are also introduced.

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