



Laser Acceleration Technology and Applications

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

Laser-driven particle accelerators have experienced tremendous development over the last few years, with clear potential to soon become a compact alternative to more conventional radio-frequency based accelerators. The ability to sustain extremely high accelerating fields (easily exceeding the GV/m) allows for the acceleration of electrons up to GeV-like energies over only a few cm of plasma. Moreover, laser-driven accelerators have the unique capability of generating femtosecond-scale electron beams with source sizes in the micron range and divergences of the order of a mrad. These appealing characteristics are unveiling a whole new range of applications in healthcare, manufacturing, and fundamental science that would not be possible otherwise.

- wakefield
- high-intensity lasers
- electron beams
- plasma physics
- optics
- particle acceleration





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Message from the Editor-in-Chief

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