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High Power Laser: Theory and Applications

Guest Editor:

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Message from the Guest Editor

High-power lasers play an important role in modern society. At present, researchers are committed to improving output power/energy, beam quality control capability and operating frequency by exploring new technologies and materials. These developments will in turn promote the development of relevant application technologies, such as inertial confinement fusion, astrophysics, ion acceleration, etc.

Original research articles and reviews are welcome. Research areas may include (but are not limited to) the following:

- Laser design, modeling and optimization;
- High-power/high-energy laser, ultra-short ultrastrong laser; chemical laser, free-electron laser; solid-state laser, fiber laser, semiconductor laser, etc.;
- Interaction between laser and materials. Laser plasma physics. Intense laser-driven particle acceleration and new radiation sources;
- Laser beam control and transmission;
- Advanced optical functional materials and devices, films and applications;
- Laser manufacturing, laser detection and laser imaging, laser application technology;
- Other relevant frontier interdisciplinary sciences.





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