

Recent developments of high power laser chains delivering intense laser pulses with high recurrence rates have led to a boom in the domain of laser plasma interaction notably in the relativistic regime.

This growth has led to major scientific advances in the generation of high order harmonics, X ray or gamma ray source, and particle beams (electrons and ions) with potential applications in many fields including medicine, materials science, ultrafast phenomena, nuclear physics, etc...

In parallel many basic mechanisms have been discovered such as Self Modulated Laser Wakefield, Forced Laser Wakefield, Bubble and Blow-Out regime, Collision Laser Pulses regime, Target Normal Sheath Acceleration Radiation Dominated Acceleration, Relativistic Optical Mirror, Coherent Wake Emission, etc...

High qualities research advances on both fundamental and application sides reveal the dynamism of this growing research area.

The start of major projects such as European projects like "Extreme Light Infrastructure" promises a prosperous scientific future.

In this context, the "Journal of Intense Pulsed Lasers and Applications in Advanced Physics » arrives at the right time. Its mission is to federate and to inform the related community in this well-defined area. This scientific journal will, hopefully, play the role of common platform to inform our scientific community of the most significant advances in this area that, we hope, will strengthen the ties between laser, plasma accelerator, synchrotron, and nuclear communities.

The Journal of Intense Pulsed Lasers and Applications in Advanced Physics will be published with 4 issues per year. The JIPLAAP will be published under the aegis of VIP (Virtual Institute of Physics) affiliated to the "Horia Hulubei" Foundation and UNESCO Chair - Bucharest.

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