Special Issue

The Temporal Contrast Issue of High-Power / High-Brightness Lasers

Message from the Guest Editor

As the brightness of IR solid-state CPA laser systems and short-pulse UV excimer gas lasers is continously increasing, exact control of the temporal noise is of increased importance. The origin of the noise is connected either to the CPA scheme, or to the rapidly growing ASE in the UV. With regard to the requirements of most applications, in both systems, contrast improvement techniques are needed to be applied in the end (or preferably after) the amplifier chain. This necessitates the use of energy-scalable pulse cleaning methods, such as the plasma mirror technique, or the recently introduced nonlinear Fourier filtering (NFF). Implementation/further improvement of these techniques could open new perspectives on the achievable temporal contrast of high-power laser systems. *Applied Sciences* invites papers for a Special Issue on “The Temporal Contrast Issue of High Power/High-Brightness Lasers”, includingthe measurement, the theoretical and experimental study of the temporal noise of large-scale laser systems.

Guest Editor

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As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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