





an Open Access Journal by MDPI

Innovations in Fiber Laser Technology

Guest Editors:

Dr. Yi An

Test Center, National University of Defense Technology, Xi'an 710106, China

Dr. Jiaxin Song

College of Advanced Interdisciplinary Studies, National University of Defense Technology, Changsha 410073, China

Dr. Hanshuo Wu

College of Advanced Interdisciplinary Studies, National University of Defense Technology, Changsha 410073, China

Deadline for manuscript submissions:

10 February 2025

Message from the Guest Editors

Innovations in fiber laser technology have enabled the fast progress of fiber lasers over the past six decades, ranging from visible to mid-infrared wavelengths, and the maximum output power has reached 150 kW through beam combination. The temporal properties of fiber lasers span continuous wave, quasi-continuous wave and pulsed operation, with pulse durations ranging from ms to fs. The beam profiles of fiber lasers can be extensively customized through specially designed fibers and electronic servo systems. Although the development of fiber lasers is prominent, recently emerging techniques such as artificial intelligence have brought fiber lasers into a more innovative era, making fiber lasers smarter, more efficient. more powerful and more practical. We believe that innovations in fiber laser technology will further drive their development and applications.



