

YOUR KEY to innovation and success

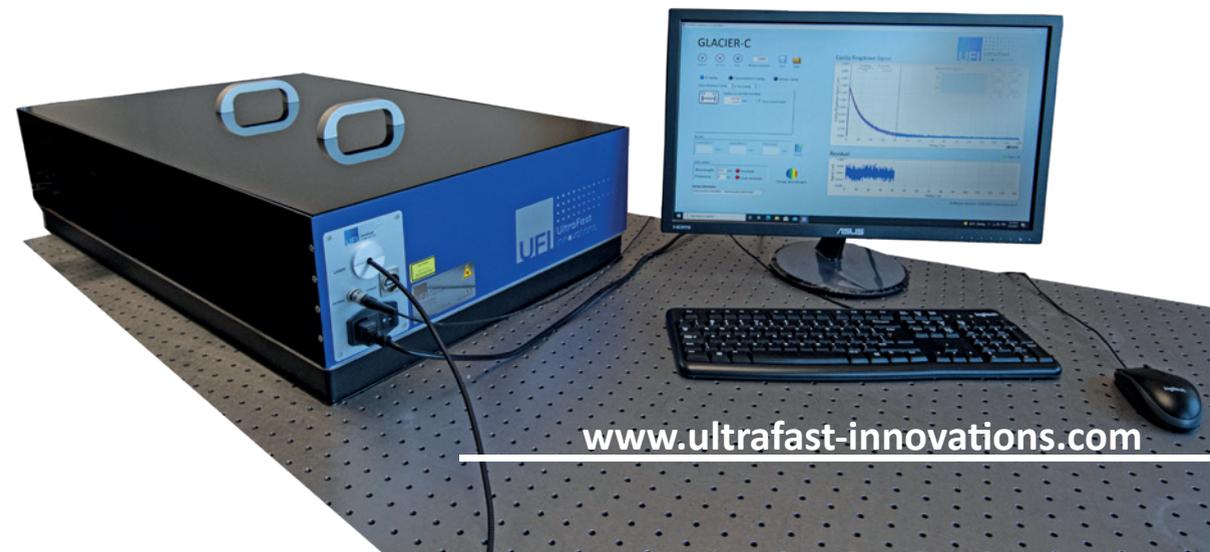


Summary

Manufacturer of custom-made optics, broadband coherent sources, diagnostic devices and engineering solutions in ultrafast science.




made in
Germany



www.ultrafast-innovations.com

Company Profile

UltraFast Innovations GmbH (UFI®) was founded in 2009 as a spin-off from the Ludwig-Maximilians-Universität München (LMU) and the Max Planck Institute of Quantum Optics (MPQ), in particular from the groups of Professors Ferenc Krausz and Ulf Kleineberg. Our roots date back to the inception of chirped mirrors in the 1990s. From the beginning, Prof. Krausz and colleagues pioneered chirped mirror technology and attosecond pulse generation. Over the years, much experience in the theoretical design, reliable manufacture and thorough testing of optics has been accumulated. This experience has been crucially helpful in numerous innovations; for instance, in the generation of laser pulses with a duration of three femtoseconds. It was also the key ingredient in achieving some of the shortest light pulses ever created, at a duration of 80 attoseconds. We furthermore developed characterization instruments, that we now commercialize. Now, we are making this experience available to our customers.

Products / Services

We specialize in the design and manufacture (from standard to tailor-made) of optical elements and devices for ultrafast laser applications. Combining broadband coherent sources with unique dispersive technology, we offer the tools to generate and diagnose the shortest pulses on the market in the femto- (UV-VIS-IR) and attosecond (XUV/soft X-ray) range, ideal for applications in spectroscopy and pump-probe experiments. We have complex design and manufacturing capabilities in dielectric optics for laser applications, as well as metallic multilayer structures for XUV/soft X-ray applications. Finally, our product portfolio is complemented by characterization devices for dispersive and high-reflective mirrors. Through our integral consultation approach, we help our customers find the solution that best suits their exact requirements/specifications.

References and export activities

Our primary markets are located in North America, Europe and Asia and count numerous industrial coating facilities, laser manufacturers as well as international research groups needing cutting-edge optics, diagnostic tools and radiation sources.

We export the majority of our products outside of the EU.

Target group

Research institutes and companies that:

- need to characterize optical coatings
- need high-end dispersive optics
- work with ultrafast laser sources

Competitive advantages

- Decades of experience in production of high-end dielectric and XUV/soft-X-ray optics
- Our optics have won multiple innovation awards
- Access to the latest research through close collaboration with research groups
- High degree of consultation and customization to our products is possible to ensure that you get the product you need

Ideal Business Partners

- Laser facilities and manufacturers
- Research institutions operating with ultrafast and/or high intensity lasers
- Optical coating facilities
- Local distributors



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Project

Israeli-German
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26th - 30th March 2023



Supported by:



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systems for business solutions

