

all wavelengths.



Welcome at
EPIC Meeting in Industrial Quantum Photonics @ TOPTICA
11. – 12.10.2023

Wilhelm Kaenders, Founder and President





TOPTICA Group: Key Figures



Technology

Diode Laser Systems	190 – 4000 nm
Ultrafast ps/fs Fiber Lasers	390 – 15000 nm
CW Fiber Lasers & Amplifiers	488 – 1570 nm
Terahertz Generation	0.1 – 6 THz
High Power Laser Diodes	630 – 1120 nm (TOPTICA eagleyard)

Key Figures

Employees	about 500
Revenues	130 Mio € (135 Mio \$)
Founded	1998



TOPTICA Group: Company Structure

TOPTICA

TOPTICA Photonics, AG
Headquarter Germany
Laser Systems

Gräfelfing, Germany

President (Vorstand)
 Dr. Wilhelm Kaenders
 Dr. Thomas Renner

Legal form
 Aktiengesellschaft (AG)

Ownership
 Private

Chairman
 Dr. Dieter Schenk

TOPTICA

TOPTICA Photonics, Inc.
Subsidiary North America
Optical Isolators
OPOs

Headquarter
 Pittsford, NY, USA

2nd Office
 Boulder, CO, USA

President
 Mark Tolbert

Chairman
 Dr. Thomas Renner

TOPTICA

TOPTICA Photonics K.K.
Subsidiary Japan

Headquarter
 Fuchu-shi, Tokyo

Pres./Shacho
 Taro Saito

Kaicho
 Dr. Thomas Renner

TOPTICA

TOPTICA Photonics China
Subsidiary China

Headquarter
 Shanghai

GM/LR
 Dr. Juergen Stuhler

TOPTICA

TOPTICA Photonics SAS
Subsidiary France

Headquarter
 Bordeaux

President
 Dr. Nicholas Traynor

GM
 Dr. Juergen Stuhler

Chairman
 Dr. Wilhelm Kaenders

TOPTICA
EAGLEYARD

TOPTICA eagleyard
High-Power
Laser Diodes

Headquarter
 Berlin, Germany

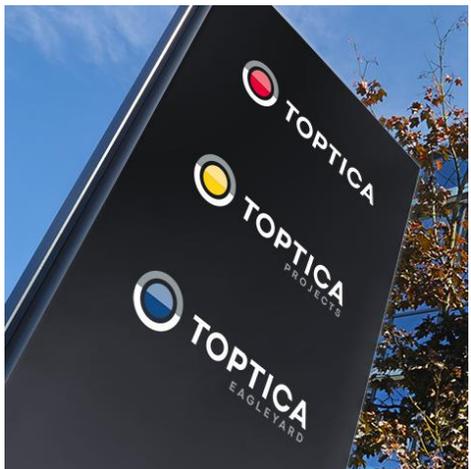
GM
 Jörg Muchametow
 Claus Heitmann
 Dr. Wilhelm Kaenders

TOPTICA
PROJECTS

TOPTICA Projects GmbH
Subsidiary
Special Projects
GuideStar Lasers

Headquarter
 Martinsried, Germany

GM
 Dr. Frank Lison
 Dr. Wilhelm Kaenders
 Armin Zach



TOPTICA Photonics: International



TOPTICA Photonics Distributors

TOPTICA Photonics offices
Germany, USA, Japan, China,
France

TOPTICA Projects
Germany

TOPTICA eagleyard
Germany

Lastek
Australia

Opton Laser
France

Simco Global
Technology
India

Lahat Technologies
Israel

Jinsung Laser
Korea

EuroLase Ltd.
Russia

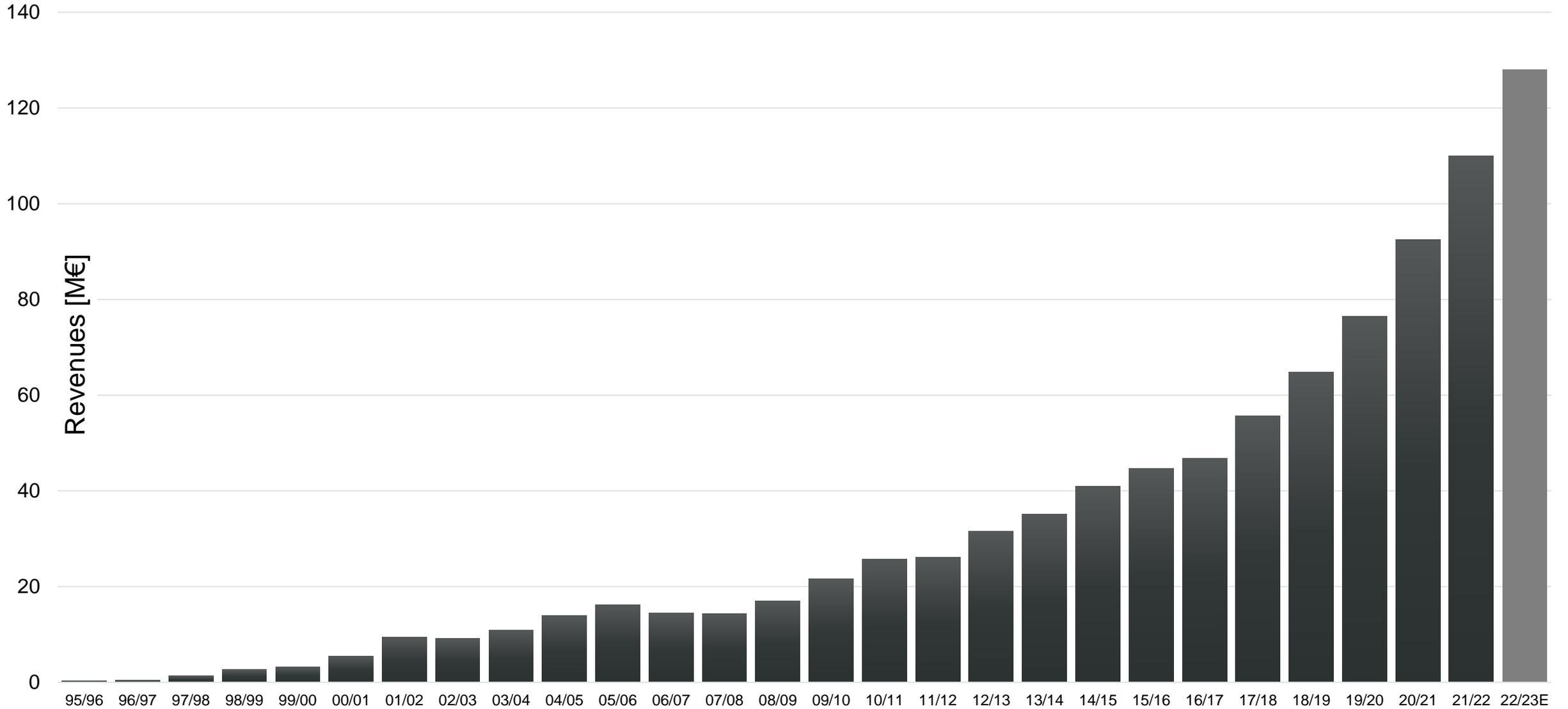
Precision
Technologies
Singapore

Luxton Inc.
Taiwan

TOPTICA
Photonics UK
UK

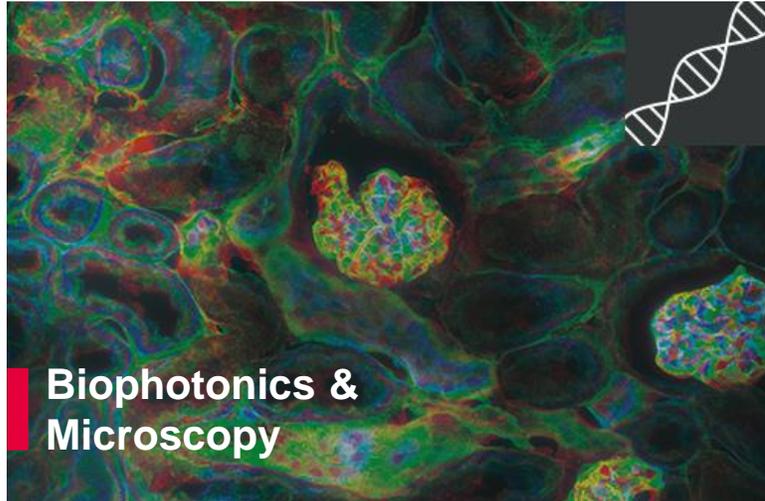


TOPTICA Group: Revenues



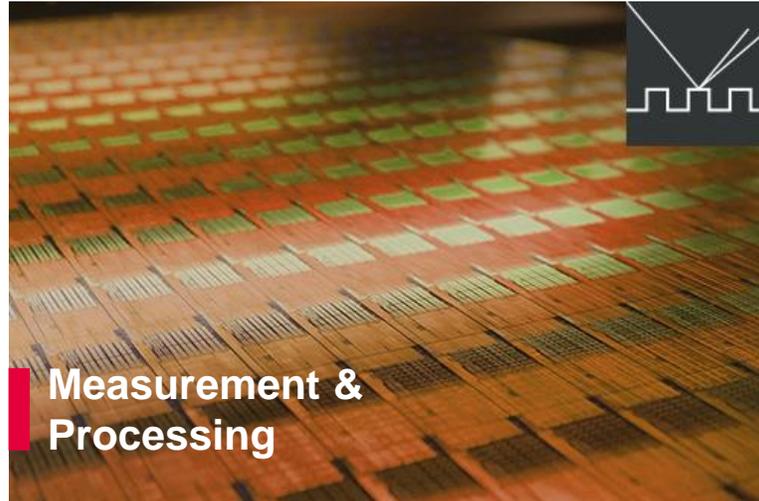


TOPTICA Photonics: Markets for our Laser Products



Biophotonics & Microscopy

- Confocal Microscopy
- Multiphoton Microscopy
- Raman Microscopy
- Optogenetics
- Neuroscience
- Ophthalmology
- Flow Cytometry
- High Throughput Screening



Measurement & Processing

- Metrology
- Semicon Inspection
- Interferometry
- Holography / AR / VR
- Terahertz Spectroscopy
- Non-destructive Testing
- Gas Sensing
- Multiphoton Lithography
- Material Processing



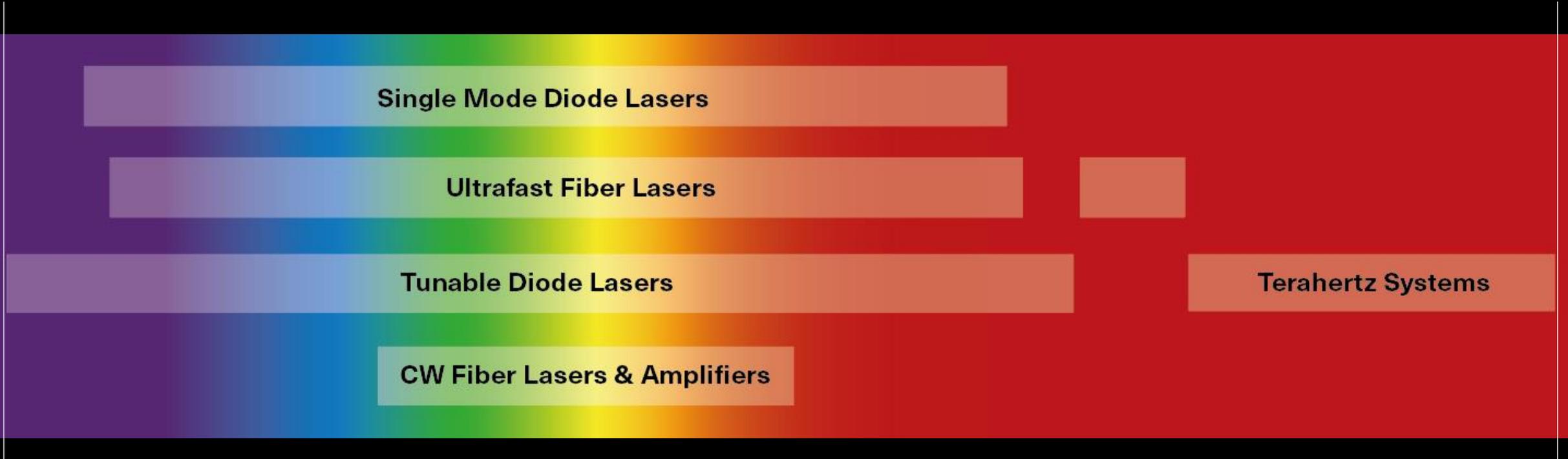
Quantum Technologies & Spectroscopy

- Quantum Computing
- Quantum Simulation
- Quantum Sensing
- Quantum Communication
- Cold Atoms, Laser Cooling
- Bose-Einstein Condensation
- Rydberg Excitation
- Optical Clocks
- Frequency Comb Spectroscopy

190 nm - 0.1 THz



all wavelengths.



190 nm
1600 THz

3 mm
0.1 THz

Nobel Laureates related to TOPTICA



Ion trapping

Norman Ramsey, Hans Dehmelt, Wolfgang Paul



BEC

Carl Wieman, Eric Cornell, Wolfgang Ketterle



Graphene Analysis

Andre Geim, Konstantin Novoselov



Blue light-emitting diodes

Isamu Akasaki, Hiroshi Amano, Shuji Nakamura



Black holes/Astronomy

Roger Penrose, Reinhard Genzel, Andrea Ghez



Atom cooling & trapping

William Phillips, Steven Chu, Claude Cohen-Tannoudji



Precision Spectroscopy

Roy Glauber, John Hall, Theodor Haensch



Quantum Computing

Serge Haroche, David Wineland



Super-Resolution Microscopy

Eric Betzig, Stefan W. Hell, William E. Moerner

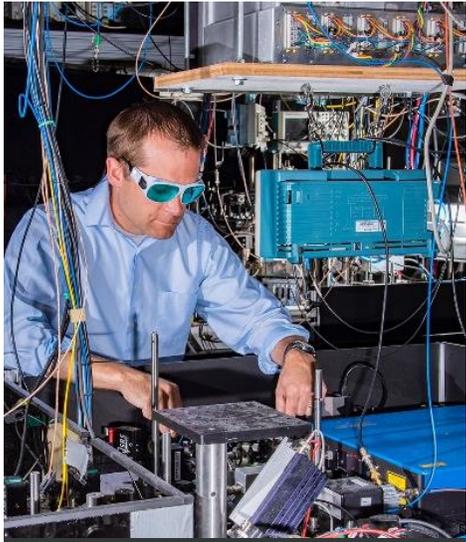


Entanglement

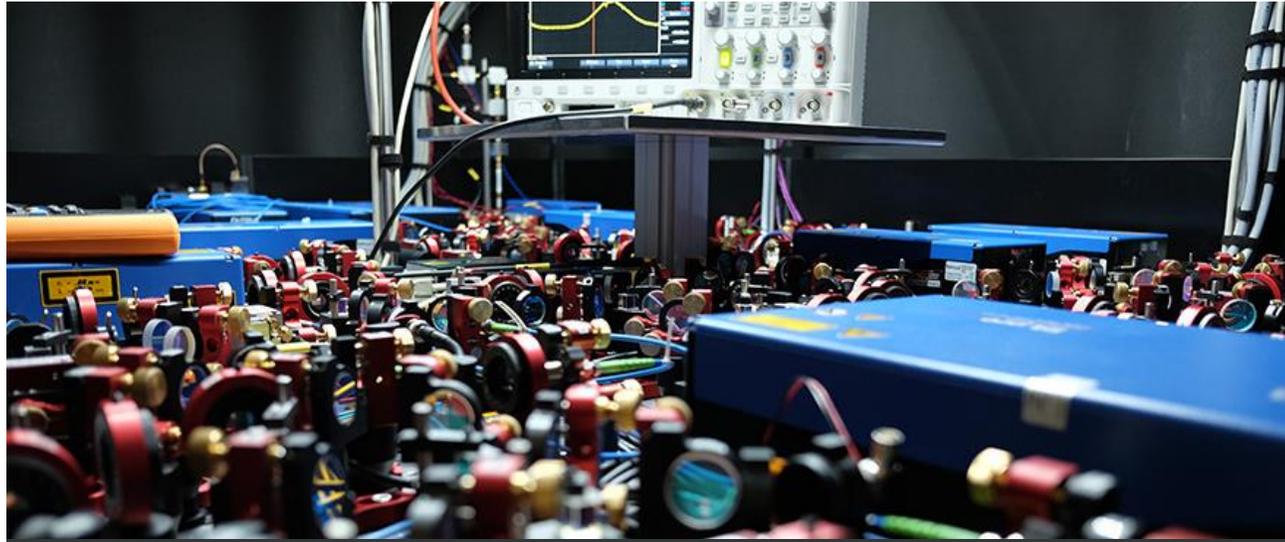
Alain Aspect, John F. Clauser, Anton Zeilinger

New:Attoscience and Quantum Dots

TOPTICA lasers in world-leading labs



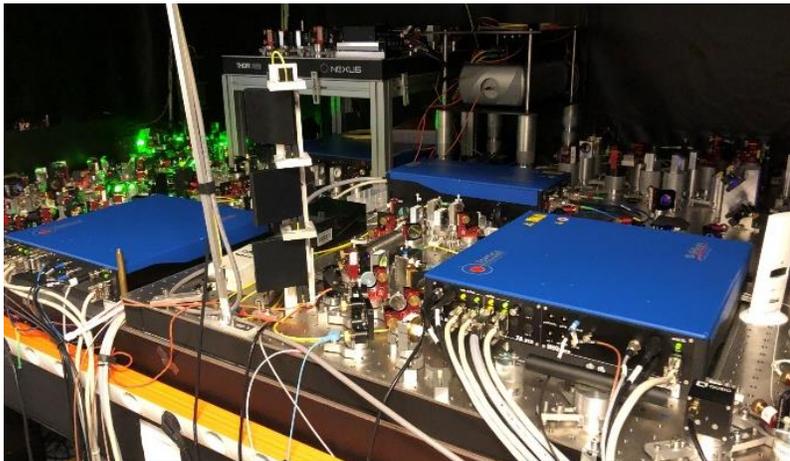
Ludlow lab, NIST Boulder



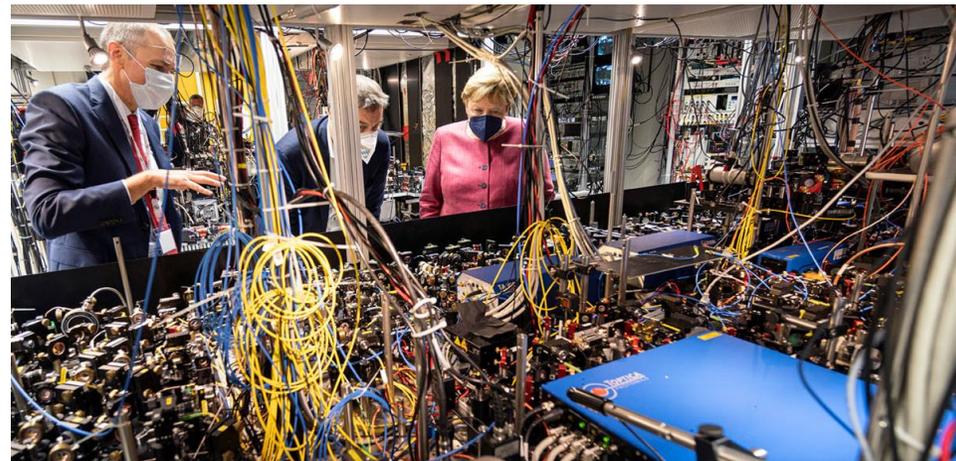
Schneider lab, University of Cambridge



Blatt lab, University of Innsbruck



Sengstock lab, Institut für Laserphysik, University of Hamburg

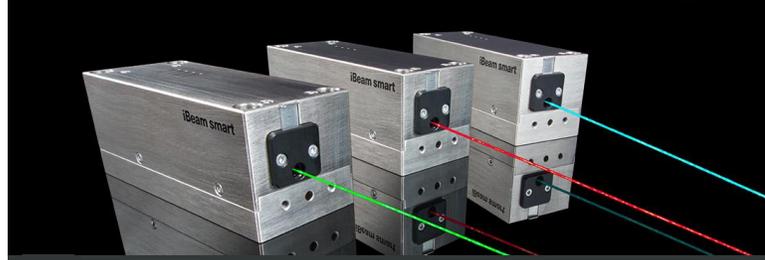


Bloch lab, MPQ, Munich (Photo: Bundesregierung / Bergmann)



TOPTICA product range at a glance

Biophotonics & Microscopy



 Single Mode Diode Lasers



 ps/fs Fiber Lasers



 Multi Laser Engines

Measurement & Processing



 Single Frequency Diode Lasers

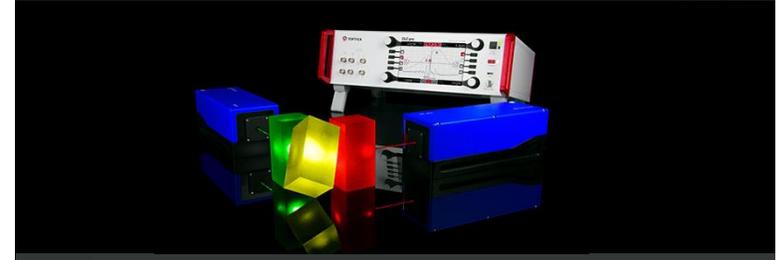


 Terahertz Systems



 Wavelength Meters & Laser Diodes

Quantum Technologies



 Tunable Diode Lasers



 CW Fiber Lasers  Frequency Combs



 Laser Rack Systems

■ Thank you for your interest! Good Questions, please?

confidential

