### RP Photonics Buyer's Guide

and the

# **Encyclopedia of Laser Physics and Technology**

The photonics industry's leading source of technical, product and supplier information.

### **Table of Contents**

| The RP Photonics website:   | Page |
|---|------|
| <ul> <li>containing an encyclopedia and a photonics buyer's guide</li> </ul>      | 3    |
| the high popularity and its reasons   | 5    |
| <ul><li>search engine ranking and web traffic</li></ul>                           | 7    |
| <ul> <li>how users find suppliers for photonics products</li> </ul>               | 9    |
| How suppliers can present their company and products:                             |      |
| <ul> <li>ad packages for enhanced company profiles and product entries</li> </ul> | 10   |
| <ul><li>special promotions</li></ul>  | 18   |
| <ul><li>skyscraper banners</li></ul>  | 19   |
| <ul><li>how to get started</li></ul>  | 20   |

### The RP Photonics Website

### ww.rp-photonics.com

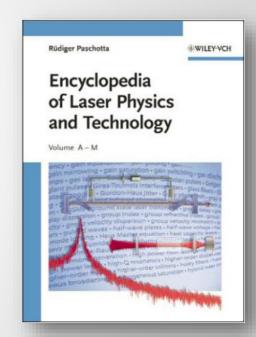
#### contains

- the famous Encyclopedia of Laser Physics and Technology, a huge high-quality information source
- the RP Photonics Buyer's Guide, listing many photonics products and suppliers

#### and therefore

- has a very high reputation in the field and
- is the most popular website on laser technology!

This means that **photonics suppliers** *must* be there to promote their products!



In 2008, the encyclopedia also appeared as a book.

ENCYCLOPEDIA

BUYER'S GUIDE

CONSULTING

SOFTWARE

#### RP PHOTONICS ENCYCLOPEDIA

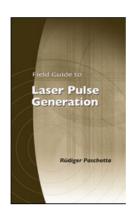
ENCYCLOPEDIA ... combined with a great BUYER'S GUIDE!



#### Field Guide on Laser Pulse Generation

Learn a lot on pulse generation with lasers:

- basic on optical pulses
- Q switching
- cavity dumping
- gain switching
- mode locking
- amplification of ultrashort pulses
- pulse characterization



Enjoy a compact booklet, authored by a top expert on laser pulses.

| Номе   |   |   |   | SPOTLIGHT  |   |   |   | Quiz     |   |   |   |   |
|--------|---|---|---|------------|---|---|---|----------|---|---|---|---|
| SEARCH |   |   |   | CATEGORIES |   |   |   | GLOSSARY |   |   |   |   |
| Α      | В | С | D | Е          | F | G | Н | ı        | J | K | L | М |
| N      | 0 | Р | Q | R          | S | Т | U | V        | W | X | Υ | Z |

Article keyword

Note: this box searches only for keywords in the titles. For full-text searches, use our search page.

#### **Ultrafast Lasers**

Definition: lasers emitting ultrashort pulses

German: Ultrakurzpulslaser

Categories: lasers, light pulses

How to cite the article; suggest additional literature

The term *ultrafast lasers* is often used for modelocked lasers emitting ultrashort pulses, i.e. pulses with durations of femtoseconds or picoseconds (typically, below 100 ps). A more precise term is actually *ultrashort pulse lasers*, such lasers utilize ultrafast processes but are not ultrafast themselves. comprehensive anys mode-locked lasers, encyclopedia ing can also provide ult

Tupes of Ultrafast Lasers

Suppliers for ultrafast lesers

The RP Photonics Buyer's Guide contains 45 suppliers for ultrafast lasers.

Among them:







satile Fiber Optics Software

RP Fiber Power - the ver-

Fiber Couplers, Doubleclad Fibers, Multicore Fibers, ...





Simulate pump absorption in double-clad fibers, study beam propagation in fiber couplers, light propagation in tapered fibers, analyze the impact of bending, crosssaturation effects in ampli-

iption

otation!

fiers, leaky modes, etc.

with one click, get to the corresponding buyer's guide page

### **Web Traffic**

The RP Photonics website is the probably most popular website for laser

technology:

- far over 50,000 unique visitors per month
- around 150,000 200,000 page views
   on the encyclopedia and buyer's guide pages
- many thousands of referrals to supplier websites per month

We regularly publish traffic data:

#### www.rp-photonics.com/bg\_statistics.html

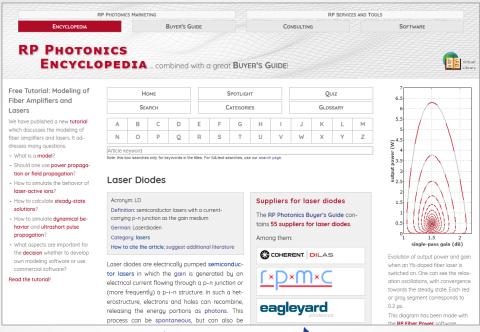
Note: We publish data in more detail than others, and we filter the data quite strictly to eliminate artifacts, e.g. from various robot activities.



### Why is That Website So Popular?

**Returning Visitors** 

using high-quality encyclopedia articles in their daily work



The crucial asset of the RP Photonics website: a huge amount of high-quality content, open for free use by anyone and serving the laser community worldwide.





thousands of websites linking to RP Photonics













Search engines see the content and the links

→ excellent ranking!





### **Superior Value for Users**

is the key for the high popularity of our website:

- detailed high quality technical content
   (who else has got such a laser encyclopedia?)
- high quality supplier data
   (e.g., we allow product listings only when these products appear on the supplier's own website)
  - → don't frustrate users with inaccurate data
- clear page layout, not cluttered with ads
- high-performance web server, delivering the pages fast
- respecting the users' privacy (<a href="https://www.rp-photonics.com/privacy.html">https://www.rp-photonics.com/privacy.html</a>)
   (no user tracking, no cookies, encrypted transmission, ...)

We are used to work hard ...

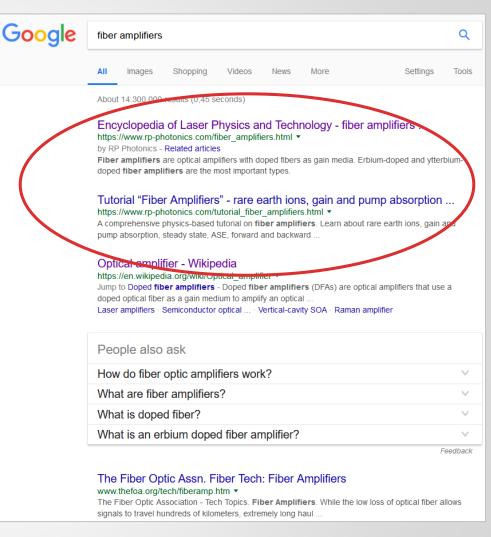
### **Search Engine Ranking**

Our search engine ranking is extraordinary because Google and other search engines find the comprehensive content and the many inbound links.

Try yourself searching for

- technical details: femtosecond laser, fiber amplifiers, ...
- scientific keywords: laser noise, laser pulse amplification, ...
- suppliers: buy fiber laser, suppliers for nonlinear crystals, ...

and you will see that RP Photonics ranks much higher than any other website.



### **How Do People Find Photonics Suppliers?**

search for products with Google or other search engines

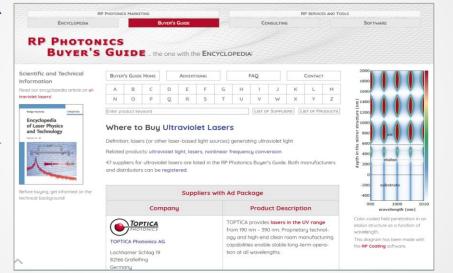
directly go for the best buyer's guide





search for technical
information with
Google or other
search engines

Users get reliable technical information, overview on suppliers, etc.



Don't consider traffic numbers only – branding is also important!



Referral traffic can be maximized with our ad package!



### **Advertising with RP Photonics**

### Your options:

- free: basic company profile and basic product entries for up to 10 products
- ad package :
  - allowing for any number of products and much improved company profile and product entries
    - → the simple way to generate far more leads!
  - included: one promotion for white paper or video, placed in an encyclopedia article → perfectly targeted!
  - also included: skyscraper banner ad displayed on buyer's guide pages (get a certain display probability for each buyer's guide page)

### **Ad Package**

- One price for a bunch of essential improvements:
  - much improved company profile:
     company description, large image, trade show participation, ...
  - allowing for any number of products
  - far better visibility of product entries
    - → the simple way to generate more leads: just take the ad package, provide your company description, product descriptions and images, and you are done!
- included: one white paper promotion
- included: one skyscraper banner ad
   (get a certain display probability for each page)

## **Enhanced Company Profile**

With any **ad package** you get an enhanced company profile:

- social media links
- quality certificates
- company description
- trade show participation
- distributor information

Also, it is far more visible in the alphabetical list of all suppliers.

#### Company profile:

#### **DILAS Diodenlaser GmbH**

DILAS

Edit profile data

back

Galileo-Galilei-Strasse 10 55129 Mainz-Hechtsheim Germany

DILAS Diodenlaser GmbH

Tel.: +49 6131 9 22 60 Fax: +49 6131 9 22 62 57

E-mail: sales@dilas.com
Website: www.dilas.com

Social media: Facebook, LinkedIn, Twitter

Quality certification: ISO-9001:2008

#### **Company Description**

DILAS, the diode laser company, manufactures high-power diode laser components and systems in a wide range of output powers and wavelengths including fiber-coupled, direct beam and integrated solutions.

#### **Products**

| Product      | <b>Description</b> (only for enhanced product en  |  |  |  |  |  |
|--------------|---|--|--|--|--|--|
| blue lasers  | Blue lasers with up to 25 W output power from a multisingle emitter based 450 nm, 400-micron, 0.22 NA, fibercoupled module developed for cinema projectiand medical applications. |  |  |  |  |  |
| diode lasers | design of diode laser bars cover- ing a wavelength spectrum from 450 nm to  |  |  |  |  |  |

2200 nm.

### **Alternative Suppliers**

In the company profile of a supplier having only basic entries, *alternative* suppliers can appear.

### If you have any ad package:

- No alternative suppliers will appear in your company profile. The right column is then reserved for product descriptions (associated with enhanced product entries, see later).
- Your company (with links to your company profile) can appear in profiles of others.



### **Alphabetical List of All Suppliers**

www.rp-photonics.com/bg\_suppliers.html

Companies having an ad package are shown with logo and bold letters

Also, customers with ad package can have their participation in upcoming **trade shows** displayed – here, in their company profile and in all of their enhanced product entries!

For major trade shows, we even enter that information ourselves.

| D   |  |             |
|---|--|-------------|
| DataRay Inc.                              | DataRay Inc. Advancing the Technology of Laser Beam Analysis | 6 products  |
| Dausinger & Giesen GmbH                   |  | 10 products |
| Dayoptics, Inc.                           |  | 10 products |
| Deep Photonics                            |  | 10 products |
| Del Mar Photonics, Inc.                   |  | 10 products |
| Deposition Sciences, Inc.                 |  | 10 products |
| DIAMOND GmbH                              |  | 8 products  |
| Diamond SA                                |  | 10 products |
| DiCon Fiberoptics, Inc.                   |  | 8 products  |
| DILAS Diodenlaser GmbH                    | COHERENT. DILAS  | 11 products |
| Dimetix AG                                |  | 2 products  |
| Directed Light Inc.                       |  | 4 products  |
| DirectPhotonics Industries GmbH           |  | 9 products  |
| Discovery Semiconductors, Inc.            |  | 7 products  |
| DK Photonics Technology Co., Ltd.         | <b>EXECUTION</b> Passive Components                          | 10 products |
| DNA Equipment, Inc.                       |  | 8 products  |
| Dolan-Jenner Industries                   |  | 8 products  |
| Doric Lenses Inc.                         |  | 10 products |
| DoroTEK GmbH                              |  | 10 products |
| DPM Photonics                             | <b>DPM</b> PHOTONICS   | 38 products |
| DPSS Lasers Inc.                          |  | 9 products  |
| H+P SPECTROSCOPY   Dr. Hoerlein + Partner |  | 5 products  |

### **Suppliers for a Product**

For every product (there are >550), there is a list of suppliers – see the example for **laser diodes**.

- Presents a link to an encyclopedia article and a useful checklist (as far as available).
- First, list of suppliers with ad package.
- Then, alphabetical list of all suppliers offering that product.
- Ad package boosts visibility of all products:
  - product description, product image, logo, trade show participation
  - additional display on related encyclopedia article page, if available!

#### Where to Buy Laser Diodes

hack

126 suppliers for laser diodes are listed in the RP Photonics Buyer's Guide. Both manufacturers and distributors can be registered.

Related products: laser diode drivers, semiconductor lasers, semiconductor fabrication equipment

#### Scientific and Technical Information

Read our encyclopedia article on laser diodes!

Before buying, get informed on the technical background.
The Encyclopedia of Laser Physics and Technology presents
a large volume of high-quality scientific and technical information.



#### **Check List for Laser Diodes**

Click here to see a check list before buying such products!

#### **Suppliers with Enhanced Product Entries**

Company

**Product Description** 

DILAS Diodenlaser GmbH

Germany

The diode laser company.

cal, horizontal



#### www.dilas.com

Social: Facebook, LinkedIn, Twitter

E-mail: sales@dilas.com Tel.: +49 6131 9 22 60 Fax: +49 6131 9 22 62 57

Galileo-Galilei-Strasse 10

55129 Mainz-Hechtsheim

two-dimensional CW and QCW stacks that have tight tolerances and can be customized to meet the performance and production configurations for stacked array solutions

Enhanced entries for laser diodes are available for just 400 € per year (or twice that with a product image displayed) – with strong rebates for multiple product entries.

#### All Suppliers

3S Photonics S.A.S.

Route de Villejust 91625 Nozay Cedex

France

www.3spgroup.com Tel.: +33 1 69 80 57 50

Fax: +33 1 69 80 58 83

Acal B

Assar-Gabrielsson-Straße 1 63128 Dietzenbach

Germany

www.acalbfi.com Tel.: +49 60 7 44 09 80

Fax: +49 60 7 44 09 81 10



CONSULTING GMBH

### Display in the Encyclopedia

 For each product of a supplier with ad package, an advertisement also appears in a box within the corresponding encyclopedia article, if there is

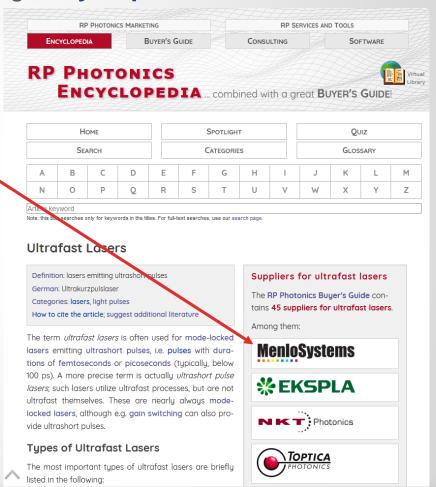
one.

In addition, the logo, product description and product image appear at the end of the encyclopedia article.

Note: encyclopedia articles get much more traffic than supplier listings!

(On most days, people are searching for technical information!)

Result: great branding effect!



### **Price of Ad Packages**

Simple rules for the cost per year:

- base price: 2400 €
- add 75 € for each product (up to 50)
- add 50 € for each further product (beyond 50)

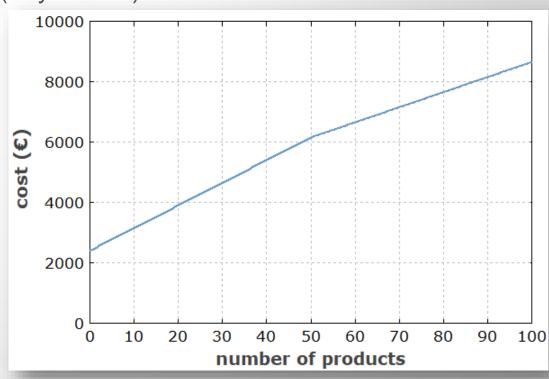
#### Examples:

■ 20 products: 3900 €

50 products: 6150 €

■ 100 products: 8650 €

Pay extra only for special additions like additional white paper or video promotions (one is included).



### **Promotion of White Papers and Videos**

- Get your white paper shown and offered for download in an encyclopedia article on the corresponding topic!
- Similarly, promote your videos.

That way you directly reach readers which are interested in a certain topic!

We graphically display the preview of your document or video in the encyclopedia article. Users can click on it to download the paper or go to the page with the video.

#### **Fiber Bragg Gratings**

Acronym: FBG

Definition: reflective structures in the core of an optical fiber with a periodic or aperiodic perturbation of the effective refractive index

German: Faser-Bragg-Gitter

Categories: fiber optics and waveguides, photonic devices

How to cite the article; suggest additional literature

A fiber Bragg grating is a periodic or apenadic perturbation of the effective refractive index in the core of an optical fiber (see Figure 1). Typically, the perturbation is approximately periodic over a certain length of e.g. a few millimeters or centimeters, and the period is of the order of hundreds of nanometers, or much longer for long-period fiber gratings (see below).

The refractive index perturbation leads the reflection of light (propagating along the fiber) in a narrow range of wavelengths, for which a *Bragg condition* is satisfied ( $\rightarrow$  *Bragg mirrors*):

$$\frac{2\pi}{\Lambda} = 2 \cdot \frac{2\pi n_{\text{eff}}}{\lambda} \quad \Rightarrow \quad \lambda = 2n_{\text{eff}} \Lambda$$

where  $\varLambda$  is the grating period,  $\lambda$  is the vacuum wavelength, and  $n_{\rm eff}$  is the effective refractive index of light in the fiber. Essentially, the condition means that the wavenumber of the grating matches the difference of the (opposite) wave vectors of the incident and reflected waves. In

### Suppliers for fiber Bragg aratinas

The RP Photonics Buyer's Guide contains 20 suppliers for fiber Bragg gratings.

Among them:

#### **TeraXion**



Find more supplier details at the **end of the encyclopedia article**, or go to our

List of suppliers for fiber Bragg gratings

You are not yet listed? Get your entry!

### RELATED WHITE PAPERS FROM TECHNICA OPTICAL COMPONENTS:

TECHNICA

Reinforced FBG Sensors Serve Demanding Applications

Kevin Hsu, Andrei Csipkes, and Tommy Jin Technica Optical Components / 3657 Peachtree Rd, Suite 10A, Atlanta, 30319, US

Introduction

With a proven record over years of development, Fiber Bragg Crattings (FBG) sensors are being widely deployed for field applications in multiple industries. Many well-known advantages of FBGs over conventional electrical sensors include immunity to electromagnetic interference (EMI) chemically linet, small dimensions and low weight for easy integration and embedding into various materials, as well as high multiplexing capacity in a fong single fiber lead.

screen in received are countries and conclusing or the Prob selecting food, a well-execution process. OFFR exhibits high strength and correction resistance, which makes the sensitive er much more rugged for embedded applications in concrete and composite materials. These PFF-FEG sensors are isosally suited for applications where there is concern that using cables will expect the properties of the process of the strength of the process of the ere using an unprotected filter merely could with anyships, polymide, concern or other first over using an unprotected filter merely could with anyships.

GFRP-FBG Characteristics

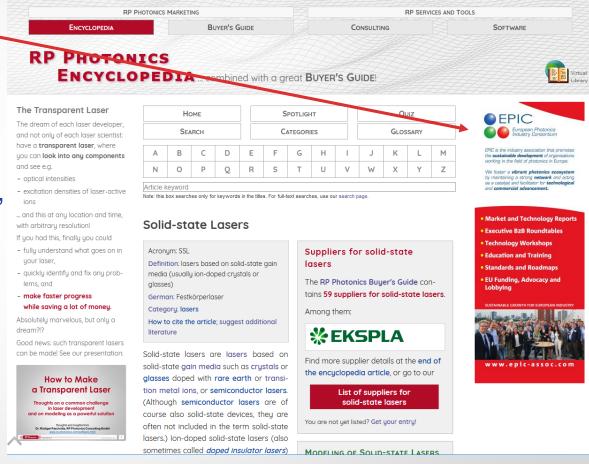
he key for GFRP-FBG fibers is to ensure that the linear strain and temperature characteristic are reserved. Technica's GFRP sension cable is designed with smart GFRP embedding process.

### Super-wide Skyscraper Banners

Included in your ad package:

super-wide skyscraper
banner displayed on buyer's
guide pages with a certain
display probability.

Extra on request: additional banner for **special promotions**, **branding** etc.: get great visibility!



### **How to Get Started**

- If your company doesn't have an entry on the RP Photonics website yet, register here: <a href="https://www.rp-photonics.com/new.html">https://www.rp-photonics.com/new.html</a>
- If you have an entry already, go to your company profile and click on the button "Edit profile data".
   (To find your company profile, go to the buyer's guide, click on List of Suppliers, find your company in the list.)
- Fill out the form and finally click on "Send the data to RP Photonics".
   We will then review the information and enter it into the buyer's guide.
   If you have selected an ad package, we will respond with the details (e.g. terms & conditions) and ask you to confirm that. If you confirm, we will send you an invoice. You do not need to sign a contract.

### **Excellent Service**

- Friendly, no-hassle telephone and e-mail support to clarify any issues.
- If you like, we try to collect the product descriptions and images from your website! So you only need to check whether everything is correct.
- We are happy to update e.g. your product descriptions whenever required.
- We regularly check for broken links e.g. in your product descriptions.
- We even search for exhibitor listings of trade shows and enter that information for you.
- We make everything as easy as possible for you:
  - clear explanations
  - no contract to sign
  - easy invoicing and payments

### **Get It Done!**

#### You have now realized:

- RP Photonics operates the leading online information source in laser technology,
   with extraordinary search engine ranking and traffic data
   → the place where the experts are spending their time!
- We offer you the best online advertising options in photonics:
   high return on investment and excellent service.

## So contact us immediately and let RP Photonics support your sales!

www.rp-photonics.com/bg advertising.html