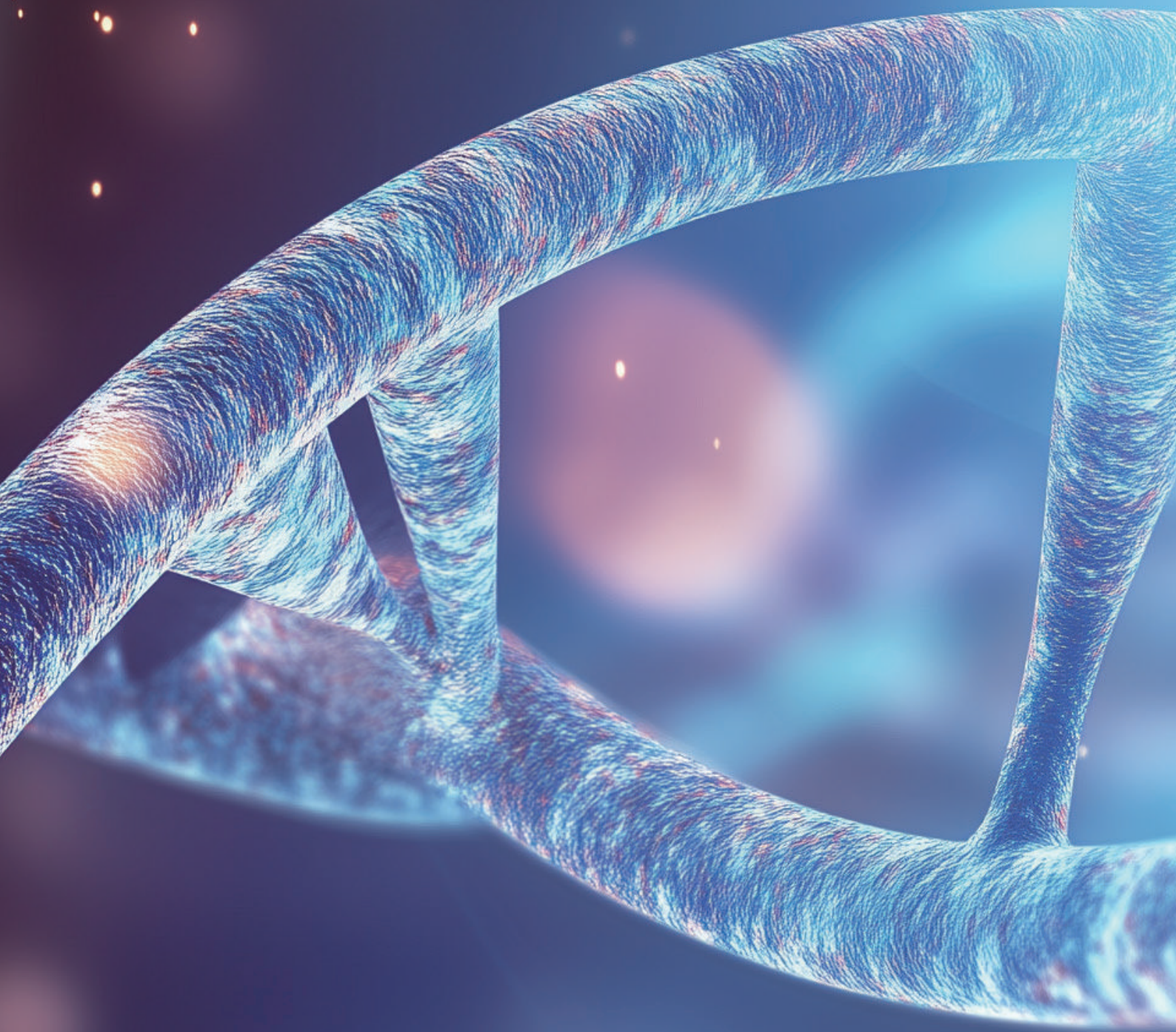


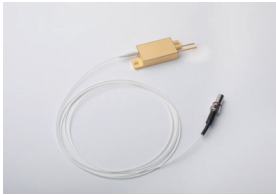
**FOCUSLIGHT**  
Never stop exploring



Photonics Solutions for  
**MEDICAL AND HEALTH**

## Fluorescence Angiography

Focuslight's fiber coupling modules and single emitter diode lasers can be applied in fluorescence endoscopy and other various laser medical treatment systems as core components with high reliability and excellent performance. A variety options of 808nm, 780nm, 650nm, and 450nm wavelength are provided.



Single-Emitter-Based Fiber Coupled Modules: FCMSE55

| FCMSE55 Key Specs   | Value              |
|---------------------|--------------------|
| Power Output        | 15 – 25 W          |
| Fiber Core Diameter | 105/200 $\mu$ m    |
| Wavelength          | 808/780/650/450 nm |



Dust-Proof CW Single-Emitter Diode Laser: NV02

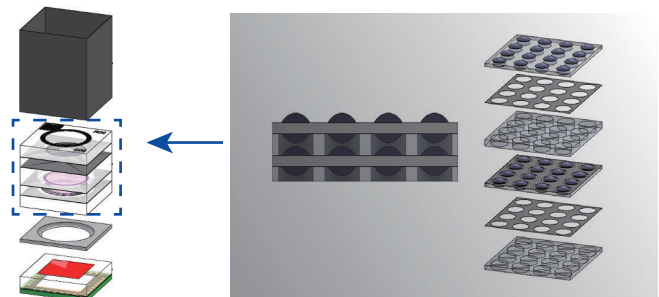
| NV02 Key Specs        | Value              |
|-----------------------|--------------------|
| Power Output          | 10 – 12 W          |
| Fast Axis Collimation | 1:1 Beam Ratio     |
| Wavelength            | 808/780/650/450 nm |

## Disposable Endoscopy

Focuslight's high-quality wafer-level optics and wafer-level stacking technologies enable miniaturized micro-optical modules that can be easily integrated into disposable endoscopes. These precise elements improve the image quality and enhance the system performance.



### Our Solution: Micro-Optical Modules Powered by Wafer-Level Optics and Stacking Technologies



#### Key Features

- Tiny footprint of 1x1mm
- Full wafer-scale process for high volume production
- Micro-precision of wafer stacking
- Customization of optical performance available
- Leading thermal performance, ensuring simple thermal design



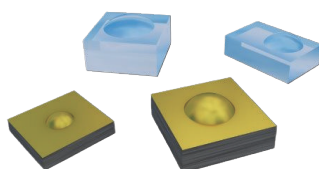
## Health Monitoring

Focuslight optical components are used as an integral part of medical optical sensors, enabling real-time, non-invasive monitoring and device miniaturization in applications such as point of care, glucose monitoring and smart wearables.



### Our Solutions for Health Monitoring:

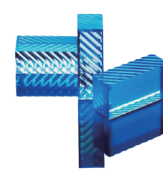
- Shack-Hartmann Arrays
- Microlens Arrays
- Diffractive Optical Elements



Single Microlenses



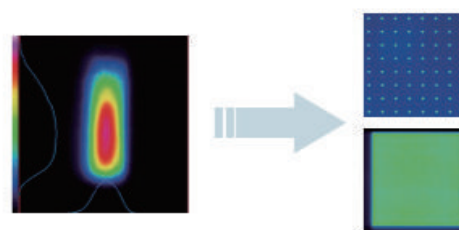
Shack Hartmann Arrays



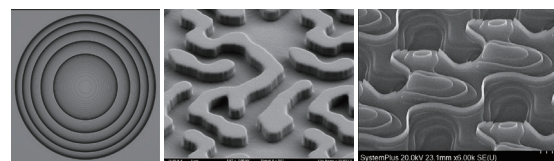
Microlens Arrays

## Intraoral Scanner

Intraoral scanners typically employ structured light or laser projection systems to illuminate dental surfaces for 3D imaging. Diffractive optical elements (DOE) are used to shape or pattern the illumination, enabling detailed analysis of the dental structures. Microlens arrays (MLA) are integral to laser-based systems, where they help focus the laser beams for precise scanning.



Spot generator and flat top beam



Diffractive optical elements

### Our Solutions for Intraoral Scanners:

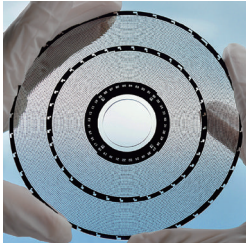
- Diffractive Optical Elements
- Microlens Array

| DOE Features     | Value                   |
|------------------|-------------------------|
| Materials        | FS and Si               |
| Levels           | 2 (binary) to 16 levels |
| Wavelength Range | 190nm to 5µm            |
| Minimum Size     | 500nm to 1µm            |
| Efficiency       | Up to 96%               |

| MLA Features         | Value                                 |
|----------------------|---------------------------------------|
| Angular Spectrum     | Typical < 1 - 20 degrees              |
| Materials            | Fused Silica, Silicon                 |
| Area of Illumination | Linear, circular, rectangular, square |
| AR Coating           | UV, VIS, NIR                          |

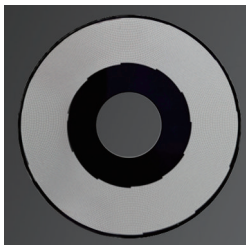
## Confocal Microscopy

Focuslight produces high-precision lens discs and pinhole discs which are essential components of confocal microscopes. Our discs facilitate the generation of high-resolution, high-contrast, and sharply focused images for the 3D reconstruction of imaged samples.



Pinhole Array Disc

| Pinhole Disc Features  | Value        |
|------------------------|--------------|
| Disc diameter          | ≤ 160 mm     |
| Material               | Fused Silica |
| Pinhole / lens pattern | Custom       |
| AR coating             | UV, VIS, NIR |
| Chrome coating         | Customized   |



Microlens Array Disc

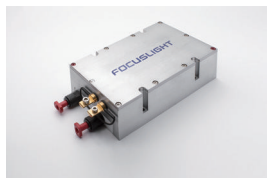
| MLA Disc Specifications | Value                             |
|-------------------------|-----------------------------------|
| Disc Diameter           | 80-120 mm typically, up to 160 mm |
| Material                | Fused silica                      |
| Lens surface            | Custom                            |
| Lens pattern            | Spiral                            |
| Single aperture         | 500-700 μm                        |

## Laser Surgery

Based on different absorption efficiencies of biological tissues, different wavelengths of laser are applied in various surgery applications. Focuslight offers various fiber coupled diode laser modules that create precise and concentrated laser output, which is essential in energy applications such as laser surgeries.



### Urinary Surgery



Multi-Bar-Based Fiber Coupled Modules

| Specifications      | Value             |
|---------------------|-------------------|
| Power Output        | 100 – 400 W (QCW) |
| Fiber Core Diameter | 200/400 μm        |
| Wavelength          | 808/980 nm        |



Side-Pumped Modules

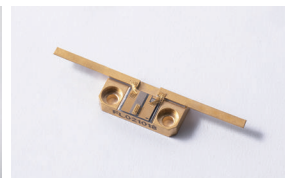
| Specifications   | Value              |
|------------------|--------------------|
| Power Output     | Up to 5000 W (QCW) |
| Crystal Diameter | 4 mm               |
| SSG              | > 30               |

### Dentistry



Single-Emitter-Based Fiber Coupled Modules

| Specifications      | Value           |
|---------------------|-----------------|
| Power Output        | 25 – 35 W       |
| Fiber Core Diameter | 200 μm          |
| Wavelength          | 808/976/1064 nm |



Open Package Single Emitter Diode Laser

| Specifications        | Value                    |
|-----------------------|--------------------------|
| Power Output          | 10 – 12 W                |
| Fast Axis Collimation | 1:1 Beam Ratio Available |
| Wavelength            | 808/915/940/976 nm       |

### Eye Surgery



Single-Bar-Based Fiber Coupled Modules

| Specifications      | Value     |
|---------------------|-----------|
| Power Output        | 15 – 25 W |
| Fiber Core Diameter | 400 μm    |
| Wavelength          | 808 nm    |

## Laser Hair Removal

For cosmetic procedures where lasers are used to permanently remove unwanted hair, we offer optical components for beam shaping, as well as laser components and modules with integrated laser source, optics, and cooling.



Laser hair removal modules



Laser hair removal engines: Vsilks 2, Vsilks 2 Pro

| Specifications | Value           |
|----------------|-----------------|
| Power Output   | 600 – 3000 W    |
| Wavelength     | 755/808/1060 nm |

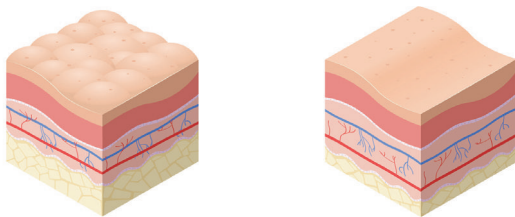
| Specifications | Vsilks 2             | Vsilks 2 Pro         |
|----------------|----------------------|----------------------|
| Power Output   | Up to 1800 W         | Up to 3000 W         |
| Work Mode      | 106A, 30% Duty Cycle | 185A, 10% Duty Cycle |

## Laser Body Sculpting

The non-invasive form of fat removal is performed by modules which consist of the laser source, and modules for beam shaping, cooling and skin contact detection.



Laser body sculpting module: Fairy

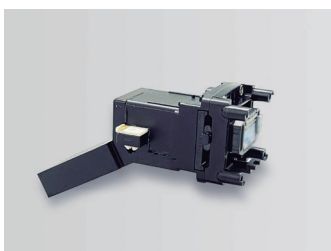


Skin and fat cells before and after laser body sculpting

| Fairy FR06 Features | Value                   |
|---------------------|-------------------------|
| Power Output        | 50 W                    |
| Wavelength          | 1064 ± 20 nm            |
| Beam Size           | 80 x 40 mm <sup>2</sup> |
| Weight              | 385 g                   |

## Laser Skin Rejuvenation

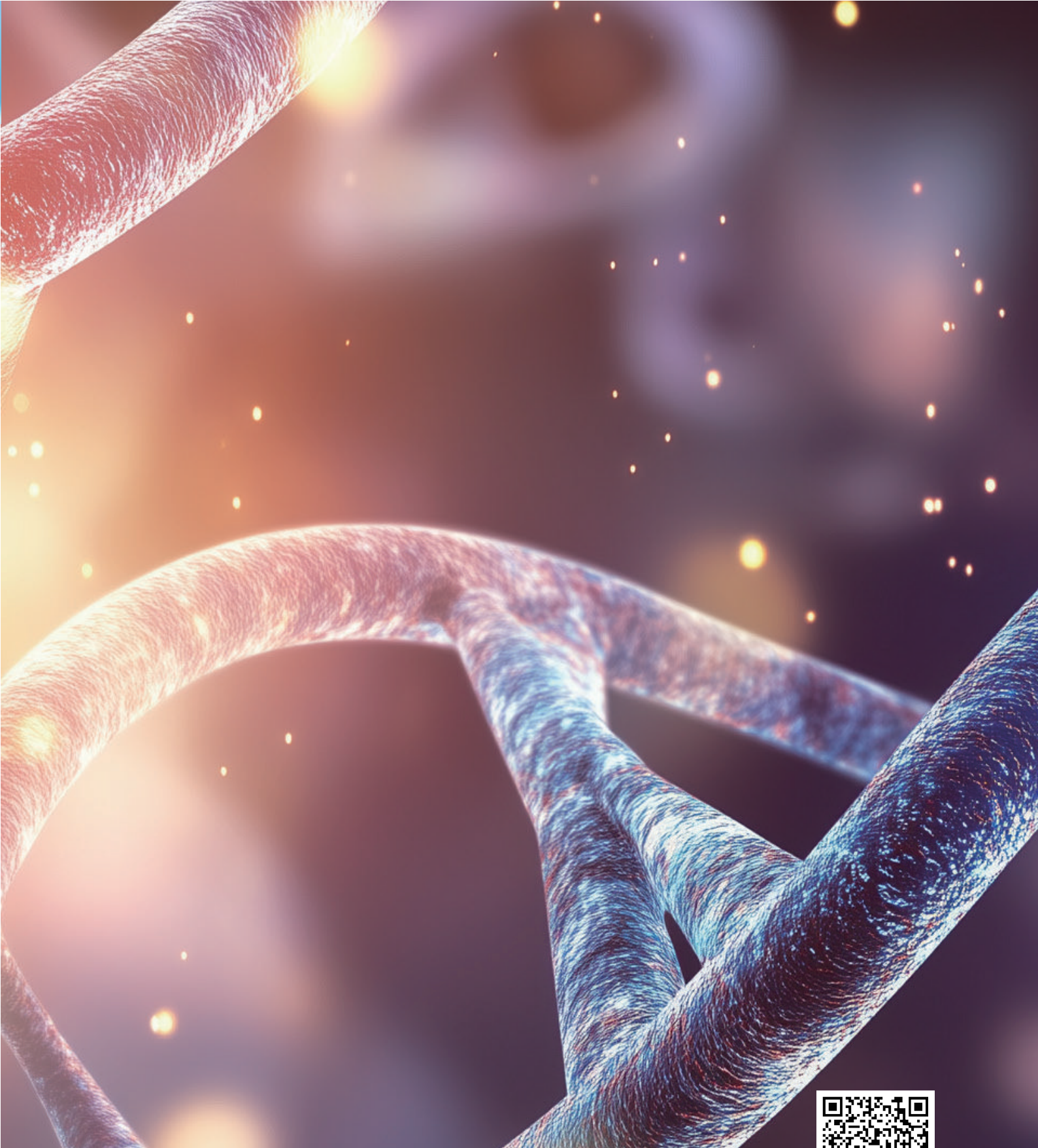
Laser technology can significantly reduce skin imperfections like acne marks, scars, or wrinkles. Skin rejuvenation module with 1470nm laser is eye safe and therefore suitable for home-use application.



Laser skin rejuvenation module and the dot matrix it generated







[www.focuslight.com](http://www.focuslight.com)

## COMPANY INTRODUCTION

Founded in 2007 and headquartered in Xi'an, China, Focuslight Technologies Inc. is a fast-growing public company (Shanghai: 688167) that specializes in developing and manufacturing high-power diode laser components and materials, laser optics, as well as photonics module and system solutions focusing on optical communication, automotive, pan-semiconductor, and medical and health applications. Focuslight has expanded its global footprint through strategic acquisitions including LIMO GmbH in 2017 and SUSS MicroOptics SA in 2024 (now as Focuslight Switzerland SA). With the acquisition of assets from ams OSRAM in 2024, Focuslight extends its business to be a global photonics foundry by providing global photonics industry process development and manufacturing service under the brand of Heptagon. Learn more at [www.focuslight.com](http://www.focuslight.com) and [www.hptg.com](http://www.hptg.com).

**Focuslight Technologies Inc.**

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