

# Global Fluorescence Microscopy Market

<https://marketpublishers.com/r/GBC95CDF89DEN.html>

Date: June 2019

Pages: 146

Price: US\$ 2,750.00 (Single User License)

ID: GBC95CDF89DEN

## Abstracts

### REPORT SCOPE:

For the purpose of this report, fluorescence microscopy or microscope is defined as an optical microscope that uses fluorescence and phosphorescence instead of, or in addition to, reflection and absorption, to study properties of organic or inorganic substances. A fluorescence microscope is based on the phenomenon that certain materials emit energy which is detectable as visible light when irradiated with the light of a specific wavelength. The absorption and subsequent re-radiation of light by organic and inorganic specimens is mainly the result of either fluorescence or phosphorescence. A conventional microscope uses visible light (400-700 nanometers) to illuminate and produce a magnified image of a sample. A fluorescence microscope uses a much more intense light source that excites a fluorescent species in a sample of interest. This fluorescent species in turn emits a lower energy light of a longer wavelength that produces the magnified image, instead of the original light source.

The scope of this report covers the global fluorescence microscopy market for various end-user application industries. The market is broken down by illumination methods, types of fluorescence microscopes, technology, region, and applications (end users). Revenue forecasts from 2018 to 2023 are given for each fluorescence microscopy segment, and regional market with estimated values derived from the manufacturers' total revenues.

The report also includes a discussion of the major players across each regional market. Further, it explains the major drivers, regional dynamics of the global fluorescence microscopy market and current trends within the industry.

The report concludes with a special focus on the vendor landscape and includes detailed profiles of the major vendors.

## Detailed Inclusions

For the purpose of this report, fluorescence microscopy or microscope is defined as an optical microscope that uses fluorescence and phosphorescence instead of, or in addition to reflection and absorption, to study properties of organic or inorganic substances. A fluorescence microscope uses a high intensity light source which excites a fluorescent species in a sample of interest. This fluorescent species in turn emits a lower energy light of a longer wavelength that produces the magnified image instead of the original light source.

The report covers hardware revenue of companies active in the global fluorescence microscopy market. The report covers companies that provide specific parts of fluorescence microscopy such as cameras for fluorescence microscopy.

However, companies (and revenue from those companies) that do not categorically sell hardware and tools for the fluorescence microscopy are not part of this report.

The report also covers service revenue of active vendors in the fluorescence microscopy space. However, the report excludes standalone service providers and revenue from those providers.

The report also covers software revenue, provided the software is a part of the overall package. The dedicated Leica Application Suite (LAS) X software platform provided by Leica is an example.

Standalone software providers are out of scope of this report.

Revenue forecasts from 2018 to 2023 are given for each fluorescence microscopy segment. Regional markets with estimated values are derived from manufacturers' total revenues which includes hardware, services and sometimes software.

The report begins with an introduction to the evolving global fluorescence microscopy market and the various factors which impact the market. The report then identifies the following%li%

Primary forces with a direct impact on the market.

Secondary forces that have an indirect impact.

Key challenges that may hinder the growth of this market.

Key trends visible in the market.

Leading segments within the market.

Patent analysis of the key players active in the market.

## **REPORT INCLUDES:**

75 data tables

An overview of the global market for fluorescence microscopy

Analyses of global market trends, with data from 2017, 2018, and projections of compound annual growth rates (CAGRs) through 2023

A look into background, history, development and evolution of microscopy, optical microscopy and fluorescence microscopy

Detailed description about technologies, new developments and future of the fluorescence microscopy

Comprehensive analyses of the major players of the industry, including Bruker Corp., Doric Lenses Inc., Edmund Optics Inc., Horiba Ltd., Thermo Fisher Scientific and Zeiss

## Contents

### **CHAPTER 1 INTRODUCTION**

Study Goals and Objectives  
Reasons for Doing This Study  
Scope of Report  
Information Sources  
Methodology  
Geographic Breakdown  
Analyst's Credentials  
BCC Custom Research  
Related BCC Research Reports

### **CHAPTER 2 SUMMARY AND HIGHLIGHTS**

### **CHAPTER 3 MARKET AND TECHNOLOGY BACKGROUND**

Microscopy and Its Evolution  
Fluorescence Microscopy and Its Evolution  
Types of Fluorescence Microscopes  
Recent Advancements in Fluorescence Microscopy  
Light-Sheet Based Fluorescence Microscopy (LSFM)  
Bleaching-Assisted Multichannel Microscopy (BAMM)  
Three Views of a Sample  
Plasmonics Enhanced Smartphone Fluorescence Microscopy  
Use of Artificial Intelligence  
Application in Various Industries  
Life Sciences  
Diagnostics  
Mineralogical and Geology  
Industrial  
Education  
Global Forecast of the Fluorescence Microscopy Market

### **CHAPTER 4 GLOBAL FLUORESCENCE MICROSCOPY MARKET BY TYPE**

Inverted Fluorescence Microscopy  
Upright Fluorescence Microscopy

## **CHAPTER 5 MARKET BREAKDOWN BY ILLUMINATION METHOD**

Episcopic/Reflected Fluorescence Microscopy  
Diascopic/Transmitted Fluorescence Microscopy

## **CHAPTER 6 MARKET BREAKDOWN BY TECHNOLOGY**

Epifluorescence Microscopy  
Multiphoton Microscopy  
Total Internal Reflection Fluorescence (TIRF) Microscopy  
Confocal Microscopy  
Super Resolution (SR) Fluorescence Microscopy

## **CHAPTER 7 MARKET BREAKDOWN BY COMPONENT**

Equipment  
Software and Consumables

## **CHAPTER 8 MARKET BREAKDOWN BY END USE**

Biology  
Medical Sciences  
Hospitals  
Material Sciences  
Others

## **CHAPTER 9 MARKET BREAKDOWN BY REGION**

North America  
United States  
Canada  
Mexico  
Europe  
Germany  
U.K.  
France  
Italy  
Asia-Pacific (APAC)

China  
Japan  
India  
South Korea  
Australia  
South America  
Middle East and Africa (MEA)

## **CHAPTER 10 INDUSTRY STRUCTURE AND PATENT ANALYSIS**

### Market Drivers

Growing Miniaturization in the Semiconductor Industry  
Strong Growing Life Sciences Research in the Field of Personalized Medicine  
Growing Demand for Student Microscopes

### Market Challenges

High Cost  
Availability of Substitutes  
Requirement of Highly Technical, Skilled People  
Phototoxicity and Photobleaching

### Key Market Trends

High-Throughput Imaging in Fluorescence Microscopy (Automated Fluorescence Microscopy)  
Increasing Use of Fluorescence Microscopy in the Field of Nanotechnology  
Product Innovations by Market Players  
Advancement in Fluorophores

### Patent Analysis

Five Forces Analysis of the Global Fluorescence Microscopy Market  
Power of Suppliers  
Power of Buyers  
Competition Among Existing Players  
Threat of New Entrants  
Threat of Substitute

## **CHAPTER 11 COMPANY PROFILES**

AMSCOPE  
ANMO ELECTRONICS CORP.  
BRUKER CORP.  
CAIRN RESEARCH

CHONGQING COIC INDUSTRIAL CO. LTD.  
DELMIC B.V.  
DORIC LENSES INC.  
EDMUND OPTICS INC.  
ETALUMA INC.  
EUROMEX MICROSCOPEN BV  
HOLMARC OPTO-MECHATRONICS (P) LTD.  
HORIBA LTD.  
KEYENCE CORP.  
LEICA MICROSYSTEMS GMBH  
LOGOS BIOSYSTEMS INC.  
MAGNUS ANALYTICS  
MEIJI TECHNO  
MOTIC  
NEURESCENCE BIOLOGICAL OPTICAL IMAGING  
NIKON CORP.  
NINGBO YONGXIN OPTICS CO. LTD.  
OLYMPUS CORP.  
OPTIKA SRL  
PICOQUANT  
RADICAL SCIENTIFIC EQUIPMENTS PVT. LTD.  
SHANGHAI OPTICS  
SUNNY OPTICAL TECHNOLOGY (GROUP) CO. LTD.  
THERMO FISHER SCIENTIFIC INC.  
THORLABS INC.  
TAUTEC LLC  
ZEISS GROUP

## List Of Tables

### LIST OF TABLES

Summary Table: Global Market for Fluorescence Microscopy, by Component, Through 2023

Table 1: Evolution of Microscopy and Microscopes

Table 2: Global Market for Fluorescence Microscopy, by Component, Through 2023

Table 3: Global Market for Fluorescence Microscopy, by Type, Through 2023

Table 4: Global Market Shares of Fluorescence Microscopy, by Type, 2017

Table 5: Global Market Shares of Fluorescence Microscopy, by Type, 2018

Table 6: Global Market Shares of Fluorescence Microscopy, by Type, 2023

Table 7: Global Market for Inverted Fluorescence Microscopy, Through 2023

Table 8: Global Market for Upright Fluorescence Microscopy, Through 2023

Table 9: Global Market for Fluorescence Microscopy, by Illumination Method, Through 2023

Table 10: Global Market Shares of Fluorescence Microscopy, by Illumination Method, 2017

Table 11: Global Market Shares of Fluorescence Microscopy, by Illumination Method, 2018

Table 12: Global Market Shares of Fluorescence Microscopy, by Illumination Method, 2023

Table 13: Global Market for Episcopic/Reflected Fluorescence Microscopy, by Illumination Method, Through 2023

Table 14: Global Market for Diascopic/Transmitted Fluorescence Microscopy, by Illumination Method, Through 2023

Table 15: Global Market for Fluorescence Microscopy, by Technology, Through 2023

Table 16: Global Market Shares of Fluorescence Microscopy, by Technology, 2017

Table 17: Global Market Shares of Fluorescence Microscopy, by Technology, 2018

Table 18: Global Market Shares of Fluorescence Microscopy, by Technology, 2023

Table 19: Global Market for Epifluorescence Microscopy, by Technology, Through 2023

Table 20: Global Market for Multiphoton Microscopy, by Technology, Through 2023

Table 21: Global Market for TIRF Microscopy, by Technology, Through 2023

Table 22: Global Market for Confocal Microscopy, by Technology, Through 2023

Table 23: Global Market for Super Resolution Fluorescence Microscopy, by Technology, Through 2023

Table 24: Global Market for Fluorescence Microscopy, by Component, Through 2023

Table 25: Global Market Shares of Fluorescence Microscopy, by Component, 2017

Table 26: Global Market Shares of Fluorescence Microscopy, by Component, 2018



Table 27: Global Market Shares of Fluorescence Microscopy, by Component, 2023

Table 28: Global Market for Fluorescence Microscopy Equipment, by Component, Through 2023

Table 29: Global Market for Fluorescence Microscopy Software and Consumables, by Component, Through 2023

Table 30: Global Market for Fluorescence Microscopy, by End Use, Through 2023

Table 31: Global Market Shares of Fluorescence Microscopy, by End Use, 2017

Table 32: Global Market Shares of Fluorescence Microscopy, by End Use, 2018

Table 33: Global Market Shares of Fluorescence Microscopy, by End Use, 2023

Table 34: Global Market for Fluorescence Microscopy in Biological Research, by End Use, Through 2023

Table 35: Global Market for Fluorescence Microscopy in the Medical Sciences, by End Use, Through 2023

Table 36: Global Market for Fluorescence Microscopy in Hospitals, by End Use, Through 2023

Table 37: Global Market for Fluorescence Microscopy in the Material Sciences, by End Use, Through 2023

Table 38: Global Market for Fluorescence Microscopy in Other End Uses, Through 2023

Table 39: Global Market for Fluorescence Microscopy, by Region, Through 2023

Table 40: Global Market for Fluorescence Microscopy, by Region, 2017

Table 41: Global Market for Fluorescence Microscopy, by Region, 2018

Table 42: Global Market for Fluorescence Microscopy, by Region, 2023

Table 43: North American Market for Fluorescence Microscopy, by Component, Through 2023

Table 44: North American Market for Fluorescence Microscopy, by Illumination Method, Through 2023

Table 45: North American Market for Fluorescence Microscopy, by Type, Through 2023

Table 46: North American Market for Fluorescence Microscopy, by Technology, Through 2023

Table 47: North American Market for Fluorescence Microscopy, by End User, Through 2023

Table 48: North American Market for Fluorescence Microscopy, by Country, Through 2023

Table 49: U.S. Market for Fluorescence Microscopy, Through 2023

Table 50: Canadian Market for Fluorescence Microscopy, Through 2023

Table 51: Mexican Market for Fluorescence Microscopy, Through 2023

Table 52: European Market for Fluorescence Microscopy, by Component, Through 2023

Table 53: European Market for Fluorescence Microscopy, by Illumination Method,

Through 2023

Table 54: European Market for Fluorescence Microscopy, by Type, Through 2023

Table 55: European Market for Fluorescence Microscopy, by Technology, Through 2023

Table 56: European Market for Fluorescence Microscopy, by End User, Through 2023

Table 57: European Market for Fluorescence Microscopy, by Country, Through 2023

Table 58: German Market for Fluorescence Microscopy, Through 2023

Table 59: U.K. Market for Fluorescence Microscopy, Through 2023

Table 60: French Market for Fluorescence Microscopy, Through 2023

Table 61: Italian Market for Fluorescence Microscopy, Through 2023

Table 62: APAC Market for Fluorescence Microscopy, by Component, Through 2023

Table 63: APAC Market for Fluorescence Microscopy, by Illumination Method, Through 2023

Table 64: APAC Market for Fluorescence Microscopy, by Type, Through 2023

Table 65: APAC Market for Fluorescence Microscopy, by Technology, Through 2023

Table 66: APAC Market for Fluorescence Microscopy, by End User, Through 2023

Table 67: APAC Market for Fluorescence Microscopy, by Country, Through 2023

Table 68: Chinese Market for Fluorescence Microscopy, Through 2023

Table 69: Japanese Market for Fluorescence Microscopy, Through 2023

Table 70: Indian Market for Fluorescence Microscopy, Through 2023

Table 71: South Korean Market for Fluorescence Microscopy, Through 2023

Table 72: Australian Market for Fluorescence Microscopy, Through 2023

Table 73: South American Market for Fluorescence Microscopy, Through 2023

Table 74: Middle Eastern and African Market for Fluorescence Microscopy, Through 2023

Table 75: Select Global Patents Related to Fluorescence Microscopy, by Company, 2000 Onward

## List Of Figures

### LIST OF FIGURES

Summary Figure: Global Market for Fluorescence Microscopy, by Component, 2017-2023

Figure 1: Global Market for Fluorescence Microscopy, by Component, 2017-2023

Figure 2: Global Market for Fluorescence Microscopy, by Type, 2017-2023

Figure 3: Global Market Shares of Fluorescence Microscopy, by Type, 2017

Figure 4: Global Market Shares of Fluorescence Microscopy, by Type, 2018

Figure 5: Global Market Shares of Fluorescence Microscopy, by Type, 2023

Figure 6: Global Market for Inverted Fluorescence Microscopy, 2017-2023

Figure 7: Global Market for Upright Fluorescence Microscopy, 2017-2023

Figure 8: Global Market for Fluorescence Microscopy, by Illumination Method, 2017-2023

Figure 9: Global Market Shares of Fluorescence Microscopy, by Illumination Method, 2017

Figure 10: Global Market Shares of Fluorescence Microscopy, by Illumination Method, 2023

Figure 11: Global Market for Episcopic/Reflected Fluorescence Microscopy, by Illumination Method, 2017-2023

Figure 12: Global Market for Diascopic/Transmitted Fluorescence Microscopy, by Illumination Method, 2017-2023

Figure 13: Global Market for Fluorescence Microscopy, by Technology, 2017-2023

Figure 14: Global Market Shares of Fluorescence Microscopy, by Technology, 2017

Figure 15: Global Market Shares of Fluorescence Microscopy, by Technology, 2018

Figure 16: Global Market Shares of Fluorescence Microscopy, by Technology, 2023

Figure 17: Global Market for Epifluorescence Microscopy, by Technology, 2017-2023

Figure 18: Global Market for Multiphoton Microscopy, by Technology, 2017-2023

Figure 19: Global Market for TIRF Microscopy, by Technology, 2017-2023

Figure 20: Global Market for Confocal Microscopy, by Technology, 2017-2023

Figure 21: Global Market for Super Resolution Fluorescence Microscopy, by Technology, 2017-2023

Figure 22: Global Market for Fluorescence Microscopy, by Component, 2017-2023

Figure 23: Global Market Shares of Fluorescence Microscopy, by Component, 2017

Figure 24: Global Market Shares of Fluorescence Microscopy, by Component, 2018

Figure 25: Global Market Shares of Fluorescence Microscopy, by Component, 2023

Figure 26: Global Market for Fluorescence Microscopy Equipment, by Component, 2017-2023

- Figure 27: Global Market for Fluorescence Microscopy Software and Consumables, by Component, 2017-2023
- Figure 28: Global Market for Fluorescence Microscopy, by End Use, 2017-2023
- Figure 29: Global Market Shares of Fluorescence Microscopy, by End Use, 2017
- Figure 30: Global Market Shares of Fluorescence Microscopy, by End Use, 2018
- Figure 31: Global Market Shares of Fluorescence Microscopy, by End Use, 2023
- Figure 32: Global Market for Fluorescence Microscopy in Biological Research, by End Use, 2017-2023
- Figure 33: Global Market for Fluorescence Microscopy in the Medical Sciences, by End Use, 2017-2023
- Figure 34: Global Market for Fluorescence Microscopy in Hospitals, by End Use, 2017-2023
- Figure 35: Global Market for Fluorescence Microscopy in the Material Sciences, by End Use, 2017-2023
- Figure 36: Global Market for Fluorescence Microscopy in Other End Uses, 2017-2023
- Figure 37: Global Market for Fluorescence Microscopy, by Region, 2017-2023
- Figure 38: Global Market for Fluorescence Microscopy, by Region, 2017
- Figure 39: Global Market for Fluorescence Microscopy, by Region, 2018
- Figure 40: Global Market for Fluorescence Microscopy, by Region, 2023
- Figure 41: North American Market for Fluorescence Microscopy, by Component, 2017-2023
- Figure 42: North American Market for Fluorescence Microscopy, by Illumination Method, 2017-2023
- Figure 43: North American Market for Fluorescence Microscopy, by Type, 2017-2023
- Figure 44: North American Market for Fluorescence Microscopy, by Technology, 2017-2023
- Figure 45: North America Market for Fluorescence Microscopy, by End User, 2017-2023
- Figure 46: North American Market for Fluorescence Microscopy, by Country, 2017-2023
- Figure 47: U.S. Market for Fluorescence Microscopy, 2017-2023
- Figure 48: Canadian Market for Fluorescence Microscopy, 2017-2023
- Figure 49: Canadian Market for Fluorescence Microscopy, 2017-2023
- Figure 50: European Market for Fluorescence Microscopy, by Component, 2017-2023
- Figure 51: European Market for Fluorescence Microscopy, by Illumination Method, 2017-2023
- Figure 52: European Market for Fluorescence Microscopy, by Type, 2017-2023
- Figure 53: European Market for Fluorescence Microscopy, by Technology, 2017-2023
- Figure 54: European Market for Fluorescence Microscopy, by End User, 2017-2023
- Figure 55: European Market for Fluorescence Microscopy, by Country, 2017-2023
- Figure 56: Germany Market for Fluorescence Microscopy, 2017-2023

- Figure 57: U.K. Market for Fluorescence Microscopy, 2017-2023
- Figure 58: France French Market for Fluorescence Microscopy, 2017-2023
- Figure 59: Italian Market for Fluorescence Microscopy, 2017-2023
- Figure 60: APAC Market for Fluorescence Microscopy, by Component, 2017-2023
- Figure 61: APAC Market for Fluorescence Microscopy, by Illumination Method, 2017-2023
- Figure 62: APAC Market for Fluorescence Microscopy, by Type, 2017-2023
- Figure 63: APAC Market for Fluorescence Microscopy, by Technology, 2017-2023
- Figure 64: APAC Market for Fluorescence Microscopy, by End User, 2017-2023
- Figure 65: APAC Market for Fluorescence Microscopy, by Country, 2017-2023
- Figure 66: Chinese Market for Fluorescence Microscopy, 2017-2023
- Figure 67: Japanese Market for Fluorescence Microscopy, 2017-2023
- Figure 68: Indian Market for Fluorescence Microscopy, 2017-2023
- Figure 69: South Korean Market for Fluorescence Microscopy, 2017-2023
- Figure 70: Australian Market for Fluorescence Microscopy, 2017-2023
- Figure 71: South American Market for Fluorescence Microscopy, 2017-2023
- Figure 72: Middle Eastern and African Market for Fluorescence Microscopy, 2017-2023

## I would like to order

Product name: Global Fluorescence Microscopy Market

Product link: <https://marketpublishers.com/r/GBC95CDF89DEN.html>

Price: US\$ 2,750.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/GBC95CDF89DEN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:  
Last name:  
Email:  
Company:  
Address:  
City:  
Zip code:  
Country:  
Tel:  
Fax:  
Your message:

**\*\*All fields are required**

Customer signature \_\_\_\_\_

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970