

Biophotonics Market: Global Industry Trends, Share, Size, Growth, Opportunity and Forecast 2023-2028

<https://marketpublishers.com/r/B5D18AEA864DEN.html>

Date: November 2023

Pages: 138

Price: US\$ 2,499.00 (Single User License)

ID: B5D18AEA864DEN

Abstracts

The global biophotonics market size reached US\$ 49.6 Billion in 2022. Looking forward, IMARC Group expects the market to reach US\$ 88.6 Billion by 2028, exhibiting a growth rate (CAGR) of 10.2% during 2022-2028.

Biophotonics refers to a multidisciplinary research field that uses light-based technologies to study life sciences and medicine. It involves the production and utilization of a light source to detect and manipulate biological materials. Techniques such as spectroscopy, photo-mechanics and fiber optic sensors, which are based on see-through imaging, inside imaging, molecular Spectroscopy, microscopy, analytical sensing and biosensing solutions, are used to study biological tissues, cells and molecules. These techniques aid in emission, detection, absorption, reflection and modification of radiations from biomolecules and biomaterials. As a result, biophotonics finds extensive applications in the fields of life sciences, agriculture, environmental science, dentistry and medicine.

The increasing prevalence of chronic medical ailments, along with the widespread adoption of biophotonics for disease diagnostics, is one of the key factors driving the growth of the market. The rising geriatric population, which is more susceptible to such ailments, is also driving the market growth. Furthermore, the widespread adoption of biophotonics from the non-medical sector is creating a positive outlook for the market. It is being used for testing chemicals, toxins and microbial materials for environmental monitoring and defense applications. Additionally, various technological advancements, such as the advent of nanotechnology and novel photoacoustic tomography (PAT) systems, are acting as other growth-inducing factors. These systems use gold and silica nanoparticles for biomedical imaging and accurate sensing of cancer cells in the patients. Other factors, including increasing investments in the development of diagnostic and testing facilities for proteins, nucleic acids and viruses, along with extensive research and development (R&D) activities, are anticipated to drive the

market further.

Key Market Segmentation:

IMARC Group provides an analysis of the key trends in each sub-segment of the global biophotonics market report, along with forecasts at the global, regional and country level from 2023-2028. Our report has categorized the market based on technique, technology and application.

Breakup by Technique:

Surface Imaging

Molecular Spectroscopy

Microscopy

Light Therapy

Biosensors

Inside Imaging

See-through Imaging

Others

Breakup by Technology:

In-Vitro

In-Vivo

Breakup by Application:

Medical Diagnostics

Medical Therapeutics

Material Testing

Others

Breakup by Region:

North America

United States

Canada

Asia Pacific

China

Japan

India

South Korea

Australia

Indonesia

Others

Europe

Germany

France

United Kingdom

Italy

Spain

Russia

Others

Latin America

Brazil

Mexico

Others

Middle East and Africa

Competitive Landscape:

The report has also analysed the competitive landscape of the market with some of the key players being Andor Technology Ltd. (Oxford Instruments Plc), BD (Becton, Dickinson and Company), Carl Zeiss AG (Carl-Zeiss-Stiftung), Glenbrook Technologies Inc., Hamamatsu Photonics K.K, Lumenis Ltd., Olympus Corporation, Perkinelmer Inc., Thermo Fisher Scientific Inc. and Zecotek Photonics Inc.

Key Questions Answered in This Report:

How has the global biophotonics market performed so far and how will it perform in the coming years?

What has been the impact of COVID-19 on the global biophotonics market?

What are the key regional markets?

What is the breakup of the market based on the technique?

What is the breakup of the market based on the technology?

What is the breakup of the market based on the application?

What are the various stages in the value chain of the industry?

What are the key driving factors and challenges in the industry?

What is the structure of the global biophotonics market and who are the key players?

What is the degree of competition in the industry?

Contents

1 PREFACE

2 SCOPE AND METHODOLOGY

- 2.1 Objectives of the Study
- 2.2 Stakeholders
- 2.3 Data Sources
 - 2.3.1 Primary Sources
 - 2.3.2 Secondary Sources
- 2.4 Market Estimation
 - 2.4.1 Bottom-Up Approach
 - 2.4.2 Top-Down Approach
- 2.5 Forecasting Methodology

3 EXECUTIVE SUMMARY

4 INTRODUCTION

- 4.1 Overview
- 4.2 Key Industry Trends

5 GLOBAL BIOPHOTONICS MARKET

- 5.1 Market Overview
- 5.2 Market Performance
- 5.3 Impact of COVID-19
- 5.4 Market Forecast

6 MARKET BREAKUP BY TECHNIQUE

- 6.1 Surface Imaging
 - 6.1.1 Market Trends
 - 6.1.2 Market Forecast
- 6.2 Molecular Spectroscopy
 - 6.2.1 Market Trends

- 6.2.2 Market Forecast
- 6.3 Microscopy
 - 6.3.1 Market Trends
 - 6.3.2 Market Forecast
- 6.4 Light Therapy
 - 6.4.1 Market Trends
 - 6.4.2 Market Forecast
- 6.5 Biosensors
 - 6.5.1 Market Trends
 - 6.5.2 Market Forecast
- 6.6 Inside Imaging
 - 6.6.1 Market Trends
 - 6.6.2 Market Forecast
- 6.7 See-through Imaging
 - 6.7.1 Market Trends
 - 6.7.2 Market Forecast
- 6.8 Others
 - 6.8.1 Market Trends
 - 6.8.2 Market Forecast

7 MARKET BREAKUP BY TECHNOLOGY

- 7.1 In-Vitro
 - 7.1.1 Market Trends
 - 7.1.2 Market Forecast
- 7.2 In-Vivo
 - 7.2.1 Market Trends
 - 7.2.2 Market Forecast

8 MARKET BREAKUP BY APPLICATION

- 8.1 Medical Diagnostics
 - 8.1.1 Market Trends
 - 8.1.2 Market Forecast
- 8.2 Medical Therapeutics
 - 8.2.1 Market Trends
 - 8.2.2 Market Forecast
- 8.3 Material Testing
 - 8.3.1 Market Trends

8.3.2 Market Forecast

8.4 Others

8.4.1 Market Trends

8.4.2 Market Forecast

9 MARKET BREAKUP BY REGION

9.1 North America

9.1.1 United States

9.1.1.1 Market Trends

9.1.1.2 Market Forecast

9.1.2 Canada

9.1.2.1 Market Trends

9.1.2.2 Market Forecast

9.2 Asia Pacific

9.2.1 China

9.2.1.1 Market Trends

9.2.1.2 Market Forecast

9.2.2 Japan

9.2.2.1 Market Trends

9.2.2.2 Market Forecast

9.2.3 India

9.2.3.1 Market Trends

9.2.3.2 Market Forecast

9.2.4 South Korea

9.2.4.1 Market Trends

9.2.4.2 Market Forecast

9.2.5 Australia

9.2.5.1 Market Trends

9.2.5.2 Market Forecast

9.2.6 Indonesia

9.2.6.1 Market Trends

9.2.6.2 Market Forecast

9.2.7 Others

9.2.7.1 Market Trends

9.2.7.2 Market Forecast

9.3 Europe

9.3.1 Germany

9.3.1.1 Market Trends

- 9.3.1.2 Market Forecast
- 9.3.2 France
 - 9.3.2.1 Market Trends
 - 9.3.2.2 Market Forecast
- 9.3.3 United Kingdom
 - 9.3.3.1 Market Trends
 - 9.3.3.2 Market Forecast
- 9.3.4 Italy
 - 9.3.4.1 Market Trends
 - 9.3.4.2 Market Forecast
- 9.3.5 Spain
 - 9.3.5.1 Market Trends
 - 9.3.5.2 Market Forecast
- 9.3.6 Russia
 - 9.3.6.1 Market Trends
 - 9.3.6.2 Market Forecast
- 9.3.7 Others
 - 9.3.7.1 Market Trends
 - 9.3.7.2 Market Forecast
- 9.4 Latin America
 - 9.4.1 Brazil
 - 9.4.1.1 Market Trends
 - 9.4.1.2 Market Forecast
 - 9.4.2 Mexico
 - 9.4.2.1 Market Trends
 - 9.4.2.2 Market Forecast
 - 9.4.3 Others
 - 9.4.3.1 Market Trends
 - 9.4.3.2 Market Forecast
- 9.5 Middle East and Africa
 - 9.5.1 Market Trends
 - 9.5.2 Market Breakup by Country
 - 9.5.3 Market Forecast

10 SWOT ANALYSIS

- 10.1 Overview
- 10.2 Strengths
- 10.3 Weaknesses

10.4 Opportunities

10.5 Threats

11 VALUE CHAIN ANALYSIS

12 PORTERS FIVE FORCES ANALYSIS

12.1 Overview

12.2 Bargaining Power of Buyers

12.3 Bargaining Power of Suppliers

12.4 Degree of Competition

12.5 Threat of New Entrants

12.6 Threat of Substitutes

13 PRICE ANALYSIS

14 COMPETITIVE LANDSCAPE

14.1 Market Structure

14.2 Key Players

14.3 Profiles of Key Players

14.3.1 Andor Technology Ltd (Oxford Instruments Plc)

14.3.1.1 Company Overview

14.3.1.2 Product Portfolio

14.3.1.3 Financials

14.3.2 BD (Becton, Dickinson and Company)

14.3.2.1 Company Overview

14.3.2.2 Product Portfolio

14.3.2.3 Financials

14.3.2.4 SWOT Analysis

14.3.3 Carl Zeiss AG (Carl-Zeiss-Stiftung)

14.3.3.1 Company Overview

14.3.3.2 Product Portfolio

14.3.3.3 Financials

14.3.3.4 SWOT Analysis

14.3.4 Glenbrook Technologies Inc.

14.3.4.1 Company Overview

- 14.3.4.2 Product Portfolio
- 14.3.5 Hamamatsu Photonics K.K
 - 14.3.5.1 Company Overview
 - 14.3.5.2 Product Portfolio
 - 14.3.5.3 Financials
- 14.3.6 Lumenis Ltd.
 - 14.3.6.1 Company Overview
 - 14.3.6.2 Product Portfolio
 - 14.3.6.3 SWOT Analysis
- 14.3.7 Olympus Corporation
 - 14.3.7.1 Company Overview
 - 14.3.7.2 Product Portfolio
 - 14.3.7.3 Financials
 - 14.3.7.4 SWOT Analysis
- 14.3.8 Perkinelmer Inc.
 - 14.3.8.1 Company Overview
 - 14.3.8.2 Product Portfolio
 - 14.3.8.3 Financials
 - 14.3.8.4 SWOT Analysis
- 14.3.9 Thermo Fisher Scientific Inc.
 - 14.3.9.1 Company Overview
 - 14.3.9.2 Product Portfolio
 - 14.3.9.3 Financials
 - 14.3.9.4 SWOT Analysis
- 14.3.10 Zecotek Photonics Inc.
 - 14.3.10.1 Company Overview
 - 14.3.10.2 Product Portfolio
 - 14.3.10.3 Financials
 - 14.3.10.4 SWOT Analysis

List Of Tables

LIST OF TABLES

Table 1: Global: Biophotonics Market: Key Industry Highlights, 2022 and 2028

Table 2: Global: Biophotonics Market Forecast: Breakup by Technique (in Million US\$), 2023-2028

Table 3: Global: Biophotonics Market Forecast: Breakup by Technology (in Million US\$), 2023-2028

Table 4: Global: Biophotonics Market Forecast: Breakup by Application (in Million US\$), 2023-2028

Table 5: Global: Biophotonics Market Forecast: Breakup by Region (in Million US\$), 2023-2028

Table 6: Global: Biophotonics Market Structure

Table 7: Global: Biophotonics Market: Key Players

List Of Figures

LIST OF FIGURES

Figure 1: Global: Biophotonics Market: Major Drivers and Challenges

Figure 2: Global: Biophotonics Market: Sales Value (in Billion US\$), 2017-2022

Figure 3: Global: Biophotonics Market: Breakup by Technique (in %), 2022

Figure 4: Global: Biophotonics Market: Breakup by Technology (in %), 2022

Figure 5: Global: Biophotonics Market: Breakup by Application (in %), 2022

Figure 6: Global: Biophotonics Market: Breakup by Region (in %), 2022

Figure 7: Global: Biophotonics Market Forecast: Sales Value (in Billion US\$), 2023-2028

Figure 8: Global: Biophotonics (Surface Imaging) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 9: Global: Biophotonics (Surface Imaging) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 10: Global: Biophotonics (Molecular Spectroscopy) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 11: Global: Biophotonics (Molecular Spectroscopy) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 12: Global: Biophotonics (Microscopy) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 13: Global: Biophotonics (Microscopy) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 14: Global: Biophotonics (Light Therapy) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 15: Global: Biophotonics (Light Therapy) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 16: Global: Biophotonics (Biosensors) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 17: Global: Biophotonics (Biosensors) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 18: Global: Biophotonics (Inside Imaging) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 19: Global: Biophotonics (Inside Imaging) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 20: Global: Biophotonics (See-through Imaging) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 21: Global: Biophotonics (See-through Imaging) Market Forecast: Sales Value

(in Million US\$), 2023-2028

Figure 22: Global: Biophotonics (Other Techniques) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 23: Global: Biophotonics (Other Techniques) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 24: Global: Biophotonics (In-Vitro) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 25: Global: Biophotonics (In-Vitro) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 26: Global: Biophotonics (In-Vivo) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 27: Global: Biophotonics (In-Vivo) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 28: Global: Biophotonics (Medical Diagnostics) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 29: Global: Biophotonics (Medical Diagnostics) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 30: Global: Biophotonics (Medical Therapeutics) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 31: Global: Biophotonics (Medical Therapeutics) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 32: Global: Biophotonics (Material Testing) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 33: Global: Biophotonics (Material Testing) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 34: Global: Biophotonics (Other Applications) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 35: Global: Biophotonics (Other Applications) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 36: North America: Biophotonics Market: Sales Value (in Million US\$), 2017 & 2022

Figure 37: North America: Biophotonics Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 38: United States: Biophotonics Market: Sales Value (in Million US\$), 2017 & 2022

Figure 39: United States: Biophotonics Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 40: Canada: Biophotonics Market: Sales Value (in Million US\$), 2017 & 2022

Figure 41: Canada: Biophotonics Market Forecast: Sales Value (in Million US\$),

2023-2028

Figure 42: Asia Pacific: Biophotonics Market: Sales Value (in Million US\$), 2017 & 2022

Figure 43: Asia Pacific: Biophotonics Market Forecast: Sales Value (in Million US\$),
2023-2028

Figure 44: China: Biophotonics Market: Sales Value (in Million US\$), 2017 & 2022

Figure 45: China: Biophotonics Market Forecast: Sales Value (in Million US\$),
2023-2028

Figure 46: Japan: Biophotonics Market: Sales Value (in Million US\$), 2017 & 2022

Figure 47: Japan: Biophotonics Market Forecast: Sales Value (in Million US\$),
2023-2028

Figure 48: India: Biophotonics Market: Sales Value (in Million US\$), 2017 & 2022

Figure 49: India: Biophotonics Market Forecast: Sales Value (in Million US\$),
2023-2028

Figure 50: South Korea: Biophotonics Market: Sales Value (in Million US\$), 2017 &
2022

Figure 51: South Korea: Biophotonics Market Forecast: Sales Value (in Million US\$),
2023-2028

Figure 52: Australia: Biophotonics Market: Sales Value (in Million US\$), 2017 & 2022

Figure 53: Australia: Biophotonics Market Forecast: Sales Value (in Million US\$),
2023-2028

Figure 54: Indonesia: Biophotonics Market: Sales Value (in Million US\$), 2017 & 2022

Figure 55: Indonesia: Biophotonics Market Forecast: Sales Value (in Million US\$),
2023-2028

Figure 56: Others: Biophotonics Market: Sales Value (in Million US\$), 2017 & 2022

Figure 57: Others: Biophotonics Market Forecast: Sales Value (in Million US\$),
2023-2028

Figure 58: Europe: Biophotonics Market: Sales Value (in Million US\$), 2017 & 2022

Figure 59: Europe: Biophotonics Market Forecast: Sales Value (in Million US\$),
2023-2028

Figure 60: Germany: Biophotonics Market: Sales Value (in Million US\$), 2017 & 2022

Figure 61: Germany: Biophotonics Market Forecast: Sales Value (in Million US\$),
2023-2028

Figure 62: France: Biophotonics Market: Sales Value (in Million US\$), 2017 & 2022

Figure 63: France: Biophotonics Market Forecast: Sales Value (in Million US\$),
2023-2028

Figure 64: United Kingdom: Biophotonics Market: Sales Value (in Million US\$), 2017 &
2022

Figure 65: United Kingdom: Biophotonics Market Forecast: Sales Value (in Million US\$),
2023-2028

Figure 66: Italy: Biophotonics Market: Sales Value (in Million US\$), 2017 & 2022

Figure 67: Italy: Biophotonics Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 68: Spain: Biophotonics Market: Sales Value (in Million US\$), 2017 & 2022

Figure 69: Spain: Biophotonics Market Forecast: Sales Value (in Million US\$),
2023-2028

Figure 70: Russia: Biophotonics Market: Sales Value (in Million US\$), 2017 & 2022

Figure 71: Russia: Biophotonics Market Forecast: Sales Value (in Million US\$),
2023-2028

Figure 72: Others: Biophotonics Market: Sales Value (in Million US\$), 2017 & 2022

Figure 73: Others: Biophotonics Market Forecast: Sales Value (in Million US\$),
2023-2028

Figure 74: Latin America: Biophotonics Market: Sales Value (in Million US\$), 2017 &
2022

Figure 75: Latin America: Biophotonics Market Forecast: Sales Value (in Million US\$),
2023-2028

Figure 76: Brazil: Biophotonics Market: Sales Value (in Million US\$), 2017 & 2022

Figure 77: Brazil: Biophotonics Market Forecast: Sales Value (in Million US\$),
2023-2028

Figure 78: Mexico: Biophotonics Market: Sales Value (in Million US\$), 2017 & 2022

Figure 79: Mexico: Biophotonics Market Forecast: Sales Value (in Million US\$),
2023-2028

Figure 80: Others: Biophotonics Market: Sales Value (in Million US\$), 2017 & 2022

Figure 81: Others: Biophotonics Market Forecast: Sales Value (in Million US\$),
2023-2028

Figure 82: Middle East and Africa: Biophotonics Market: Sales Value (in Million US\$),
2017 & 2022

Figure 83: Middle East and Africa: Biophotonics Market Forecast: Sales Value (in Million
US\$), 2023-2028

Figure 84: Global: Biophotonics Industry: SWOT Analysis

Figure 85: Global: Biophotonics Industry: Value Chain Analysis

Figure 86: Global: Biophotonics Industry: Porter's Five Forces Analysis

I would like to order

Product name: Biophotonics Market: Global Industry Trends, Share, Size, Growth, Opportunity and Forecast 2023-2028

Product link: <https://marketpublishers.com/r/B5D18AEA864DEN.html>

Price: US\$ 2,499.00 (Single User License / Electronic Delivery)

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

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/B5D18AEA864DEN.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

