

# Monocrystalline Transparent Ceramics Market by Material {Sapphire (Al<sub>2</sub>O<sub>3</sub>), Yttrium Aluminum Garnet (YAG), Aluminum Oxynitride[(AlN)<sub>x</sub>.(Al<sub>2</sub>O<sub>3</sub>)<sub>1-x</sub>], and Yttria (Y<sub>2</sub>O<sub>3</sub>)}, and Application {Optics & Optoelectronics, Aerospace, Defense & Security, Healthcare, and Others (Sensors & Instrumentation and Energy)} - Global Opportunity Analysis and Industry Forecast, 2014-2022

<https://marketpublishers.com/r/M03D597B9A9EN.html>

Date: March 2017

Pages: 190

Price: US\$ 3,999.00 (Single User License)

ID: M03D597B9A9EN

## Abstracts

Monocrystalline transparent ceramics are single crystal ceramics with properties such as homogeneity, uniformity, crystal size, and high doping concentration. The melt growth in making a single crystal of ceramic eliminates all the vulnerabilities of void formations in the internal structure of the ceramic making it a more uniform crystal with better and enhanced transparency.

Optics & optoelectronics application is expected to be the grow at a highest rate during the forecast period as the material is used as a host material in lasers for optics industry. Enhanced visibility is offered by monocrystalline transparent ceramics due to their uniform crystal structure, making it a favorable choice for optical applications. In addition, superior mechanical properties and scratch & corrosion resistance add up to its widespread adoption in optics & optoelectronic applications.

The global monocrystalline transparent ceramics market is segmented based on material, application, and geography. Based on material, it is classified into sapphire (Al<sub>2</sub>O<sub>3</sub>), yttrium aluminum garnet (YAG), aluminum oxynitride [(AlN)<sub>x</sub>-(Al<sub>2</sub>O<sub>3</sub>)<sub>1-x</sub>], and yttria (Y<sub>2</sub>O<sub>3</sub>). Based on application, it is categorized into optics & optoelectronics, aerospace, defense & security, healthcare, and others (sensors & instrumentation and energy). Geographically, it is analyzed across North America, Europe, Asia-Pacific, and

LAMEA.

Major players profiled in this study include the following:

Brightcrystals Technology Inc.

Ceramtec ETEC

Ceranova Corporation

CILAS

Coorstek Inc.

II-VI Incorporated

Konoshima Chemicals Co., Ltd.

Murata Manufacturing Co. Ltd.

Schott AG

Surmet Corporation

## KEY BENEFITS FOR STAKEHOLDERS

The report provides an in-depth analysis of the current trends, drivers, and dynamics of the global monocrystalline transparent ceramics market to elucidate the prevailing opportunities and the probable investment pockets.

It offers qualitative trends and quantitative analysis from 2014 to 2022 to assist the stakeholder to understand the market scenario.

In-depth analysis of the key segments demonstrates the adoption of monocrystalline transparent ceramics across various applications.

Competitive intelligence highlights the business practices followed by key business players globally and the prevailing market opportunities.

Key players are profiled along with the strategies and developments, which portray the competitive market outlook.

## KEY MARKET SEGMENTS

### By Material

Sapphire

Yttrium Aluminum Garnet (YAG)

Aluminum Oxynitride

Yttria (Y<sub>2</sub>O<sub>3</sub>)

### By Application

Optics & Optoelectronics

Aerospace, Defense & Security

Healthcare

Others (Sensors & Instrumentation and Energy)

### By Geography

North America

U.S.

Canada

Mexico

Europe

Germany

UK

Turkey

France

Spain

Russia

Rest of Europe

Asia-Pacific

China

Japan

Australia

India

Rest of Asia-Pacific

LAMEA

Brazil

Argentina

UAE

Saudi Arabia

Rest of LAMEA

## OTHER KEY PLAYERS

General Electric

IBD Deisenroth Engineering

Koito Manufacturing

Philips

Innovacera

(Companies mentioned above are not profiled in the report, but can be profiled upon client request.)

## Contents

### CHAPTER 1. INTRODUCTION

- 1.1. REPORT DESCRIPTION
- 1.2. KEY BENEFITS
- 1.3. KEY MARKET SEGMENT
- 1.4. RESEARCH METHODOLOGY
  - 1.4.1. Secondary Research
  - 1.4.2. Primary Research
  - 1.4.3. Analyst Tool & Model

### CHAPTER 2. EXECUTIVE SUMMARY

- 2.1. MARKET SNAPSHOT
- 2.2. CXO PERSPECTIVES

### CHAPTER 3. MARKET OVERVIEW

- 3.1. MARKET DEFINITION AND SCOPE
- 3.2. KEY FINDINGS
  - 3.2.1. Top Investment Pockets
  - 3.2.2. Top winning strategies
- 3.3. PORTERS FIVE FORCES ANALYSIS
- 3.4. MARKET DYNAMICS
  - 3.4.1. Drivers
    - 3.4.1.1. Substitute to Glass, Metal, and Plastics
    - 3.4.1.2. Increasing defense expenditure on advanced material and technologies
    - 3.4.1.3. Low thermal expansion
  - 3.4.2. Restraints
    - 3.4.2.1. High cost of transparent ceramics
  - 3.4.3. Opportunities
    - 3.4.3.1. Advancements in nanotechnology
    - 3.4.3.2. Increased demand in niche applications
  - 3.4.4. Challenges
    - 3.4.4.1. Transparent ceramics are non-recyclable and non-repairable

### CHAPTER 4. GLOBAL MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET, BY MATERIAL

*Monocrystalline Transparent Ceramics Market by Material {Sapphire (Al<sub>2</sub>O<sub>3</sub>), Yttrium Aluminum Garnet (YAG), Alum...*

#### 4.1. INTRODUCTION

4.1.1. Market Size and Forecast

#### 4.2. SAPPHIRE

4.2.1. Key Market Trends, Growth Factors, and Opportunities

4.2.2. Market Size and Forecast

#### 4.3. YTTRIUM ALUMINUM GARNET (YAG)

4.3.1. Key Market Trends, Growth Factors, and Opportunities

4.3.2. Market Size and Forecast

#### 4.4. ALUMINUM OXYNITRIDE

4.4.1. Key Market Trends, Growth Factors, and Opportunities

4.4.2. Market Size and Forecast

#### 4.5. YTTRIA (Y<sub>2</sub>O<sub>3</sub>)

4.5.1. Key Market Trends, Growth Factors, and Opportunities

4.5.2. Market Size and Forecast

### **CHAPTER 5. GLOBAL MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET, BY APPLICATION**

#### 5.1. INTRODUCTION

5.1.1. Market Size and Forecast

#### 5.2. OPTICS & OPTOELECTRONICS

5.2.1. Key Market Trends, Growth Factors, and Opportunities

5.2.2. Market Size and Forecast

#### 5.3. AEROSPACE, DEFENSE & SECURITY

5.3.1. Key Market Trends, Growth Factors, and Opportunities

5.3.2. Market Size and Forecast

#### 5.4. HEALTHCARE

5.4.1. Key Market Trends, Growth Factors, and Opportunities

5.4.2. Market Size and Forecast

#### 5.5. OTHERS (SENSORS & INSTRUMENTATION AND ENERGY)

5.5.1. Key Market Trends, Growth Factors, and Opportunities

5.5.2. Market Size and Forecast

### **CHAPTER 6. MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET, BY GEOGRAPHY**

#### 6.1. INTRODUCTION

6.1.1. Market Size and Forecast

## 6.2. NORTH AMERICA

### 6.2.1. Key Market Trends, Growth Factors, and Opportunities

### 6.2.2. Market Size and Forecast

#### 6.2.3. U.S.

##### 6.2.3.1. Market size and forecast, by material

#### 6.2.4. Canada

##### 6.2.4.1. Market size and forecast, by material

#### 6.2.5. Mexico

##### 6.2.5.1. Market size and forecast, by material

## 6.3. EUROPE

### 6.3.1. Key Market Trends, Growth Factors, and Opportunities

### 6.3.2. Market Size and Forecast

#### 6.3.3. Germany

##### 6.3.3.1. Market size and forecast, by material

#### 6.3.4. UK

##### 6.3.4.1. Market size and forecast, by material

#### 6.3.5. Turkey

##### 6.3.5.1. Market size and forecast, by material

#### 6.3.6. France

##### 6.3.6.1. Market size and forecast, by material

#### 6.3.7. Spain

##### 6.3.7.1. Market size and forecast, by material

#### 6.3.8. Russia

##### 6.3.8.1. Market size and forecast, by material

#### 6.3.9. Rest of Europe

##### 6.3.9.1. Market size and forecast, by material

## 6.4. ASIA-PACIFIC

### 6.4.1. Key Market Trends, Growth Factors, and Opportunities

### 6.4.2. Market Size and Forecast

#### 6.4.3. China

##### 6.4.3.1. Market size and forecast, by material

#### 6.4.4. Japan

##### 6.4.4.1. Market size and forecast, by material

#### 6.4.5. Australia

##### 6.4.5.1. Market size and forecast, by material

#### 6.4.6. India

##### 6.4.6.1. Market size and forecast, by material

#### 6.4.7. Rest of Asia-Pacific

##### 6.4.7.1. Market size and forecast, by material



## 6.5. LAMEA

### 6.5.1. Key Market Trends, Growth Factors, and Opportunities

### 6.5.2. Market Size and Forecast

### 6.5.3. Brazil

#### 6.5.3.1. Market size and forecast, by material

### 6.5.4. Argentina

#### 6.5.4.1. Market size and forecast, by material

### 6.5.5. U.A.E.

#### 6.5.5.1. Market size and forecast, by material

### 6.5.6. Saudi Arabia

#### 6.5.6.1. Market size and forecast, by material

### 6.5.7. Rest of LAMEA

#### 6.5.7.1. Market size and forecast, by material

## CHAPTER 7. COMPANY PROFILES

### 7.1. BRIGHTCRYSTALS TECHNOLOGY INC.

#### 7.1.1. Company Overview

#### 7.1.2. Company Snapshot

#### 7.1.3. Operating Business Segments

#### 7.1.4. Business Performance

#### 7.1.5. Key Strategic Moves and Developments

### 7.2. CERAMTEC ETEC

#### 7.2.1. Company Overview

#### 7.2.2. Company Snapshot

#### 7.2.3. Operating Business Segments

#### 7.2.4. Business Performance

#### 7.2.5. Key Strategic Moves and Developments

### 7.3. CERANOVA CORPORATION

#### 7.3.1. Company Overview

#### 7.3.2. Company Snapshot

#### 7.3.3. Operating Business Segments

#### 7.3.4. Business Performance

#### 7.3.5. Key Strategic Moves and Developments

### 7.4. CILAS

#### 7.4.1. Company Overview

#### 7.4.2. Company Snapshot

#### 7.4.3. Operating Business Segments

#### 7.4.4. Business Performance

- 7.4.5. Key Strategic Moves and Developments
- 7.5. COORSTEK INC.
  - 7.5.1. Company Overview
  - 7.5.2. Company Snapshot
  - 7.5.3. Operating Business Segments
  - 7.5.4. Business Performance
  - 7.5.5. Key Strategic Moves and Developments
- 7.6. II-VI INCORPORATED
  - 7.6.1. Company Overview
  - 7.6.2. Company Snapshot
  - 7.6.3. Operating Business Segments
  - 7.6.4. Business Performance
  - 7.6.5. Key Strategic Moves and Developments
- 7.7. KONOSHIMA CHEMICALS CO., LTD.
  - 7.7.1. Company Overview
  - 7.7.2. Company Snapshot
  - 7.7.3. Operating Business Segments
  - 7.7.4. Business Performance
  - 7.7.5. Key Strategic Moves and Developments
- 7.8. MURATA MANUFACTURING CO., LTD.
  - 7.8.1. Company Overview
  - 7.8.2. Company Snapshot
  - 7.8.3. Operating Business Segments
  - 7.8.4. Business Performance
  - 7.8.5. Key Strategic Moves and Developments
- 7.9. SCHOTT AG
  - 7.9.1. Company Overview
  - 7.9.2. Company Snapshot
  - 7.9.3. Operating Business Segments
  - 7.9.4. Business Performance
  - 7.9.5. Key Strategic Moves and Developments
- 7.10. SURMET CORPORATION
  - 7.10.1. Company Overview
  - 7.10.2. Company Snapshot
  - 7.10.3. Operating Business Segments
  - 7.10.4. Business Performance
  - 7.10.5. Key Strategic Moves and Developments

## List Of Tables

### LIST OF TABLES

TABLE 1. GLOBAL MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY MATERIAL, 2014-2022 (\$MILLION)

TABLE 2. GLOBAL SAPPHIRE MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY REGION, 2014-2022 (\$MILLION)

TABLE 3. GLOBAL YTTRIUM ALUMINIUM GARNET (YAG) MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY REGION, 2014-2022 (\$MILLION)

TABLE 4. GLOBAL ALUMINUM OXYNITRIDE MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY REGION, 2014-2022 (\$MILLION)

TABLE 5. GLOBAL YTTRIA (Y<sub>2</sub>O<sub>3</sub>) MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY REGION, 2014-2022 (\$MILLION)

TABLE 6. GLOBAL MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY APPLICATION, 2014-2022 (\$MILLION)

TABLE 7. GLOBAL OPTICS & OPTOELECTRONICS MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY REGION, 2014-2022 (\$MILLION)

TABLE 8. GLOBAL AEROSPACE, DEFENSE & SECURITY MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY REGION, 2014-2022 (\$MILLION)

TABLE 9. GLOBAL HEALTHCARE MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY REGION, 2014-2022 (\$MILLION)

TABLE 10. GLOBAL OTHERS (SENSORS & INSTRUMENTATION AND ENERGY) MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY REGION, 2014-2022 (\$MILLION)

TABLE 11. GLOBAL MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY REGION, 2014-2022 (\$MILLION)

TABLE 12. NORTH AMERICA MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY MATERIAL, 2014-2022 (\$MILLION)

TABLE 13. NORTH AMERICA MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY APPLICATION, 2014-2022 (\$MILLION)

TABLE 14. NORTH AMERICA MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY COUNTRY, 2014-2022 (\$MILLION)

TABLE 15. U.S. MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY MATERIAL, 2014-2022 (\$MILLION)

TABLE 16. CANADA MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY MATERIAL, 2014-2022 (\$MILLION)

TABLE 17. MEXICO MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY MATERIAL, 2014-2022 (\$MILLION)

TABLE 18. EUROPE MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY MATERIAL, 2014-2022 (\$MILLION)

TABLE 19. EUROPE MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY APPLICATION, 2014-2022 (\$MILLION)

TABLE 20. EUROPE MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY COUNTRY, 2014-2022 (\$MILLION)

TABLE 21. GERMANY MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY MATERIAL, 2014-2022 (\$MILLION)

TABLE 22. UK MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY MATERIAL, 2014-2022 (\$MILLION)

TABLE 23. TURKEY MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY MATERIAL, 2014-2022 (\$MILLION)

TABLE 24. FRANCE MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY MATERIAL, 2014-2022 (\$MILLION)

TABLE 25. SPAIN MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY MATERIAL, 2014-2022 (\$MILLION)

TABLE 26. RUSSIA MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY MATERIAL, 2014-2022 (\$MILLION)

TABLE 27. REST OF EUROPE MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY MATERIAL, 2014-2022 (\$MILLION)

TABLE 28. ASIA-PACIFIC MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY MATERIAL, 2014-2022 (\$MILLION)

TABLE 29. ASIA-PACIFIC MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY APPLICATION, 2014-2022 (\$MILLION)

TABLE 30. ASIA-PACIFIC MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY COUNTRY, 2014-2022 (\$MILLION)

TABLE 31. CHINA MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY MATERIAL, 2014-2022 (\$MILLION)

TABLE 32. JAPAN MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY MATERIAL, 2014-2022 (\$MILLION)

TABLE 33. AUSTRALIA MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY MATERIAL, 2014-2022 (\$MILLION)

TABLE 34. INDIA MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY MATERIAL, 2014-2022 (\$MILLION)

TABLE 35. REST OF ASIA-PACIFIC MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY MATERIAL, 2014-2022 (\$MILLION)

TABLE 36. LAMEA MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY MATERIAL, 2014-2022 (\$MILLION)

TABLE 37. LAMEA MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET

VALUE, BY APPLICATION, 2014-2022 (\$MILLION)

TABLE 38. LAMEA MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY COUNTRY, 2014-2022 (\$MILLION)

TABLE 39. BRAZIL MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY MATERIAL, 2014-2022 (\$MILLION)

TABLE 40. ARGENTINA MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY MATERIAL, 2014-2022 (\$MILLION)

TABLE 41. U.A.E. MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY MATERIAL, 2014-2022 (\$MILLION)

TABLE 42. SAUDI ARABIA MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY MATERIAL, 2014-2022 (\$MILLION)

TABLE 43. REST OF LAMEA MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, BY MATERIAL, 2014-2022 (\$MILLION)

TABLE 44. BRIGHTCRYSTALS TECHNOLOGY INC.: COMPANY SNAPSHOT

TABLE 45. BRIGHTCRYSTALS TECHNOLOGY INC.: OPERATING SEGMENTS

TABLE 46. CERAMTEC ETEC: COMPANY SNAPSHOT

TABLE 47. CERAMTEC ETEC: OPERATING SEGMENTS

TABLE 48. CERANOVA CORPORATION: COMPANY SNAPSHOT

TABLE 49. CERANOVA CORPORATION: OPERATING SEGMENTS

TABLE 50. CILAS: COMPANY SNAPSHOT

TABLE 51. CILAS: OPERATING SEGMENTS

TABLE 52. COORSTEK INC.: COMPANY SNAPSHOT

TABLE 53. COORSTEK INC.: OPERATING SEGMENTS

TABLE 54. II-VI INCORPORATED: COMPANY SNAPSHOT

TABLE 55. II-VI INCORPORATED: OPERATING SEGMENTS

TABLE 56. KONOSHIMA CHEMICALS CO., LTD.: COMPANY SNAPSHOT

TABLE 57. KONOSHIMA CHEMICALS CO., LTD.: OPERATING SEGMENTS

TABLE 58. MURATA MANUFACTURING CO., LTD.: COMPANY SNAPSHOT

TABLE 59. MURATA MANUFACTURING CO., LTD.: OPERATING SEGMENTS

TABLE 60. SCHOTT AG: COMPANY SNAPSHOT

TABLE 61. SCHOTT AG: OPERATING SEGMENTS

TABLE 62. SURMET CORPORATION: COMPANY SNAPSHOT

TABLE 63. SURMET CORPORATION: OPERATING SEGMENTS

## List Of Figures

### LIST OF FIGURES

FIGURE 1. GLOBAL MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET: SEGMENTATION

FIGURE 2. GLOBAL MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET SHARE, BY MATERIAL, 2015 (%)

FIGURE 3. TOP INVESTMENT POCKETS, BY APPLICATION

FIGURE 4. TOP WINNING STRATEGIES

FIGURE 5. BARGAINING POWER OF SUPPLIERS

FIGURE 6. BARGAINING POWER OF BUYERS

FIGURE 7. THREAT OF NEW ENTRANTS

FIGURE 8. THREAT OF SUBSTITUTES

FIGURE 9. COMPETITIVE RIVALRY

FIGURE 10. U.S. MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, 2014-2022 (\$MILLION)

FIGURE 11. CANADA MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, 2014-2022 (\$MILLION)

FIGURE 12. MEXICO MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, 2014-2022 (\$MILLION)

FIGURE 13. GERMANY MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, 2014-2022 (\$MILLION)

FIGURE 14. UK MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, 2014-2022 (\$MILLION)

FIGURE 15. TURKEY MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, 2014-2022 (\$MILLION)

FIGURE 16. FRANCE MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, 2014-2022 (\$MILLION)

FIGURE 17. SPAIN MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, 2014-2022 (\$MILLION)

FIGURE 18. RUSSIA MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, 2014-2022 (\$MILLION)

FIGURE 19. REST OF EUROPE MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, 2014-2022 (\$MILLION)

FIGURE 20. CHINA MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, 2014-2022 (\$MILLION)

FIGURE 21. JAPAN MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, 2014-2022 (\$MILLION)

FIGURE 22. AUSTRALIA MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, 2014-2022 (\$MILLION)

FIGURE 23. INDIA MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, 2014-2022 (\$MILLION)

FIGURE 24. REST OF ASIA-PACIFIC MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, 2014-2022 (\$MILLION)

FIGURE 25. BRAZIL MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, 2014-2022 (\$MILLION)

FIGURE 26. ARGENTINA MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, 2014-2022 (\$MILLION)

FIGURE 27. U.A.E. MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, 2014-2022 (\$MILLION)

FIGURE 28. SAUDI ARABIA MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, 2014-2022 (\$MILLION)

FIGURE 29. REST OF LAMEA MONOCRYSTALLINE TRANSPARENT CERAMICS MARKET VALUE, 2014-2022 (\$MILLION)



## I would like to order

Product name: Monocrystalline Transparent Ceramics Market by Material {Sapphire (Al<sub>2</sub>O<sub>3</sub>), Yttrium Aluminum Garnet (YAG), Aluminum Oxynitride[(AlN)<sub>x</sub>.(Al<sub>2</sub>O<sub>3</sub>)<sub>1-x</sub>], and Yttria (Y<sub>2</sub>O<sub>3</sub>)}, and Application {Optics & Optoelectronics, Aerospace, Defense & Security, Healthcare, and Others (Sensors & Instrumentation and Energy)} - Global Opportunity Analysis and Industry Forecast, 2014-2022

Product link: <https://marketpublishers.com/r/M03D597B9A9EN.html>

Price: US\$ 3,999.00 (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/M03D597B9A9EN.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