

# Magnetite Nanoparticles Market: Global Industry Trends, Share, Size, Growth, Opportunity and Forecast 2023-2028

<https://marketpublishers.com/r/M2F7019E95DCEN.html>

Date: February 2023

Pages: 143

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

ID: M2F7019E95DCEN

## Abstracts

The global magnetite nanoparticles market size reached US\$ 74.2 Million in 2022. Looking forward, IMARC Group expects the market to reach US\$ 139.2 Million by 2028, exhibiting a growth rate (CAGR) of 10.4% during 2023-2028.

Magnetite nanoparticles (NPs) are structures composed of different metallic elements, such as iron, cobalt, nickel, and platinum, or metal alloys, which exhibit superparamagnetic properties at ambient temperatures. Their compact size and non-toxic properties make them viable for applications in catalysis, biosensors, ferrofluids, magnetic separations, and magnetic resonance imaging (MRI) contrast agents. Due to their high coercivity, low curie temperature, and excellent magnetic susceptibility, magnetite NPs have now become an important element in developing novel biomedical applications. They are consequently used in nanotoxicology and magnetic nanotechnology research and development (R&D) across the globe.

### Magnetite Nanoparticles Market Trends:

Magnetite NPs find extensive applications in cancer therapy, drug nanocarriers (NCs), targeted delivery systems, and diagnosis involving two guided NPs as nanoprobe and contrast agents. This, in confluence with the increasing prevalence of chronic diseases and the rising need for improved diagnostic modalities and personalized treatments, represents one of the key factors bolstering the market growth. Moreover, magnetic NPs are gaining traction in magnetic bio-separation and detection of biological entities, such as cells, proteins, nucleic acids, enzymes, bacteria, and viruses. Besides this, as the magnetic properties of magnetite NPs can efficiently remove contaminants from wastewater, they are considered suitable for wastewater treatment processes, including flocculation, demulsification, adsorption, filtration, and photocatalytic activities. In

In addition, rapidly diminishing freshwater resources and the growing wastewater complexities are driving the demand for magnetic NPs. Apart from this, researchers are focusing on obtaining functionalized magnetite NPs via green chemistry to reduce environmental pollution. Such developments are anticipated to aid the usage of magnetite NPs in various industrial applications and medical practices to improve the quality of life of the patients.

#### Key Market Segmentation:

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

#### Breakup by Type:

- Iron Based
- Cobalt Based

#### Breakup by Physical Form:

- Nanopowder
- Solution
- Dispersion

#### Breakup by Application:

- Bio-medical
- Electronics
- Wastewater Treatment
- Energy
- 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 competitive landscape of the industry has also been examined along with the profiles of the key players being American Elements, Cytodiagnosics Inc., Merck KGaA, Nano Research Elements Inc., nanoComposix (Fortis Life Sciences), Nanografi Nano Technology, Nanoshel LLC, Reade International Corp., SkySpring Nanomaterials Inc., Strem Chemicals Inc. and US Research Nanomaterials Inc.

#### Key Questions Answered in This Report

1. What was the size of the global magnetite nanoparticles market in 2022?
2. What is the expected growth rate of the global magnetite nanoparticles market during 2023-2028?
3. What has been the impact of COVID-19 on the global magnetite nanoparticles market?
4. What are the key factors driving the global magnetite nanoparticles market?
5. What is the breakup of the global magnetite nanoparticles market based on the type?
6. What is the breakup of the global magnetite nanoparticles market based on the physical form?
7. What is the breakup of the global magnetite nanoparticles market based on the

application?

8. What are the key regions in the global magnetite nanoparticles market?

9. Who are the key players/companies in the global magnetite nanoparticles market?

## 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 MAGNETITE NANOPARTICLES MARKET**

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

### **6 MARKET BREAKUP BY TYPE**

- 6.1 Iron Based
  - 6.1.1 Market Trends
  - 6.1.2 Market Forecast
- 6.2 Cobalt Based
  - 6.2.1 Market Trends
  - 6.2.2 Market Forecast

## **7 MARKET BREAKUP BY PHYSICAL FORM**

### 7.1 Nanopowder

#### 7.1.1 Market Trends

#### 7.1.2 Market Forecast

### 7.2 Solution

#### 7.2.1 Market Trends

#### 7.2.2 Market Forecast

### 7.3 Dispersion

#### 7.3.1 Market Trends

#### 7.3.2 Market Forecast

## **8 MARKET BREAKUP BY APPLICATION**

### 8.1 Bio-medical

#### 8.1.1 Market Trends

#### 8.1.2 Market Forecast

### 8.2 Electronics

#### 8.2.1 Market Trends

#### 8.2.2 Market Forecast

### 8.3 Wastewater Treatment

#### 8.3.1 Market Trends

#### 8.3.2 Market Forecast

### 8.4 Energy

#### 8.4.1 Market Trends

#### 8.4.2 Market Forecast

### 8.5 Others

#### 8.5.1 Market Trends

#### 8.5.2 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 American Elements

##### 14.3.1.1 Company Overview

##### 14.3.1.2 Product Portfolio

#### 14.3.2 Cytodiagnosics Inc.

##### 14.3.2.1 Company Overview

##### 14.3.2.2 Product Portfolio

#### 14.3.3 Merck KGaA

##### 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 Nano Research Elements Inc.

##### 14.3.4.1 Company Overview

##### 14.3.4.2 Product Portfolio

#### 14.3.5 nanoComposix (Fortis Life Sciences)

##### 14.3.5.1 Company Overview

##### 14.3.5.2 Product Portfolio

#### 14.3.6 Nanografi Nano Technology

##### 14.3.6.1 Company Overview

##### 14.3.6.2 Product Portfolio

#### 14.3.7 Nanoshel LLC

##### 14.3.7.1 Company Overview

##### 14.3.7.2 Product Portfolio

#### 14.3.8 Reade International Corp.

##### 14.3.8.1 Company Overview

##### 14.3.8.2 Product Portfolio

#### 14.3.9 SkySpring Nanomaterials Inc.

##### 14.3.9.1 Company Overview

##### 14.3.9.2 Product Portfolio

#### 14.3.10 Strem Chemicals Inc.

##### 14.3.10.1 Company Overview

##### 14.3.10.2 Product Portfolio

### 14.3.11 US Research Nanomaterials Inc.

#### 14.3.11.1 Company Overview

#### 14.3.11.2 Product Portfolio

## List Of Tables

### LIST OF TABLES

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

Table 2: Global: Magnetite Nanoparticles Market Forecast: Breakup by Type (in Million US\$), 2023-2028

Table 3: Global: Magnetite Nanoparticles Market Forecast: Breakup by Physical Form (in Million US\$), 2023-2028

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

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

Table 6: Global: Magnetite Nanoparticles Market: Competitive Structure

Table 7: Global: Magnetite Nanoparticles Market: Key Players

## List Of Figures

### LIST OF FIGURES

Figure 1: Global: Magnetite Nanoparticles Market: Major Drivers and Challenges

Figure 2: Global: Magnetite Nanoparticles Market: Sales Value (in Million US\$), 2017-2022

Figure 3: Global: Magnetite Nanoparticles Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 4: Global: Magnetite Nanoparticles Market: Breakup by Type (in %), 2022

Figure 5: Global: Magnetite Nanoparticles Market: Breakup by Physical Form (in %), 2022

Figure 6: Global: Magnetite Nanoparticles Market: Breakup by Application (in %), 2022

Figure 7: Global: Magnetite Nanoparticles Market: Breakup by Region (in %), 2022

Figure 8: Global: Magnetite Nanoparticles (Iron Based) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 9: Global: Magnetite Nanoparticles (Iron Based) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 10: Global: Magnetite Nanoparticles (Cobalt Based) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 11: Global: Magnetite Nanoparticles (Cobalt Based) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 12: Global: Magnetite Nanoparticles (Nanopowder) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 13: Global: Magnetite Nanoparticles (Nanopowder) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 14: Global: Magnetite Nanoparticles (Solution) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 15: Global: Magnetite Nanoparticles (Solution) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 16: Global: Magnetite Nanoparticles (Dispersion) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 17: Global: Magnetite Nanoparticles (Dispersion) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 18: Global: Magnetite Nanoparticles (Bio-medical) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 19: Global: Magnetite Nanoparticles (Bio-medical) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 20: Global: Magnetite Nanoparticles (Electronics) Market: Sales Value (in Million

US\$), 2017 & 2022

Figure 21: Global: Magnetite Nanoparticles (Electronics) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 22: Global: Magnetite Nanoparticles (Wastewater Treatment) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 23: Global: Magnetite Nanoparticles (Wastewater Treatment) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 24: Global: Magnetite Nanoparticles (Energy) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 25: Global: Magnetite Nanoparticles (Energy) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 26: Global: Magnetite Nanoparticles (Other Applications) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 27: Global: Magnetite Nanoparticles (Other Applications) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 28: North America: Magnetite Nanoparticles Market: Sales Value (in Million US\$), 2017 & 2022

Figure 29: North America: Magnetite Nanoparticles Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 30: United States: Magnetite Nanoparticles Market: Sales Value (in Million US\$), 2017 & 2022

Figure 31: United States: Magnetite Nanoparticles Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 32: Canada: Magnetite Nanoparticles Market: Sales Value (in Million US\$), 2017 & 2022

Figure 33: Canada: Magnetite Nanoparticles Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 34: Asia-Pacific: Magnetite Nanoparticles Market: Sales Value (in Million US\$), 2017 & 2022

Figure 35: Asia-Pacific: Magnetite Nanoparticles Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 36: China: Magnetite Nanoparticles Market: Sales Value (in Million US\$), 2017 & 2022

Figure 37: China: Magnetite Nanoparticles Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 38: Japan: Magnetite Nanoparticles Market: Sales Value (in Million US\$), 2017 & 2022

Figure 39: Japan: Magnetite Nanoparticles Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 40: India: Magnetite Nanoparticles Market: Sales Value (in Million US\$), 2017 & 2022

Figure 41: India: Magnetite Nanoparticles Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 42: South Korea: Magnetite Nanoparticles Market: Sales Value (in Million US\$), 2017 & 2022

Figure 43: South Korea: Magnetite Nanoparticles Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 44: Australia: Magnetite Nanoparticles Market: Sales Value (in Million US\$), 2017 & 2022

Figure 45: Australia: Magnetite Nanoparticles Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 46: Indonesia: Magnetite Nanoparticles Market: Sales Value (in Million US\$), 2017 & 2022

Figure 47: Indonesia: Magnetite Nanoparticles Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 48: Others: Magnetite Nanoparticles Market: Sales Value (in Million US\$), 2017 & 2022

Figure 49: Others: Magnetite Nanoparticles Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 50: Europe: Magnetite Nanoparticles Market: Sales Value (in Million US\$), 2017 & 2022

Figure 51: Europe: Magnetite Nanoparticles Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 52: Germany: Magnetite Nanoparticles Market: Sales Value (in Million US\$), 2017 & 2022

Figure 53: Germany: Magnetite Nanoparticles Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 54: France: Magnetite Nanoparticles Market: Sales Value (in Million US\$), 2017 & 2022

Figure 55: France: Magnetite Nanoparticles Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 56: United Kingdom: Magnetite Nanoparticles Market: Sales Value (in Million US\$), 2017 & 2022

Figure 57: United Kingdom: Magnetite Nanoparticles Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 58: Italy: Magnetite Nanoparticles Market: Sales Value (in Million US\$), 2017 & 2022

Figure 59: Italy: Magnetite Nanoparticles Market Forecast: Sales Value (in Million US\$),

2023-2028

Figure 60: Spain: Magnetite Nanoparticles Market: Sales Value (in Million US\$), 2017 & 2022

Figure 61: Spain: Magnetite Nanoparticles Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 62: Russia: Magnetite Nanoparticles Market: Sales Value (in Million US\$), 2017 & 2022

Figure 63: Russia: Magnetite Nanoparticles Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 64: Others: Magnetite Nanoparticles Market: Sales Value (in Million US\$), 2017 & 2022

Figure 65: Others: Magnetite Nanoparticles Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 66: Latin America: Magnetite Nanoparticles Market: Sales Value (in Million US\$), 2017 & 2022

Figure 67: Latin America: Magnetite Nanoparticles Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 68: Brazil: Magnetite Nanoparticles Market: Sales Value (in Million US\$), 2017 & 2022

Figure 69: Brazil: Magnetite Nanoparticles Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 70: Mexico: Magnetite Nanoparticles Market: Sales Value (in Million US\$), 2017 & 2022

Figure 71: Mexico: Magnetite Nanoparticles Market Forecast: Sales Value (in Million US\$), 2023-2028

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

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

Figure 74: Middle East and Africa: Magnetite Nanoparticles Market: Sales Value (in Million US\$), 2017 & 2022

Figure 75: Middle East and Africa: Magnetite Nanoparticles Market: Breakup by Country (in %), 2022

Figure 76: Middle East and Africa: Magnetite Nanoparticles Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 77: Global: Magnetite Nanoparticles Industry: SWOT Analysis

Figure 78: Global: Magnetite Nanoparticles Industry: Value Chain Analysis

Figure 79: Global: Magnetite Nanoparticles Industry: Porter's Five Forces Analysis

## I would like to order

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

Product link: <https://marketpublishers.com/r/M2F7019E95DCEN.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](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/M2F7019E95DCEN.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



