

Global 3D Structure Lithium-ion Batteries Market Growth (Status and Outlook) 2024-2030

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Abstracts

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3D structure lithium-ion batteries are a novel type of battery design that incorporates three-dimensional electrode architectures to enhance energy storage capacity, power output, and overall performance. Unlike traditional flat, planar electrodes, 3D structure batteries utilize intricate nanoscale or microscale structures that increase the active surface area available for electrochemical reactions, thereby improving energy density and charge/discharge rates. These batteries often feature electrodes with hierarchical porous structures or nanostructured materials, allowing for more efficient ion transport and electron conduction pathways. The 3D design also promotes better electrolyte penetration and electrolyte-electrode contact, leading to improved cycling stability and longevity. These advancements hold promise for applications in portable electronics, electric vehicles, and energy storage systems, offering greater energy storage capabilities and faster charging times compared to conventional lithium-ion batteries.

The global 3D Structure Lithium-ion Batteries market size is projected to grow from US\$ million in 2024 to US\$ million in 2030; it is expected to grow at a CAGR of % from 2024 to 2030.

LPI (LP Information)' newest research report, the "3D Structure Lithium-ion Batteries Industry Forecast" looks at past sales and reviews total world 3D Structure Lithium-ion Batteries sales in 2022, providing a comprehensive analysis by region and market sector of projected 3D Structure Lithium-ion Batteries sales for 2023 through 2029. With 3D Structure Lithium-ion Batteries sales broken down by region, market sector and sub-sector, this report provides a detailed analysis in US\$ millions of the world 3D Structure Lithium-ion Batteries industry.

This Insight Report provides a comprehensive analysis of the global 3D Structure Lithium-ion Batteries landscape and highlights key trends related to product segmentation, company formation, revenue, and market share, latest development, and M&A activity. This report also analyses the strategies of leading global companies with a focus on 3D Structure Lithium-ion Batteries portfolios and capabilities, market entry strategies, market positions, and geographic footprints, to better understand these firms' unique position in an accelerating global 3D Structure Lithium-ion Batteries market.

This Insight Report evaluates the key market trends, drivers, and affecting factors shaping the global outlook for 3D Structure Lithium-ion Batteries and breaks down the forecast by Type, by Application, geography, and market size to highlight emerging pockets of opportunity. With a transparent methodology based on hundreds of bottom-up qualitative and quantitative market inputs, this study forecast offers a highly nuanced view of the current state and future trajectory in the global 3D Structure Lithium-ion Batteries.

United States market for 3D Structure Lithium-ion Batteries is estimated to increase from US\$ million in 2023 to US\$ million by 2030, at a CAGR of % from 2024 through 2030.

China market for 3D Structure Lithium-ion Batteries is estimated to increase from US\$ million in 2023 to US\$ million by 2030, at a CAGR of % from 2024 through 2030.

Europe market for 3D Structure Lithium-ion Batteries is estimated to increase from US\$ million in 2023 to US\$ million by 2030, at a CAGR of % from 2024 through 2030.

Global key 3D Structure Lithium-ion Batteries players cover Addionics, Prieto Battery, LionVolt, Enovix, QuantumScape, etc. In terms of revenue, the global two largest companies occupied for a share nearly % in 2023.

This report presents a comprehensive overview, market shares, and growth opportunities of 3D Structure Lithium-ion Batteries market by product type, application, key players and key regions and countries.

Segmentation by Type:

Interdigitated Structure

Concentric Structure

Aperiodic Structure

Segmentation by Application:

E-mobility

Energy Storage

Portable Electronics

Others

This report also splits the market by region:

Americas

United States

Canada

Mexico

Brazil

APAC

China

Japan

Korea

Southeast Asia

India

Australia

Europe

Germany

France

UK

Italy

Russia

Middle East & Africa

Egypt

South Africa

Israel

Turkey

GCC Countries

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Southeast Asia

India

Australia

Europe

Germany

France

UK

Italy

Russia

Middle East & Africa

Egypt

South Africa

Israel

Turkey

GCC Countries

The below companies that are profiled have been selected based on inputs gathered from primary experts and analyzing the company's coverage, product portfolio, its market penetration.

Addionics

Prieto Battery

LionVolt

Enovix

QuantumScape

StoreDot

Contents

1 SCOPE OF THE REPORT

- 1.1 Market Introduction
- 1.2 Years Considered
- 1.3 Research Objectives
- 1.4 Market Research Methodology
- 1.5 Research Process and Data Source
- 1.6 Economic Indicators
- 1.7 Currency Considered

2 EXECUTIVE SUMMARY

- 2.1 World Market Overview
 - 2.1.1 Global 3D Structure Lithium-ion Batteries Market Size 2025-2030
 - 2.1.2 3D Structure Lithium-ion Batteries Market Size CAGR by Region
- 2.2 3D Structure Lithium-ion Batteries Segment by Type
 - 2.2.1 Interdigitated Structure
 - 2.2.2 Concentric Structure
 - 2.2.3 Aperiodic Structure
- 2.3 3D Structure Lithium-ion Batteries Market Size by Type
 - 2.3.1 Global 3D Structure Lithium-ion Batteries Market Size Market Share by Type (2025-2030)
 - 2.3.2 Global 3D Structure Lithium-ion Batteries Market Size Growth Rate by Type (2025-2030)
- 2.4 3D Structure Lithium-ion Batteries Segment by Application
 - 2.4.1 E-mobility
 - 2.4.2 Energy Storage
 - 2.4.3 Portable Electronics
 - 2.4.4 Others
- 2.5 3D Structure Lithium-ion Batteries Market Size by Application (2025-2030)
 - 2.5.1 Global 3D Structure Lithium-ion Batteries Market Size Market Share by Application (2025-2030)
 - 2.5.2 Global 3D Structure Lithium-ion Batteries Market Size Growth Rate by Application (2025-2030)

3 3D STRUCTURE LITHIUM-ION BATTERIES KEY PLAYERS

- 3.1 Date of Key Players Enter into 3D Structure Lithium-ion Batteries
- 3.2 Key Players 3D Structure Lithium-ion Batteries Product Offered
- 3.3 Key Players 3D Structure Lithium-ion Batteries Funding/Investment Analysis
- 3.4 Funding/Investment
 - 3.4.1 Funding/Investment by Regions
 - 3.4.2 Funding/Investment by End-Industry
- 3.5 Key Players 3D Structure Lithium-ion Batteries Valuation & Market Capitalization
- 3.6 Key Players Mergers & Acquisitions, Expansion Plans
- 3.7 Market Ranking
- 3.8 New Product/Technology Launches
- 3.9 Partnerships, Agreements, and Collaborations
- 3.10 Mergers and Acquisitions

4 3D STRUCTURE LITHIUM-ION BATTERIES BY REGIONS

- 4.1 3D Structure Lithium-ion Batteries Market Size by Regions (2025-2030)
- 4.2 United States 3D Structure Lithium-ion Batteries Market Size Growth (2025-2030)
- 4.3 China 3D Structure Lithium-ion Batteries Market Size Growth (2025-2030)
- 4.4 Europe 3D Structure Lithium-ion Batteries Market Size Growth (2025-2030)
- 4.5 Rest of World 3D Structure Lithium-ion Batteries Market Size Growth (2025-2030)

5 UNITED STATES

- 5.1 United States 3D Structure Lithium-ion Batteries Market Size by Type (2025-2030)
- 5.2 United States 3D Structure Lithium-ion Batteries Market Size by Application (2025-2030)

6 EUROPE

- 6.1 Europe 3D Structure Lithium-ion Batteries Market Size by Type (2025-2030)
- 6.2 Europe 3D Structure Lithium-ion Batteries Market Size by Application (2025-2030)

7 CHINA

- 7.1 China 3D Structure Lithium-ion Batteries Market Size by Type (2025-2030)
- 7.2 China 3D Structure Lithium-ion Batteries Market Size by Application (2025-2030)

8 REST OF WORLD

8.1 Rest of World 3D Structure Lithium-ion Batteries Market Size by Type (2025-2030)

8.2 Rest of World 3D Structure Lithium-ion Batteries Market Size by Application (2025-2030)

8.3 Japan

8.4 South Korea

8.5 Southeast Asia

9 MARKET DRIVERS, CHALLENGES AND TRENDS

9.1 Market Drivers & Growth Opportunities

9.2 Market Challenges & Risks

9.3 Industry Trends

10 KEY INVESTORS IN 3D STRUCTURE LITHIUM-ION BATTERIES

10.1 Company A

10.1.1 Company A Company Details

10.1.2 Company Description

10.1.3 Companies Invested by Company A

10.1.4 Company A Key Development and Market Layout

10.2 Company B

10.2.1 Company B Company Details

10.2.2 Company Description

10.2.3 Companies Invested by Company B

10.2.4 Company B Key Development and Market Layout

10.3 Company C

10.3.1 Company C Company Details

10.3.2 Company Description

10.3.3 Companies Invested by Company C

10.3.4 Company C Key Development and Market Layout

10.4 Company D

10.5

11 KEY PLAYERS ANALYSIS

11.1 Addionics

11.1.1 Addionics Company Details

11.1.2 Addionics 3D Structure Lithium-ion Batteries Product Offered

11.1.3 Addionics 3D Structure Lithium-ion Batteries Market Size (2023 VS 2028)

- 11.1.4 Addionics Main Business Overview
- 11.1.5 Addionics News
- 11.2 Prieto Battery
 - 11.2.1 Prieto Battery Company Details
 - 11.2.2 Prieto Battery 3D Structure Lithium-ion Batteries Product Offered
 - 11.2.3 Prieto Battery 3D Structure Lithium-ion Batteries Market Size (2023 VS 2028)
 - 11.2.4 Prieto Battery Main Business Overview
 - 11.2.5 Prieto Battery News
- 11.3 LionVolt
 - 11.3.1 LionVolt Company Details
 - 11.3.2 LionVolt 3D Structure Lithium-ion Batteries Product Offered
 - 11.3.3 LionVolt 3D Structure Lithium-ion Batteries Market Size (2023 VS 2028)
 - 11.3.4 LionVolt Main Business Overview
 - 11.3.5 LionVolt News
- 11.4 Enovix
 - 11.4.1 Enovix Company Details
 - 11.4.2 Enovix 3D Structure Lithium-ion Batteries Product Offered
 - 11.4.3 Enovix 3D Structure Lithium-ion Batteries Market Size (2023 VS 2028)
 - 11.4.4 Enovix Main Business Overview
 - 11.4.5 Enovix News
- 11.5 QuantumScape
 - 11.5.1 QuantumScape Company Details
 - 11.5.2 QuantumScape 3D Structure Lithium-ion Batteries Product Offered
 - 11.5.3 QuantumScape 3D Structure Lithium-ion Batteries Market Size (2023 VS 2028)
 - 11.5.4 QuantumScape Main Business Overview
 - 11.5.5 QuantumScape News
- 11.6 StoreDot
 - 11.6.1 StoreDot Company Details
 - 11.6.2 StoreDot 3D Structure Lithium-ion Batteries Product Offered
 - 11.6.3 StoreDot 3D Structure Lithium-ion Batteries Market Size (2023 VS 2028)
 - 11.6.4 StoreDot Main Business Overview
 - 11.6.5 StoreDot News

12 RESEARCH FINDINGS AND CONCLUSION

List Of Tables

LIST OF TABLES

Table 1. 3D Structure Lithium-ion Batteries Market Size CAGR by Region (2025-2030) (\$ millions)

Table 2. Major Players of Interdigitated Structure

Table 3. Major Players of Concentric Structure

Table 4. Major Players of Aperiodic Structure

Table 5. Global Market Size by Type (2025-2030) (\$ millions)

Table 6. Global 3D Structure Lithium-ion Batteries Market Size Market Share by Type (2025-2030)

Table 7. Global 3D Structure Lithium-ion Batteries Market Size by Application (2025-2030) (\$ millions)

Table 8. Global 3D Structure Lithium-ion Batteries Market Size Market Share by Application (2025-2030)

Table 9. Date of Global Key Players Enter into 3D Structure Lithium-ion Batteries Market

Table 10. Global Key Players 3D Structure Lithium-ion Batteries Product Offered

Table 11. Key Players 3D Structure Lithium-ion Batteries Funding/Investment (Million USD)

Table 12. Funding/Investment by Regions

Table 13. Funding/Investment by End-Industry

Table 14. Key Players 3D Structure Lithium-ion Batteries Valuation & Market Capitalization (Million USD)

Table 15. Key Players Mergers & Acquisitions, Expansion Plans

Table 16. 3D Structure Lithium-ion Batteries New Product/Technology Launches

Table 17. 3D Structure Lithium-ion Batteries Industry Partnerships, Agreements, and Collaborations

Table 18. 3D Structure Lithium-ion Batteries Industry Mergers and Acquisitions

Table 19. Global 3D Structure Lithium-ion Batteries Market Size by Regions 2025-2030 (\$ millions)

Table 20. Global 3D Structure Lithium-ion Batteries Market Size Market Share by Regions 2025-2030

Table 21. United States 3D Structure Lithium-ion Batteries Market Size by Type (2025-2030) (\$ millions)

Table 22. United States 3D Structure Lithium-ion Batteries Market Size Market Share by Type (2025-2030)

Table 23. United States 3D Structure Lithium-ion Batteries Market Size by Application

(2025-2030) (\$ millions)

Table 24. United States 3D Structure Lithium-ion Batteries Market Size Market Share by Application (2025-2030)

Table 25. Europe 3D Structure Lithium-ion Batteries Market Size by Type (2025-2030) (\$ millions)

Table 26. Europe 3D Structure Lithium-ion Batteries Market Size Market Share by Type (2025-2030)

Table 27. Europe 3D Structure Lithium-ion Batteries Market Size by Application (2025-2030) (\$ millions)

Table 28. Europe 3D Structure Lithium-ion Batteries Market Size Market Share by Application (2025-2030)

Table 29. China 3D Structure Lithium-ion Batteries Market Size by Type (2025-2030) (\$ millions)

Table 30. China 3D Structure Lithium-ion Batteries Market Size Market Share by Type (2025-2030)

Table 31. China 3D Structure Lithium-ion Batteries Market Size by Application (2025-2030) (\$ millions)

Table 32. China 3D Structure Lithium-ion Batteries Market Size Market Share by Application (2025-2030)

Table 33. Rest of World 3D Structure Lithium-ion Batteries Market Size by Type (2025-2030) (\$ millions)

Table 34. Rest of World 3D Structure Lithium-ion Batteries Market Size Market Share by Type (2025-2030)

Table 35. Rest of World 3D Structure Lithium-ion Batteries Market Size by Application (2025-2030) (\$ millions)

Table 36. Rest of World 3D Structure Lithium-ion Batteries Market Size Market Share by Application (2025-2030)

Table 37. Key Market Drivers & Growth Opportunities of 3D Structure Lithium-ion Batteries

Table 38. Key Market Challenges & Risks of 3D Structure Lithium-ion Batteries

Table 39. Key Industry Trends of 3D Structure Lithium-ion Batteries

Table 40. Company A Company Details

Table 41. Companies Invested by Company A

Table 42. Company A Key Development and Market Layout

Table 43. Company B Company Details

Table 44. Companies Invested by Company B

Table 45. Company B Key Development and Market Layout

Table 46. Company C Company Details

Table 47. Companies Invested by Company C

Table 48. Company C Key Development and Market Layout

Table 49. Addionics Basic Information, Head Office, Major Market Areas and Its Competitors

Table 50. Addionics 3D Structure Lithium-ion Batteries Market Size (2023 VS 2028)

Table 51. Prieto Battery Basic Information, Head Office, Major Market Areas and Its Competitors

Table 52. Prieto Battery 3D Structure Lithium-ion Batteries Market Size (2023 VS 2028)

Table 53. LionVolt Basic Information, Head Office, Major Market Areas and Its Competitors

Table 54. LionVolt 3D Structure Lithium-ion Batteries Market Size (2023 VS 2028)

Table 55. Enovix Basic Information, Head Office, Major Market Areas and Its Competitors

Table 56. Enovix 3D Structure Lithium-ion Batteries Market Size (2023 VS 2028)

Table 57. QuantumScape Basic Information, Head Office, Major Market Areas and Its Competitors

Table 58. QuantumScape 3D Structure Lithium-ion Batteries Market Size (2023 VS 2028)

Table 59. StoreDot Basic Information, Head Office, Major Market Areas and Its Competitors

Table 60. StoreDot 3D Structure Lithium-ion Batteries Market Size (2023 VS 2028)

List Of Figures

LIST OF FIGURES

- Figure 1. Picture of 3D Structure Lithium-ion Batteries
- Figure 2. 3D Structure Lithium-ion Batteries Report Years Considered
- Figure 3. Research Objectives
- Figure 4. Research Methodology
- Figure 5. Research Process and Data Source
- Figure 6. Global 3D Structure Lithium-ion Batteries Market Size Growth Rate 2025-2030 (\$ millions)
- Figure 7. 3D Structure Lithium-ion Batteries Market Size by Region (2024 & 2030) (\$ millions)
- Figure 8. Global 3D Structure Lithium-ion Batteries Market Size Market Share by Type (2025-2030)
- Figure 9. Global Interdigitated Structure Market Size Growth Rate
- Figure 10. Global Concentric Structure Market Size Growth Rate
- Figure 11. 3D Structure Lithium-ion Batteries in E-mobility
- Figure 12. Global 3D Structure Lithium-ion Batteries Market: E-mobility (2025-2030) (\$ millions)
- Figure 13. 3D Structure Lithium-ion Batteries in Energy Storage
- Figure 14. Global 3D Structure Lithium-ion Batteries Market: Energy Storage (2025-2030) (\$ millions)
- Figure 15. 3D Structure Lithium-ion Batteries in Portable Electronics
- Figure 16. Global 3D Structure Lithium-ion Batteries Market: Portable Electronics (2025-2030) (\$ millions)
- Figure 17. 3D Structure Lithium-ion Batteries in Others
- Figure 18. Global 3D Structure Lithium-ion Batteries Market: Others (2025-2030) (\$ millions)
- Figure 19. Global 3D Structure Lithium-ion Batteries Market Size Market Share by Application (2025-2030)
- Figure 20. Global 3D Structure Lithium-ion Batteries Market Size in E-mobility Growth Rate
- Figure 21. Global 3D Structure Lithium-ion Batteries Market Size in Energy Storage Growth Rate
- Figure 22. Funding/Investment
- Figure 23. Global 3D Structure Lithium-ion Batteries Market Size Market Share by Regions 2025-2030
- Figure 24. United States 3D Structure Lithium-ion Batteries Market Size 2025-2030 (\$

millions)

Figure 25. China 3D Structure Lithium-ion Batteries Market Size 2025-2030 (\$ millions)

Figure 26. Europe 3D Structure Lithium-ion Batteries Market Size 2025-2030 (\$ millions)

Figure 27. Rest of World 3D Structure Lithium-ion Batteries Market Size 2025-2030 (\$ millions)

Figure 28. United States 3D Structure Lithium-ion Batteries Consumption Market Share by Type in 2028

Figure 29. United States 3D Structure Lithium-ion Batteries Market Size Market Share by Application in 2028

Figure 30. Europe 3D Structure Lithium-ion Batteries Consumption Market Share by Type in 2028

Figure 31. Europe 3D Structure Lithium-ion Batteries Market Size Market Share by Application in 2028

Figure 32. China 3D Structure Lithium-ion Batteries Consumption Market Share by Type in 2028

Figure 33. China 3D Structure Lithium-ion Batteries Market Size Market Share by Application in 2028

Figure 34. Rest of World 3D Structure Lithium-ion Batteries Consumption Market Share by Type in 2028

Figure 35. Rest of World 3D Structure Lithium-ion Batteries Market Size Market Share by Application in 2028

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