

Global Silicon Wafers Market: Size, Trends & Forecasts (2018-2022)

October 2018



Global Silicon Wafers Market: Coverage

Executive Summary and Scope

Introduction/Market Overview

Global Market Analysis

Regional Market Analysis

Dynamics

Competitive Landscape

Company Profiling

Global Silicon Wafers Market: Coverage

Scope of the Report

Attributes	Details
Title	Global Silicon Wafers Market: Size, Trends & Forecasts (2018-2022)
Coverage	Global and Regional
Regional Coverage	APAC and North America
Market Influencing Variables	Growth Drivers, Challenges, Market Trends
Forecast Period of Market	2018-2022
Competition in the Market	Dominated
Key Players	Taiwan Semiconductor Manufacturing Company, Limited (TSMC), Ferrotec Holdings Corporation, SUMCO Corporation and Shin-Etsu Chemical Co., Ltd.

Global Silicon Wafers Market

Executive Summary

A wafer is a thin slice of semiconductor material that is formed with highly pure single crystalline material that is almost defect free. The wafer undergoes many micro fabrication process steps during formation. Wafers are used in various devices like, in electronics and photovoltaic for the fabrication of integrated circuits and for the solar cells, etc.

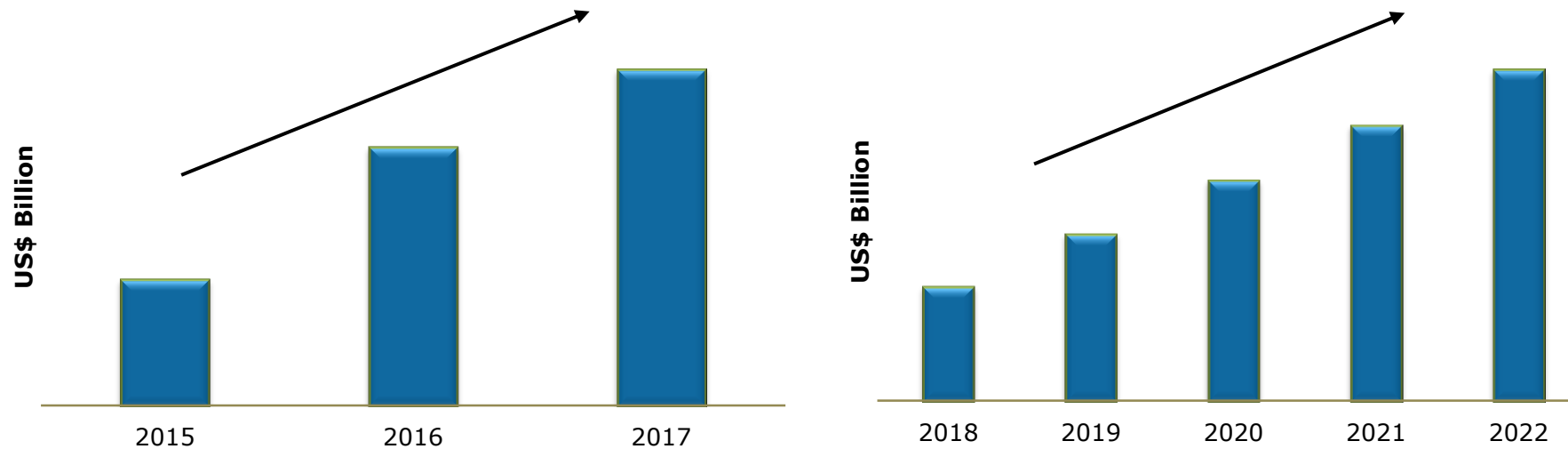
Silicon wafers are the most popular type of wafer. Wafers are also made using other compound, like III-V or II-VI materials, Gallium arsenide (GaAs), a III-V semiconductor etc. Silicon wafers are the most prevalent in the electronics industry and have various other applications like, manufacturing semiconductors, artificial intelligence, integrated circuits, home appliances, automobile etc. Silicon wafers are majorly used as there is abundance of silicon in nature, and silicon is hard and highly efficient. Silicon wafers also conduct electricity well at high temperatures and are thermally stable. But, silicon wafers are also brittle, have short lifecycles and produce toxic substances in manufacturing process.

Silicon wafers are segmented on the basis of type, fabrication and size. Silicon wafers are of six types: Polished Wafers, Hydrogen Annealed Wafer, Hyper Hydrogen Annealed Wafer, Epitaxial Wafers, Diffused Wafers and Silicon-On-Insulator (SOI) Wafer. On the basis of fabrication, silicon wafers are segmented as: Undoped Silicon Wafer and Doped Silicon Wafer (P-type Silicon Wafer and N-type Silicon Wafer). Silicon wafers are of various sizes: Less than 200mm, 200mm, 300mm and 450mm.

The global silicon wafers market has increased at a significant CAGR over the years and projections are made that the market would rise in the next four years i.e. 2018-2022 tremendously. The silicon wafers market is expected to increase due to increasing demand from memory sectors, rising automotive production, rising demand for solar photovoltaic power etc. Yet the market faces some challenges such as high cost, high barriers to entry, environmental regulations, etc.

Silicon Wafers Market: Global Analysis

Global Silicon Wafers Market by Value



CAGRs

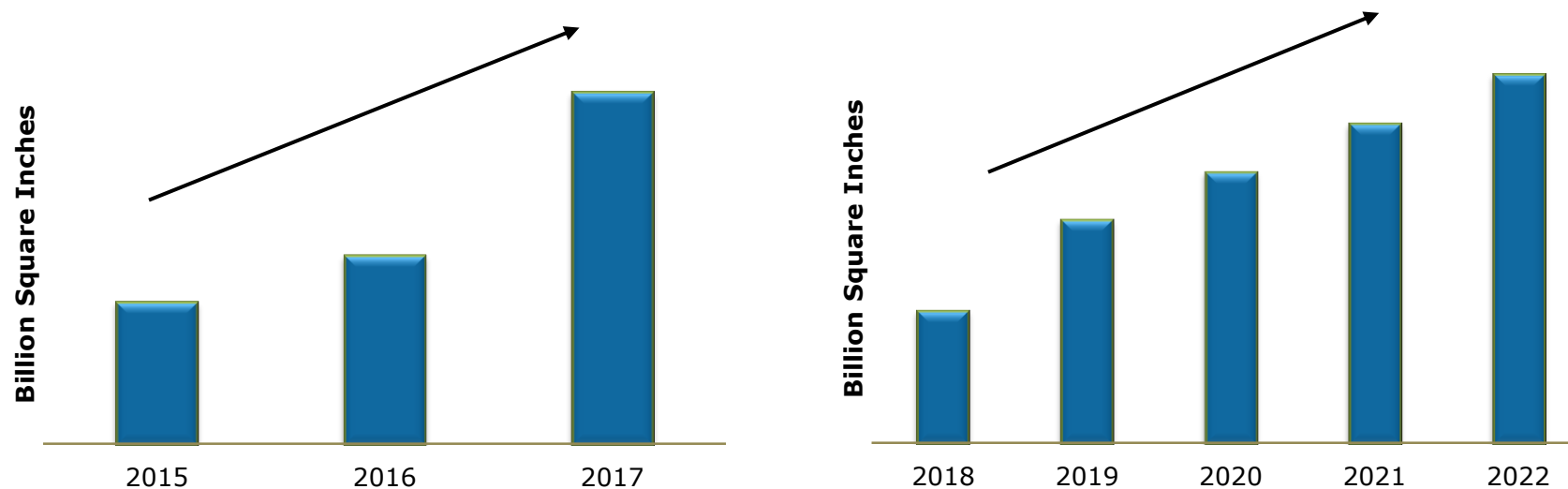
2018-2022

xx%

The global silicon wafers market valued at US\$.... billion in 2017, increased as compared to US\$... billion in 2016. The global silicon wafers market is anticipated to grow at CAGR of ...% from 2018-2022, and reach up to US\$... billion by 2022 from US\$... billion in 2018.

Silicon Wafers Market: Global Analysis

Global Silicon Wafers Market by Shipment



CAGR_s

2018-2022

xx%

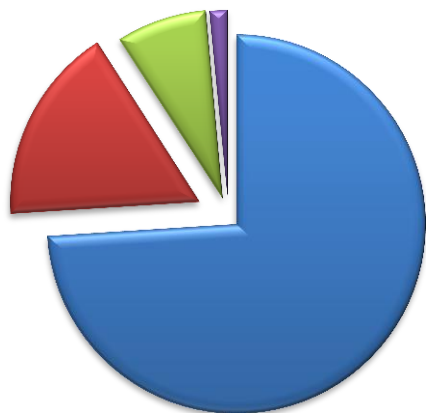
The global silicon wafers shipment was ...billion square inches in 2017, increased as compared to ... billion square inches in 2016. The global silicon wafers shipment is anticipated to grow at CAGR of ...% from 2018-2022, and reach up to ... billion square inches by 2022 from ... billion square inches in 2018.

Silicon Wafers Market: Global Analysis

Global Silicon Wafers Market by Region; 2017



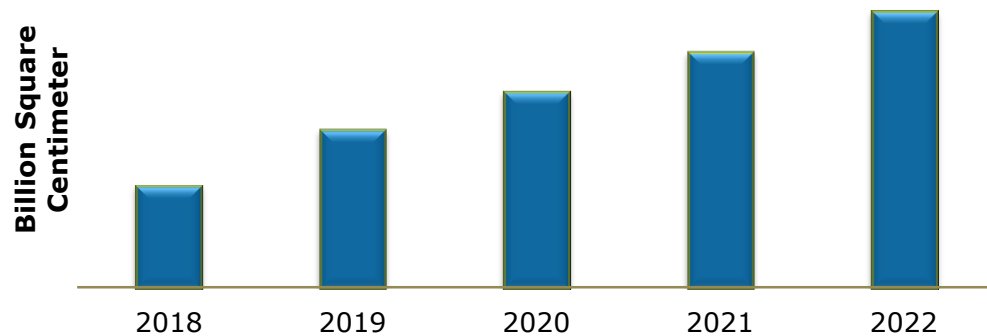
Global Silicon Wafers Market by Segments; 2017



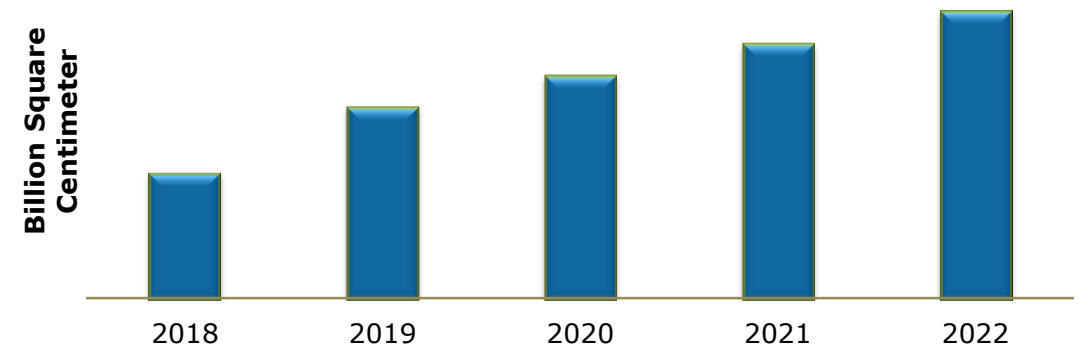
Segments	Share	CAGRs
300mm Silicon Wafers	xx%	xx%
200mm Silicon Wafers	xx%	xx%
Less than 200mm Silicon Wafers	xx%	xx%
450mm Silicon Wafers	xx%	xx%

Silicon Wafers Market: Demand Analysis

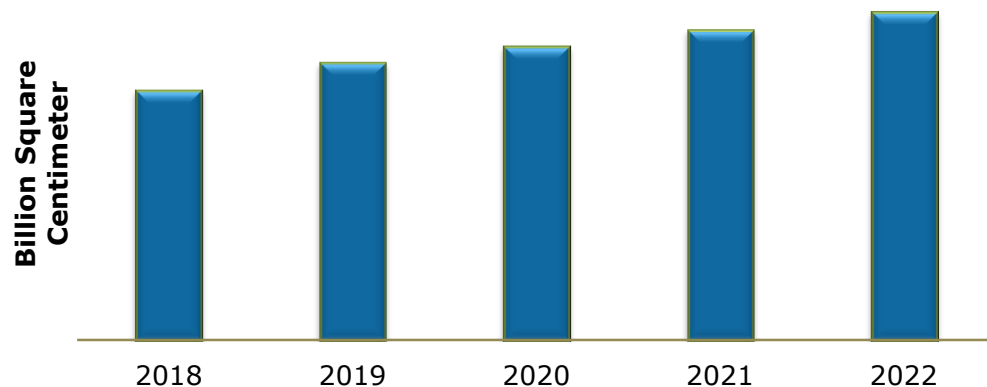
Computing Silicon Wafers Market by Demand



Mobile Phones Silicon Wafers Market by Demand



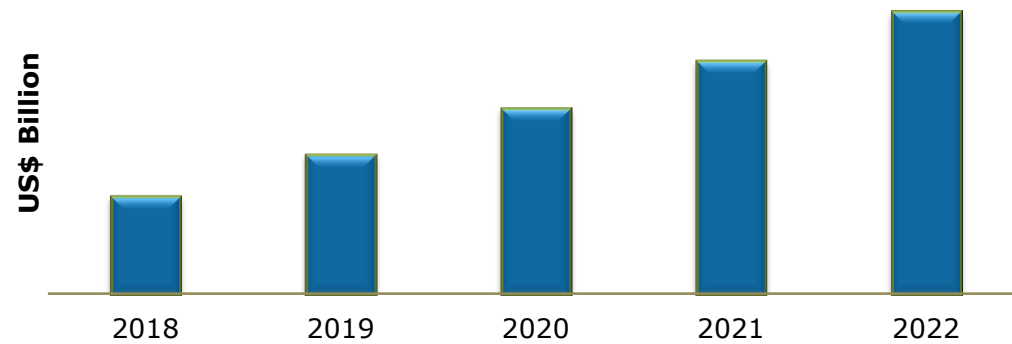
Industrial Silicon Wafers Market by Demand



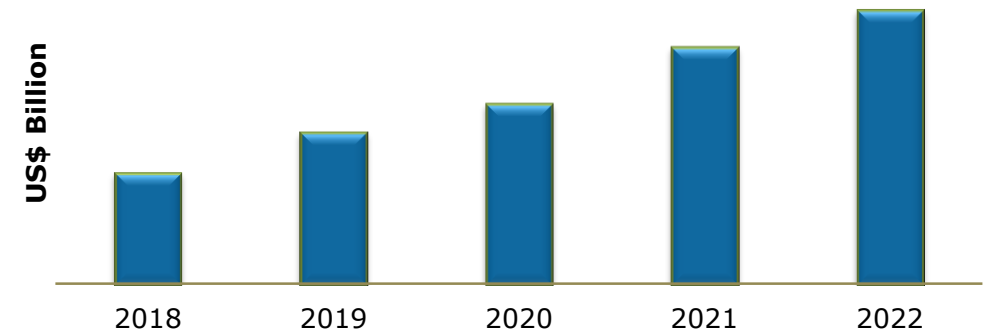
Applications	CAGR
	2018-2022
Computing	xx%
Mobile Phones	xx%
Industrial	xx%
Automotive	xx%

Silicon Wafers Market: Segment Analysis

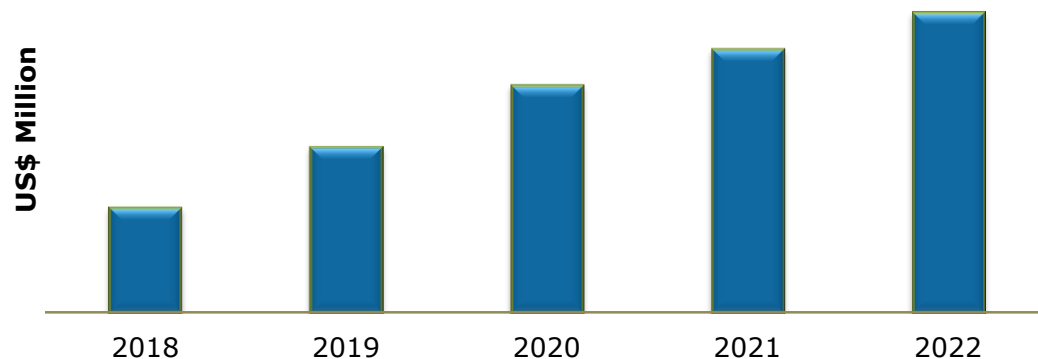
3000mm Silicon Wafers Market by Value



200mm Silicon Wafers Market by Value



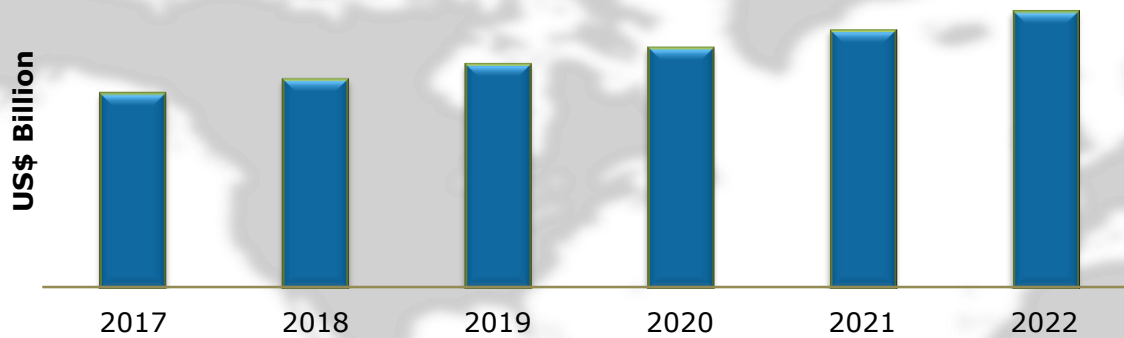
Less than 200mm Market by Value



Segments	CAGR
	2018-2022
300mm Silicon Wafers	xx%
200mm Silicon Wafers	xx%
Less than 200mm Silicon Wafers	xx%
450mm Silicon Wafers	xx%

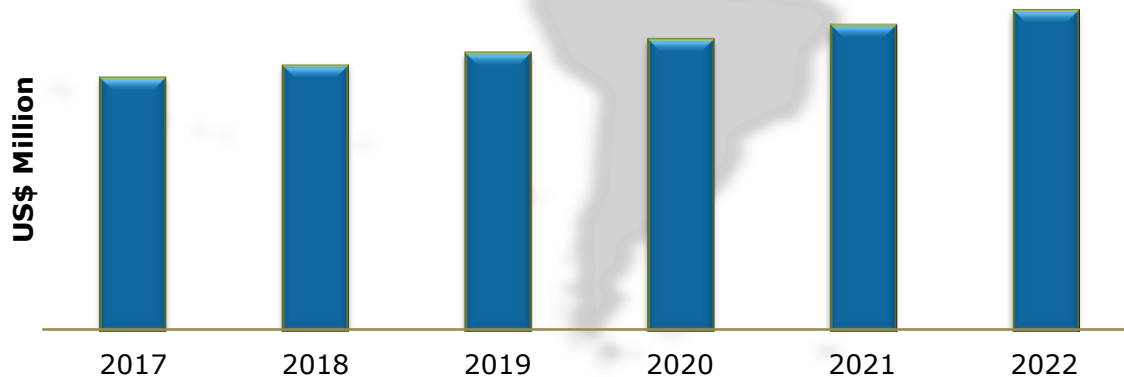
Silicon Wafers Market: Regional Analysis

APAC Silicon Wafers Market by Value

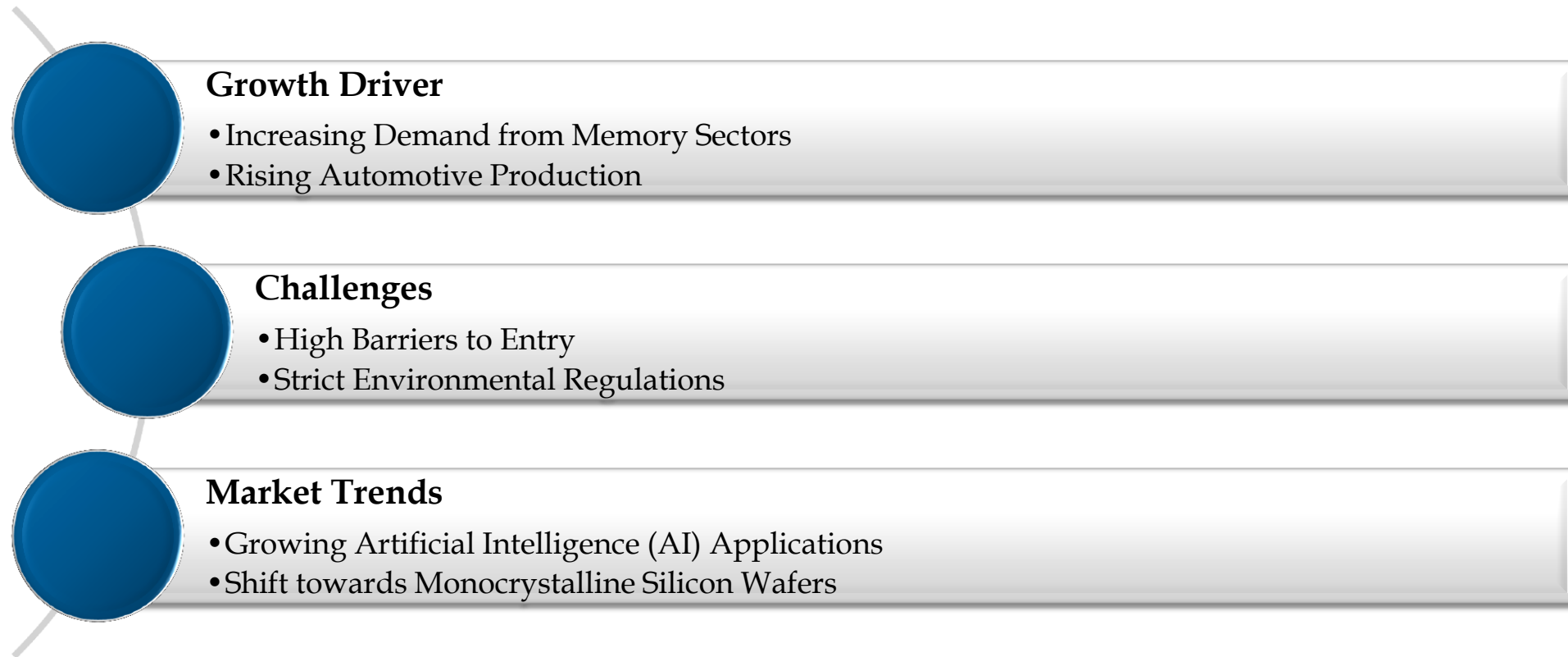


Region	CAGR
	2018-2022
APAC	xx%
North America	xx%

North America Silicon Wafers Market by Value



Silicon Wafers Market: Dynamics



Silicon Wafers Market: Competitive Landscape

Players Profiled

- Taiwan Semiconductor Manufacturing Company, Limited (TSMC)



- Ferrotec Holdings Corporation



- SUMCO Corporation



- Shin-Etsu Chemical Co., Ltd.



Note: The graphs on this slide are only for sample representation.