

OPEN CASCADE TECHNOLOGY

IN RESEARCH & SCIENCE
PUBLICATIONS

REPORT
2015 - 2020





CONTENT

OCCT - BASED ARTICLES EXECUTIVE SUMMARY	4
NUMBER OF ARTICLES BY YEAR	5
RESEARCH ARTICLES BY COUNTRY	6
RESEARCH ORGANIZATIONS BY COUNTRY. PART 1	8
RESEARCH ORGANIZATIONS BY COUNTRY. PART 2	9
ARTICLES BY APPLICATION AREA. PART 1	10
ARTICLES BY APPLICATION AREA. PART 2	11
MOST ACTIVE ORGANIZATIONS BY APPLICATION AREA	12
APPLICATIONS AREAS BY COUNTRY	14
OCCT - BASED RESEARCH: TOP-15 ORGANIZATIONS	15
OCCT - BASED RESEARCH: COMMERCIAL COMPANIES	15
ABOUT US	16

OCCT-BASED ARTICLES EXECUTIVE SUMMARY



48

countries

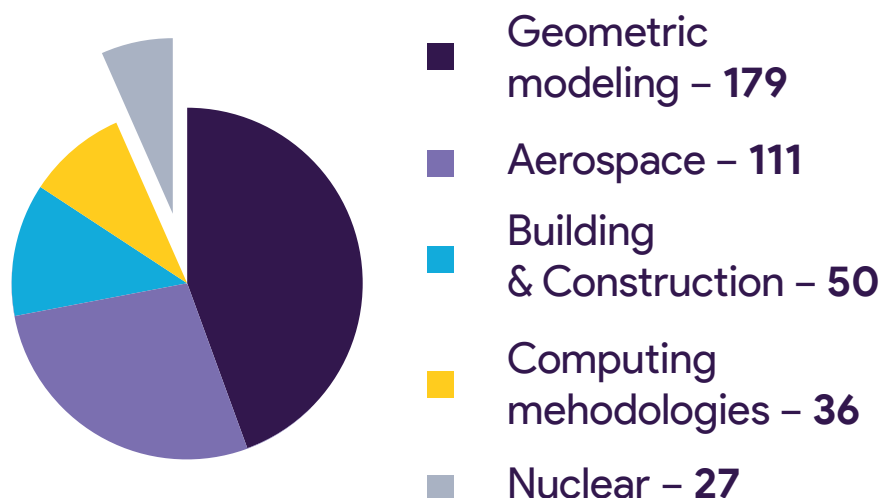
639

articles for
2015-2020

424

organizations

TOP 5 APPLICATION AREAS



342

universities

44

other
research
organizations

38

commercial
organizations

SUMMARY

We at Open Cascade would like to express gratitude to the scientists all over the world who address Open CASCADE Technology (OCCT) in their research projects!

Forecasted data is based on the results of research articles analysis from scientific databases (Web of Science, ScienceDirect, Scopus, GoogleScholar).

NUMBER OF ARTICLES BY YEAR

100

2015

98

2016

109

2017

123

2018

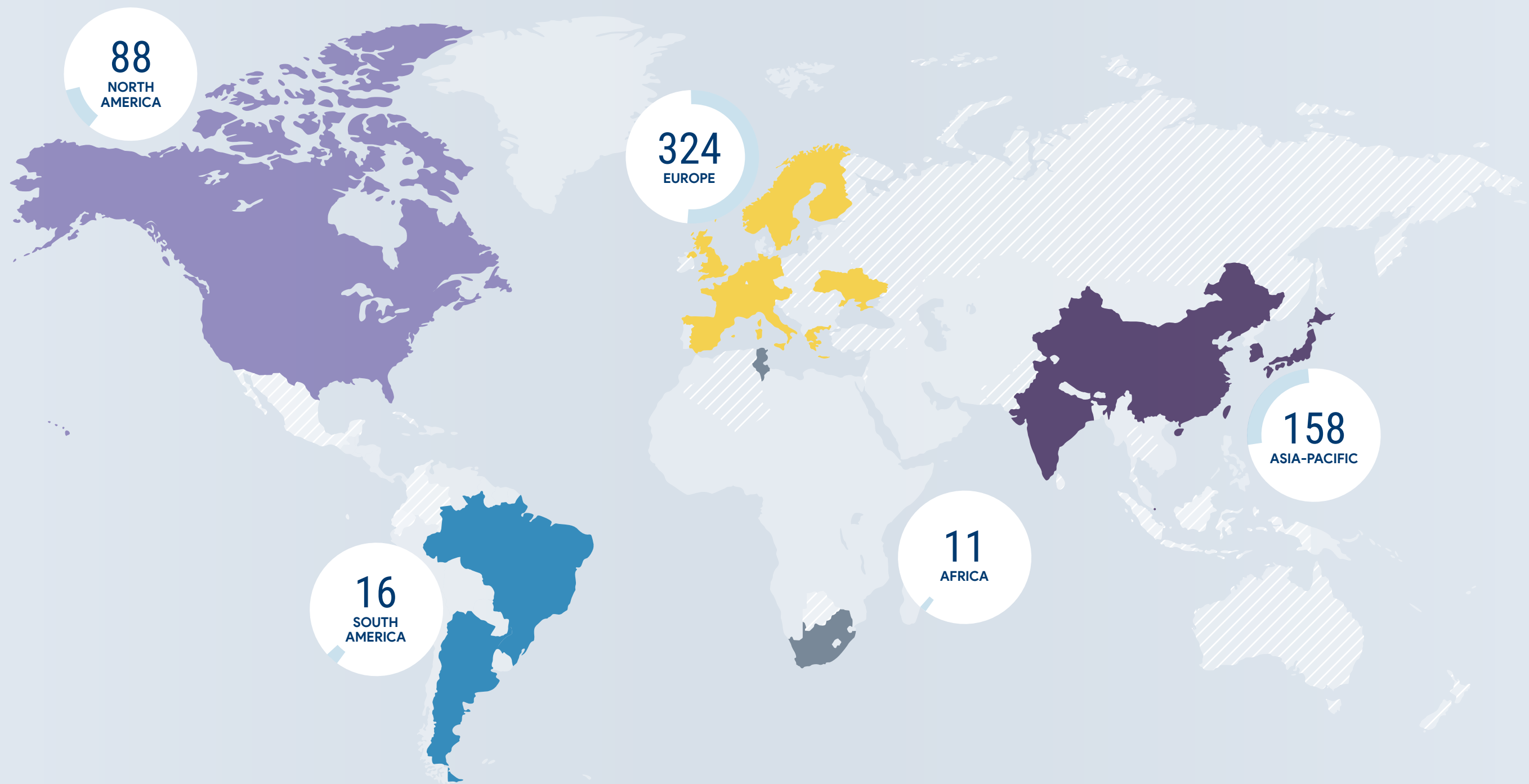
117

2019

91

2020

RESEARCH ARTICLES BY COUNTRY



NUMBER OF ARTICLES BY COUNTRY

- | | | | | |
|------------------------|-------------------|--------------------|---------------------------------|--------------------|
| 📍 Germany – 101 | 📍 Finland – 8 | 📍 China – 87 | 📍 United States of America – 67 | 📍 Tunisia – 6 |
| 📍 United Kingdom – 53 | 📍 Sweden – 6 | 📍 South Korea – 40 | 📍 Canada – 21 | 📍 South Africa – 5 |
| 📍 France – 44 | 📍 Greece – 5 | 📍 India – 10 | | |
| 📍 Italy – 39 | 📍 Austria – 5 | 📍 Japan – 10 | | |
| 📍 Spain – 27 | 📍 Switzerland – 5 | 📍 Taiwan – 6 | 📍 Argentina – 10 | |
| 📍 Belgium – 11 | 📍 Norway – 5 | 📍 Singapore – 5 | 📍 Brazil – 6 | |
| 📍 the Netherlands – 10 | 📍 Ukraine – 5 | | | |

OTHERS – 42

Mexico, Indonesia, Poland, Romania, Russia, Slovenia, Australia, Turkey, Cuba, Pakistan, Colombia, Ecuador, Thailand, Croatia, Hungary, Botswana, Algeria, Ireland, Israel, Lithuania, Malaysia, Sri Lanka, New Zealand, Latvia

RESEARCH ORGANIZATIONS BY COUNTRY. PART 1



RESEARCH ORGANIZATIONS BY COUNTRY. PART 2



UNIVERSITY OF
Southampton



Queen Mary
University of London

UNIVERSITY OF
EXETER



CARDIFF
UNIVERSITY
PRIFYSGOL
CARDIFF



QUEEN'S
UNIVERSITY
BELFAST



UNIVERSITY OF
SURREY



Inria



cea



SORBONNE
UNIVERSITÉ



université
PARIS-SACLAY



KiSTi



KICT 한국건설기술연구원
Korea Institute of Construction and Building Technology



POLITECNICO
MILANO 1863



UNIVERSITÀ DEGLI STUDI DI NAPOLI
FEDERICO II



UNIVERSITÀ
DEGLI STUDI
DI BERGAMO



SISSA



Universidad
Zaragoza



ESS
Bilbao



Universidad
de La Laguna



Université du Québec
à Trois-Rivières



UNIVERSITY OF
TORONTO



ÉTS
Le génie pour l'industrie



ARTICLES BY APPLICATION AREA. PART 1



GEOMETRIC MODELING – 179



AEROSPACE – 111



BUILDING & CONSTRUCTION – 50



**COMPUTING
METHODOLOGIES – 36**



NUCLEAR – 27



MEDICINE – 28

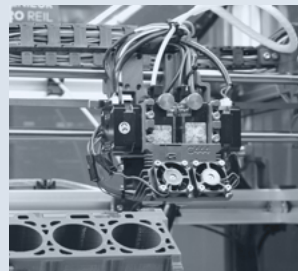
ARTICLES BY APPLICATION AREA. PART 2



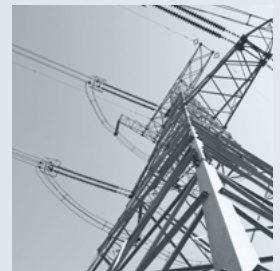
CAM - 26



MECHANICS - 16



**ADDITIVE
MANUFACTURING - 15**



**ELECTRICAL
ENGINEERING - 13**



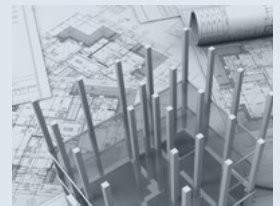
ROBOTICS - 23



SHIPBUILDING - 13



OTHERS - 13



ENGINEERING - 11



PHYSICS - 20



HYDROINFORMATICS - 10



ENERGY - 8



IT - 6



MILITARY - 6



AUTOMOTIVE - 8



AR & VR - 8



**STEEL
CASTING - 5**



MANAGEMENT - 5



GEOLOGY - 4

OTHERS INCLUDE



WELDING



LASER



**ARTIFICIAL
INTELLIGENCE**



ZOOLOGY



IOT



E-COMMERCE



**DESIGN
LANGUAGES**



ASTRONOMY

MOST ACTIVE ORGANIZATIONS BY APPLICATION AREA



GEOMETRIC MODELING



AEROSPACE



BUILDING & CONSTRUCTION



ROBOTICS



3D CAM



NUCLEAR



COMPUTING METHODOLOGIES



MEDICINE

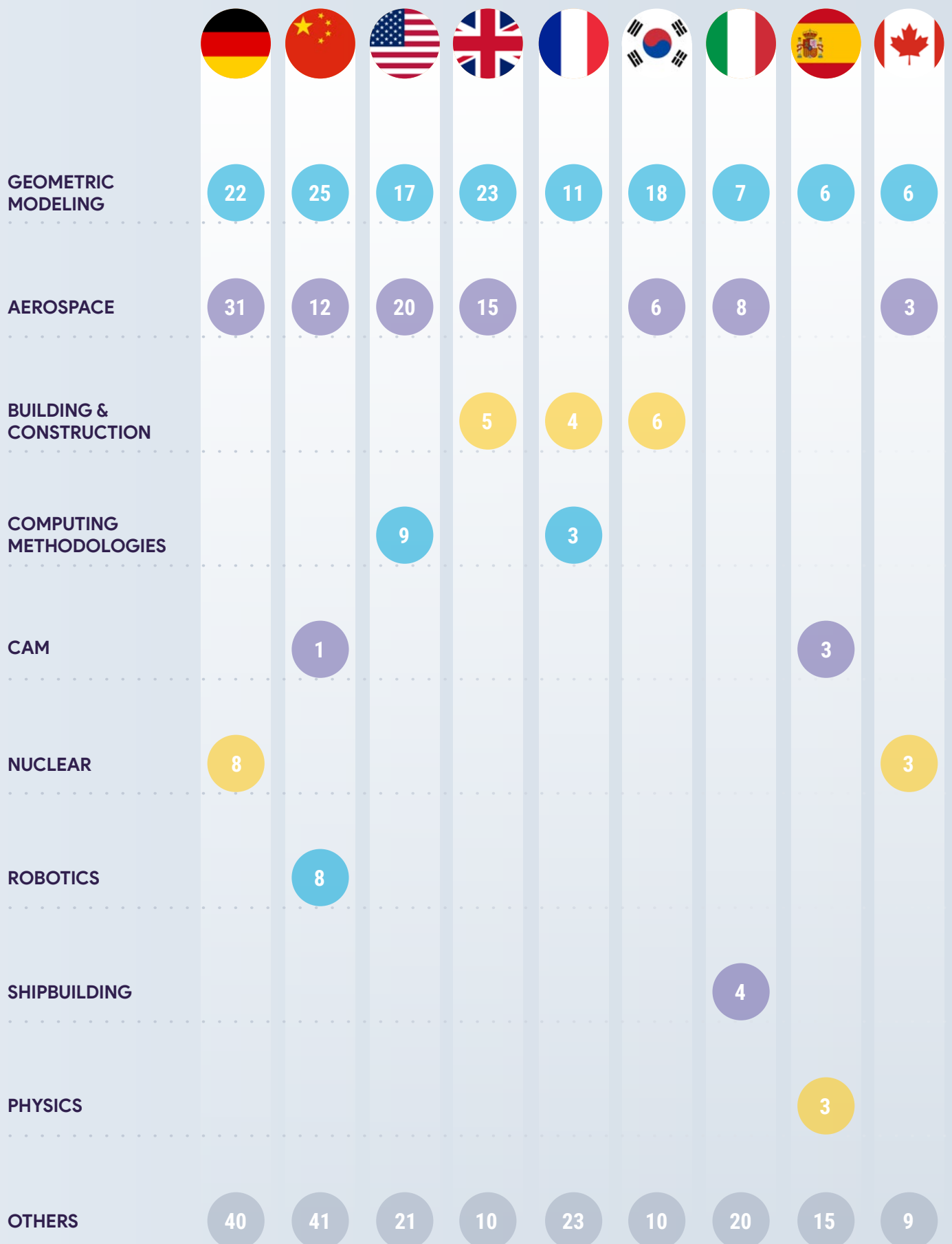


PHYSICS

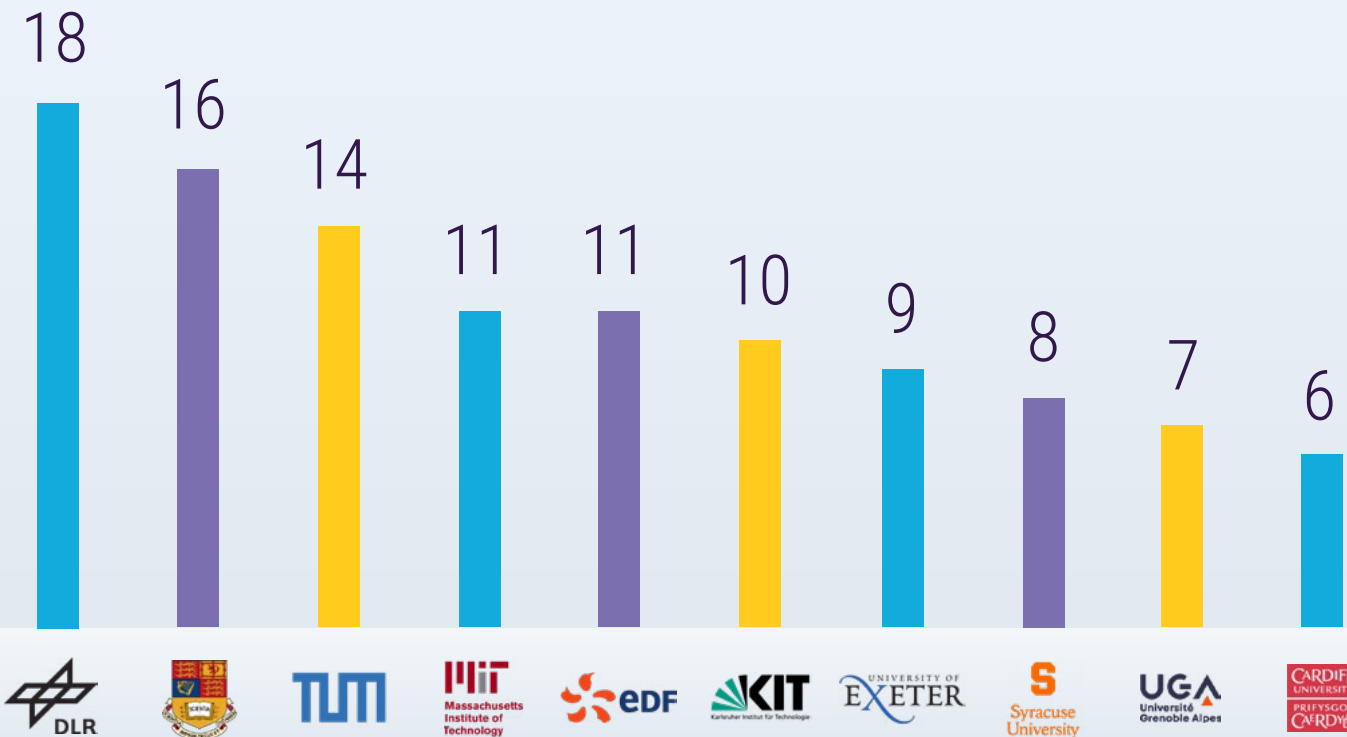


APPLICATION AREAS BY COUNTRY

APPLICATION AREAS BY COUNTRY



OCCT-BASED RESEARCH: TOP-15 ORGANIZATIONS



OCCT-BASED RESEARCH: COMMERCIAL COMPANIES



ABOUT US

Open CASCADE Technology (OCCT) is the only open-source full-scale 3D geometry library. Originally developed as an industrial CAD kernel, OCCT is widely used for the development of specialized programs dealing with the following engineering and mechanical domains: 3D modeling (CAD), manufacturing (CAM), numerical simulation (CAE), measurement equipment (CMM), and quality control (CAQ). Since its publication in 1999, OCCT has been successfully used in numerous projects from all industrial fields. It includes a set of C++ class libraries providing services for 3D surface and solid modeling, visualization, data exchange, and rapid application development. This report represents wider OCCT usage not only in commercial projects but also in academic domain.

Learn more about Open CASCADE Technology at dev.opencascade.org



Over the course of 20 years, Open Cascade company supports OCCT providing community with the opportunity to develop 3D CAD projects. Open Cascade is a software development company which is focused on digital transformation of industries through the use of 3D technologies. The company is a part of the Capgemini Engineering. Open Cascade offers a wide range of high-performance proprietary 3D software tools both open-source and commercial.

Learn more about Open Cascade at www.opencascade.com

