CSA project InCoQFlag

Nurturing QT international collaboration:

Preliminary international landscape of QT competences

Partners

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CEA (FR) Coord.
NCN (PL)
ICFO (SP)

TNO team

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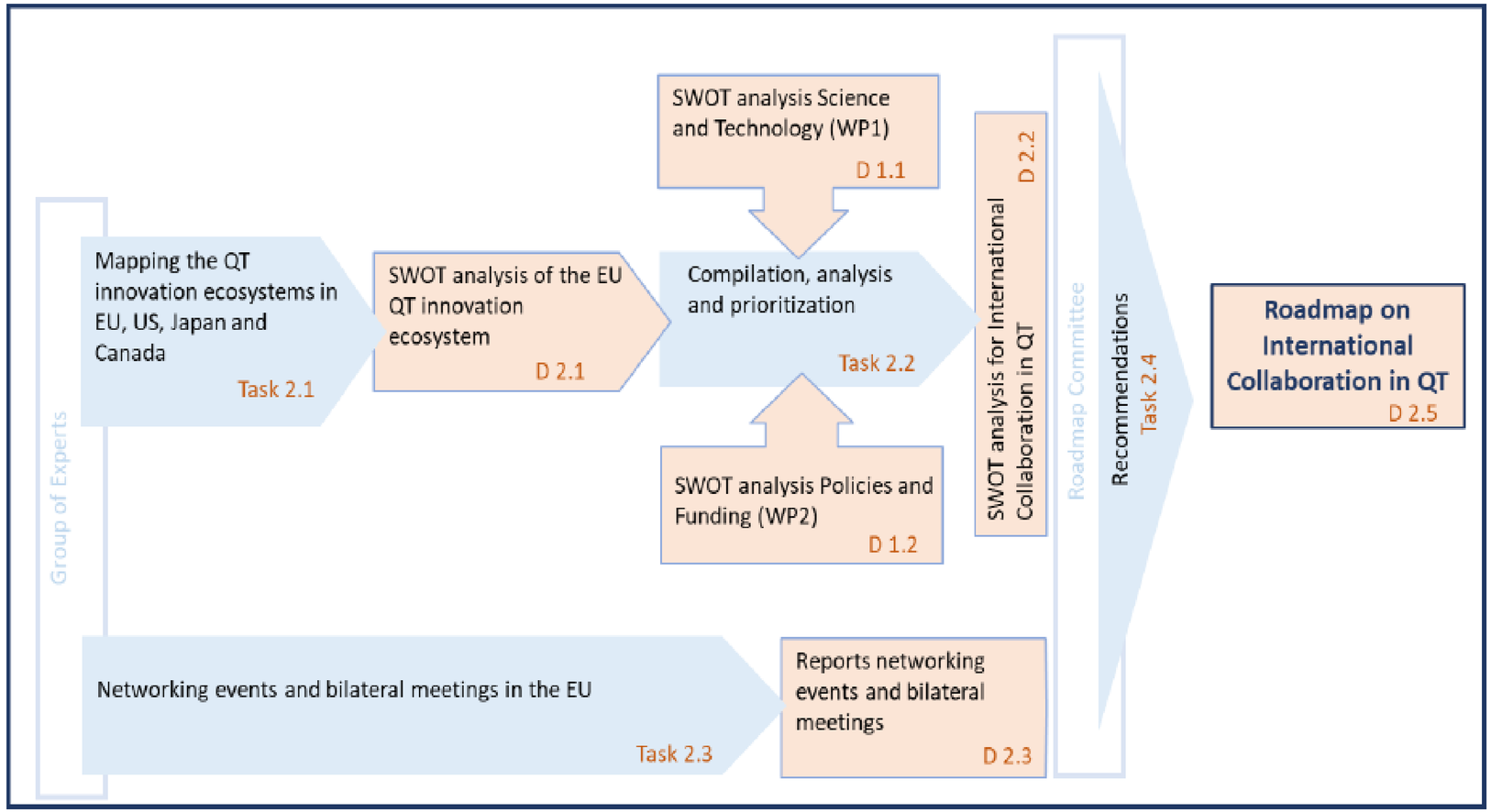
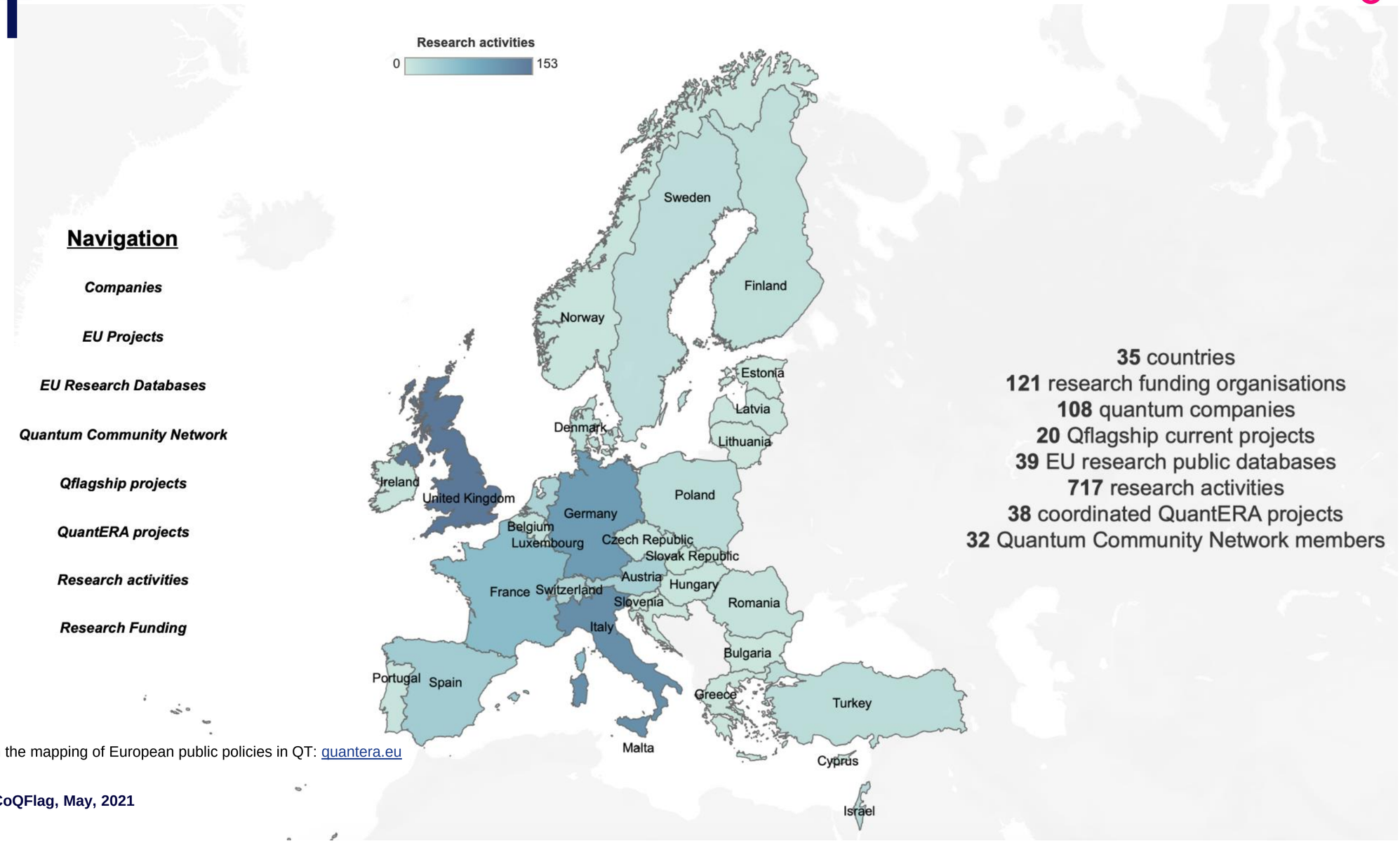
What are we doing?

Mapping:

- Competences;
- IP, standards;
- Access to infra;
- Skills needs, and
- Suporting Strategies and Policies

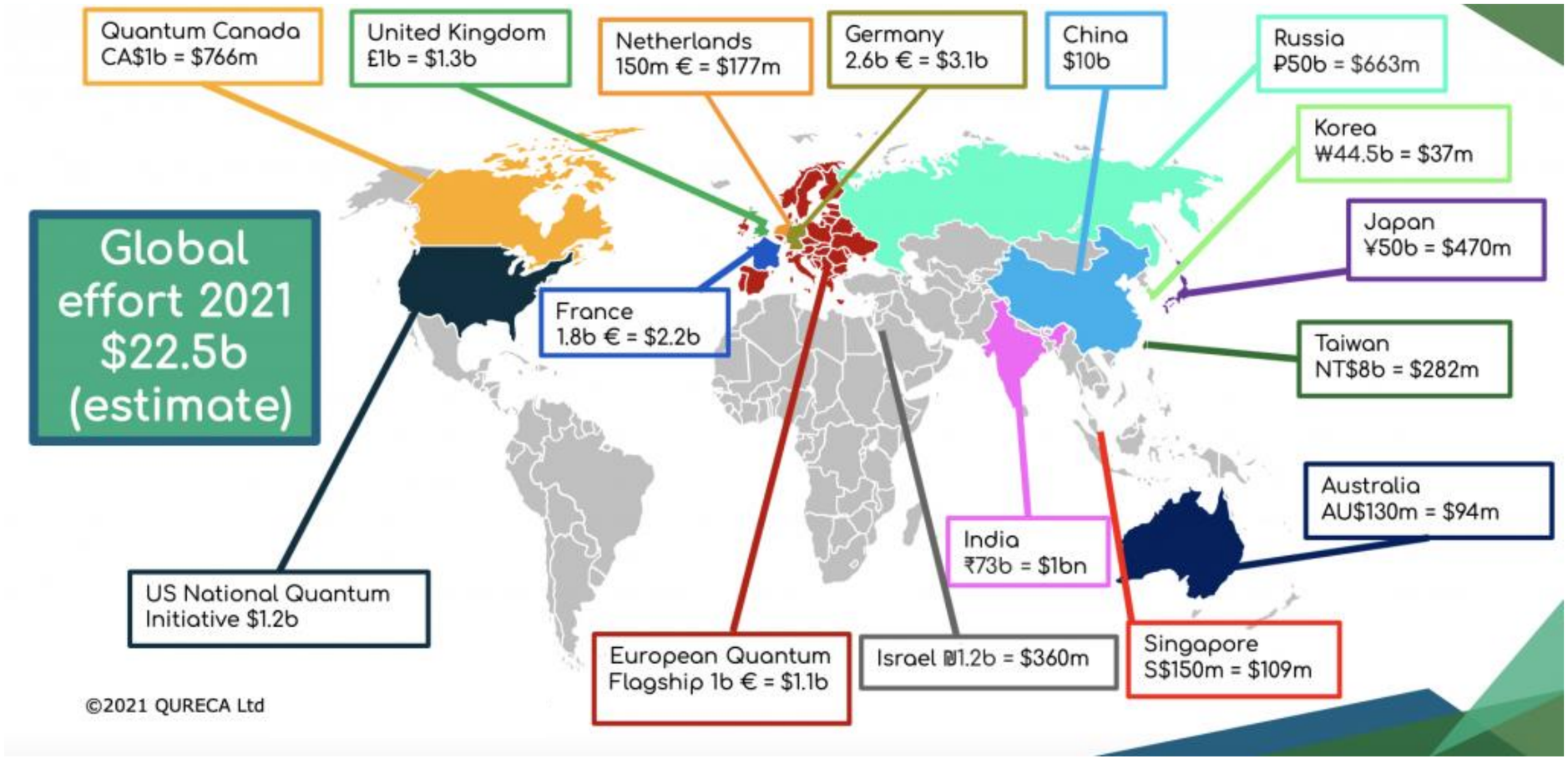


Mapping of EU Public Policies in QT

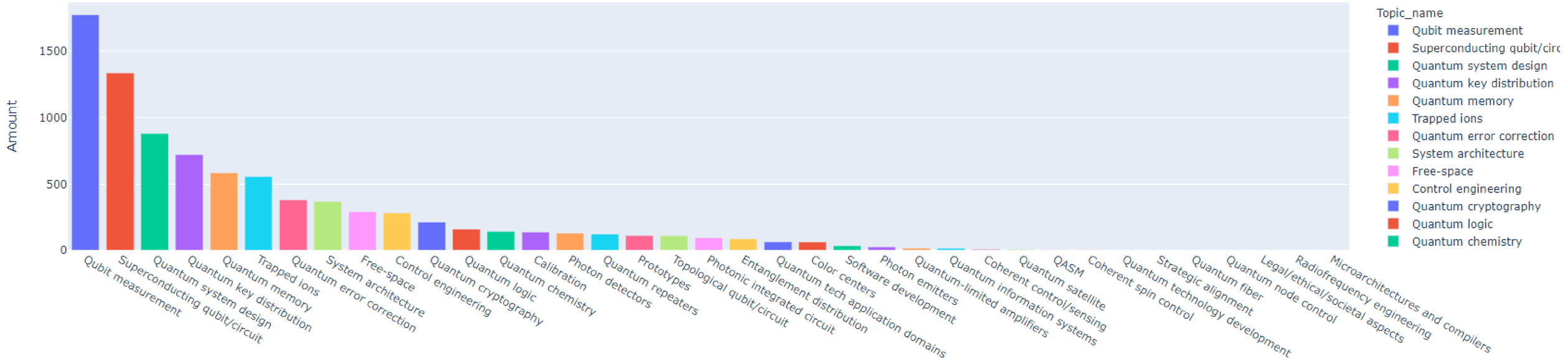


Report on the mapping of European public policies in QT: quantera.eu

Which countries are investing the most?

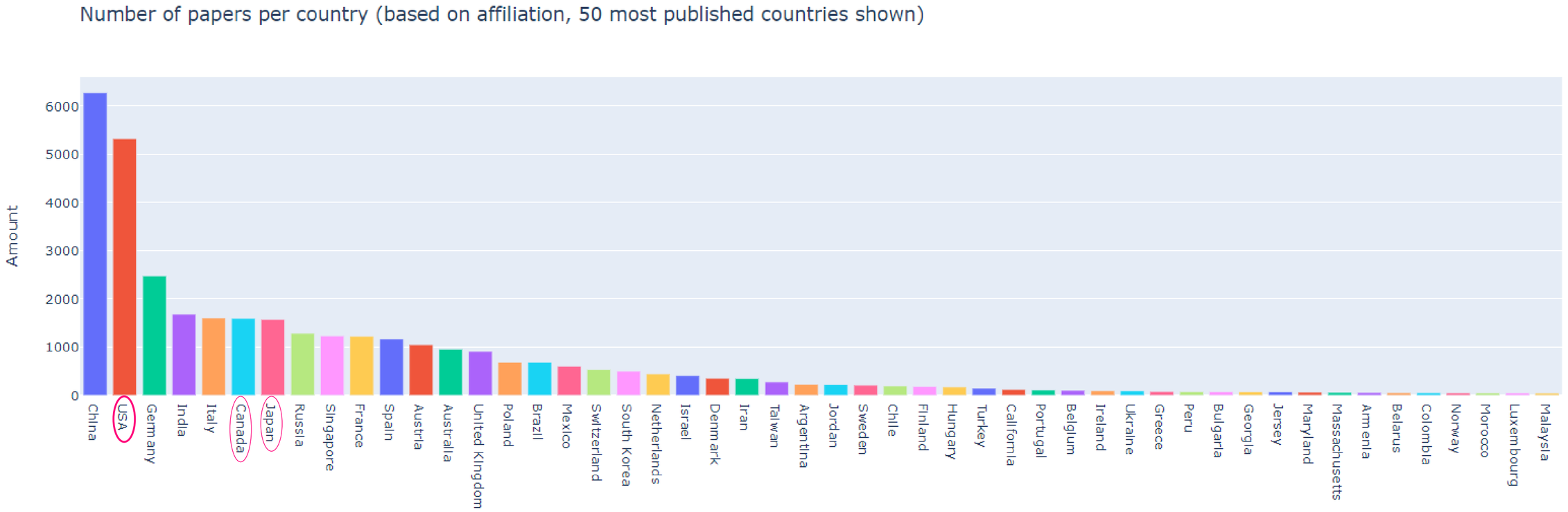


What topics receive more attention? (top 25)



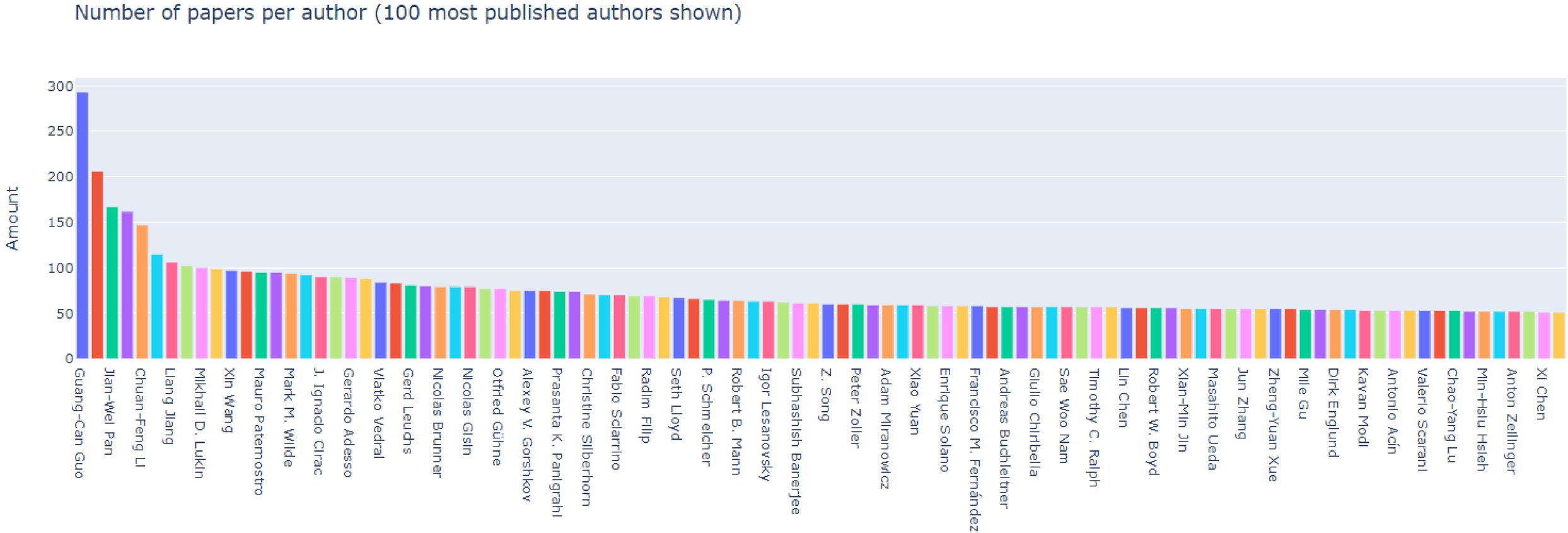
- All data is gathered from ArXiv, considering publications from June 2014 up until February 2021
- Scraping is done considering the label ‘quantum’, and using key words

Which countries are publishing the most?

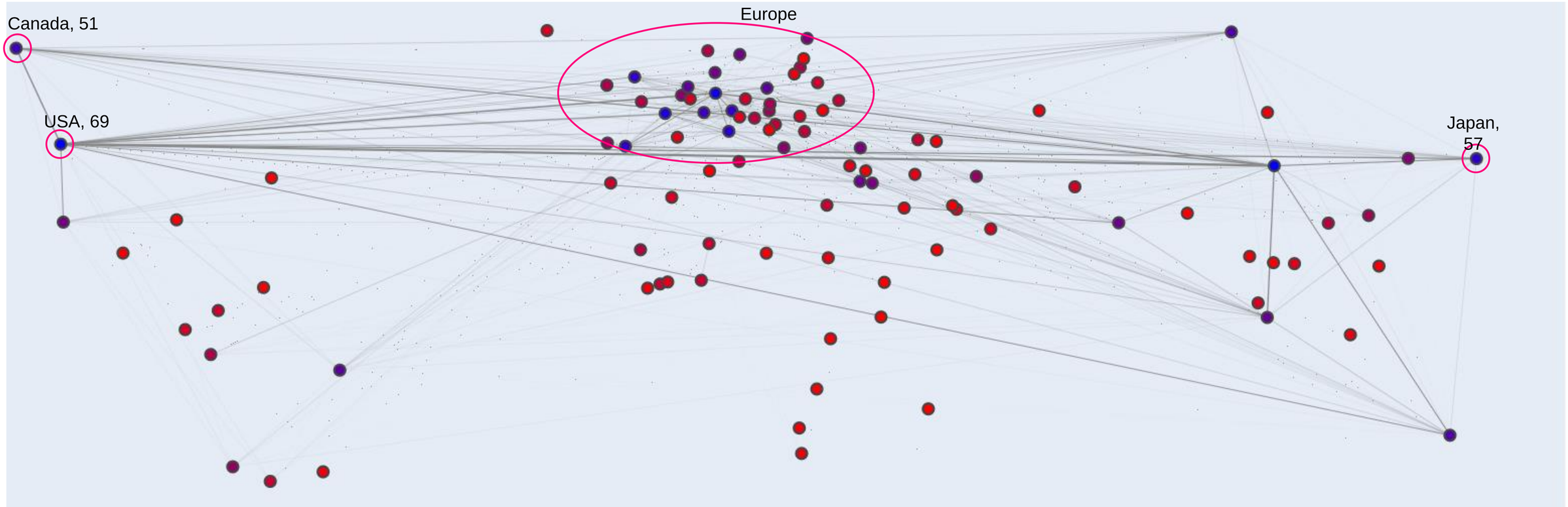


- All data is gathered from ArXiv, considering publications from June 2014 up until February 2021
- Scraping is done using key words

Who is publishing the most in the world?



Mapping of international research collaborati



Skills and competences survey

	Computing	*Simulation*	*Communication*	*Sensing*
A1	*Education stage – Skills*	*Education stage – Skills*	*Education stage – Skills*	*Education stage – Skills*
.	• Basic Quantum Theory (Computing)	• Basic Quantum Theory (Computing)	• Basic Quantum Theory (Communication)	• Basic Quantum Theory (Sensing)
.	• (Quantum) System Development	• (Quantum) System Development	• (Quantum) System Development	• (Quantum) System Development
.	• Quantum Information Systems	• Quantum Information Systems	• Quantum Information Systems	• Quantum Information Systems
A2	• Quantum Computing Hardware	• Quantum Computing Hardware	• Quantum Communication Hardware	• Quantum Sensor Hardware
	• Quantum Computing Software	• Quantum Computing Software	• Quantum Communication Software	
.	• Quantum Algorithms	• Quantum Chemistry	• Quantum Cryptography Protocols	
.				
.	*Radical innovation competences*	*Radical innovation competences*	*Radical innovation competences*	*Radical innovation competences*
.	• Discovery	• Discovery	• Discovery	• Discovery
	• Incubation	• Incubation	• Incubation	• Incubation
	• Acceleration	• Acceleration	• Acceleration	• Acceleration
C2	• Commercialisation	• Commercialisation	• Commercialisation	• Commercialisation

For all (80 general / 20 specific)

(80 specific/ 20 general)

Competences from (low) A1 to C2 (high)

Thank you!

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