Percentage of articles for each section covered in this survey

- MM DL Approaches
- MM Datasets
- MM Applications
- Others

MM Applications 46%
MM DL Approaches 30%
MM Datasets 13%
Others 11%
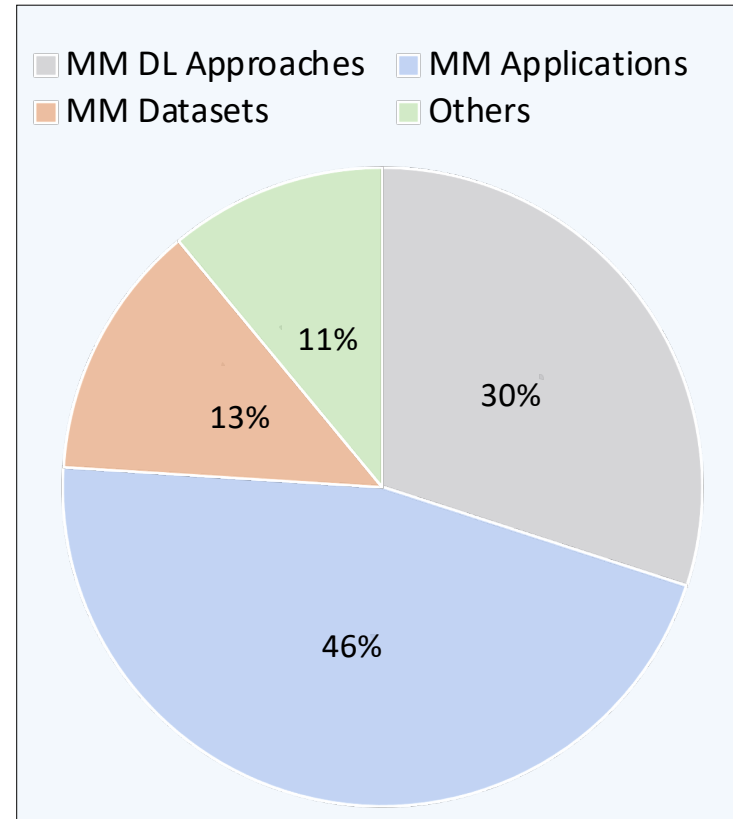
Percentage of articles for each task covered in this survey

- Understanding
- Generation
- MM Translation
- Classification
- Retrieval

Understanding 24%
Classification 28%
Generation 32%
Retrieval 10%
MM Translation 6%
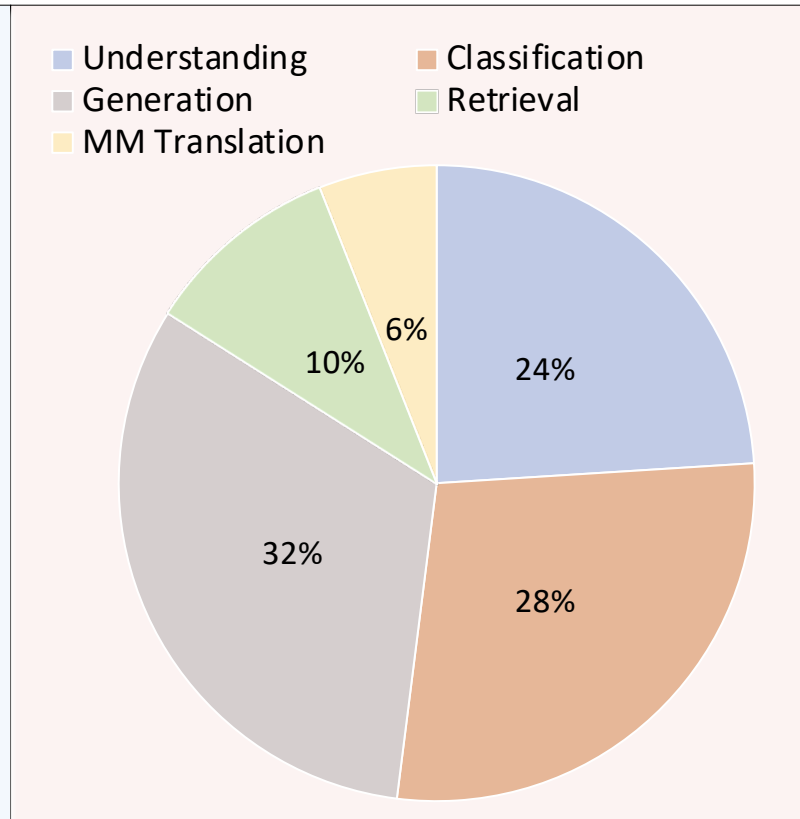
Growth of Multimodal Deep Learning research on Google Scholar in the last years

Number of papers

350
300
250
200
150
100
50
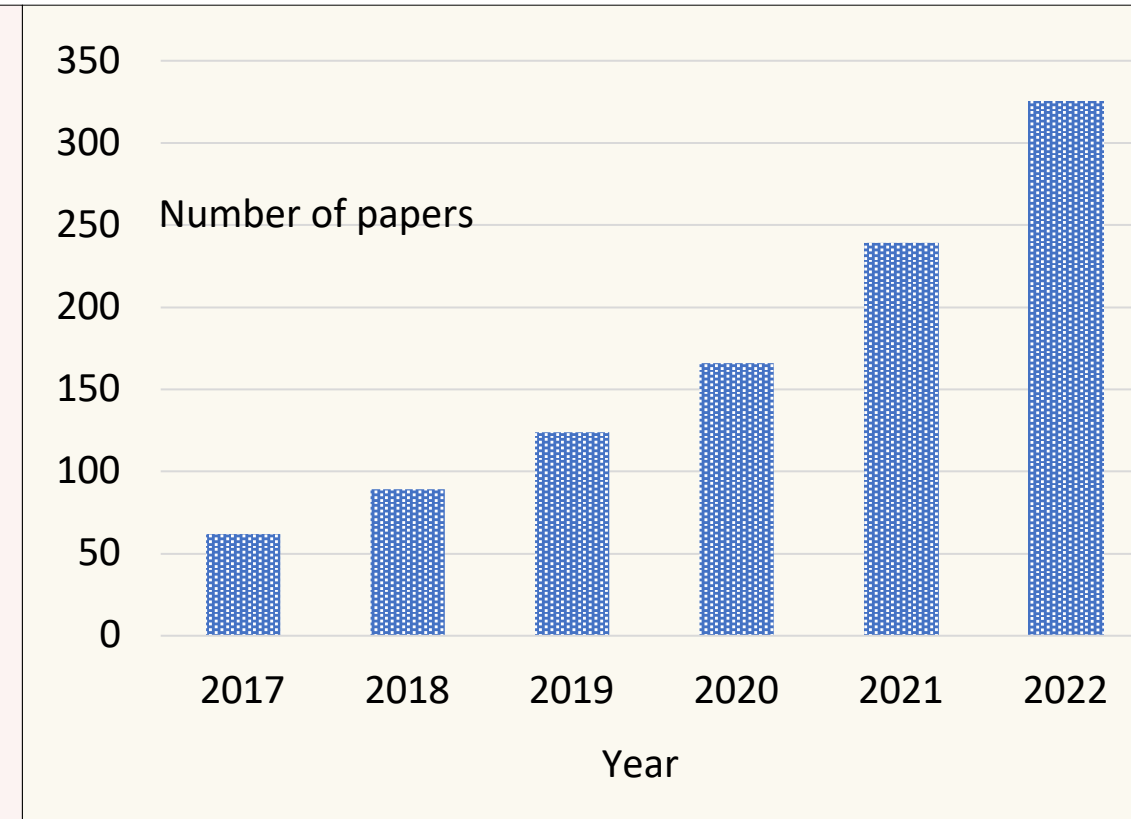0

2017 2018 2019 2020 2021 2022

Year

Fig 1. Multimodality Representation Learning: A Survey on Evolution, Pretraining and Its Applications