



Osaka–Kobe–Kyoto, Japan

Osaka–Kobe–Kyoto is the second-ranked cluster, out of 4 Japanese clusters, that falls within the top 100 S&T clusters in 2023. It filed **2,446 PCT applications** and published **3,308 scientific articles**, both per 1 million inhabitants over the last five years, making it the:

7th largest science and technology cluster in 2023 (unchanged from 2022)

30th S&T cluster by intensity (relative to population density) in 2023 (up two spots from 2022)

Top PCT applicants

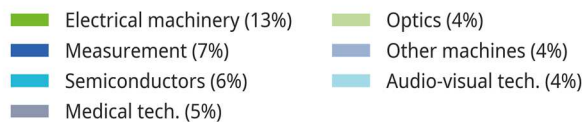
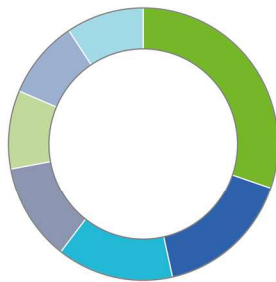
| | | Patents | Share |
|---|----------------------|---------|-------|
| 1 | Murata Manufacturing | 3,812 | 10% |
| 2 | Kyocera | 2,355 | 6% |
| 3 | Nitto Denko | 1,885 | 5% |

Top publishing organizations

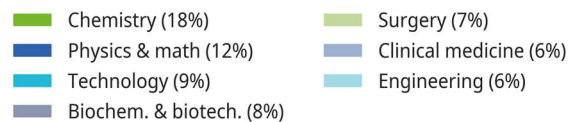
| | | Articles | Share |
|---|------------------|----------|-------|
| 1 | Kyoto University | 12,870 | 25% |
| 2 | Osaka University | 10,246 | 20% |
| 3 | Kobe University | 3,779 | 7% |

Top technology fields in Osaka–Kobe–Kyoto

Patents



Publications



13% of Osaka–Kobe–Kyoto's PCT patent applications are filed in collaboration with other inventors, with **Tokyo–Yokohama, Nagoya** and **Shanghai–Suzhou** emerging as the top collaborative locations.

61% of Osaka–Kobe–Kyoto's scientific articles are published in collaboration with other organizations, with the top three collaborating locations being **Tokyo–Yokohama, Nagoya** and **Fukuoka**.