Seoul, Republic of Korea

Seoul is the top-ranked cluster, out of 4 Korean clusters, that falls within the top 100 S&T clusters in 2023. It filed 2,400 PCT applications and published 5,054 scientific articles, both per 1 million inhabitants over the last five years, making it the:

3rd largest science and technology cluster in 2023 (up one spot from 2022)

25th S&T cluster by intensity (relative to population density) in 2023 (up four spots from 2022)

### Top PCT applicants

<table>
<thead>
<tr>
<th>Rank</th>
<th>Applicant</th>
<th>Patents</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Samsung Electronics</td>
<td>11,933</td>
<td>19%</td>
</tr>
<tr>
<td>2</td>
<td>LG Electronics</td>
<td>10,710</td>
<td>17%</td>
</tr>
<tr>
<td>3</td>
<td>LG Innotek</td>
<td>1,326</td>
<td>2%</td>
</tr>
</tbody>
</table>

### Top publishing organizations

<table>
<thead>
<tr>
<th>Rank</th>
<th>Publishing Organization</th>
<th>Articles</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Seoul National University</td>
<td>10,643</td>
<td>8%</td>
</tr>
<tr>
<td>2</td>
<td>Korea University</td>
<td>7,700</td>
<td>6%</td>
</tr>
<tr>
<td>3</td>
<td>Yonsei University</td>
<td>7,215</td>
<td>5%</td>
</tr>
</tbody>
</table>

### Top technology fields in Seoul

- **Patents**
  - Digital cons. (14%)
  - Computer tech. (10%)
  - Audio-visual tech. (7%)
  - Medical tech. (6%)
  - Electrical machinery (6%)
  - Telecoms (5%)
  - Semiconductors (4%)

- **Publications**
  - Chemistry (15%)
  - Technology (12%)
  - Biochem. & biotech. (6%)
  - Engineering (12%)
  - Clinical medicine (9%)
  - Surgery (4%)

10% of Seoul’s PCT patent applications are filed in collaboration with other inventors, with Daejeon, Busan and Daegu emerging as the top collaborative locations.

43% of Seoul’s scientific articles are published in collaboration with other organizations, with the top three collaborating locations being Daejeon, Busan and Daegu.