Overview and Comparisons with Other Universities

Number of Faculty and Staff Members

Number of Students

Admissions

Enrollment

Graduate Degrees Conferred

Career Paths and Employment Status

Success in Qualification Examinations

Research

International

Industry-University-Government Collaboration

University Hospital

Income and Expenditure

Selection of Research/ Education Programs

9. Research

9-1. Trends across Kyushu University as a Whole Based on Field Classification of Journals

Kyushu University | 2018 to 2022 Articles & Reviews

View Publication Set definition

* The pie graph reflects the percentage of papers published by researchers affiliated with Kyushu University from 2018 to 2022, by subject area in Scopus.
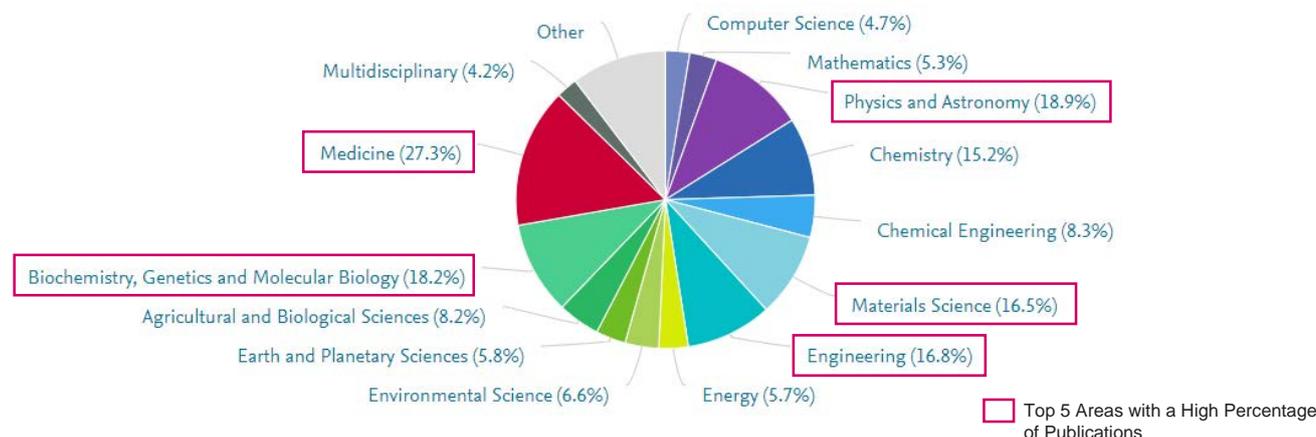
2018 to 2022 ⌄ | All subject areas ⌄ | ASJC | ⬤ 🏛

Overall research performance

21,860 Scholarly Output ⓘ

103,443 Authors

1.13 (*1) FWCI Field-Weighted Citation Impact ⓘ

292,384 Citation Count ⓘ

13.4 Citations per Publication ⓘ

Pie chart:
- Other
- Multidisciplinary (4.2%)
- Medicine (27.3%)
- Biochemistry, Genetics and Molecular Biology (18.2%)
- Agricultural and Biological Sciences (8.2%)
- Earth and Planetary Sciences (5.8%)
- Environmental Science (6.6%)
- Energy (5.7%)
- Engineering (16.8%)
- Materials Science (16.5%)
- Chemical Engineering (8.3%)
- Chemistry (15.2%)
- Physics and Astronomy (18.9%)
- Mathematics (5.3%)
- Computer Science (4.7%)

☐ Top 5 Areas with a High Percentage of Publications

Performance indicators

Outputs in Top Citation Percentiles ⓘ
Publications in top 10% most cited worldwide
☐ Show as field-weighted

Kyushu University: **10.6%**
Japan: **8.0%**

Publications in Top Journal Percentiles ⓘ
Publications in top 10% journals
by CiteScore Percentile ⌄

Kyushu University: **31.7%**
Japan: **25.2%**
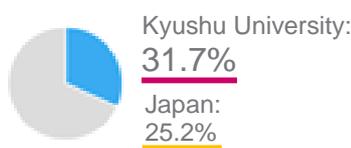
International Collaboration ⓘ
Publications co-authored with Institutions in other countries/regions

Kyushu University: **36.1%**
Japan: **32.6%**

Academic-Corporate Collaboration ⓘ
Publications with both academic and corporate affiliations

Kyushu University: **8.1%**
Japan: **7.0%**
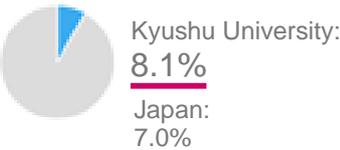
— Kyushu University
— National average

(*1) FWCI (Field-Weighted Citation Impact) is the number of citations received by the publication, divided by the world average for the same type of publications in the same field and same publication year. An FWCI of 1 or higher means that the average impact is higher than the world average.

Metrics Details

Publication Type: Articles and Reviews; Journal Metric: CiteScore Percentile; Self-Citations: included; Field-Weighted (output in top 10% citation percentiles): yes; Field-Weighted (international collaboration): no
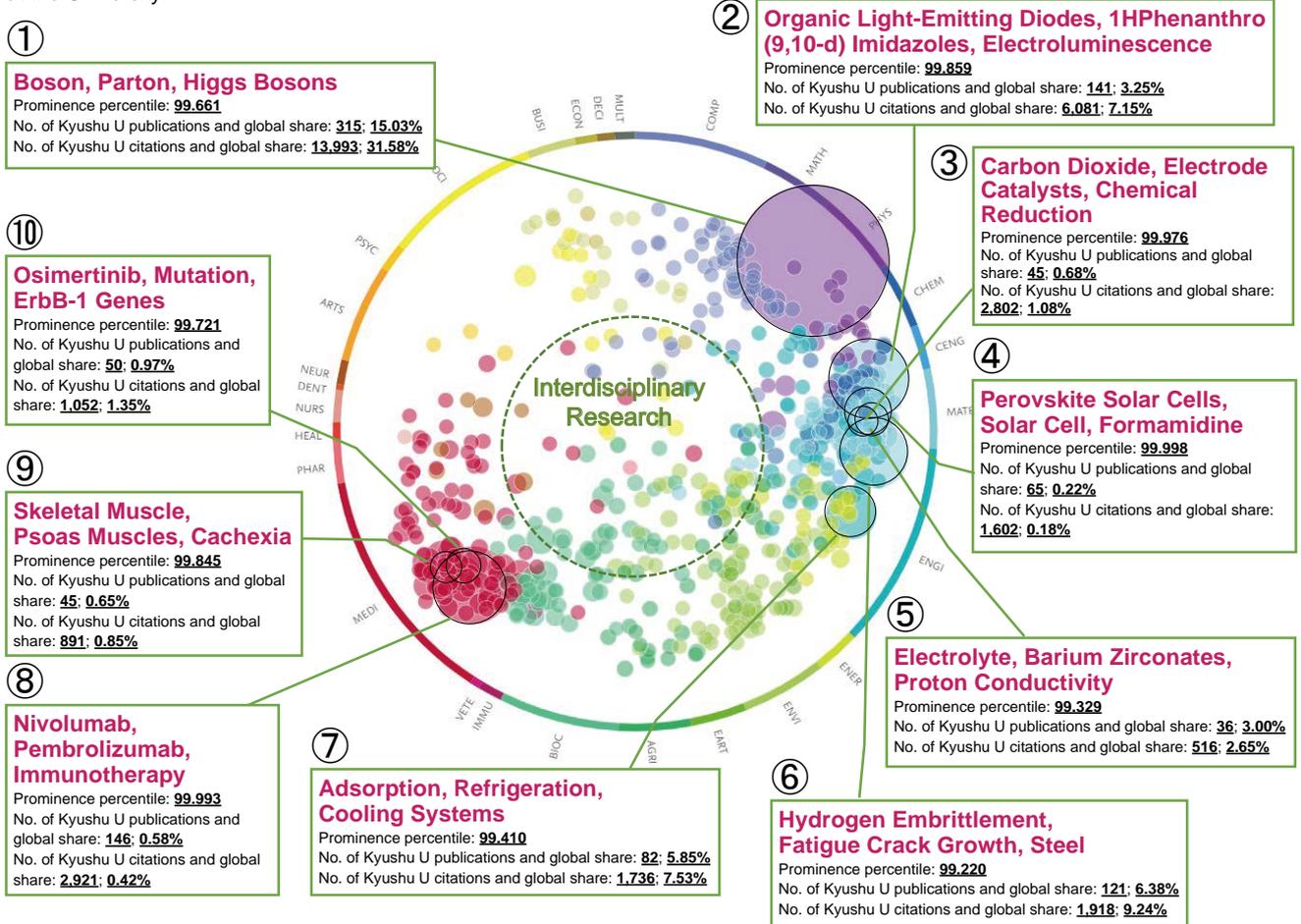
Source: Elsevier's *"SciVal"* (as of September 2023)

■ Topic Prominence: Analysis of University Strengths Based on Co-citation of Publications

The Most Prominent 1% of Topics (2018-2022)

Out of the top 1% prominent topics, 1-10 are those with the top 10 highest number of publications
Kyushu university has a high number of publications in these fields, so these can be considered some of the most active research fields at the University.

① Boson, Parton, Higgs Bosons
Prominence percentile: **99.661**
No. of Kyushu U publications and global share: **315**; **15.03%**
No. of Kyushu U citations and global share: **13,993**; **31.58%**

② Organic Light-Emitting Diodes, 1HPhenanthro (9,10-d) Imidazoles, Electroluminescence
Prominence percentile: **99.859**
No. of Kyushu U publications and global share: **141**; **3.25%**
No. of Kyushu U citations and global share: **6,081**; **7.15%**

③ Carbon Dioxide, Electrode Catalysts, Chemical Reduction
Prominence percentile: **99.976**
No. of Kyushu U publications and global share: **45**; **0.68%**
No. of Kyushu U citations and global share: **2,802**; **1.08%**

④ Perovskite Solar Cells, Solar Cell, Formamidine
Prominence percentile: **99.998**
No. of Kyushu U publications and global share: **65**; **0.22%**
No. of Kyushu U citations and global share: **1,602**; **0.18%**

⑤ Electrolyte, Barium Zirconates, Proton Conductivity
Prominence percentile: **99.329**
No. of Kyushu U publications and global share: **36**; **3.00%**
No. of Kyushu U citations and global share: **516**; **2.65%**

⑥ Hydrogen Embrittlement, Fatigue Crack Growth, Steel
Prominence percentile: **99.220**
No. of Kyushu U publications and global share: **121**; **6.38%**
No. of Kyushu U citations and global share: **1,918**; **9.24%**

⑦ Adsorption, Refrigeration, Cooling Systems
Prominence percentile: **99.410**
No. of Kyushu U publications and global share: **82**; **5.85%**
No. of Kyushu U citations and global share: **1,736**; **7.53%**

⑧ Nivolumab, Pembrolizumab, Immunotherapy
Prominence percentile: **99.993**
No. of Kyushu U publications and global share: **146**; **0.58%**
No. of Kyushu U citations and global share: **2,921**; **0.42%**

⑨ Skeletal Muscle, Psoas Muscles, Cachexia
Prominence percentile: **99.845**
No. of Kyushu U publications and global share: **45**; **0.65%**
No. of Kyushu U citations and global share: **891**; **0.85%**

⑩ Osimertinib, Mutation, ErbB-1 Genes
Prominence percentile: **99.721**
No. of Kyushu U publications and global share: **50**; **0.97%**
No. of Kyushu U citations and global share: **1,052**; **1.35%**

Interdisciplinary Research

Legend

COMP	Computer Science	
MATH	Mathematics	
PHYS	Physics and Astronomy	
CHEM	Chemistry	
CENG	Chemical Engineering	
MATE	Materials Science	
ENGI	Engineering	
ENER	Energy	
ENVI	Environmental Science	
EART	Earth and Planetary Sciences	
AGRI	Agricultural and Biological Sciences	
BIOC	Biochemistry, Genetics and Molecular Biology	
IMMU	Immunology and Microbiology	
VETE	Veterinary	
MEDI	Medicine	
PHAR	Pharmacology, Toxicology and Pharmaceutics	
HEAL	Health Professions	
NURS	Nursing	
DENT	Dentistry	
NEUR	Neuroscience	
ARTS	Arts and Humanities	
PSYC	Psychology	
SOCI	Social Sciences	
BUSI	Business, Management and Accounting	
ECON	Economics, Econometrics and Finance	
DECI	Decision Sciences	
MULT	Multidisciplinary	

・An Overview of the Topic Prominence Function
The Scopus literature was clustered into approximately 96,000 topics and 1,500 topic clusters based on citation links and ranked by Prominence. Prominence indicates the current momentum and attention level of a topic by looking at the number of citations in the most recent literature, the number of Scopus views, and the CiteScore. The highest Prominence percentile is 100; Prominence is correlated with grants and helps researchers and administrators identify topics with the highest potential for increased funding.
(Excerpted from Elsevier Quick Reference Guide, May 2020)
Between 2018 and 2022, of all Kyushu University publications, 7,884 research fields emerged as high-profile topics.

◆Perspectives◆
・Circumference indicates research fields used in Scopus (ASJC 27 major subject areas) by color.
・Each circle represents a topic.
・Color of circle: For the fields of the publications that make up the topics, the fields that make the highest proportion of the total are displayed in the color of the fields located around the circumference.
・Size of circle indicates the output of the entity in the topic.
・Position of the circle is based upon the ASJC categories of the journals in which the scholarly output is published. Topics closer to the center of the wheel are more likely to be multidisciplinary.

Metrics Details
Publication Type: Articles and Reviews; Self-Citations: included

Source: Elsevier's *"SciVal"* (as of September 2023)

Overview and Comparisons with Other Universities
Number of Faculty and Staff Members
Number of Students
Admissions
Enrollment
Graduate Degrees Conferred
Career Paths and Employment Status
Success in Qualification Examinations
Research
International
Industry-University-Government Collaboration
University Hospital
Income and Expenditure
Selection of Research/ Education Programs

Overview and Comparisons with Other Universities

Number of Faculty and Staff Members

Number of Students

Admissions

Enrollment

Graduate Degrees Conferred

Career Paths and Employment Status

Success in Qualification Examinations

Research

International

Industry-University-Government Collaboration

University Hospital

Income and Expenditure

Selection of Research/ Education Programs

9-2. Comparisons of Publication Quantity and Quality
■ Number of Publications and FWCI

◆Kyushu University◆

Number of Publications and FWCI (*1): 2013-2022

Year	Number of publications	FWCI
2013	3,822	1.09
2014	3,672	1.16
2015	3,867	1.17
2016	4,022	1.29
2017	4,124	1.16
2018	4,030	1.13
2019	4,257	1.11
2020	4,511	1.08
2021	4,564	1.23
2022	4,498	1.10

◆ Comparison of RU11 (*2) ◆

Scholarly Output

Rank	University	Number
1	The University of Tokyo	53,810
2	Kyoto University	37,058
3	Osaka University	29,270
4	Tohoku University	28,228
5	Nagoya University	22,127
6	**Kyushu University**	**21,860**
7	Hokkaido University	20,909
8	University of Tsukuba	16,147
9	Tokyo Institute of Technology	14,684
10	Keio University	14,587
11	Waseda University	9,356

(2018-2022)

Citation Count

Rank	University	Citation Count	Average Citations per Publication
1	The University of Tokyo	871,975	16.2
2	Kyoto University	565,250	15.3
3	Osaka University	386,849	13.2
4	Tohoku University	363,963	12.9
5	Nagoya University	304,763	13.8
6	**Kyushu University**	**292,384**	**13.4**
7	Hokkaido University	262,773	12.6
8	University of Tsukuba	231,531	14.3
9	Tokyo Institute of Technology	197,227	13.4
10	Keio University	191,109	13.1
11	Waseda University	111,230	11.9

(2018-2022)

FWCI

Rank	University	FWCI
1	The University of Tokyo	1.33
2	University of Tsukuba	1.25
3	Kyoto University	1.23
4	Keio University	1.19
5	Nagoya University	1.18
6	**Kyushu University**	**1.13**
7	Waseda University	1.12
8	Osaka University	1.10
9	Tohoku University	1.07
10	Hokkaido University	1.05
10	Tokyo Institute of Technology	1.05

(2018-2022)

(*1) FWCI (Field-Weighted Citation Impact) is the number of citations received by the publication, divided by the world average for the same type of publications in the same field and same publication year. An FWCI of 1 or higher means that the average impact is higher than the world average.

(*2) RU11 (Research University 11) is a consortium that aims to develop academia via eleven universities: Hokkaido University, Tohoku University, University of Tsukuba, The University of Tokyo, Waseda University, Keio University, Tokyo Institute of Technology, Nagoya University, Kyoto University, Osaka University, and Kyushu University. RU11 is composed of both national and private universities.
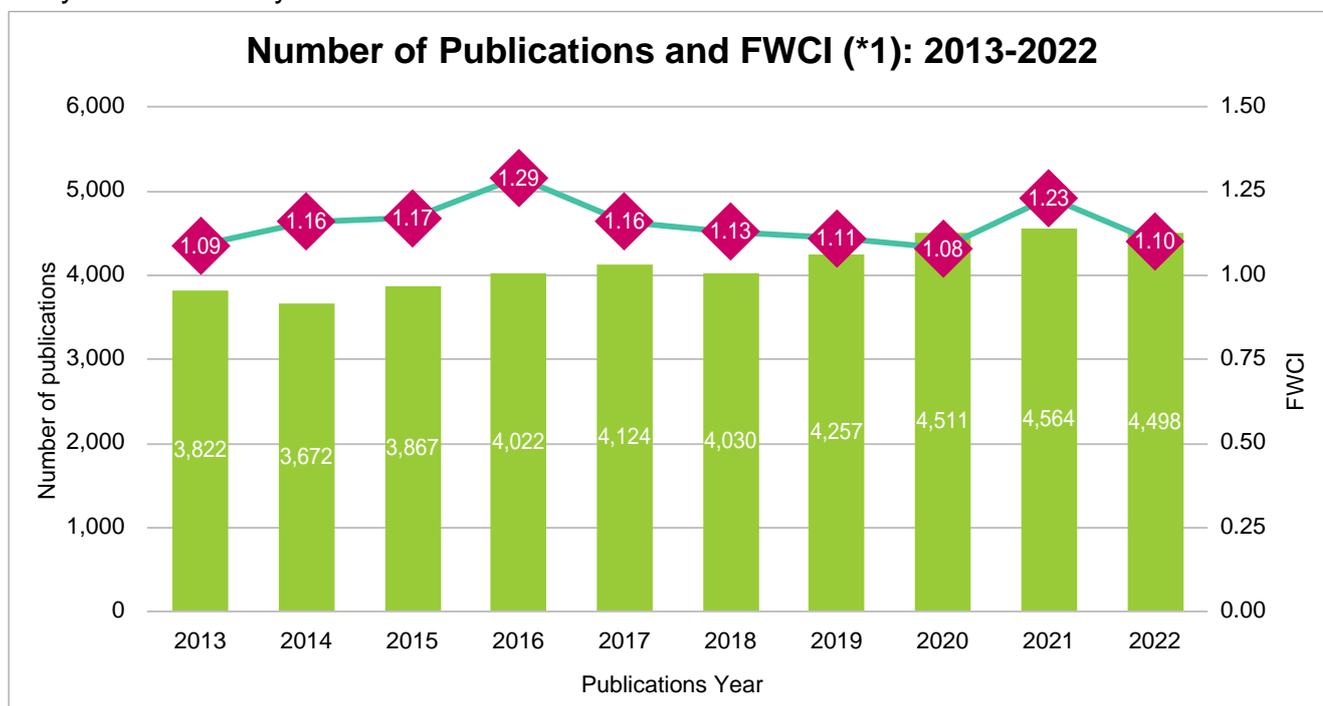
Metrics Details

Publication Type: Articles and Reviews; Self-Citations: included

Source: Elsevier's *"SciVal"* (as of September 2023)

Overview and Comparisons with Other Universities

Number of Faculty and Staff Members

Number of Students

Admissions

Enrollment

Graduate Degrees Conferred

Career Paths and Employment Status

Success in Qualification Examinations

Research

International

Industry-University-Government Collaboration

University Hospital

Income and Expenditure

Selection of Research/ Education Programs

9-2. Comparisons of Publication Quantity and Quality (Continued)

◆Comparison of RU11 (*1)◆

Comparison of Number of RU11 Publications: 2013-2022

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Hokkaido University	3,462	3,427	3,473	3,636	3,704	3,765	3,847	4,312	4,530	4,455
Tohoku University	4,995	5,042	4,803	5,063	5,050	5,236	5,204	5,697	6,110	5,981
University of Tsukuba	2,349	2,296	2,519	2,567	2,647	2,822	2,900	3,228	3,627	3,570
The University of Tokyo	9,064	9,078	8,959	9,190	9,378	9,816	10,025	10,936	11,660	11,373
Waseda University	1,446	1,423	1,476	1,482	1,594	1,637	1,643	1,926	2,045	2,105
Keio University	2,233	2,081	2,168	2,351	2,446	2,514	2,551	2,921	3,401	3,200
Tokyo Institute of Technology	2,620	2,636	2,684	2,761	2,674	2,783	2,911	3,019	3,113	2,858
Nagoya University	3,662	3,617	3,721	3,709	3,981	4,095	4,145	4,483	4,838	4,566
Kyoto University	6,624	6,446	6,521	6,713	6,823	7,066	6,991	7,584	8,003	7,414
Osaka University	5,396	5,089	5,302	5,040	5,200	5,305	5,344	5,821	6,556	6,244
Kyushu University	3,822	3,672	3,867	4,022	4,124	4,030	4,257	4,511	4,564	4,498

Comparison of RU11 FWCI(*2): 2013-2022

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Hokkaido University	1.07	1.03	1.00	1.09	1.01	0.96	1.05	1.14	1.03	1.06
Tohoku University	1.15	1.15	1.06	1.15	1.19	1.10	1.12	1.00	1.03	1.10
University of Tsukuba	1.20	1.26	1.27	1.25	1.22	1.73	1.14	1.32	1.09	1.08
The University of Tokyo	1.39	1.45	1.47	1.51	1.44	1.39	1.33	1.39	1.26	1.30
Waseda University	1.32	1.34	1.37	1.29	1.20	1.14	1.12	1.00	1.11	1.23
Keio University	1.07	1.13	1.07	1.20	1.32	1.17	1.18	1.30	1.18	1.14
Tokyo Institute of Technology	1.18	1.23	1.28	1.28	1.18	1.14	1.09	1.01	1.01	1.00
Nagoya University	1.22	1.30	1.26	1.23	1.19	1.22	1.19	1.27	1.05	1.16
Kyoto University	1.22	1.28	1.31	1.52	1.59	1.45	1.26	1.11	1.16	1.17
Osaka University	1.17	1.17	1.13	1.19	1.13	1.15	1.14	1.11	1.07	1.02
Kyushu University	1.09	1.16	1.17	1.29	1.16	1.13	1.11	1.08	1.23	1.10

(*1) RU11 (Research University 11) is a consortium that aims to develop academia via eleven universities: Hokkaido University, Tohoku University, University of Tsukuba, The University of Tokyo, Waseda University, Keio University, Tokyo Institute of Technology, Nagoya University, Kyoto University, Osaka University, and Kyushu University. RU11 is composed of both national and private universities.
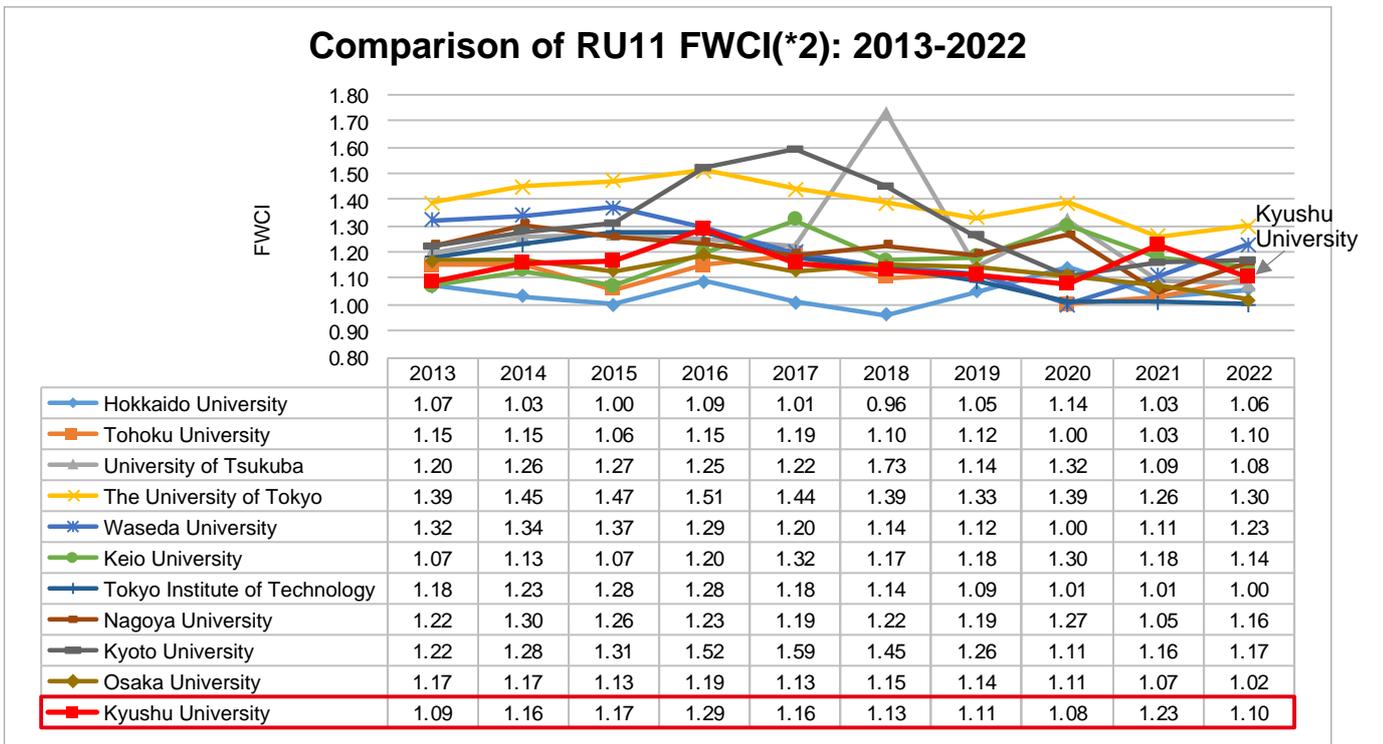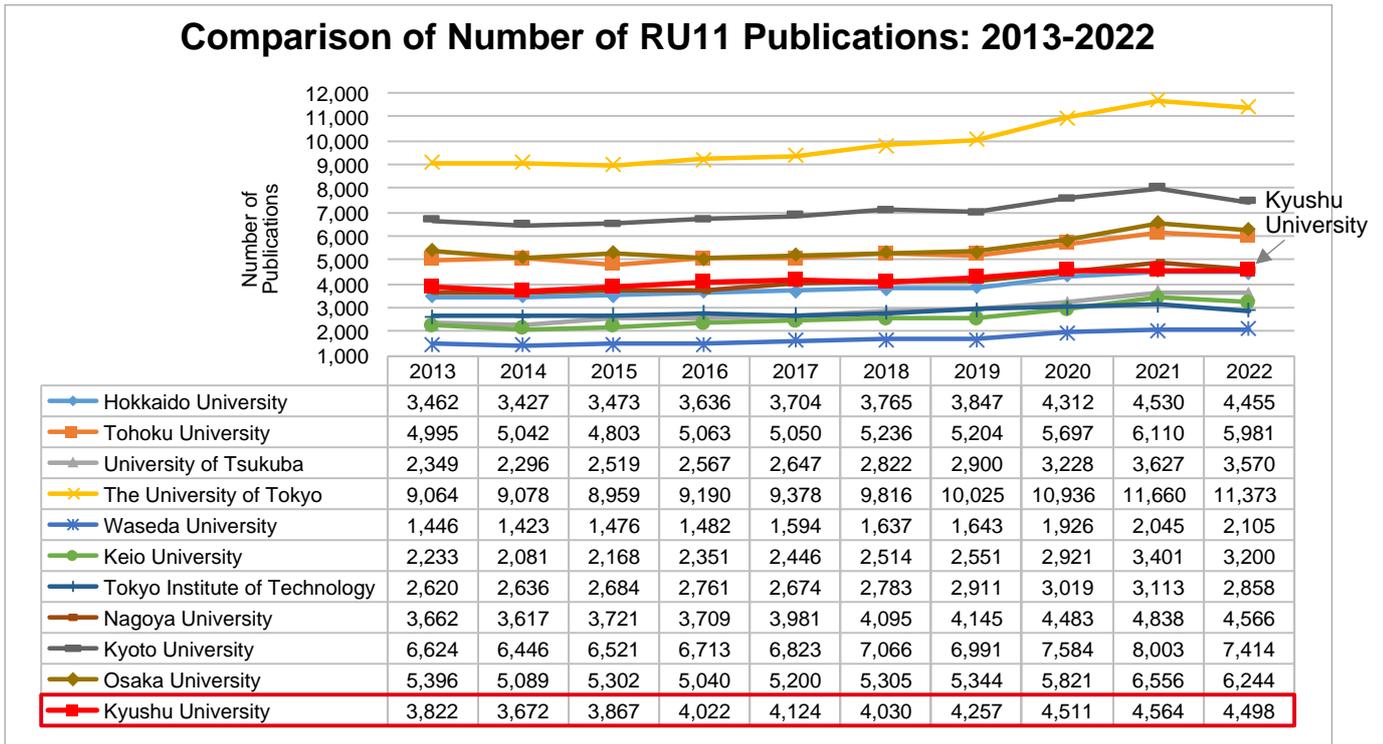
(*2) FWCI (Field-Weighted Citation Impact) is the number of citations received by the publication, divided by the world average for the same type of publications in the same field and same publication year. An FWCI of 1 or higher means that the average impact is higher than the world average.
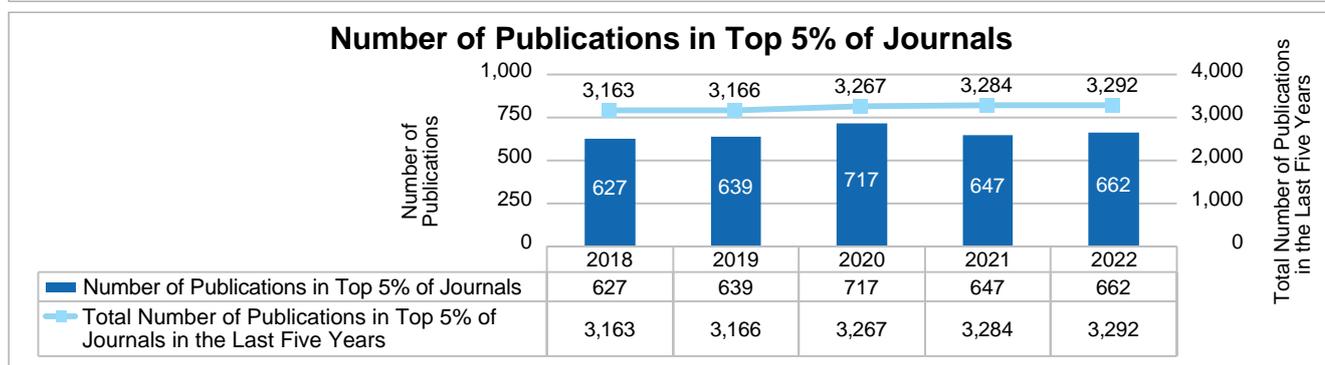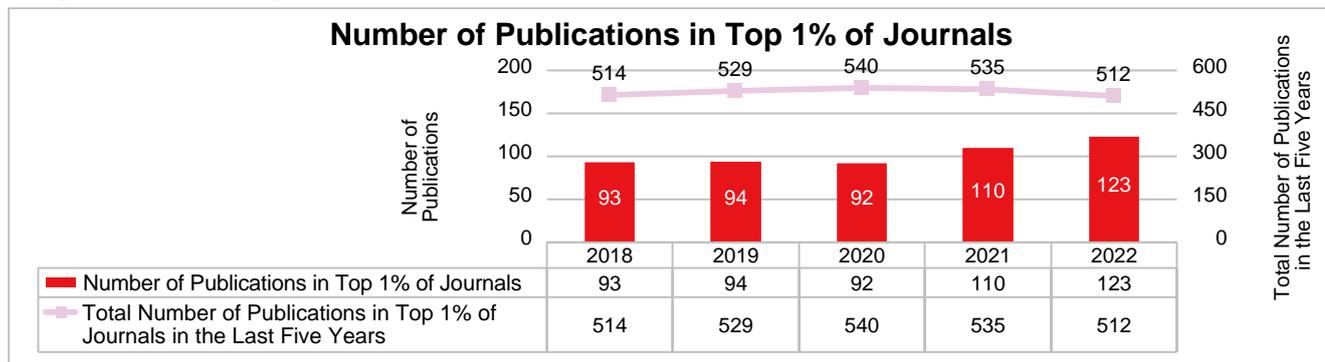
Metrics Details
   Publication Type: Articles and Reviews; Self-Citations: included

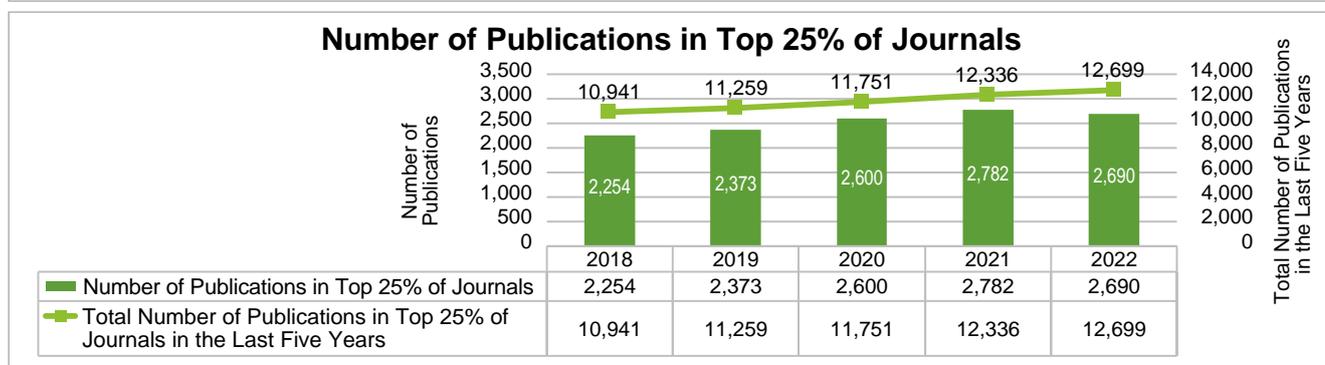Source: Elsevier's "*SciVal*" (as of September 2023)

Overview and Comparisons with Other Universities

Number of Faculty and Staff Members

Number of Students

Admissions

Enrollment

Graduate Degrees Conferred

Career Paths and Employment Status

Success in Qualification Examinations

Research

International

Industry-University-Government Collaboration

University Hospital

Income and Expenditure

Selection of Research/ Education Programs

9-2. Comparisons of Publication Quantity and Quality (Continued)

■ Number and Percentage of Publications Carried in the World's Top Journals

◆Kyushu University◆

Number of Publications in Top 1% of Journals

	2018	2019	2020	2021	2022
Number of Publications in Top 1% of Journals	93	94	92	110	123
Total Number of Publications in Top 1% of Journals in the Last Five Years	514	529	540	535	512

Number of Publications in Top 5% of Journals

	2018	2019	2020	2021	2022
Number of Publications in Top 5% of Journals	627	639	717	647	662
Total Number of Publications in Top 5% of Journals in the Last Five Years	3,163	3,166	3,267	3,284	3,292

★Key Performance Indicators (KPIs) for the Designated National University Corporations

Number of Publications in Top 10% of Journals

KPI for "4th Mid-term Objectives and Plans"(expected to 8,000)
KPI for "Designated National University Corporation Vision" (expected to 9,000)

	2018	2019	2020	2021	2022
Number of Publications in Top 10% of Journals	1,256	1,259	1,449	1,432	1,359
Total Number of Publications in Top 10% of Journals in the Last Five Years	6,499	6,572	6,759	6,795	6,755

Number of Publications in Top 25% of Journals

	2018	2019	2020	2021	2022
Number of Publications in Top 25% of Journals	2,254	2,373	2,600	2,782	2,690
Total Number of Publications in Top 25% of Journals in the Last Five Years	10,941	11,259	11,751	12,336	12,699

・Number of Publications in Top X% of Journals refer to the number of publications in the world's top percentile of journals, based on the number of citations.
・The polygonal line indicates the total number of publications in top 10% of journals in the last five years, including the relevant year.

Metrics Details
  Publication Type: Articles and Reviews; Journal Metric: CiteScore Percentile

Source: Elsevier's *"SciVal"* (as of September 2023)

Overview and Comparisons with Other Universities

Number of Faculty and Staff Members

Number of Students

Admissions

Enrollment

Graduate Degrees Conferred

Career Paths and Employment Status

Success in Qualification Examinations

Research

International

Industry-University-Government Collaboration

University Hospital

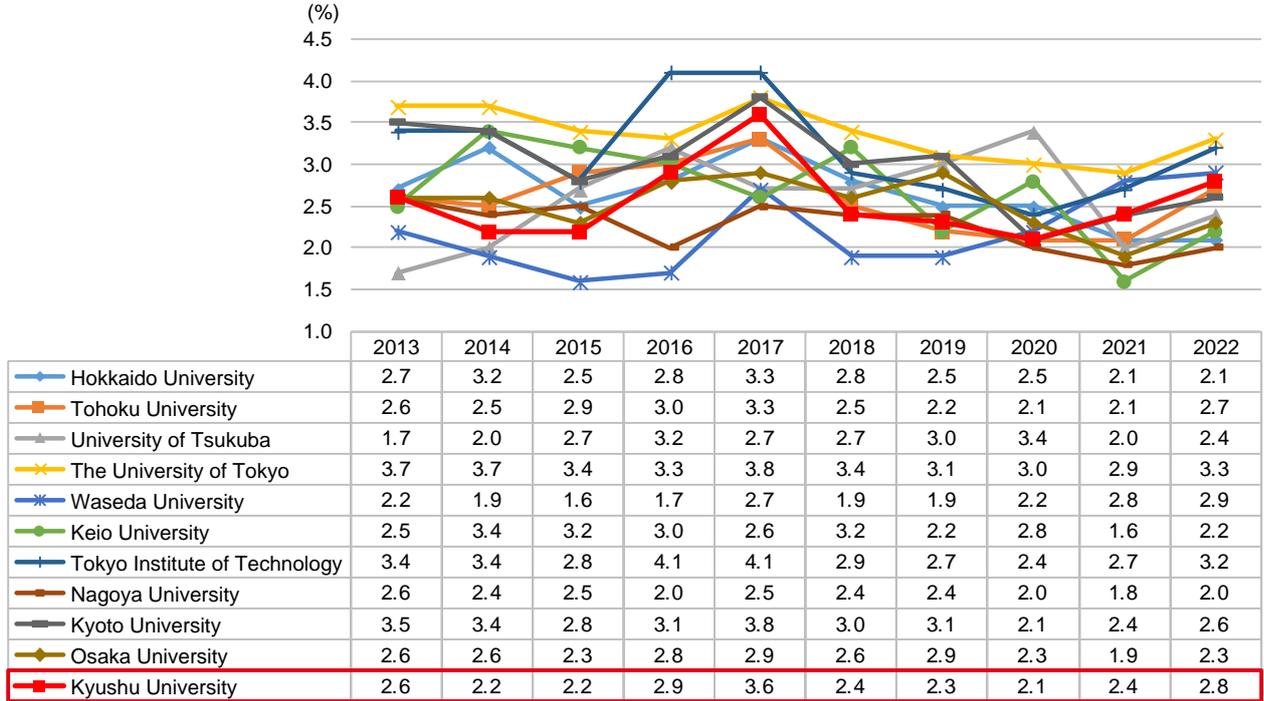Income and Expenditure

Selection of Research/Education Programs

9-2. Comparisons of Publication Quantity and Quality (Continued)

◆Comparison of RU11 (*1) ◆

Percentage of Publications in Top 1% of Journals

(%)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Hokkaido University	2.7	3.2	2.5	2.8	3.3	2.8	2.5	2.5	2.1	2.1
Tohoku University	2.6	2.5	2.9	3.0	3.3	2.5	2.2	2.1	2.1	2.7
University of Tsukuba	1.7	2.0	2.7	3.2	2.7	2.7	3.0	3.4	2.0	2.4
The University of Tokyo	3.7	3.7	3.4	3.3	3.8	3.4	3.1	3.0	2.9	3.3
Waseda University	2.2	1.9	1.6	1.7	2.7	1.9	1.9	2.2	2.8	2.9
Keio University	2.5	3.4	3.2	3.0	2.6	3.2	2.2	2.8	1.6	2.2
Tokyo Institute of Technology	3.4	3.4	2.8	4.1	4.1	2.9	2.7	2.4	2.7	3.2
Nagoya University	2.6	2.4	2.5	2.0	2.5	2.4	2.4	2.0	1.8	2.0
Kyoto University	3.5	3.4	2.8	3.1	3.8	3.0	3.1	2.1	2.4	2.6
Osaka University	2.6	2.6	2.3	2.8	2.9	2.6	2.9	2.3	1.9	2.3
Kyushu University	2.6	2.2	2.2	2.9	3.6	2.4	2.3	2.1	2.4	2.8

Percentage of Publications in Top 5% of Journals

(%)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Hokkaido University	17.9	19.7	19.3	18.2	16.8	15.6	15.5	15.2	14.7	13.2
Tohoku University	19.0	19.2	16.5	18.2	15.9	14.9	14.6	15.1	13.4	14.4
University of Tsukuba	18.2	17.5	17.5	15.9	17.6	16.0	16.2	16.2	12.6	13.3
The University of Tokyo	20.9	22.9	21.2	22.2	21.4	20.1	20.0	21.0	16.6	16.7
Waseda University	17.0	16.3	16.1	17.0	17.8	16.1	14.0	14.6	12.9	14.2
Keio University	16.3	16.5	16.2	15.9	13.5	13.3	13.5	13.6	11.5	11.6
Tokyo Institute of Technology	21.1	21.0	21.4	22.4	22.6	21.3	20.5	20.9	16.3	16.7
Nagoya University	18.7	20.6	18.2	17.9	16.9	18.3	16.0	15.4	12.7	12.2
Kyoto University	20.7	22.4	21.3	21.0	21.8	20.2	19.4	18.7	15.6	15.4
Osaka University	19.9	20.5	17.9	18.3	17.7	16.1	16.2	15.8	12.2	12.8
Kyushu University	16.3	17.8	16.4	16.1	16.2	16.0	15.5	16.5	14.3	14.9

(*1) RU11 (Research University 11) is a consortium that aims to develop academia via eleven universities: Hokkaido University, Tohoku University, University of Tsukuba, The University of Tokyo, Waseda University, Keio University, Tokyo Institute of Technology, Nagoya University, Kyoto University, Osaka University, and Kyushu University. RU11 is composed of both national and private universities.

Metrics Details

  Publication Type: Articles and Reviews; Journal Metric: CiteScore Percentile

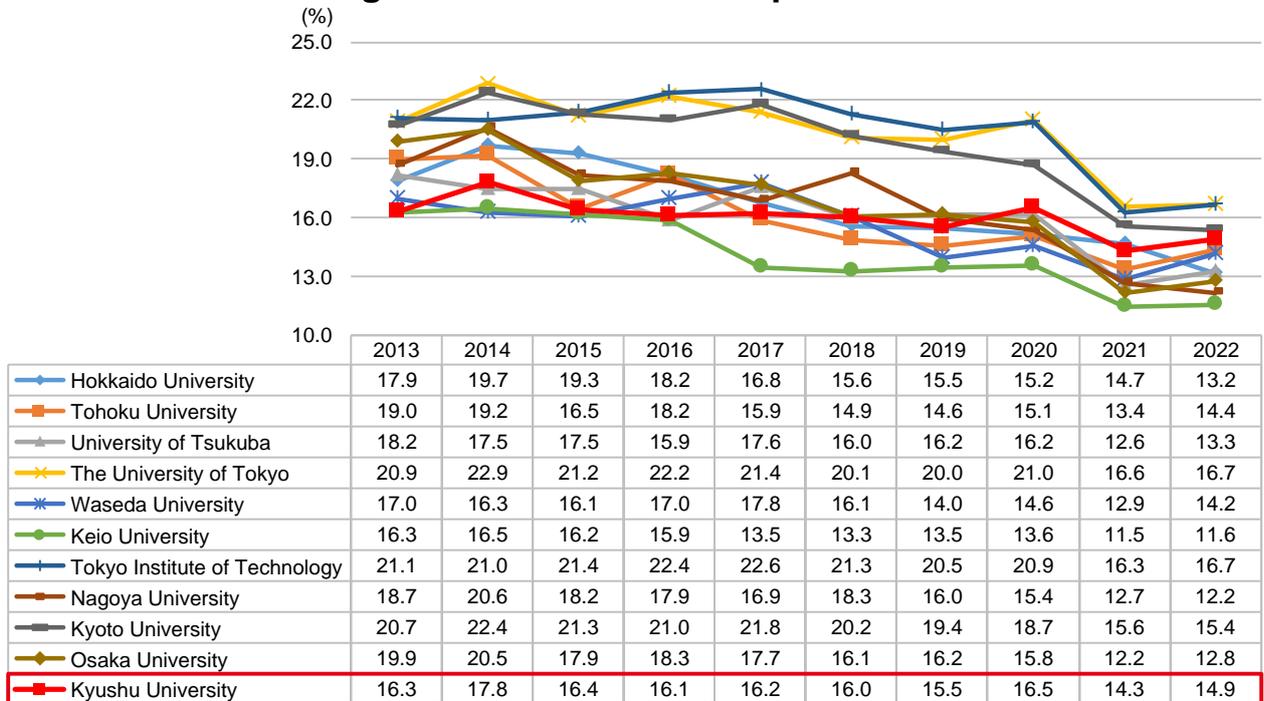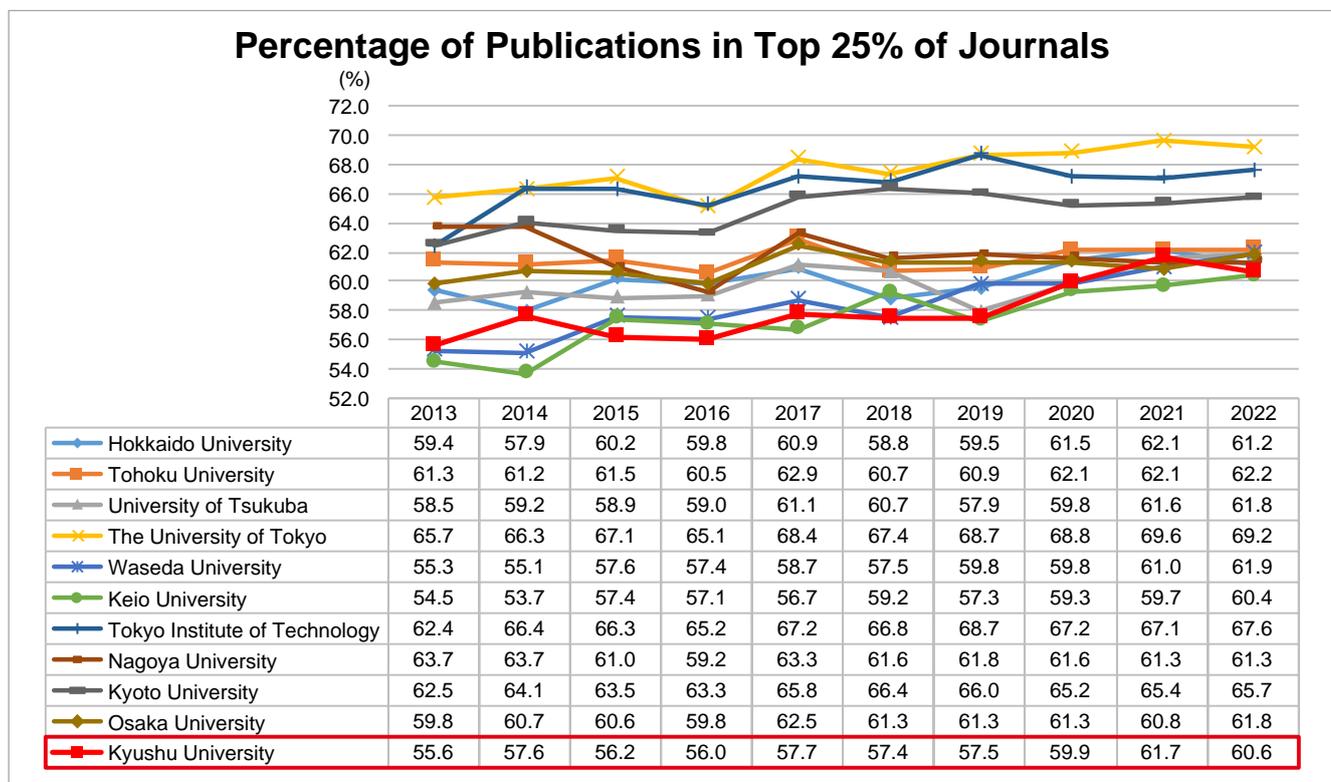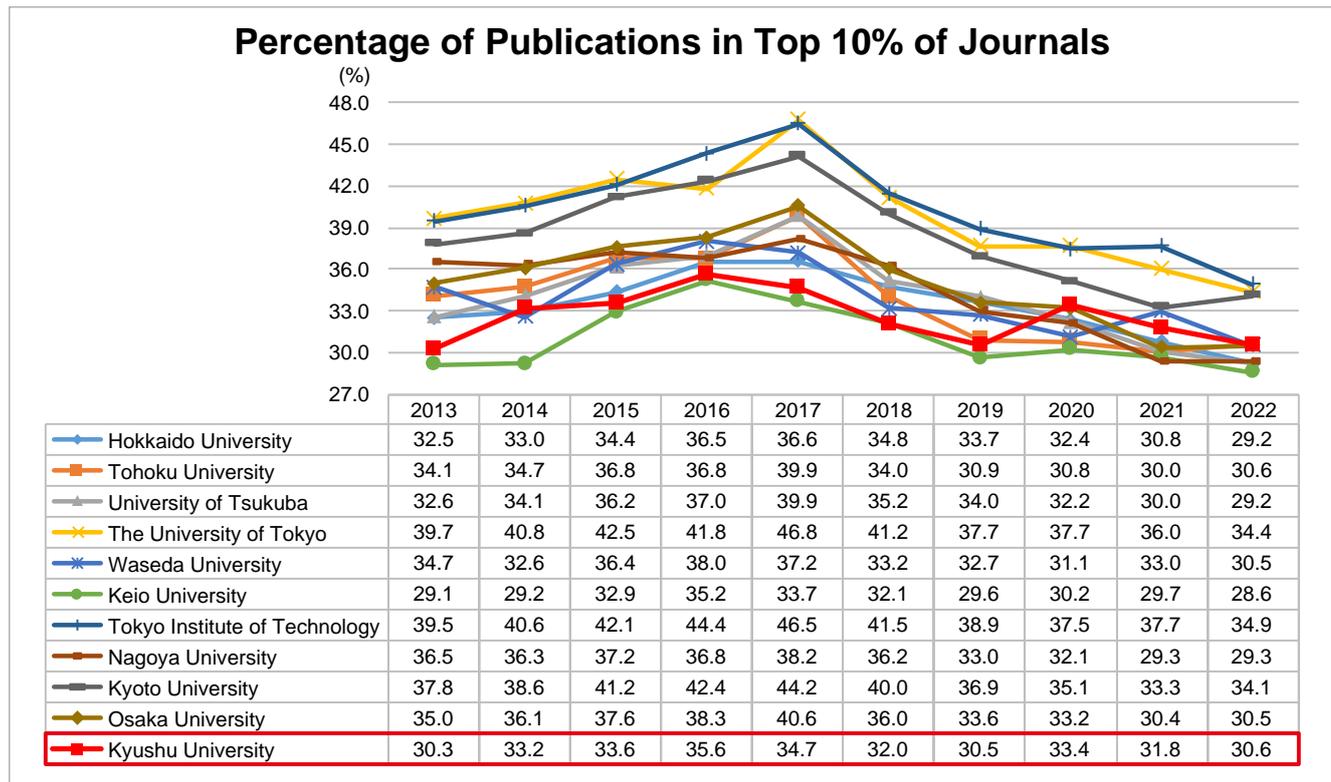Source: Elsevier's *"SciVal"* (as of September 2023)

Overview and Comparisons with Other Universities

Number of Faculty and Staff Members

Number of Students

Admissions

Enrollment

Graduate Degrees Conferred

Career Paths and Employment Status

Success in Qualification Examinations

Research

International

Industry-University-Government Collaboration

University Hospital

Income and Expenditure

Selection of Research/ Education Programs

9-2. Comparisons of Publication Quantity and Quality (Continued)

◆Comparison of RU11 (*1)◆ (Continued)

Percentage of Publications in Top 10% of Journals

(%)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Hokkaido University	32.5	33.0	34.4	36.5	36.6	34.8	33.7	32.4	30.8	29.2
Tohoku University	34.1	34.7	36.8	36.8	39.9	34.0	30.9	30.8	30.0	30.6
University of Tsukuba	32.6	34.1	36.2	37.0	39.9	35.2	34.0	32.2	30.0	29.2
The University of Tokyo	39.7	40.8	42.5	41.8	46.8	41.2	37.7	37.7	36.0	34.4
Waseda University	34.7	32.6	36.4	38.0	37.2	33.2	32.7	31.1	33.0	30.5
Keio University	29.1	29.2	32.9	35.2	33.7	32.1	29.6	30.2	29.7	28.6
Tokyo Institute of Technology	39.5	40.6	42.1	44.4	46.5	41.5	38.9	37.5	37.7	34.9
Nagoya University	36.5	36.3	37.2	36.8	38.2	36.2	33.0	32.1	29.3	29.3
Kyoto University	37.8	38.6	41.2	42.4	44.2	40.0	36.9	35.1	33.3	34.1
Osaka University	35.0	36.1	37.6	38.3	40.6	36.0	33.6	33.2	30.4	30.5
Kyushu University	30.3	33.2	33.6	35.6	34.7	32.0	30.5	33.4	31.8	30.6

Percentage of Publications in Top 25% of Journals

(%)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Hokkaido University	59.4	57.9	60.2	59.8	60.9	58.8	59.5	61.5	62.1	61.2
Tohoku University	61.3	61.2	61.5	60.5	62.9	60.7	60.9	62.1	62.1	62.2
University of Tsukuba	58.5	59.2	58.9	59.0	61.1	60.7	57.9	59.8	61.6	61.8
The University of Tokyo	65.7	66.3	67.1	65.1	68.4	67.4	68.7	68.8	69.6	69.2
Waseda University	55.3	55.1	57.6	57.4	58.7	57.5	59.8	59.8	61.0	61.9
Keio University	54.5	53.7	57.4	57.1	56.7	59.2	57.3	59.3	59.7	60.4
Tokyo Institute of Technology	62.4	66.4	66.3	65.2	67.2	66.8	68.7	67.2	67.1	67.6
Nagoya University	63.7	63.7	61.0	59.2	63.3	61.6	61.8	61.6	61.3	61.3
Kyoto University	62.5	64.1	63.5	63.3	65.8	66.4	66.0	65.2	65.4	65.7
Osaka University	59.8	60.7	60.6	59.8	62.5	61.3	61.3	61.3	60.8	61.8
Kyushu University	55.6	57.6	56.2	56.0	57.7	57.4	57.5	59.9	61.7	60.6

(*1) RU11 (Research University 11) is a consortium that aims to develop academia via eleven universities: Hokkaido University, Tohoku University, University of Tsukuba, The University of Tokyo, Waseda University, Keio University, Tokyo Institute of Technology, Nagoya University, Kyoto University, Osaka University, and Kyushu University. RU11 is composed of both national and private universities.
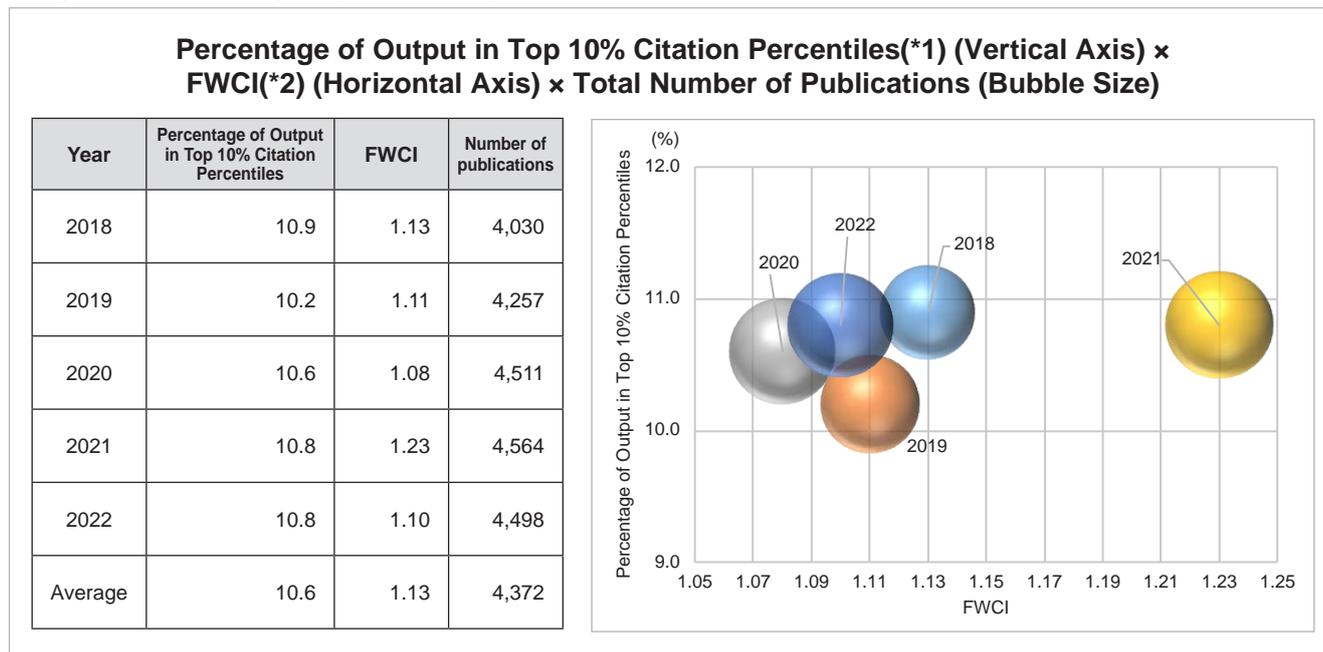
Metrics Details

Publication Type: Articles and Reviews; Journal Metric: CiteScore Percentile

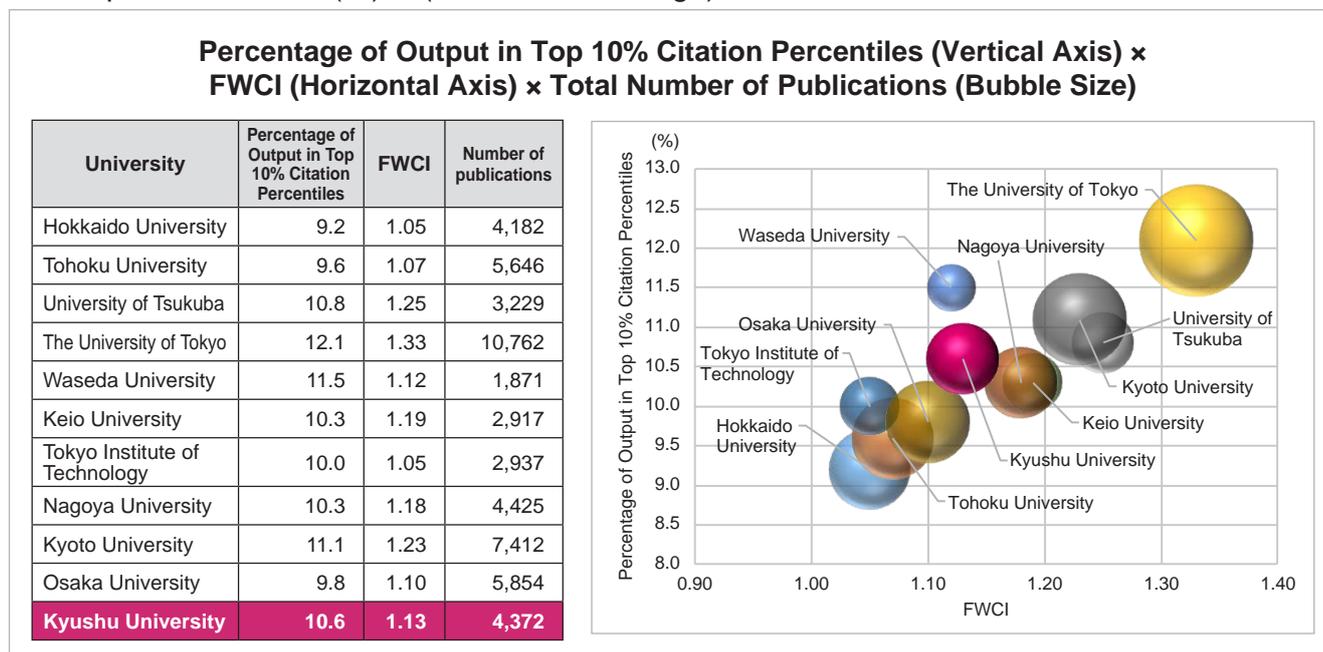Source: Elsevier's *"SciVal"* (as of September 2023)

Overview and Comparisons with Other Universities

Number of Faculty and Staff Members

Number of Students

Admissions

Enrollment

Graduate Degrees Conferred

Career Paths and Employment Status

Success in Qualification Examinations

Research

International

Industry-University-Government Collaboration

University Hospital

Income and Expenditure

Selection of Research/ Education Programs

9-2. Comparisons of Publication Quantity and Quality (Continued)

■ Overall Comparisons of Publication Quantity and Quality

◆Kyushu University◆ (2018-2022)

Percentage of Output in Top 10% Citation Percentiles(*1) (Vertical Axis) × FWCI(*2) (Horizontal Axis) × Total Number of Publications (Bubble Size)

Year	Percentage of Output in Top 10% Citation Percentiles	FWCI	Number of publications
2018	10.9	1.13	4,030
2019	10.2	1.11	4,257
2020	10.6	1.08	4,511
2021	10.8	1.23	4,564
2022	10.8	1.10	4,498
Average	10.6	1.13	4,372

◆Comparison of RU11(*3)◆ (2018-2022 Average)

Percentage of Output in Top 10% Citation Percentiles (Vertical Axis) × FWCI (Horizontal Axis) × Total Number of Publications (Bubble Size)

University	Percentage of Output in Top 10% Citation Percentiles	FWCI	Number of publications
Hokkaido University	9.2	1.05	4,182
Tohoku University	9.6	1.07	5,646
University of Tsukuba	10.8	1.25	3,229
The University of Tokyo	12.1	1.33	10,762
Waseda University	11.5	1.12	1,871
Keio University	10.3	1.19	2,917
Tokyo Institute of Technology	10.0	1.05	2,937
Nagoya University	10.3	1.18	4,425
Kyoto University	11.1	1.23	7,412
Osaka University	9.8	1.10	5,854
Kyushu University	**10.6**	**1.13**	**4,372**

(*1) Percentage of Output in Top 10% Citation Percentiles
   This refers to the number of (field-weighted) publications in top 10% most cited worldwide. This figure indicates the proportion of papers, including the top 10%, based on the annual number of Scopus citations.

(*2) FWCI (Field-Weighted Citation Impact) is the number of citations received by the publication, divided by the world average for the same type of publications in the same field and same publication year. An FWCI of 1 or higher means that the average impact is higher than the world average.

(*3) RU11 (Research University 11) is a consortium that aims to develop academia via eleven universities: Hokkaido University, Tohoku University, University of Tsukuba, The University of Tokyo, Waseda University, Keio University, Tokyo Institute of Technology, Nagoya University, Kyoto University, Osaka University, and Kyushu University. RU11 is composed of both national and private universities.
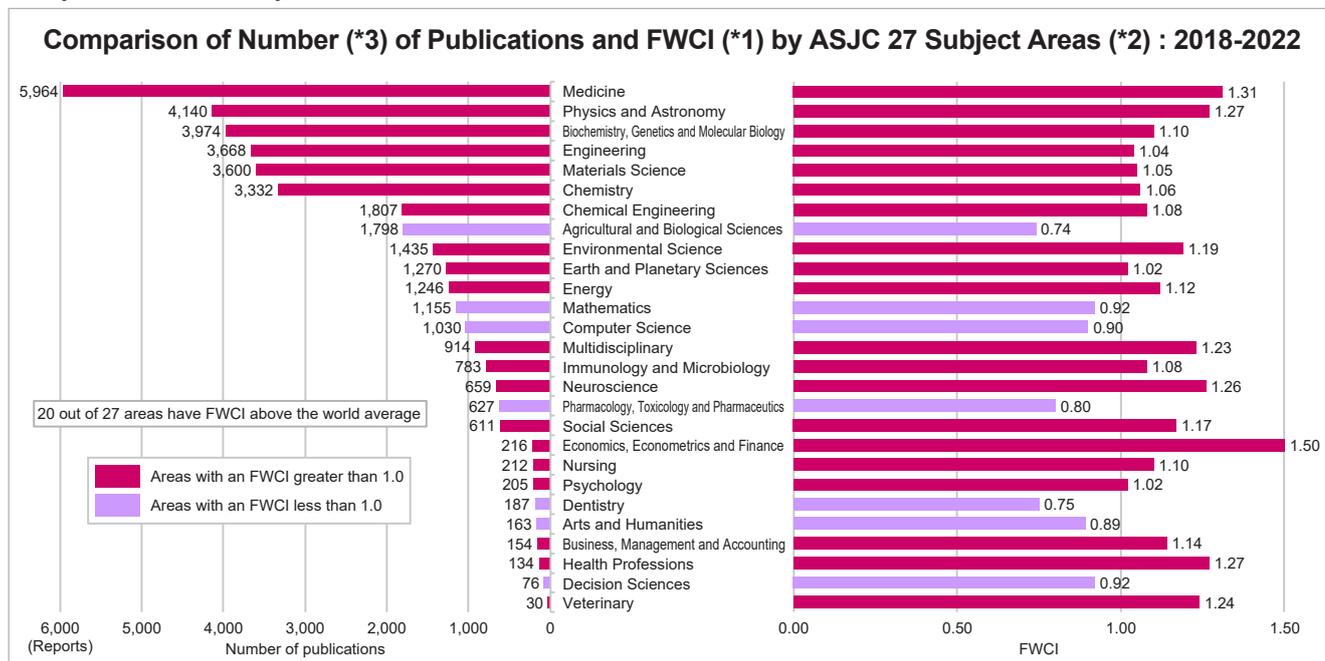
Metrics Details
   Publication Type: Articles and Reviews; Self-Citations: included; Field-Weighted: yes

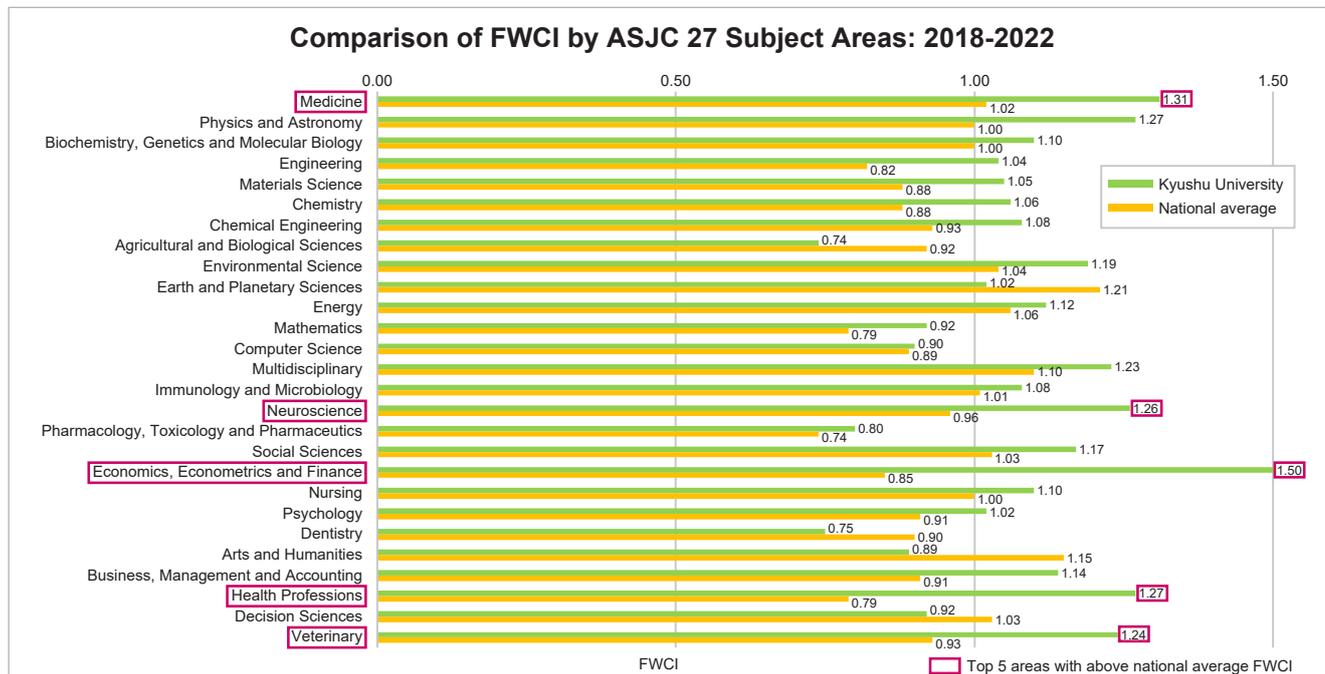Source: Elsevier's "*SciVal*" (as of September 2023)

Overview and Comparisons with Other Universities
Number of Faculty and Staff Members
Number of Students
Admissions
Enrollment
Graduate Degrees Conferred
Career Paths and Employment Status
Success in Qualification Examinations
Research
International
Industry-University-Government Collaboration
University Hospital
Income and Expenditure
Selection of Research/ Education Programs

9-2. Comparisons of Publication Quantity and Quality (Continued)

■ Comparison between Kyushu University and the National Average by ASJC 27 Subject Areas: FWCI

◆Kyushu University◆

Comparison of Number (*3) of Publications and FWCI (*1) by ASJC 27 Subject Areas (*2) : 2018-2022

Subject Area	Number of publications	FWCI
Medicine	5,964	1.31
Physics and Astronomy	4,140	1.27
Biochemistry, Genetics and Molecular Biology	3,974	1.10
Engineering	3,668	1.04
Materials Science	3,600	1.05
Chemistry	3,332	1.06
Chemical Engineering	1,807	1.08
Agricultural and Biological Sciences	1,798	0.74
Environmental Science	1,435	1.19
Earth and Planetary Sciences	1,270	1.02
Energy	1,246	1.12
Mathematics	1,155	0.92
Computer Science	1,030	0.90
Multidisciplinary	914	1.23
Immunology and Microbiology	783	1.08
Neuroscience	659	1.26
Pharmacology, Toxicology and Pharmaceutics	627	0.80
Social Sciences	611	1.17
Economics, Econometrics and Finance	216	1.50
Nursing	212	1.10
Psychology	205	1.02
Dentistry	187	0.75
Arts and Humanities	163	0.89
Business, Management and Accounting	154	1.14
Health Professions	134	1.27
Decision Sciences	76	0.92
Veterinary	30	1.24

20 out of 27 areas have FWCI above the world average

Areas with an FWCI greater than 1.0
Areas with an FWCI less than 1.0

◆Comparison between Kyushu University and the National Averages ◆

Comparison of FWCI by ASJC 27 Subject Areas: 2018-2022

Subject Area	Kyushu University	National average
Medicine	1.31	1.02
Physics and Astronomy	1.27	1.00
Biochemistry, Genetics and Molecular Biology	1.10	1.00
Engineering	1.04	0.82
Materials Science	1.05	0.88
Chemistry	1.06	0.88
Chemical Engineering	1.08	0.93
Agricultural and Biological Sciences	0.74	0.92
Environmental Science	1.19	1.04
Earth and Planetary Sciences	1.02	1.21
Energy	1.12	1.06
Mathematics	0.92	0.79
Computer Science	0.90	0.89
Multidisciplinary	1.23	1.10
Immunology and Microbiology	1.08	1.01
Neuroscience	1.26	0.96
Pharmacology, Toxicology and Pharmaceutics	0.80	0.74
Social Sciences	1.17	1.03
Economics, Econometrics and Finance	1.50	0.85
Nursing	1.10	1.00
Psychology	1.02	0.91
Dentistry	0.75	0.90
Arts and Humanities	0.89	1.15
Business, Management and Accounting	1.14	0.91
Health Professions	1.27	0.79
Decision Sciences	0.92	1.03
Veterinary	1.24	0.93

Top 5 areas with above national average FWCI: Medicine, Neuroscience, Economics, Econometrics and Finance, Health Professions, Veterinary

(*1) FWCI (Field-Weighted Citation Impact) is the number of citations received by the publication, divided by the world average for the same type of publications in the same field and same publication year. An FWCI of 1 or higher means that the average impact is higher than the world average.

(*2) The above journal categories are based on the ASJC 27 (ASJC: All Science Journal Classification) in Scopus.

(*3) A larger number of publications and higher FWCI indicates greater depth of research capability (i.e. that it is one of the university's strengths). A smaller number of publications and high FWCI often indicates that there is a specific faculty member with advanced research ability. In addition, when a specific faculty member belongs to a huge community of researchers, both the number of publications and FWCI are often higher.
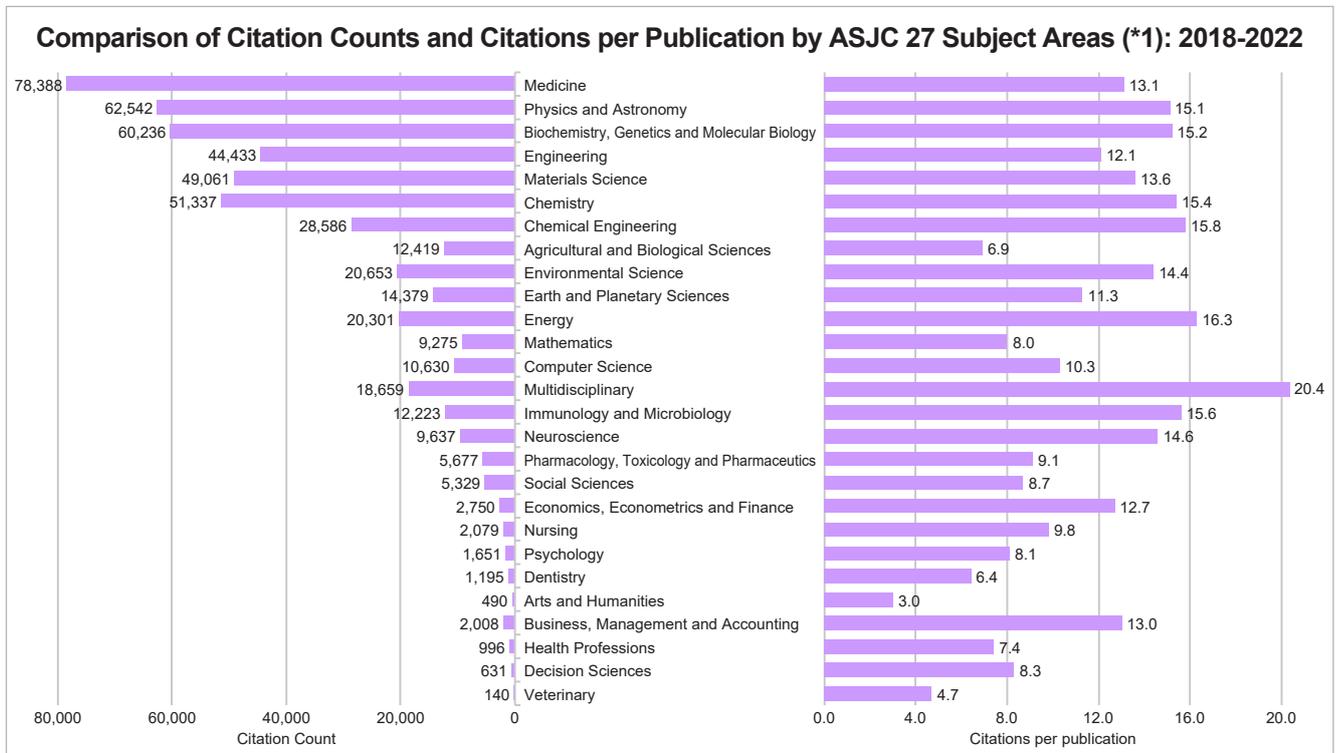
Metrics Details
Publication Type: Articles and Reviews; Self-Citations: included
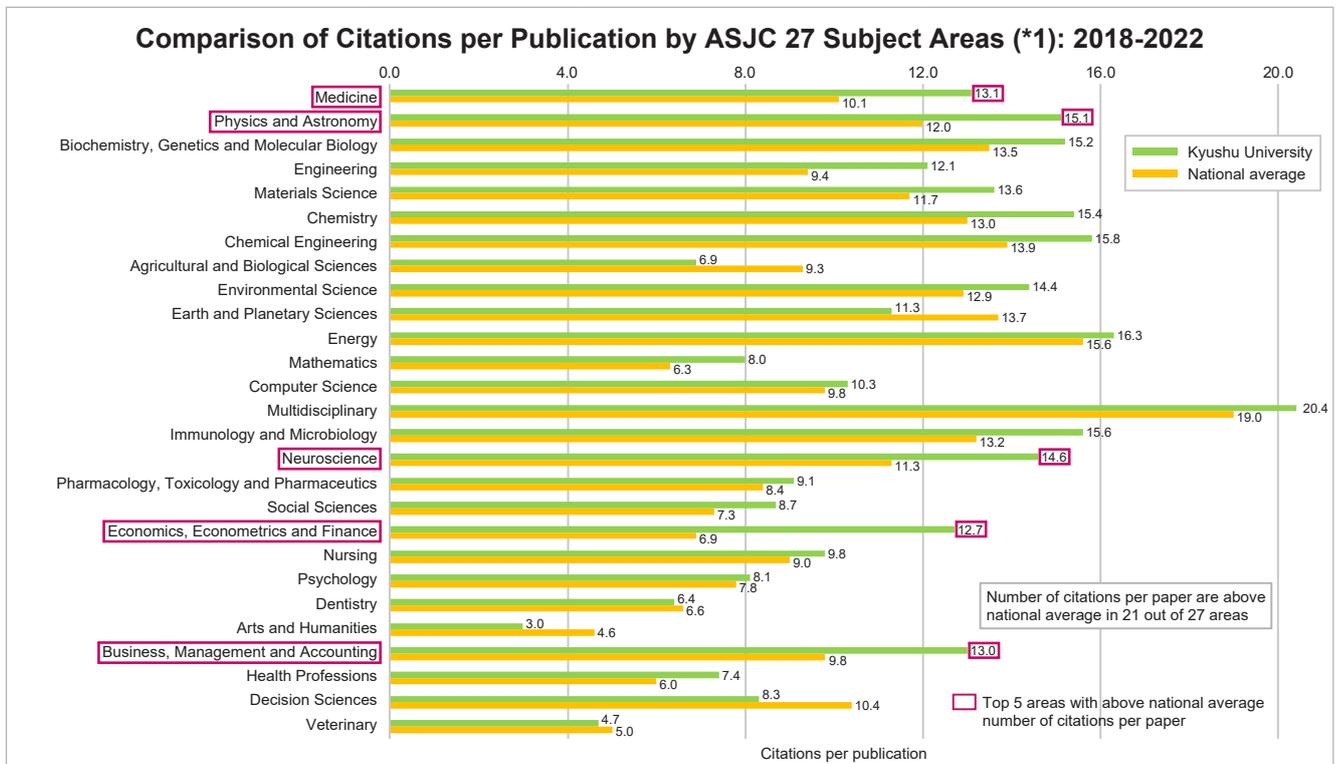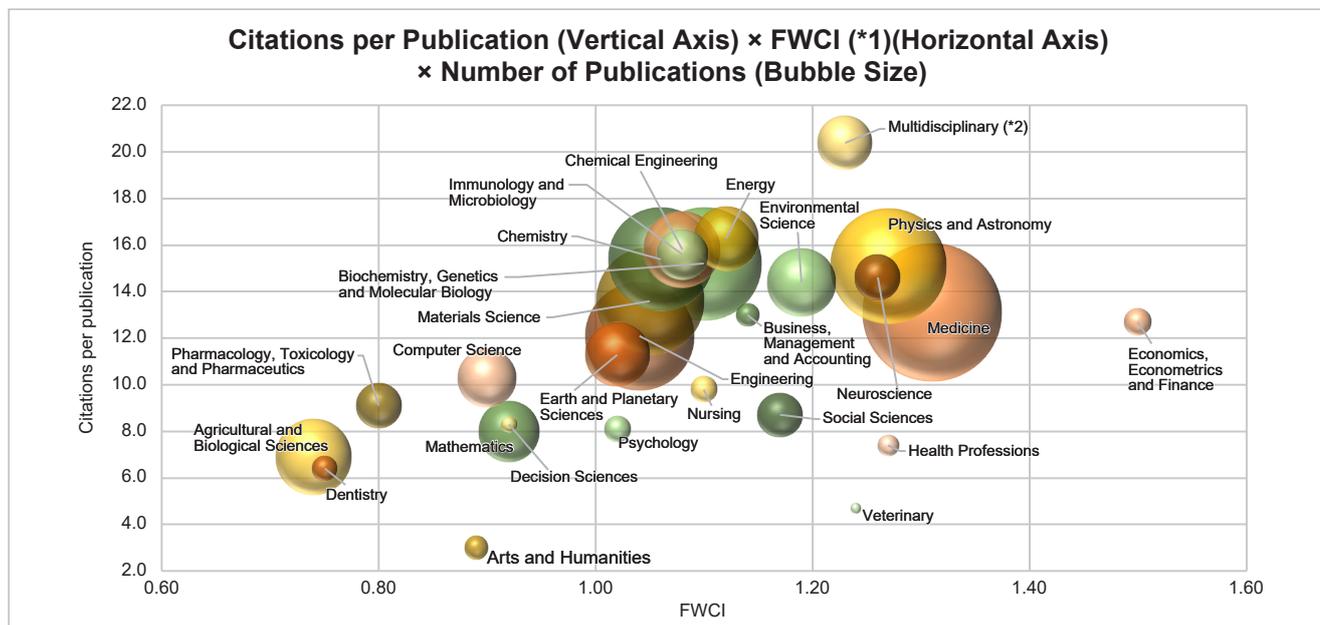
Source: Elsevier's *"SciVal"* (as of September 2023)

9-2. Comparisons of Publication Quantity and Quality (Continued)

■ Comparison between Kyushu University and the National Average by ASJC 27 Subject Areas: Citations per Publication

◆Kyushu University◆

Comparison of Citation Counts and Citations per Publication by ASJC 27 Subject Areas (*1): 2018-2022

Subject Area	Citation Count	Citations per publication
Medicine	78,388	13.1
Physics and Astronomy	62,542	15.1
Biochemistry, Genetics and Molecular Biology	60,236	15.2
Engineering	44,433	12.1
Materials Science	49,061	13.6
Chemistry	51,337	15.4
Chemical Engineering	28,586	15.8
Agricultural and Biological Sciences	12,419	6.9
Environmental Science	20,653	14.4
Earth and Planetary Sciences	14,379	11.3
Energy	20,301	16.3
Mathematics	9,275	8.0
Computer Science	10,630	10.3
Multidisciplinary	18,659	20.4
Immunology and Microbiology	12,223	15.6
Neuroscience	9,637	14.6
Pharmacology, Toxicology and Pharmaceutics	5,677	9.1
Social Sciences	5,329	8.7
Economics, Econometrics and Finance	2,750	12.7
Nursing	2,079	9.8
Psychology	1,651	8.1
Dentistry	1,195	6.4
Arts and Humanities	490	3.0
Business, Management and Accounting	2,008	13.0
Health Professions	996	7.4
Decision Sciences	631	8.3
Veterinary	140	4.7

◆Comparison between Kyushu University and the National Averages ◆

Comparison of Citations per Publication by ASJC 27 Subject Areas (*1): 2018-2022

Subject Area	Kyushu University	National average
Medicine	13.1	10.1
Physics and Astronomy	15.1	12.0
Biochemistry, Genetics and Molecular Biology	15.2	13.5
Engineering	12.1	9.4
Materials Science	13.6	11.7
Chemistry	15.4	13.0
Chemical Engineering	15.8	13.9
Agricultural and Biological Sciences	6.9	9.3
Environmental Science	14.4	12.9
Earth and Planetary Sciences	11.3	13.7
Energy	16.3	15.6
Mathematics	8.0	6.3
Computer Science	10.3	9.8
Multidisciplinary	20.4	19.0
Immunology and Microbiology	15.6	13.2
Neuroscience	14.6	11.3
Pharmacology, Toxicology and Pharmaceutics	9.1	8.4
Social Sciences	8.7	7.3
Economics, Econometrics and Finance	12.7	6.9
Nursing	9.8	9.0
Psychology	8.1	7.8
Dentistry	6.4	6.6
Arts and Humanities	3.0	4.6
Business, Management and Accounting	13.0	9.8
Health Professions	7.4	6.0
Decision Sciences	8.3	10.4
Veterinary	4.7	5.0

Number of citations per paper are above national average in 21 out of 27 areas

Top 5 areas with above national average number of citations per paper

(*1) The above journal categories are based on the ASJC 27 (ASJC: All Science Journal Classification) in Scopus.
Metrics Details
　Publication Type: Articles and Reviews; Self-Citations: included

Source: Elsevier's *"SciVal"* (as of September 2023)

9-2. Comparisons of Publication Quantity and Quality (Continued)

■ Comparison of Research Fields of Kyushu University Publications by ASJC 27 Subject Areas: 2018-2022

Citations per Publication (Vertical Axis) × FWCI (*1)(Horizontal Axis) × Number of Publications (Bubble Size)

■ Comparison of Research Fields of Kyushu University Publications by ASJC 334 Fields: 2018-2022

Top 10 fields with high FWCI (*3)

Rank	ASJC 27 Subject Areas (*4)	ASJC 334 Fields (*4)	FWCI	Number of publications
1	Nursing	Psychiatric Mental Health	17.40	3
2	Immunology and Microbiology	Parasitology	3.63	21
3	Medicine	General Medicine	3.57	399
4	Medicine	Anatomy	3.55	29
5	Health Professions	Optometry	3.36	1
6	Veterinary	Equine	2.91	3
6	Veterinary	Small Animals	2.91	3
8	Business, Management and Accounting	Business and International Management	2.45	27
9	Economics, Econometrics and Finance	General Economics,Econometrics and Finance	2.42	15
10	Engineering	Engineering (miscellaneous) (*5)	2.40	206

(*1) FWCI (Field-Weighted Citation Impact) is the number of citations received by the publication, divided by the world average for the same type of publications in the same field and same publication year. An FWCI of 1 or higher means that the average impact is higher than the world average.

(*2) Multidisciplinary field is one in which publications are carried in general scientific magazines such as Nature and Science.

(*3) 142 fields out of a total of 334 fields have FWCI above world average. Fields with high FWCI and a low number of papers indicate a strong ability to perform research amongst staff. Fields with a high FWCI and a high number of papers demonstrate a strong research ability overall (as a University).

(*4) The 27 subject areas and 334 fields is based on the Scopus ASJC categorization (ASJC: All Science Journal Classification). Translation assistance: NIAD-QE, the National Institution for Academic Degrees and Quality Enhancement of Higher Education (the major field categories are Elsevier translations)

(*5) Engineering (miscellaneous) refers to topics besides the following: Aerospace Engineering; Automotive Engineering; Biomedical Engineering; Civil and Structural Engineering; Computational Mechanics; Control and Systems Engineering; Electrical and Electronic Engineering; Industrial and Manufacturing Engineering; Mechanical Engineering; Mechanics of Materials; Ocean Engineering; Safety, Risk, Reliability, and Quality; Media Technology; Building and Construction; Architecture.

Metrics Details
  Publication Type: Articles and Reviews; Self-Citations: included

Source: Elsevier's "SciVal" (as of September 2023)

Overview and Comparisons with Other Universities

Number of Faculty and Staff Members

Number of Students

Admissions

Enrollment

Graduate Degrees Conferred

Career Paths and Employment Status

Success in Qualification Examinations

Research

International

Industry-University-Government Collaboration

University Hospital

Income and Expenditure

Selection of Research/ Education Programs

Overview and Comparisons with Other Universities

Number of Faculty and Staff Members

Number of Students

Admissions

Enrollment

Graduate Degrees Conferred

Career Paths and Employment Status

Success in Qualification Examinations

Research

International

Industry-University-Government Collaboration

University Hospital

Income and Expenditure

Selection of Research/ Education Programs

9-3. International Co-Authored Publications

◆Kyushu University◆ ★Key Performance Indicators (KPIs) for the Designated National University Corporations

International Co-Authored Publications
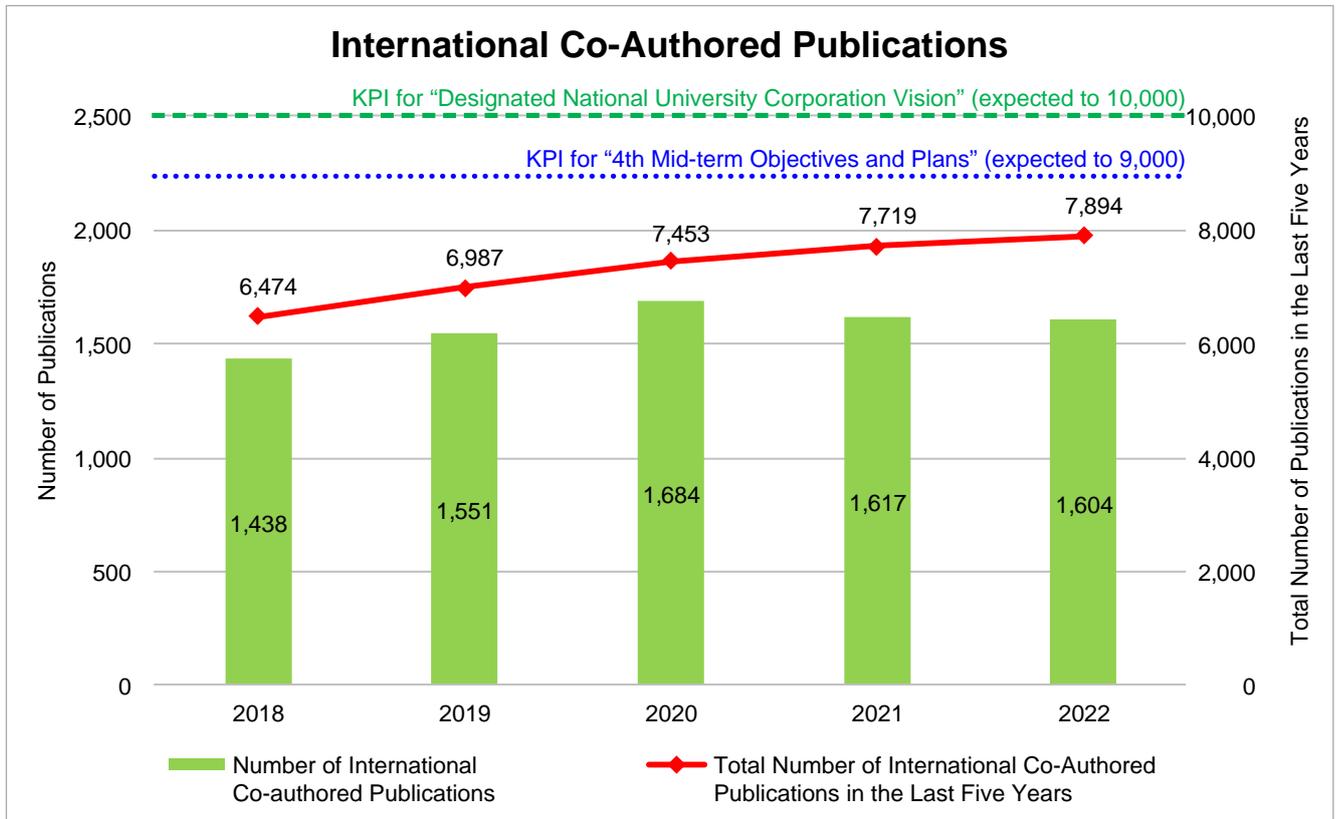
・ The polygonal line indicates the total number of international co-authored publications in the last five years, including the relevant year.

◆By Faculty◆ (2018-2022)

Rank	Faculty	Number of International Co-Authored Publications (Total)	International Co-Authorship Average Rate (%)
1	Faculty of Engineering	1,202	33.5
2	Faculty of Science	955	50.6
3	Faculty of Medical Sciences	763	16.9
4	Faculty of Agriculture	693	42.3
5	Faculty of Engineering Sciences	473	42.8
6	Faculty of Information Science and Electrical Engineering	375	39.6
7	Faculty of Pharmaceutical Sciences	154	26.2
8	Faculty of Dental Science	150	24.0
9	Faculty of Design	83	27.5
10	Faculty of Social and Cultural Studies	71	45.8
11	Faculty of Human-Environment Studies	50	29.2
12	Faculty of Mathematics	48	27.6
13	Faculty of Economics	39	26.9
14	Faculty of Languages and Cultures	7	21.9
15	Faculty of Law	6	75.0
16	Faculty of Humanities	3	10.0

Metrics Details

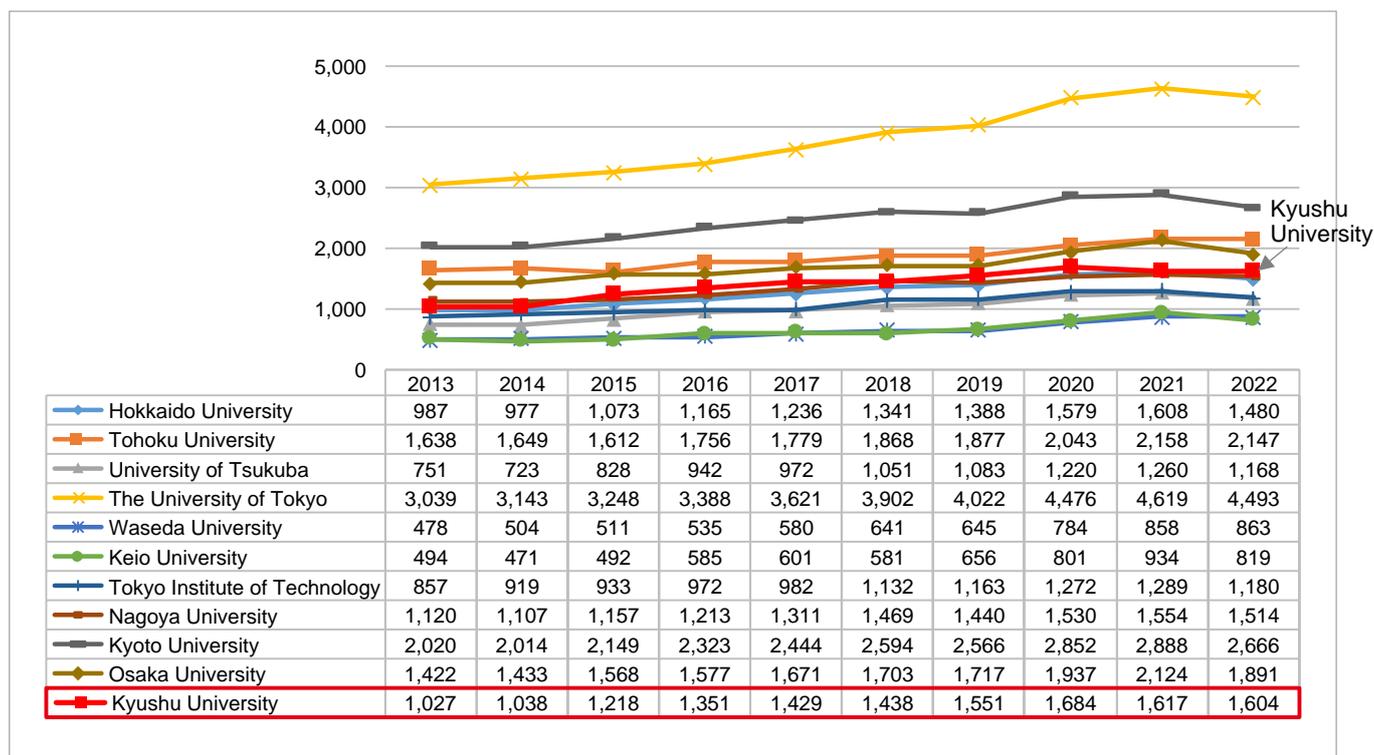　Publication Type: Articles and Reviews; Field-Weighted: no

・ Number of internationally co-authored publications by faculty: A tally of international co-authored publications by authors enrolled at Kyushu University as of 1st April 2023, including those previously published while working at other institutions.

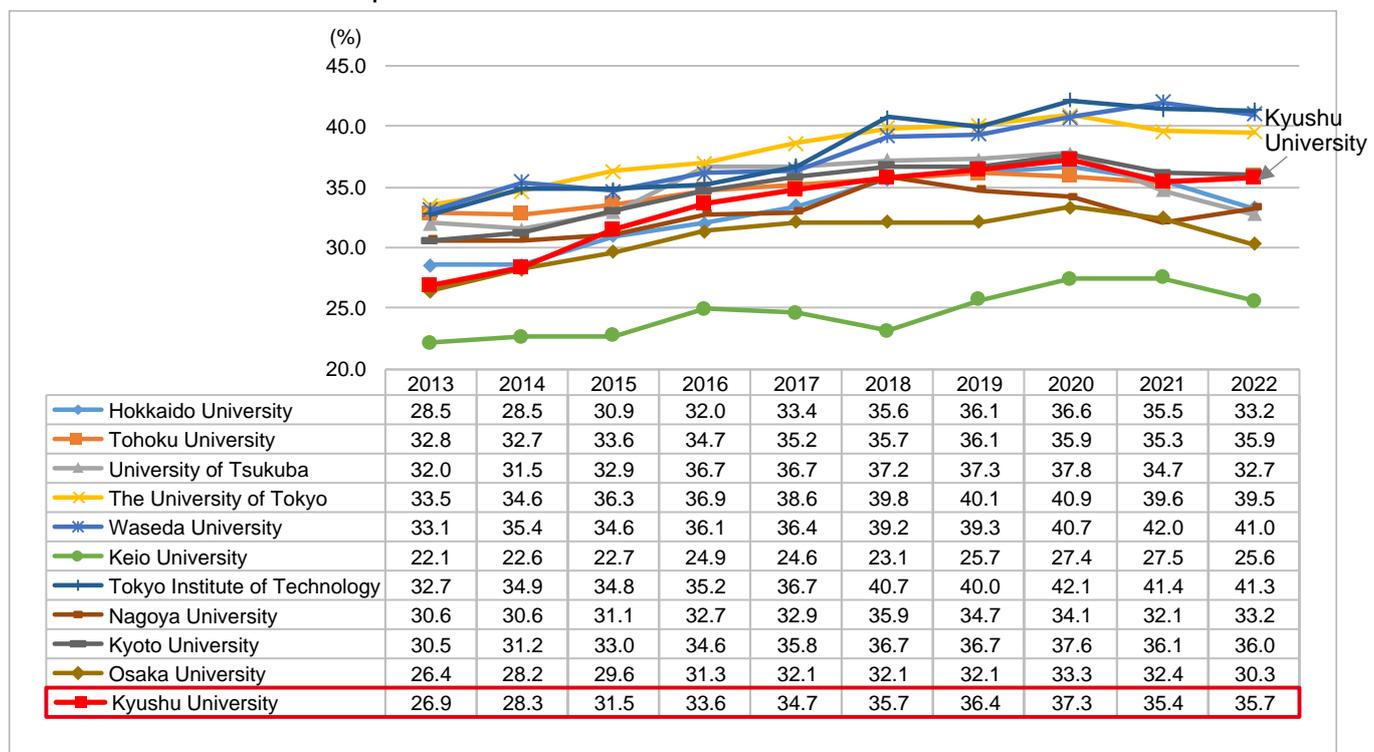Source: Elsevier's *"SciVal"* (as of September 2023)

Overview and Comparisons with Other Universities

Number of Faculty and Staff Members

Number of Students

Admissions

Enrollment

Graduate Degrees Conferred

Career Paths and Employment Status

Success in Qualification Examinations

Research

International

Industry-University-Government Collaboration

University Hospital

Income and Expenditure

Selection of Research/ Education Programs

9-3. International Co-Authored Publications (Continued)

◆Comparison of RU11 (*1)◆ (2013-2022)

Number of International Co-Authored Publications

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Hokkaido University	987	977	1,073	1,165	1,236	1,341	1,388	1,579	1,608	1,480
Tohoku University	1,638	1,649	1,612	1,756	1,779	1,868	1,877	2,043	2,158	2,147
University of Tsukuba	751	723	828	942	972	1,051	1,083	1,220	1,260	1,168
The University of Tokyo	3,039	3,143	3,248	3,388	3,621	3,902	4,022	4,476	4,619	4,493
Waseda University	478	504	511	535	580	641	645	784	858	863
Keio University	494	471	492	585	601	581	656	801	934	819
Tokyo Institute of Technology	857	919	933	972	982	1,132	1,163	1,272	1,289	1,180
Nagoya University	1,120	1,107	1,157	1,213	1,311	1,469	1,440	1,530	1,554	1,514
Kyoto University	2,020	2,014	2,149	2,323	2,444	2,594	2,566	2,852	2,888	2,666
Osaka University	1,422	1,433	1,568	1,577	1,671	1,703	1,717	1,937	2,124	1,891
Kyushu University	1,027	1,038	1,218	1,351	1,429	1,438	1,551	1,684	1,617	1,604

International Co-Authorship Rates

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Hokkaido University	28.5	28.5	30.9	32.0	33.4	35.6	36.1	36.6	35.5	33.2
Tohoku University	32.8	32.7	33.6	34.7	35.2	35.7	36.1	35.9	35.3	35.9
University of Tsukuba	32.0	31.5	32.9	36.7	36.7	37.2	37.3	37.8	34.7	32.7
The University of Tokyo	33.5	34.6	36.3	36.9	38.6	39.8	40.1	40.9	39.6	39.5
Waseda University	33.1	35.4	34.6	36.1	36.4	39.2	39.3	40.7	42.0	41.0
Keio University	22.1	22.6	22.7	24.9	24.6	23.1	25.7	27.4	27.5	25.6
Tokyo Institute of Technology	32.7	34.9	34.8	35.2	36.7	40.7	40.0	42.1	41.4	41.3
Nagoya University	30.6	30.6	31.1	32.7	32.9	35.9	34.7	34.1	32.1	33.2
Kyoto University	30.5	31.2	33.0	34.6	35.8	36.7	36.7	37.6	36.1	36.0
Osaka University	26.4	28.2	29.6	31.3	32.1	32.1	32.1	33.3	32.4	30.3
Kyushu University	26.9	28.3	31.5	33.6	34.7	35.7	36.4	37.3	35.4	35.7

(*1) RU11 (Research University 11) is a consortium that aims to develop academia via eleven universities: Hokkaido University, Tohoku University, University of Tsukuba, The University of Tokyo, Waseda University, Keio University, Tokyo Institute of Technology, Nagoya University, Kyoto University, Osaka University, and Kyushu University. RU11 is composed of both national and private universities.

Metrics Details
Publication Type: Articles and Reviews; Field-Weighted: no

Source: Elsevier's *"SciVal"* (as of September 2023)

Overview and Comparisons with Other Universities
Number of Faculty and Staff Members
Number of Students
Admissions
Enrollment
Graduate Degrees Conferred
Career Paths and Employment Status
Success in Qualification Examinations
Research
International
Industry-University-Government Collaboration
University Hospital
Income and Expenditure
Selection of Research/Education Programs

9-3. International Co-Authored Publications (Continued)

■ International Co-Authorship with Institutions Worldwide: 2018-2022

North America
2,912 International Co-Authored Publications with 830 Institutions

Europe
3,100 International Co-Authored Publications with 1,837 Institutions

Asia-Pacific
6,595 International Co-Authored Publications with 1,324 Institutions

Worldwide: 9,295 International Co-Authored Publications with 4,630 Institutions

Number of International Co-Authored Publications   Low [gradient] High

North America
Europe
Middle East
Asia-Pacific
Africa
South America
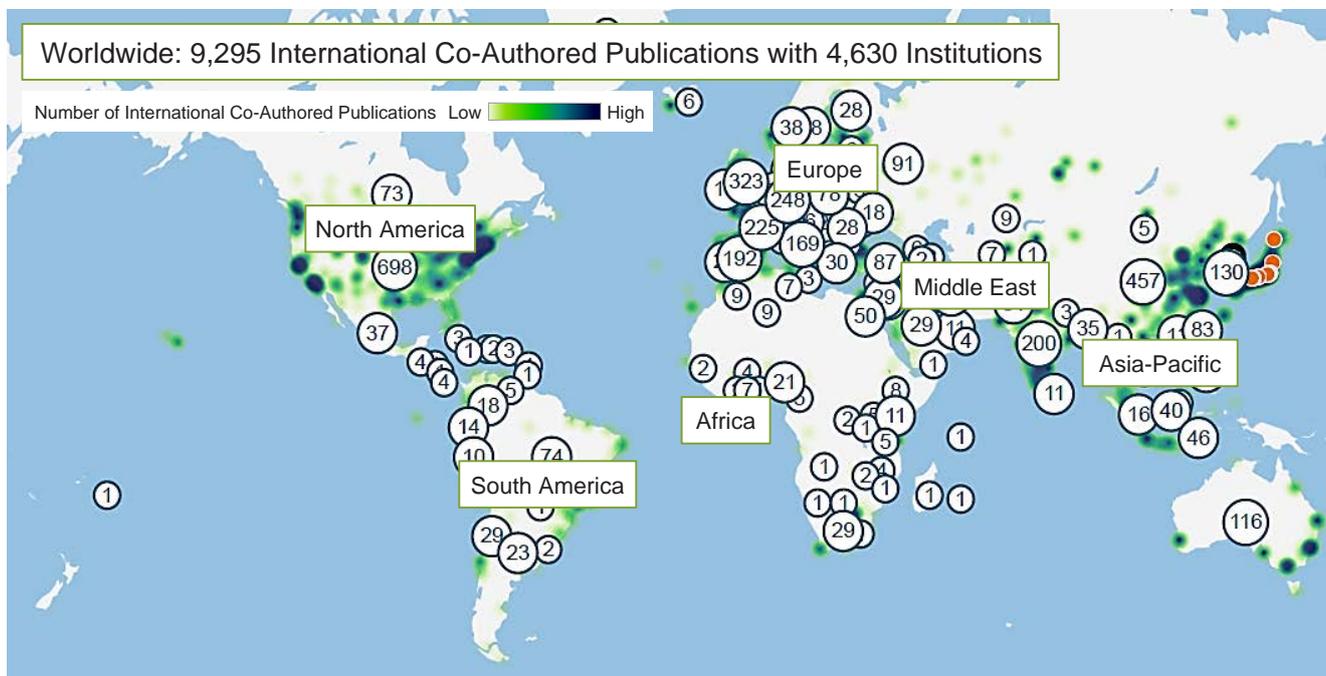
South America
634 International Co-Authored Publications with 177 Institutions

Africa
1,098 International Co-Authored Publications with 192 Institutions

Middle East
906 International Co-Authored Publications with 270 Institutions
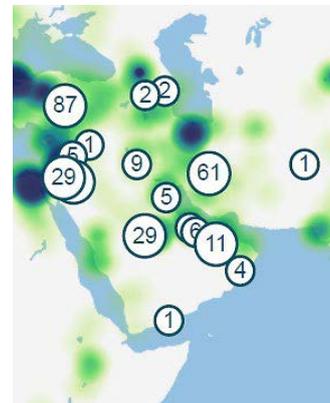
・Figures on the maps represent the number of institutions.

Metrics Details
　Publication Type: All

Source: Elsevier's *"SciVal"* (as of September 2023)