

Institution Overview Report - National Technical University Kharkiv Polytechnic Institute

National Technical University Kharkiv Polytechnic Institute 2015 to >2020

Overall research performance

Entity: National Technical University Kharkiv Polytechnic Institute · Year range: 2015 to 2021 ·

Data source: Scopus, up to 05 May 2021 ·

2,181 ▲

Scholarly Output 

34.2% Open Access

1,389 ▼

Authors

0.71

Field-Weighted Citation Impact 

6,149

Citation Count 

2.8

Citations per Publication 

21

h5-index

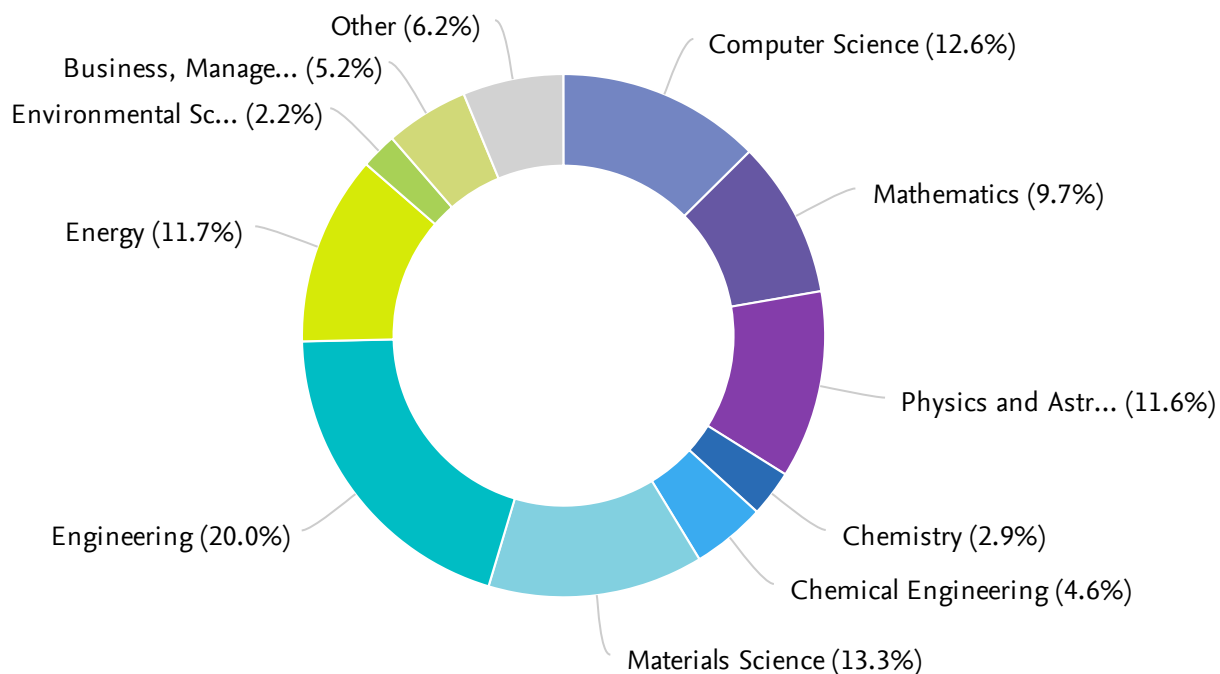
This analysis provides an overall metrics summary of the institution. The snowflake means the metrics have been calculated using the Snowball Metrics methodology.

Note: for researchers with a small scholarly output, please beware of highly cited publications which may skew the FWCI.

Publications by Subject Area

Entity: National Technical University Kharkiv Polytechnic Institute · Year range: 2015 to 2021 ·

Data source: Scopus, up to 05 May 2021 ·



This gives an overview of the Subject Areas in which the institution is publishing and is based upon the high level All Science Journal Classification (ASJC). These Subject Areas are assigned to all articles via the journals in which they are published. Please note, that an article can belong to more than one ASJC.

Key Topics

Entity: National Technical University Kharkiv Polytechnic Institute · Year range: 2015 to 2021 ·

Data source: Scopus, up to 05 May 2021 · Filters: Top 10% of worldwide Topics by Prominence ·



Key Topics

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

A Topic is a collection of articles focused on a common intellectual research problem. There are 96,000 Topics in SciVal that are created by analyzing citation links between articles in Scopus - where there is a strong link a Topic is formed. This chart shows the Topics with a lot of momentum (a high Prominence percentile), in which the institution is potentially making an impact. To learn more, search for Topic Prominence in Science in the SciVal Support Hub.

Key Topics





Entity: National Technical University Kharkiv Polytechnic Institute · Year range: 2015 to 2021 ·

Data source: Scopus, up to 05 May 2021 ·

Key Topics

Topic	At this Institution			Worldwide
	Scholarly Output	Publication Share	Field-Weighted Citation Impact	Prominence percentile
Nitrides; Insulating Oil; Microhardness ... T.29572	58	20.21% ▼	0.93	66.113
Electroplating; Tungsten Alloys; Gluconic Acid ... T.18925	40	11.46% ▲	0.95	84.753
Coke; Coking; Coal ... T.26962	32	13.85% ▲	0.24	68.064
Heat Exchangers; Corrugated Plates; Friction Factor ... T.11648	22	3.54% ▲	0.42	92.142
Overhead Lines; Electric Field Strength; Ferroelectric Materials ... T.93848	17	62.96% ▲	0.40	12.381
Plasma Diagnostics; Mirrors; Divertors (Fusion Reactors) ... T.33502	17	8.17% ▲	0.29	75.827
Electromagnetic Launchers; Coils; Reluctance ... T.24077	16	6.18% ▼	0.48	70.590
Assignment Problem; Fuzzy Parameters; Divisible ... T.47469	13	21.67% ▲	0.43	65.420

Key Topics

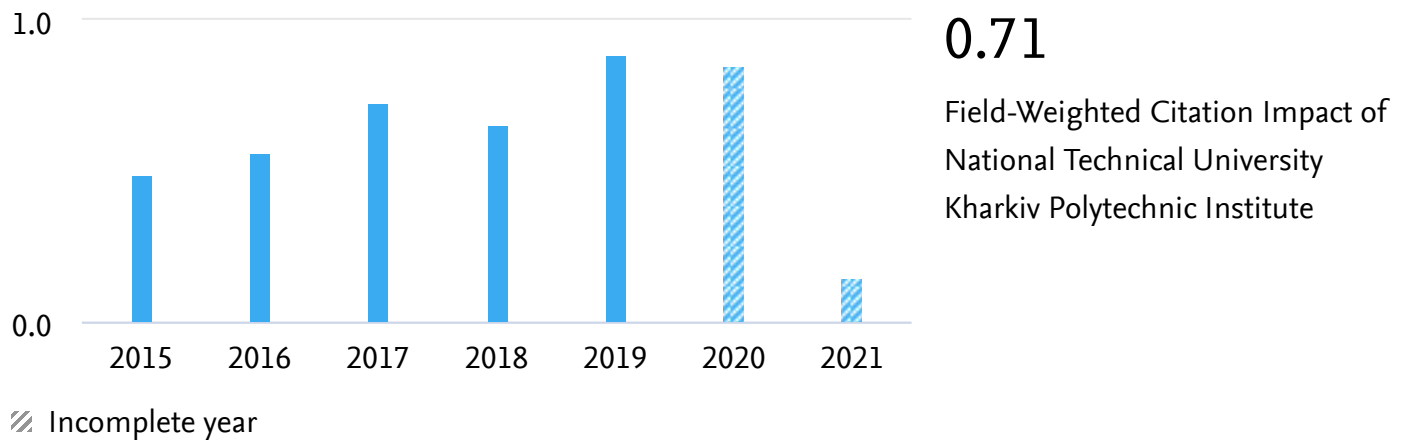
Topic	At this Institution			Worldwide
	Scholarly Output	Publication Share	Field-Weighted Citation Impact	Prominence percentile
 Polaritons; Magnetic Semiconductors; Superlattices ... T.43216	12	36.36% ▼	0.43	14.285 
 Broaching; Cutting Force; High Speed Steel ... T.71312	10	12.35% ▲	0.52	49.836 

A Topic is a collection of articles focused on a common intellectual research problem. There are 96,000 Topics in SciVal that are created by analyzing citation links between articles in Scopus - where there is a strong link a Topic is formed. This table shows the Topics with a lot of momentum (a high Prominence percentile), in which the institution is potentially making an impact. To learn more, search for Topic Prominence in Science in the SciVal Support Hub.

Field-Weighted Citation Impact

Entity: National Technical University Kharkiv Polytechnic Institute · Year range: 2015 to 2021 ·

Data source: Scopus, up to 05 May 2021 ·



Field-Weighted Citation Impact (FWCI) indicates how the number of citations received by the institution publications compares with the average number of citations received by all other similar publications in Scopus. A FWCI of 1.00 indicates that the institution's publications have been cited exactly as would be expected based on the global average for similar publications. A FWCI of more than 1.00 above average citations; for example, 2.11 means 111% more than the world average.

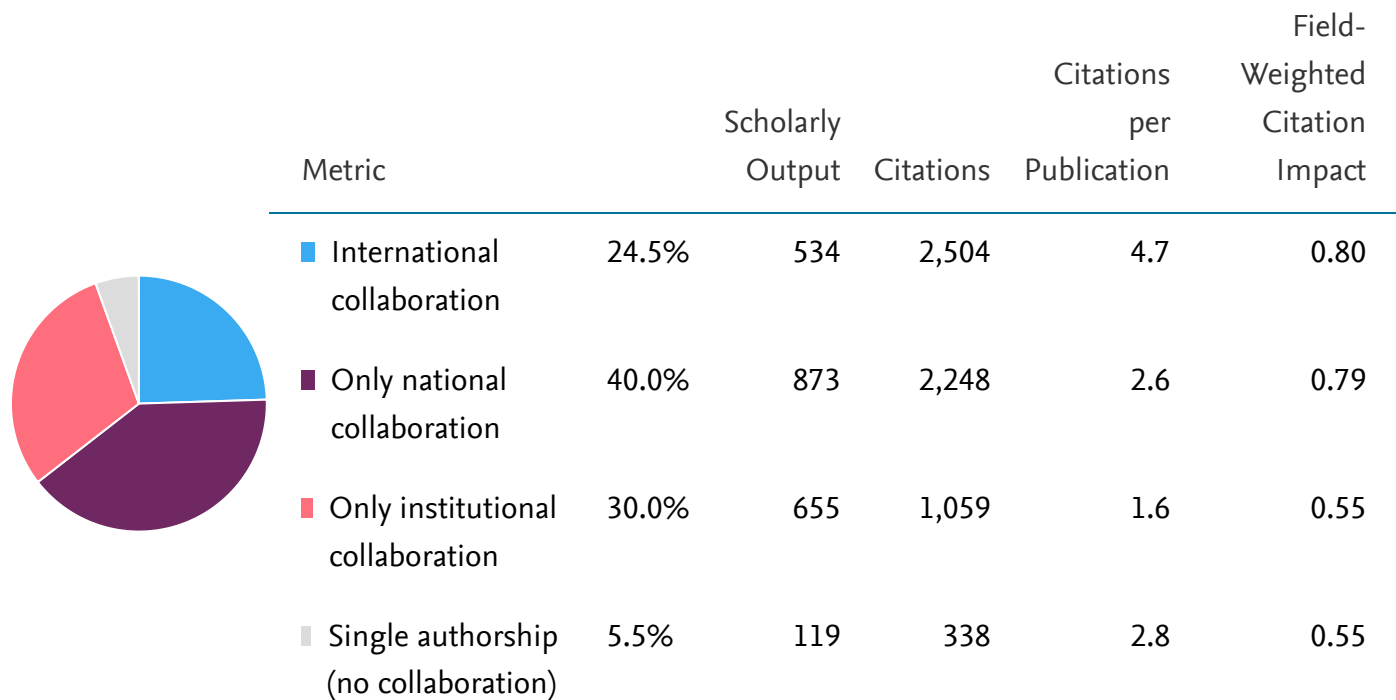
Note: for institutions with a scholarly output less than 1,000, please beware of highly cited publications which may skew the FWCI.

Collaboration

Entity: National Technical University Kharkiv Polytechnic Institute · Year range: 2015 to 2021 ·

Data source: Scopus, up to 05 May 2021 ·

Scholarly Output at National Technical University Kharkiv Polytechnic Institute, by amount of international, national and institutional collaboration



Indicates the extent to which the institution's publications have international, national, or institutional co-authorship, and single authorship. A publication is assigned a single collaboration type.

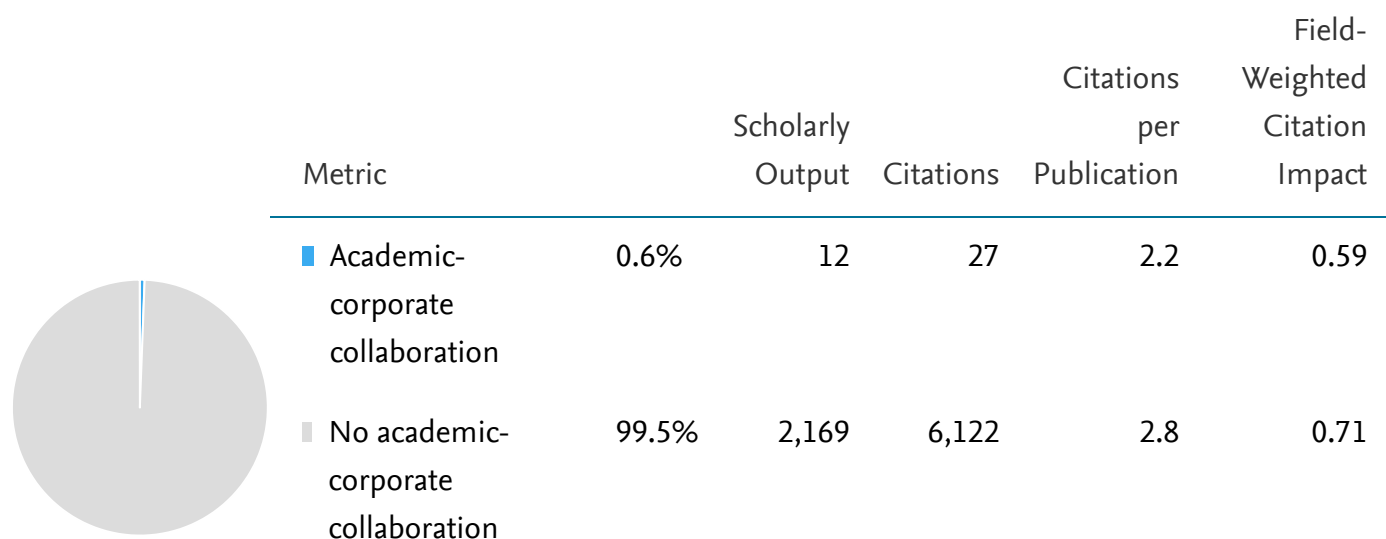
Note: for collaboration types with a scholarly output less than 1,000, please beware of highly cited publications which may skew the FWCI.

Academic-Corporate Collaboration

Entity: National Technical University Kharkiv Polytechnic Institute · Year range: 2015 to 2021 ·

Data source: Scopus, up to 05 May 2021 ·

Scholarly Output at National Technical University Kharkiv Polytechnic Institute with both academic and corporate author affiliations



Academic-Corporate Collaboration indicates the degree of collaboration between academic and corporate affiliations: to what extent are this institution's publications co-authored across the academic and corporate, or industrial, sectors?

A publication either exhibits academic-corporate collaboration, or it does not. This assignment is made based on the organization-type with which Scopus tags each affiliation.

Note: for collaboration types with a scholarly output less than 1,000, please beware of highly cited publications which may skew the FWCI.

Top collaborating Institutions

Entity: National Technical University Kharkiv Polytechnic Institute · Year range: 2015 to 2021 ·

Data source: Scopus, up to 05 May 2021 ·

Institution	Co-authored publications	Citations received for co-authored publications	Co-authors	Field-Weighted Citation Impact
1  National Academy of Sciences of Ukraine	171	687	201 ▼	0.47
2  V. N. Karazin Kharkiv National University	168 ▲	698	113 ▲	0.77
3  National Science Center Kharkov Institute of Physics and Technology	124 ▼	451	114 ▼	0.43
4  Kharkiv National University of Radio Electronics	81 ▲	174	83 ▲	1.45
5  Sumy State University	63 ▼	568	47 ▼	1.58
6  Ukrainian State University of Railway Transport	62 ▲	163	53 ▲	1.22
7  National Aerospace University "Kharkiv Aviation Institute"	47 ▲	183	35 ▲	1.06
8  O.M. Beketov National University of Urban Economy in Kharkiv	45 ▲	89	35 ▲	0.51
9  National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"	44 ▲	89	45 ▲	0.37
10  NASU - B. Verkin Institute for Low Temperature Physics and Engineering	44 ▼	232	53 ▼	0.56

Shows the top institutions that have co-authored scholarly outputs with the institution.

Note: for collaborations with a scholarly output less than 1,000, please beware of highly cited publications which may skew the FWCI.

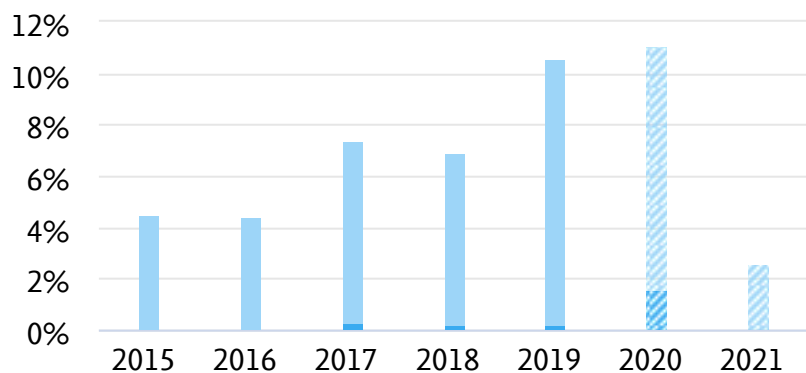
Outputs in Top 10% Citation Percentiles (field-weighted)

Entity: National Technical University Kharkiv Polytechnic Institute · Year range: 2015 to 2021 ·

Data source: Scopus, up to 05 May 2021 ·

Share of publications at National Technical University Kharkiv Polytechnic Institute that are among the most cited publications worldwide

field-weighted



175 (8.0%)

number of publications in the top 10% most cited publications worldwide

■ % publications in top 10% most cited

■ % publications in top 1% most cited

▨ Incomplete year

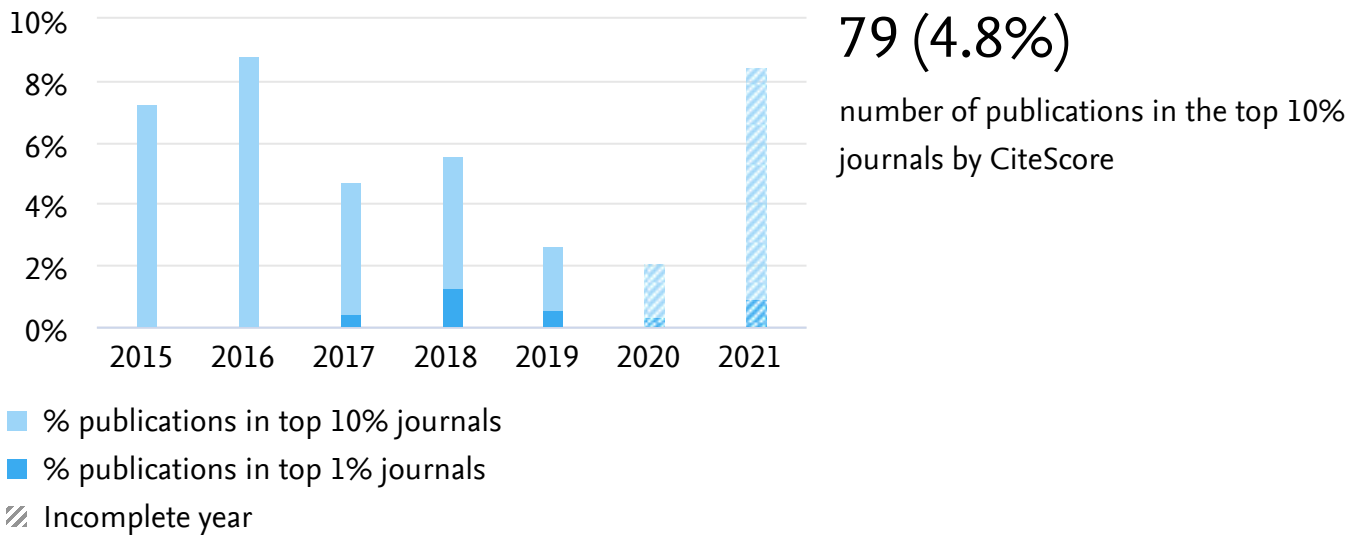
Outputs in Top Citation Percentiles indicates the extent to which an institution's publications are present in the top 10% most-cited percentiles within Scopus. This number is then field-weighted to normalize for differences in subject area citation patterns.

Publications in Top Journal Percentiles by CiteScore Percentile

Entity: National Technical University Kharkiv Polytechnic Institute · Year range: 2015 to 2021 ·

Data source: Scopus, up to 05 May 2021 ·

Share of publications at National Technical University Kharkiv Polytechnic Institute that are in the top journals by CiteScore Percentile



Publications in Top Journal Percentiles indicates the extent to which the institution's publications are present in the most-cited journals in Scopus by CiteScore percentile. The percentage thresholds are taken directly from the CiteScore Percentile values that are calculated by Scopus. A journal receives a CiteScore Percentile for each ASJC in which it's categorized. SciVal always uses the highest relevant CiteScore Percentile, which is dictated by the subject area filter.

Top Authors

Entity: National Technical University Kharkiv Polytechnic Institute · Year range: 2015 to 2021 ·

Data source: Scopus, up to 05 May 2021 ·

Name	Scholarly Output	Most recent publication	Citations	<i>h</i> -index
1. Sobol, Oleg V.	118	2021	766	27
2. Ved', M. V.	67	2021	386	14
3. Sakhnenko, Nikolay D.	67	2021	392	14
4. Khrypunov, Gennadiy S.	65	2020	280	15
5. Kirichenko, Mykhailo V.	48	2021	220	10
6. Meilekhov, A. A.	46	2021	214	7
7. Miroshnichenko, Denis V.	40	2021	67	13
8. Sokol, Yevgen I.	39	2020	52	4
9. Postelnyk, H. O.	38	2020	166	7
10. Klochko, Natalja P.	38	2021	218	11

The authors with the highest scholarly output from the institution, along with some metrics about them.

Note: only compare the *h*-index of authors who started publishing around the same time and in similar subject areas.