Repository Landscape in Turkey and GCRIS: The first National Research Information System

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15th International Conference on Current Research Information Systems (CRIS2022)
Dubrovnik, Croatia
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Topics to Cover

- About IZTECH
- Higher Education Landscape
- Key Players for Open Science in Turkey
- Open Access Movement in Turkey: Milestones
- Events
- Open Science @ TUBITAK (Dergipark, Harman, Aperta)
- Open Science Policy in Turkey
- Getting Ahead in the Race
- Research Ecosystems Inc.
- About GCRIS
"İzmir" probably derives from the former Greek name "Smyrna"

3,500 years of recorded urban history

The second largest port and the third largest city in Turkey

Population: 4,455,294

Mediterranean climate
IZMIR INSTITUTE OF TECHNOLOGY

- Founded in 1992 as a state university
- The only internationally distinguished advanced technical university in Turkey
- Emphasis on education and research in science and technology
- Language of instruction is English
- The campus is in Gülbahce /Urla/İzmir
- 3,500 hectares campus area & 132,000 square meters closed area (The biggest campus area in İzmir)

www.iyte.edu.tr
Faculties and Departments

- **Faculty of Engineering**
  - Computer Engineering
  - Bioengineering
  - Environmental Engineering
  - Energy Systems Engineering
  - Electrical-Electronics Engineering
  - Food Engineering
  - Civil Engineering
  - Chemical Engineering
  - Mechanical Engineering
  - Materials Science and Engineering

- **Faculty of Science**
  - Physics
  - Photonics
  - Chemistry
  - Mathematics
  - Molecular Biology and Genetics

- **Faculty of Architecture**
  - Industrial Design
  - Conservation and Restoration Cultural Heritage
  - Architecture
  - City and Regional Planning

- **The Graduate School**
  - 27 master's programs
  - 19 doctorate programs

- **School of Foreign Languages**
  - Basic English
  - Modern Languages

- **Students**
  - 6,769

- **Academicians**
  - 613

**www.iyte.edu.tr**
International Memberships

Being part of international community is important...

https://www.openaire.eu/amke-members
Higher Education Institutions:
Total: 203

State Universities: 129
Private Universities: 74

Higher Education Landscape in Turkey

https://v2.sherpa.ac.uk/view/repository_visualisations/1.html

https://www.yok.gov.tr/universiteler/universitelerimiz

Repositories Registered in DRIS: 4

DRIS Entries

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Name</th>
<th>Scope</th>
<th>Organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>IZTECH-GCRIS</td>
<td>Izmir Institute of Technology</td>
<td>Institutional</td>
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</table>

https://dspacecris.eurocris.org/simple-search?location=dris&query++driscountry%3A%28turkey%29
Turkey produces 1.55% of the World’s Publication

%1.36 of the World’s citation
Key Players for Open Science in Turkey

### Council of Higher Education (CoHE)
- CoHE Open Science Committee
- CoHE Research Data and Open Data Task Force Sub-Working Group

### The Scientific and Technological Research Council of Turkey
- TUBITAK Open Science Committee

### Anatolian University Libraries Consortium
- ANKOS Open Access and Institutional Repositories Working Group

### EC Projects
- **MedOANet** (2011-2013)
- **PASTEUR4OA** (2014-2016)
- **OpenAIRE projects**
  - OpenAIRE Plus (2011-2014)
  - OpenAIRE2020 (2015-2018)
  - OpenAIRE Advance (2018-2021)
Open Access Movement in Turkey: Milestones

- Middle East Technical University’s E-Thesis Archive and the first member of Networked Digital Library of Theses and Dissertations – NDLTD
- ANKOS OAIR (Open Access and Institutional Archives Working Group)
- Information Technologies Congress and Academic Informatics Conference and Open Access Declaration
- ANKOS OAIR: Presentations, translations, brochures, guides...
- MITOS Consortium
- Report Open access in Southern European countries
- 1st National Open Access Workshop and Final Declaration
- Translation of The Driver Guide 2.0
- DergiPark, OA journal hosting service
- CoHE National Academic Archive Project and OA Policy template sent to the HEIs
- PASTEUR4OA
- TUBITAK National Harvesting System: Turkey Academic Archive (Harman)
- IZTECH Open Science Policy
- TUBITAK Open Science Policy
- Turkish Era Roadmap: National Roadmap on European Research Area: 5b: Open access to publications and data in an open science context
- 1st National Open Access Workshop and Final Declaration
- First mandatory Open Access Policy - IZTECH
- OpenAIRE2020
- Creative Commons Turkey
- TUBITAK ULAKBİM National Open Science Committee
- 4th National Open Access Workshop and Ankara Declaration
- OpenAIRE Advance
- Open Access to Theses and Dissertations in Turkey has been Enacted by the Parliament
- Turkish Open Science Summit
- Research Data Management and Open Science Workshop
- CoHE Open Science and Open Access Working Group
- APERTA - TUBITAK Open Archive
- CoHE Research Data and Open Data sub-working group
- National Research Data Symposium (Online)
Events (2011 – 2022 May)

Participated in 128 events (27 of which were international events)

- 107 presentations were made
- 15 webinars were organized

12 Workshop / Conference / Symposium / Seminar

- 1st International Semantic Network and Metadata Systems Conference, 7-8 March 2013, Izmir -

https://acikerisim.org/
DergiPark supports national academic journals to gain presence following international standards and increase their visibility.

It's one of the biggest data providers to OpenAIRE.
It harvests IRs in Turkey compliant with international standards.

163 institutions
2,561,132 records
Institutional Repository for TUBITAK & Research Data Repository to serve all universities

Provide open access to scientific publications and research data by adopting the “TUBITAK Open Science Policy.”
Open Access to Theses and Dissertations in Turkey has been Enacted by the Parliament

Collin Coda 2018-08-07 · country highlights · Still Rising

This has been an extremely important improvement for the open access in Turkey. The Council of Higher Education (YÖK) National Theses Center and Turkey OpenAIRE NOAD had worked hard to make compulsory open access to theses and dissertations. As a result of these efforts, the Art. 30 of Law numbered 7100 has been entered into force upon publication of the Official Gazette numbered 30352 and dated March 66, 2018. According to this article, which constitutes Additional Art 40 of Higher Education Code numbered 2347:

"Unless a decision of secrecy is taken by the authorized institutions and organizations, the graduate theses shall be opened to access in electronic environment by the National Theses Center of the Council of Higher Education in order to contribute to science."

It is compulsory to send all theses and dissertations to YÖK National Theses Center in Turkey. Therefore, after the said provision entered into force, "The Directive on Collecting, Organizing and Opening to Access The Theses and Dissertations in Electronic Environment" is prepared in cooperation with YÖK National Theses Center and OpenAIRE NOAD and Turkey and shared with all universities in the country.

Before this regulation, theses and dissertations were closed to access for 3 years in accordance with the request of the respective author. However, it is no longer possible to prevent access to theses and dissertations except for the provisions of the regulation. In other words, the author's request is not enough to close theses and dissertations, but also university administration decision is necessary. This improvement is an important step in the liberation of science. Henceforth, much more theses and dissertations from Turkey will be available to the scientific world.

The number of downloads of theses has exceeded 16 million.
IZTECH Open Access and Open Science Policies

IZTECH Open Access Policy was approved by IZTECH Senate on 08 October 2013.

IZTECH Policy was the first Open Access Policy in Turkey.

It was sent to other Turkish universities as a model policy by CoHE.

• Translated OpenAIRE model Policy on Open Science for Research Performing Organisations (RPOs) into Turkish and adapted it to Izmir Institute of Technology (IZTECH) as a model.
• IZTECH Open Science Policy was approved by IZTECH Senate on 26 March 2019.
• This policy, the first Open Science Policy in Turkey, includes details on both publications and research data.
• It was sent to other Turkish universities as a model policy by CoHE.
The Scientific and Technological Research Council of Turkey (TUBITAK) accepted Open Science Policy on March 14, 2019.

Based on OpenAIRE model Policy on Open Science for Research Funding Organisations (RFOs).

It covers publications (peer-reviewed articles, etc.) and research data which is produced by TUBITAK support, completely or partially, and the publications and research data of TUBITAK researchers.

It has been deemed appropriate to implement the policy to pilot programs in 2019 and all support programs in 2020.

The number of researchers affected by this policy is ~ 25,000

Research Information System at International Standards to Getting Ahead in the Race: GCRIS

Visibility + Research Support + Performance Monitoring + Integration with Europe and the World = Universities Need a Research Information System.
Turkey Needs Research Information System at International Standards

RIS was required

- to be international standards
- to be an affordable price
- to provide different reporting requested by university administrations and CoHE
- To be sustainable
Research Ecosystems Inc.

An R&D and technology company

Established in 2021

The most experienced team working in data analytics

Teknopark İzmir (İYTE Campus, Urla).

“We do not sell a product; we create services that will provide continuous value to our Users with the subscription agreements.”
GCRIS: Turkey's First Research Information System at International Standards

Web Client Technologies

TypeScript and React 16.3, React Bootstrap, React Range

Dscape CRIS 6.3

Redis Cache

for accelerated response

Dashbroad and Reporting Module

Spring Boot

Restful API
GCRIS: Turkey's First Research Information System at International Standards

**Web Pages**
- Configurable theme through configuration file
- Home page fully configurable
- Researcher page replaced with statistics and listings

**Dashboard & Reporting**
- Three-layer architecture
- Repository-service pattern
- Materialized views
- HikariPool for fast execution of SQL queries

**DevOps**
- Testcontainers for testing
- Docker-compose for efficient installation
- Shell scripts for automated installation
GCRIS: Turkey's first Research Information System at international standards

https://gcris.iyte.edu.tr/
https://gcris.ktun.edu.tr/
https://gcris.etu.edu.tr/
https://gcris.eskisehir.edu.tr/

The only RIS system from Turkey registered in EuroCRIS and OpenAIRE.

Only 4 universities are registered in DRIS

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IYTE GCRIS Database

GCRIS Database is a research and performance evaluation information system that enables searching and discovering all research outputs within the Izmir Institute of Technology research ecosystem, associating these outputs with researchers, providing advanced reporting with different metrics, and supporting corporate strategic decisions. Besides, it is an institutional repository at international standards that brings together and organizes all kinds of academic outputs related to research activities and allows sharing with the whole scientific world by providing long-term preservation.

https://gcris.lyte.edu.tr/
Experimental data showing the thermal behavior of a flat roof with phase change material

Title:

Authors:
Tokuc, Ayça
Bagan, Tahsin
Yosigey, Sadik Caniz
Dokuz Eylul University
Izmir Institute of Technology
Dokuz Eylul University

Keywords:
Latent energy storage
Phase change material
Roof
Thermal behavior
Thermal energy storage

Issue Date:
Dec-2015

Publisher:
Elsevier

Source:

Abstract:
The selection and configuration of building materials for optimal energy efficiency in a building require some assumptions and models for the thermal behavior of the utilized materials. Although the models for many materials can be considered acceptable for simulation and calculation purposes, the work for modeling the real therm behavior of phase change materials is still under development. The data given in this article shows the thermal behavior of a flat roof element with a phase change material (PCM) layer. The temperature and energy given to and taken from the building element are reported. In addition the solid-liquid behavior of the PCM is tracked through images. The resulting thermal behavior of the phase change material is discussed and simulated in [1], A. Tokuc, T. Bagan, S.C. Yosigey. An experimental and numerical investigation on the use of phase change materials in building elements: the case of a flat roof in Istanbul. Build. Energy, vol 102, 2015, pp. 191-104.

URL:
https://hdl.handle.net/11447/01764
https://doi.org/10.1016/j.dib.2015.09.019

Appears in Collection:
Publications Indeksli Yayımlar Koleksiyonu / PubMed Indexed Publications Collection
Scopus Indeksli Yayımlar Koleksiyonu / Scopus Indexed Publications Collection
Veri Setleri / Datasets
WoS Indeksli Yayımlar Koleksiyonu / WoS Indexed Publications Collection

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<td>586 KB</td>
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GCRIS: Research Performance

Overall Research Performance
Baran, Yusuf

- 143 Scholarly Output
- 64 Journal Articles
- 1874 Citations
- 135.2k/451.8k View / Download
- 24 H-index
- 44 I10-index
- 1.61 Field Weighted Citation Impact
- 1 Average Prestige Per Publication
- 12 Supervised MScTheses
- 3 Supervised PhDTheses
- 0 Patents
- 9 Projects
- 13.10 Citations per Publication
- 39 Distinct Journals
- 43 Distinct Journal Categories
- $920,847 Total Funding

*Afiş ve indirilebilir içerikleri Scoopy veri kümesinden Headquarters.*
### Organizational Unit Overview Report

#### 03.04. Department of Computer Engineering

**Overall Performance**

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<th>Category</th>
<th>Value</th>
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<td>Scholarly Output</td>
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<tr>
<td>Journal Articles</td>
<td>115</td>
</tr>
<tr>
<td>Citations/Citations</td>
<td>1295</td>
</tr>
<tr>
<td>H-index</td>
<td>18</td>
</tr>
<tr>
<td>i10-index</td>
<td>34</td>
</tr>
<tr>
<td>Field Weighted Citation Impact</td>
<td>0.94</td>
</tr>
<tr>
<td>Average Prestige Per Publication</td>
<td>0.57</td>
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<tr>
<td>Supervised MScTheses</td>
<td>155</td>
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<tr>
<td>Supervised PhDTheses</td>
<td>10</td>
</tr>
<tr>
<td>Patents</td>
<td>4</td>
</tr>
<tr>
<td>Projects</td>
<td>24</td>
</tr>
<tr>
<td>Citations per Publication</td>
<td>3.46</td>
</tr>
<tr>
<td>Open Access Source</td>
<td>299</td>
</tr>
<tr>
<td>Total Funding</td>
<td>€4,757,525</td>
</tr>
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</table>

*Atif ve indeksle ilgili metrikler Scopus verilerinden hesaplanmaktadır.*
GCRIS: Advance Reporting Dashboard

Organization Charts

Parameter:
- Scholarly Output

Organizations:
- 01. Faculty of Science
- 02. Faculty of Architecture
- 03. Faculty of Engineering

Year Range:
- 2010
- 2022

Scholarly Output

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<tr>
<th>ID</th>
<th>Organization</th>
<th>Parameter</th>
<th>Total Count</th>
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<tr>
<td>1</td>
<td>01. Izmir Institute of Technology</td>
<td>Scholarly Output</td>
<td>802</td>
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<tr>
<td>2</td>
<td>02. Faculty of Architecture</td>
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<td>3</td>
<td>02.01. Department of Architectural, Restoration</td>
<td>Scholarly Output</td>
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