

Università degli Studi di Salerno – Computer Science Ph.D. Program

BOOST YOUR PH.D. 101: TIPS, TRICKS, AND SECRETS TO SUCCEED

Part I: How Academia sees your Research

Luigi Libero Lucio Starace

University of Naples Federico II

luigiliberolucio.starace@unina.it

<https://luistar.github.io>; <https://squids.unina.it>

Wait, you thought your work was done once you publish a paper?

Bad news...

WHAT YOU'LL LEARN TODAY

- What counts as a **research output**?
- How do scientific publications works?
- How do researchers and publications acquire **identities**?
- What do IRIS, Scopus, WoS, ORCID, Scholar actually do?
- How are research outputs **measured** and **evaluated**?

Not just bureaucracy, but practical Ph.D. survival skills!

What exactly do we produce as Researchers?

WHAT DO RESEARCHERS PRODUCE?

- «Papers, we produce papers»
- That's certainly true
- In academia, papers are the most visible and widely-recognized outputs
- But they are definitely not the only ones (we'll talk about this later).

Types of Scientific Publications

NOT ALL PUBLICATIONS ARE CREATED EQUAL

- Not all papers are published in the same way
- Four macro-categories of publications exist

Journal Articles	Conference and Workshop Papers	Books and Book Chapters	Posters and Extended Abstracts
• Appear in scholarly periodicals	• Published in proceedings	• Long-form scholarly publications	• Shorter research communications

- These categories define **how** and **where** research is **communicated**, not necessarily how «good» it is!

JOURNAL ARTICLES

- Published in a scholarly periodical
 - Examples include [ACM Transactions on Soft. Engineering and Methodology](#) or the [Artificial Intelligence](#) journal.
- Evaluated through editorial peer review
- Identified by journal title and publication year
- Often associated with a volume, issue, page, or article number
- May appear online before **serialization** in a specific issue of the journal

JOURNAL ARTICLES: SPECIAL ISSUES

- Journals may organize **special issues**, focusing on a specific topic:
 - Typically organized, promoted and managed by **Guest Editors**
 - Guest editors are generally not members of the editorial staff of the journal
 - In Special Issues, guest editors are generally responsible for the peer review
 - Invite reviewers
 - Send reminder to reviewers
 - Make decisions and send the decisions up to the Editor in Chief!
- Example:
 - Special Issue on Innovative Frontiers in Automated Software Engineering on the Automated Software Engineering journal

CONFERENCE PAPERS

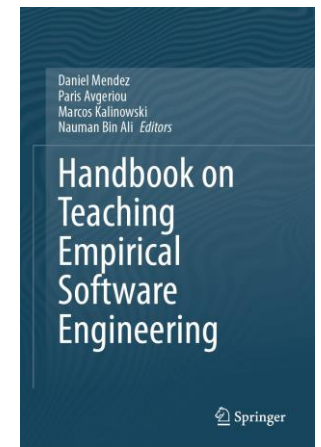
- A conference paper is a scholarly contribution that is generally:
 - Presented during a conference.
 - Published in the **proceedings** of a conference.
- Well-known conferences in the Computer Science fields include:
 - ICSE, ISSTA, NeurIPS, ICLR, ICSME, ...
- Reviewed according to the conference's procedure
- Often can be full contributions or short papers
- Not every conference presentation results in a proceedings paper!

WORKSHOP PAPERS

- Workshops typically focus on narrower, emerging, or specialized topics
- Often organize within major conferences
- Review and publication practices vary
 - May be published in separate proceedings
- A paper in a workshop is not the same as a paper in the corresponding conference!

BOOK CHAPTERS

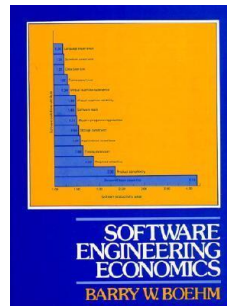
- A book chapter is a contribution published as part of a larger book
- Typically each chapter is authored by different researchers
 - Often the book is about a broader topic, and each chapter is prepared by different specialists
- Example: <https://link.springer.com/book/10.1007/978-3-031-71769-7>
- Review process is way less standardized
 - Invited chapters, open call for chapters, commissioned chapters



BOOKS: MONOGRAPHS VS EDITED VOLUMES

MONOGRAPHS

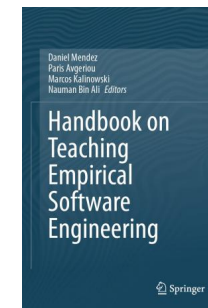
- A book authored as a coherent scholarly work
 - One or more authors
 - Integrated argument or subject
 - Authors responsible for the book's content



Software Engineering Economics, Boehm

EDITED BOOK

- A book assembled and coordinated by editors
 - One or more editors
 - Chapters by different authors
 - Editors curate and organize contributions



Handbook on Teaching Empirical Software Engineering

POSTERS AND EXTENDED ABSTRACTS

POSTER

- Primarily visual communication
- Often presented in interactive sessions
- May be accompanied by a published abstract
- May or may not be an archival research output

EXTENDED ABSTRACT

- Primarily a short written format
- Summarizes research, findings, or WIP
- May appear in proceedings or abstract collections
- Archival status depends on venue

INTERNATIONAL VS NATIONAL

- The distinction generally concerns the **scope** and **audience** of the publication venue.
 - International != published in english
 - International != held outside Italy
- Examples:
 - Ital-IA, Convegno Nazionale CINI sull'Intelligenza Artificiale



A paper published in the proceedings of «*Ital-IA, Convegno Nazionale CINI sull'Intelligenza Artificiale*» should be classified as:

International conference proceedings

National conference proceedings

National book chapter

Poster



A paper published in the proceedings of «*Ital-IA, Convegno Nazionale CINI sull'Intelligenza Artificiale*» should be classified as:

International conference proceedings

National conference proceedings

National book chapter

Poster



A paper published in the proceedings of «*Ital-IA, Convegno Nazionale CINI sull'Intelligenza Artificiale*» should be classified as:

International conference proceedings

National conference proceedings

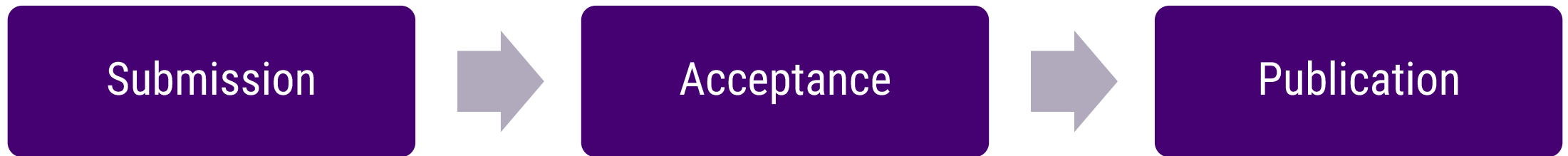
National book chapter

Poster

Publication Process

FROM PAPER TO PUBLICATION

- In peer-reviewed venues, you have to go through a multi-step process



- **Before formal acceptance:** preprint / submitted manuscript
- **Accepted manuscript:** peer-review changes included
- **Version of record:** official published version

EXAMPLE: SUBMISSION TO PUBLICATION

When AI Codes, Who Tests? A Teaching Case on Risk, Quality, and Governance in LLM-assisted Software Development – Teaching Notes

Luigi Libero Lucio Starace

*Università degli Studi di Napoli Federico II, Dept. of Electrical Engineering and Information Technology,
Software Quality and Intelligent Data-driven Systems (SQulDS) Lab, Via Claudio, 21, Napoli, 80125, Italy*

Abstract

Large Language Models (LLMs) are increasingly integrated into software development workflows, promising dramatic productivity gains but introducing distinctive risks. This teaching case explores different bug patterns in LLM-generated code through a realistic organizational scenario. Set in a mid-sized software company piloting AI-assisted coding tools, the case follows a junior engineer tasked with investigating anomalies in LLM-generated code. Students analyze realistic examples of bugs, ranging from misinterpretations and missing corner cases to hallucinated APIs, and classify them using an empirically grounded framework. In addition to classification, students reflect on how these defects differ from traditional human-introduced bugs and evaluate strategies for detecting them through testing, code review, and governance mechanisms. The narrative culminates in a strategic dilemma: should the company scale up LLM adoption, restrict it to low-risk modules, or suspend the initiative? Designed for software engineering courses, the case fosters critical thinking on quality assurance, risk management, and governance in AI-assisted development, bridging technical analysis with managerial decision-making.

Keywords: software engineering education, case-based learning, large language models (LLMs), bug patterns, software testing, software quality, software engineering management

1. Synopsis

Preprint / Submitted Manuscript



Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

The Journal of Systems & Software

journal homepage: www.elsevier.com/locate/jss



When AI codes, Who tests? A teaching case on risk, quality, and governance in LLM-assisted software development^{☆,☆☆}

Luigi Libero Lucio Starace[✉]

Università degli Studi di Napoli Federico II, Dept. of Electrical Engineering and Information Technology, Software Quality and Intelligent Data-driven Systems (SQulDS) Lab, Via Claudio, 21, Napoli, 80125, Italy

ARTICLE INFO

Keywords:

Software engineering education
Case-based learning
Large language models (LLMs)
Bug patterns
Software testing
Software quality
Software engineering management

ABSTRACT

Large Language Models (LLMs) are increasingly integrated into software development workflows, promising dramatic productivity gains but introducing distinctive risks. This teaching case explores different bug patterns in LLM-generated code through a realistic organizational scenario. Set in a mid-sized software company piloting AI-assisted coding tools, the case follows a junior engineer tasked with investigating anomalies in LLM-generated code. Students analyze realistic examples of bugs, ranging from misinterpretations and missing corner cases to hallucinated APIs, and classify them using an empirically grounded framework. In addition to classification, students reflect on how these defects differ from traditional human-introduced bugs and evaluate strategies for detecting them through testing, code review, and governance mechanisms. The narrative culminates in a strategic dilemma: should the company scale up LLM adoption, restrict it to low-risk modules, or suspend the initiative? Designed for software engineering courses, the case fosters critical thinking on quality assurance, risk management, and governance in AI-assisted development, bridging technical analysis with managerial decision-making.

1. Opening scene

The room was heavy with silence. A dashboard glowed on the big screen at the end of the conference table, its charts and numbers

awkwardly at the far end of the table, clutching a notebook like a shield.

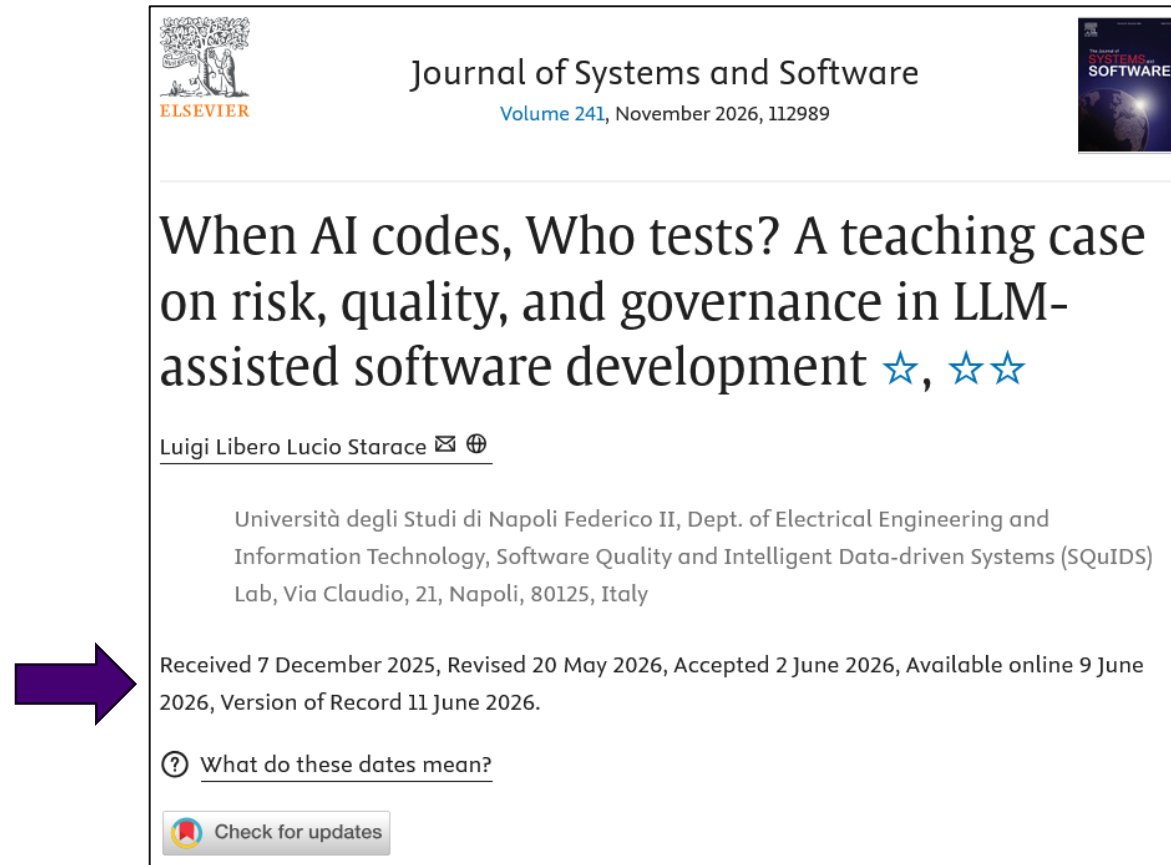
Record scratch. Freeze frame. Yup, that's our protagonist, Natalia. You're probably wondering how she ended up in this situation.

Version of record

FROM PAPER TO PUBLICATION

- From the moment you get an acceptance decision you can say you have a publication
- However, your work will **not** be actually published when it gets accepted
 - It will take a little more time
 - Undergo an editorial process, be put in the correct template, fix minor inconsistencies, ...
- Acceptance date != first online != publication date

FROM PAPER TO PUBLICATION



<https://www.sciencedirect.com/science/article/pii/S0164121226002220>

Publishing, Copyright, Open Access and Preprints

Being an author does not automatically mean you can share every version of your paper, everywhere, under any license.

IT'S MY PAPER. I CAN SHARE IT, RIGHT?

- **Authorship:** Who created the work?
- **Copyright:** Who holds the legal rights?
- **Licensing:** What uses are permitted, and by whom?
- Your first journal article is accepted!
 - A few weeks later you receive the final PDF from the publisher
 - You upload it to GitHub, ResearchGate, LinkedIn, and your personal website.
 - Is that permitted?
 - Well, that depends on the publishing agreement and on which version you're sharing!

ACCEPTED! NOW SIGN HERE, PLEASE...

- Before publication, publishers often require authors to sign a publishing agreement.
- Depending on the publisher and publication model, you may be asked to:
 - Transfer copyright to the publisher.
 - Grant an exclusive license to publish and distribute your work.
 - Grant a non-exclusive license while retaining copyright (common in Open Access publishing).
- Acceptance != Publication
 - Accepting the agreement is generally mandatory



ACCEPTED! NOW SIGN HERE, PLEASE...

- What should you check before signing?
 - Which rights are you granting, and which do you retain?
 - Can you share preprints and accepted manuscripts?
 - Can you reuse your work in your thesis or future publications?
 - Are there restrictions, embargoes, or licensing requirements?

TRADITIONAL PUBLISHING: PAY TO READ

- The **subscription-based** publishing model
 - Authors submit their research, typically without paying publication fees.
 - Reviewers / editors evaluate the manuscript, typically without compensation.
 - Publishers manage publication and distribution, obtaining copyright/licensing.
 - Readers and institutions pay for access.



SUBSCRIPTION MODEL: EXAMPLE



International Journal of Geographical Information Science >
Volume 35, 2021 - Issue 9

Submit an article Journal homepage

572 Views
21 CrossRef citations to date
1 Altmetric

Research Articles

Vehicular crowd-sensing: a parametric route increase spatio-temporal road network coverage

Dario Asprone , Sergio Di Martino , Paola Festa  & Luigi Libero Lucio Starace 

Pages 1876-1904 | Received 22 May 2020, Accepted 18 Feb 2021, Published online: 05 Apr 2021

 Cite this article  <https://doi.org/10.1080/13658816.2021.1893737> 

 Full Article  Figures & data  References  Citations  Metrics  Reprints

ABSTRACT

Current vehicles are equipped with a number of environmental sensors to improve safety and life for passengers. Many researchers have shown that these sensors can also be exploited for opportunistic crowd-sensing. Useful new services can be developed on top of these data for the surveillance of Smart Cities. The spatio-temporal sensing coverage achievable with Vehicular Crowd-Sensing (VCS), however, is an open issue, since vehicles are not uniformly distributed in the road network, undermining the quality of potential services based on VCS data.

In this paper, we present an evolution of the standard A* routing algorithm, meant to

Enter keywords, authors, DOI, etc

Log in via your institution

> Access through your institution

Log in to Taylor & Francis Online

> Log in

Restore content access

> Restore content access for purchases made as guest

Purchase options * [Save for later](#)

PDF download + Online access

- 48 hours access to article PDF & online version
- Article PDF can be downloaded
- Article PDF can be printed

EUR 56.00 

Issue Purchase

- 30 days online access to complete issue
- Article PDFs can be downloaded
- Article PDFs can be printed

EUR 499.00 

* Local tax will be added as applicable

<https://www.tandfonline.com/doi/full/10.1080/13658816.2021.1893737>

THE OPEN ACCESS MODEL

- What if we reversed the model and made research free to read?
- That's the **Open Access (OA)** model
- Often free to read != free to publish
 - Authors often face **Article Processing Charges (APCs)**

	Gold OA	Published openly in the publisher's platform
	Green OA	Permitted version in a repository
	Hybrid OA	Individual OA article in a subscription journal
	Diamond OA	OA without author-facing charges

OA: TRANSFORMATIVE CONTRACTS

- As researchers, why would we want to publish with OA?
- So, how do we pay for APCs if we publish a paper with gold OA?
- In some cases, APCs are covered by transformative contracts
 - Contracts signed by your institution / CARE-CRUI in Italy
 - Learn more here: <https://www.biblioteche.unisa.it/open-access>
- In other cases, APCs can be paid using your own funding, or project funding
 - Make sure to include an acknowledgement to the project funding the APCs!

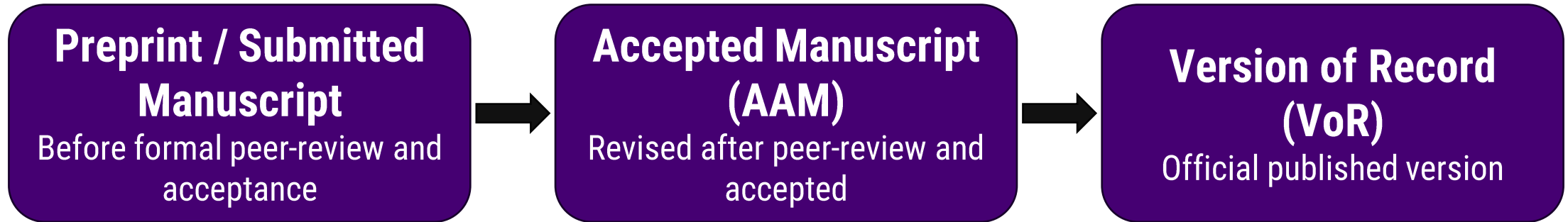
OPEN ACCESS AND LICENSING

- Free to read != Unrestricted reuse / No copyright
- Free to read != Free to redistribute

License	What readers can do
CC BY	Share and adapt, including commercially, with attribution
CC BY-SA	Share and adapt; adaptations must use ShareAlike terms
CC BY-NC	Share and adapt for noncommercial purposes
CC BY-NC-ND	Redistribute unchanged copies for noncommercial purposes

A PAPER HAS SEVERAL LIVES (AND PDFs)

- Different versions can have different sharing permissions



- A publisher may:
 - allow immediate sharing of the preprint;
 - permit deposition of the accepted manuscript only under specific conditions;
 - prohibit public redistribution of the subscription Version of Record.
- A camera-ready is not the same as the publisher's VoR!

PREPRINTS: PUBLISH BEFORE YOU PUBLISH?

- Preprints are manuscript shared before formal peer-reviewed publication.
- Why share one?
 - Easily dissemination and feedback
 - Establish a public, time-stamped record
 - Increase discoverability
 - Allow others to access results without a subscription
- Common platforms: [ArXiv](#), [TechRxiv](#), institutional repositories

BEFORE UPLOADING A PREPRINT

A checklist to apply before posting a preprint:

- Does the target venue allow preprints?
- Does double-anonymous review impose restrictions?
- Do all coauthors agree?
- Which license will apply?
- Are third-party materials cleared for public sharing?

REAL PUBLISHER POLICIES: ACM

- Since January 2026: full Open Access publishing.
 - Authors retain copyright under the current ACM publishing model.
 - ACM receives a license to publish the work.
 - Preprints and accepted manuscripts can be shared on permitted repositories and personal websites.
 - OA Versions of Record can be shared according to their applicable licenses.
- Read more: <https://www.acm.org/publications/policies/publication-rights-and-licensing-policy>

REAL PUBLISHER POLICIES: IEEE

- For the standard non-OA publishing route:
 - Preprint: allowed on personal/institutional sites and approved preprint servers.
 - Accepted manuscript: can be shared on specified platforms with the required notice and DOI.
 - Repository access: embargo rules may apply.
 - Final IEEE PDF: generally cannot be publicly reposted.
- Learn more: <https://conferences.ieeeauthorcenter.ieee.org/author-ethics/guidelines-and-policies/post-publication-policies/>

REAL PUBLISHER POLICIES: ELSEVIER

- For subscription journal articles:

Version	Typical permitted sharing
Preprint	Publicly, immediately
AAM	Immediately on a noncommercial personal homepage
AAM in a public institutional repository	After journal-specific embargo
Publisher's final PDF	Not for unrestricted public reposting

- Learn more: <https://www.elsevier.com/about/policies-and-standards/sharing>

PUBLISHING POLICIES: TAKE HOME MESSAGES

- You should **READ** and **UNDERSTAND** any agreements you sign!
- Accepting the agreement is not just a bureaucratic last step before your accepted manuscript can finally be published
 - The agreement determines what rights you retain and how/where you may share your work
- You should also save a copy of every agreement you sign for future reference



You just published a paper in a subscription journal. Which statement is correct?

You can always post the VoR on your website

You can always apply CC BY to any version

Sharing depends on version and agreement

You cannot share anything without an APC



You just published a paper in a subscription journal. Which statement is correct?

You can always post the VoR on your website

You can always apply CC BY to any version

Sharing depends on version and agreement

You cannot share anything without an APC



You just published a paper in a subscription journal. Which statement is correct?

You can always post the VoR on your website

You can always apply CC BY to any version

Sharing depends on version and agreement

You cannot share anything without an APC

Anatomy of a Publication

COMPLEMENTARY DIMENSIONS



Scientific Content

- Research problem
- Contribution
- Methods
- Results and Evidence
- Discussion
- Conclusions



Bibliographic Identity

- Authors and Affiliations
- Title
- Publication venue
- Publication year
- Publication details
- Persistent identifiers

COMPLEMENTARY DIMENSIONS

- A paper is first and foremost a scientific contribution
- But a paper is also an **artifact** in the scholarly publishing ecosystem
 - As such, it needs to be discoverable and citable by others
 - This is done using **bibliographic metadata**
- Scientific content determines what you've contributed
- Bibliographic metadata determine how your contribution is identified, discovered, cited, catalogued, and eventually evaluated.

BIBLIOGRAPHIC METADATA

Metadata	What it tells us
Authors	Who contributed to the publication
Title	What the publication is called
Venue / Source	Where it was published
Year	When it was published
Volume / Issue	Position within a serial publication
Pages / Article number	Location or identifier within the publication
Publisher	Organization responsible for publishing
DOI	Persistent identifier for the scholarly object

BIBLIOGRAPHIC METADATA: ISSN/ISBN

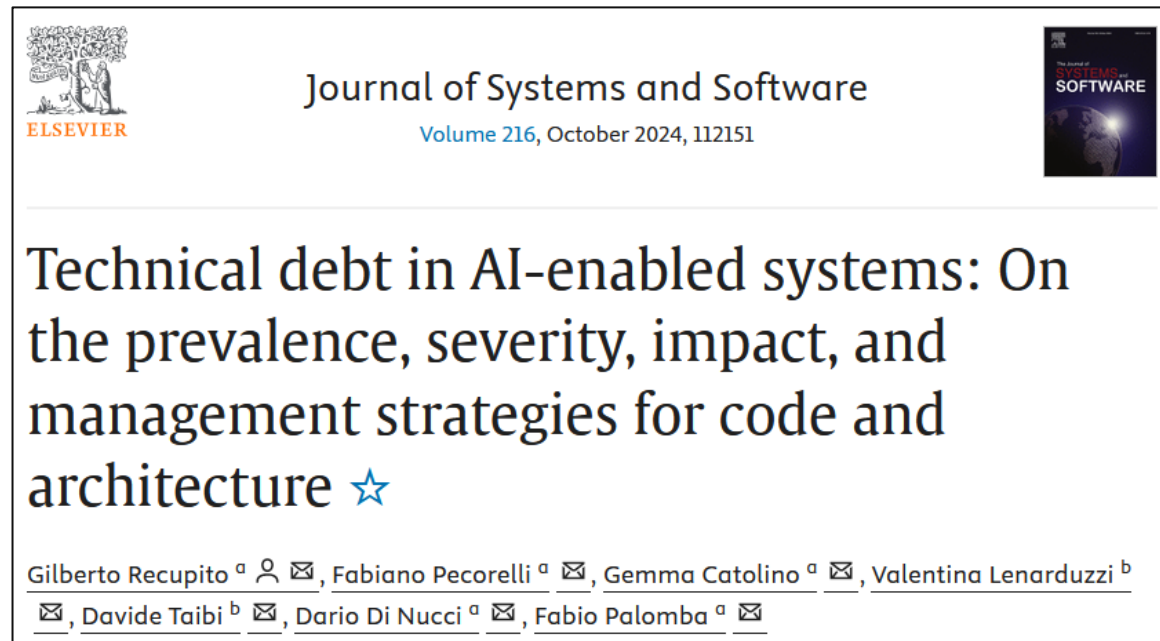
- ISSN/ISBN are identifier for the “containers”
 - ISSN identifies a serial publication
 - ISBN identifies a book edition or format.
- Some journals have multiple ISSN

BIBLIOGRAPHIC METADATA: AUTHORSHIP

- Authorship metadata are more than a list of names.
 - **Author order**: position in the publication's author list
 - **Affiliation**: institution associated with an author on the publication
 - **Corresponding author**: designated contact for publication correspondence
 - **Equal contribution**: may be indicated explicitly
 - **ORCID**: helps distinguish authors with similar names

ANATOMY OF A JOURNAL ARTICLE

- Check out the paper that will be provided as an example in the final evaluation forms you'll have to fill by the end of the month



<https://www.sciencedirect.com/science/article/pii/S0164121224001961>

ANATOMY OF A JOURNAL ARTICLE

Journal	Journal of Systems and Software
Journal ISSN	1873-1228, 0164-1212
Year	2024
Volume	216
Article number	112151
Publisher	Elsevier
DOI	10.1016/j.jss.2024.112151

ANATOMY OF A CONFERENCE PAPER

- Check out the paper that will be provided as an example in the final evaluation forms you'll have to fill by the end of the month

Conferences > 2024 50th Euromicro Conferenc... ?

An Empirical Study on the Relation Between Programming Languages and the Emergence of Community Smells

Publisher: IEEE

[Cite This](#)  PDF

[Giusy Annunziata](#) ; [Carmine Ferrara](#) ; [Stefano Lambiase](#) ; [Fabio Palomba](#) ; [All Authors](#)
[Gemma Catolino](#) ; [Filomena Ferrucci](#)

<https://ieeexplore.ieee.org/document/10803342>

ANATOMY OF A CONFERENCE PAPER

Conference	50th Euromicro SEAA
Edition / Year	SEAA 2024
Proceedings	2024 50th Euromicro Conference on Software Engineering and Advanced Applications
Pages	268–275
Publisher	IEEE
DOI	10.1109/SEAA64295.2024.00049

WHICH YEAR SHOULD YOU REPORT?

- Acceptance year and publication year are not necessarily the same.
- A journal article could be accepted in December 2026, published online in January 2027, and assigned to a journal issue later in 2027.
- If a paper has been accepted but not yet formally published, the survey provides the **Just accepted** option.
- In general, you should use the year of publication, not the year of acceptance, when identifying your research

CITATION STYLES

■ APA style

- Recupito, G., Pecorelli, F., Catolino, G., Lenarduzzi, V., Taibi, D., Di Nucci, D., & Palomba, F. (2024). Technical debt in AI-enabled systems: On the prevalence, severity, impact, and management strategies for code and architecture. *Journal of Systems and Software*, 216, Article 112151.
<https://doi.org/10.1016/j.jss.2024.112151>

■ IEEE style

- G. Recupito et al., “Technical debt in AI-enabled systems: On the prevalence, severity, impact, and management strategies for code and architecture,” *Journal of Systems and Software*, vol. 216, Art. no. 112151, 2024.

APA STYLE: JOURNAL VS CONFERENCE PAPERS

Journal article	Conference proceedings paper
Authors	Authors
Year	Year
Article title	Paper title
Journal title	Proceedings title
Volume, issue if applicable	Proceedings/volume details if applicable
Pages or article number	Page range or article number
DOI	DOI

APA STYLE: CONFERENCE PAPER

- APA style citation for the conference paper we mentioned earlier
 - Annunziata, G., Ferrara, C., Lambiase, S., Palomba, F., Catolino, G., Ferrucci, F., & De Lucia, A. (2024, August). An Empirical Study on the Relation Between Programming Languages and the Emergence of Community Smells. In *2024 50th Euromicro Conference on Software Engineering and Advanced Applications (SEAA)* (pp. 268-275). IEEE.

RELIABLE BIBLIOGRAPHIC INFORMATION?

- Where do we find reliable bibliographic information?
 - Start from the publisher's record
 - Check DOI and associated metadata
 - Verify authors, title, year, venue and page/article details
- Google Scholar can export citations in APA format (and more)
 - Always **double-check the generated citation!** It might contain mistakes!



The APA style citation for a journal paper lists «Volume 216, Article 112454». What is 112454?

The journal issue number

The first page

The suffix of the DOI

The article number



The APA style citation for a journal paper lists «Volume 216, Article 112454». What is 112454?

The journal issue number

The first page

The suffix of the DOI

The article number



An article was accepted in December 2025 and officially published online in January 2026. Which publication year should you report?

2025

2026

Both years are fine

The year the paper is indexed



An article was accepted in December 2025 and officially published online in January 2026. Which publication year should you report?

2025

2026

Both years are fine

The year the paper is indexed

Persistent Identifiers in Academia

Who are you? And which paper is yours?

IDENTITY

- We now know how to describe a publication with bibliographic metadata
- What if two authors share the same name?
- What if the same paper exists in multiple databases, with slightly different metadata?
- To solve these problems, academia uses **persistent identifiers**

WHO ARE YOU? AND WHICH PAPER IS YOURS?

The identity problem in scientific publishing

- Different researchers may share the same name.
- The same researcher may publish under different name variants.
- Researchers change institutions throughout their careers.
- Publications may exist in multiple versions and databases.
- URLs and bibliographic metadata can change.

ORCID: YOUR PERSISTENT SCIENTIFIC IDENTITY

- ORCID = Open Researcher and Contributor ID
- A unique, persistent identifier for researchers.
- Independent of name, affiliation, and career stage
- Free to register and maintain
- Connects researchers with their publications and affiliations
- Supported by publishers, universities, funders, and repositories
- Example: [0000-0001-7945-9014](https://orcid.org/0000-0001-7945-9014)



OTHER RESEARCHER IDENTIFIERS

System	Researcher identity
ORCID	ORCID iD
Scopus	Scopus Author ID
Web of Science	Web of Science ResearcherID
Google Scholar	Google Scholar profile
DBLP	Author page / DBLP person ID

DOI: DIGITAL OBJECT IDENTIFIER

- Commonly assigned to:

- Scientific articles
- Conference papers
- Books and book chapters
- Datasets and research software
- Other scholarly outputs
- Example: <https://doi.org/10.1145/3290605.3300233>

- A DOI does not certify scientific quality.

- Preprint, datasets, or other non-peer-reviewed objects can have one.



OTHER RESEARCH IDENTIFIERS

- One research paper may have multiple identifiers

Identifier	Assigned by	Identifies
DOI	DOI registration infrastructure	Scholarly object
Handle	Handle-based repository/system	Repository object or record
Scopus EID	Scopus	Scopus publication record
WoS number	Web of Science	WoS publication record

- A paper may have:
 - a DOI assigned through its publisher's registration process;
 - an IRIS Handle identifying its institutional record
 - additional identifiers if it is indexed in Scopus and Web of Science.

BEYOND PUBLISHERS

- Your paper has been published. What happens next?
 - Publishers (e.g., ACM, IEEE, Elsevier, Springer Nature) make research outputs available through their publication platforms.
- But researchers and institutions also need to:
 - Discover research published across thousands of venues.
 - Track publications, authors, and citations.
 - Preserve and share research outputs beyond publishers' platforms.
 - Monitor and evaluate scientific production and impact.
- This is where bibliographic databases and research repositories come in!

BIBLIOGRAPHIC DATABASES AND REPOS

Bibliographic Databases

Index and organize scholarly publications.

- Collect and structure publication metadata
- Connect publications to authors and venues
- Support discovery and bibliographic searches
- May track citations and research impact
- **Examples:** Scopus, Web of Science, DBLP, Google Scholar (scholarly search engine)

Research Repositories

Collect, preserve, and disseminate outputs.

- Host publications, datasets, software, etc.
- Provide metadata and persistent links
- Support Open Access and long-term preservation
- May be disciplinary, general-purpose, or institutional
- **Examples:** arXiv, Zenodo, Figshare, institutional repositories (e.g., UniSa IRIS)

BIBLIOGRAPHIC DATABASES

- **Scopus** (Elsevier) and **Web of Science** (Clarivate) are major bibliographic and citation databases.
 - Index publications from selected journals, conferences, and other sources.
 - Maintain bibliographic metadata, author profiles, and citation relationships.
 - Support research discovery, bibliometric analysis, and evaluation.
 - Assign their own unique identifiers to indexed publication records and researchers.
- Your paper may be published, have a DOI, and already exist in IRIS, but Scopus still doesn't know about it.
 - Even in academia, different databases have eventual consistency problems.

IRIS: Institutional Research Information System

Your paper has been accepted, published, assigned a DOI, and is indexed in Scopus. You're done? Well, not quite. Your university would also like to know about it.

IRIS: YOUR UNIVERSITY'S RESEARCH CATALOG

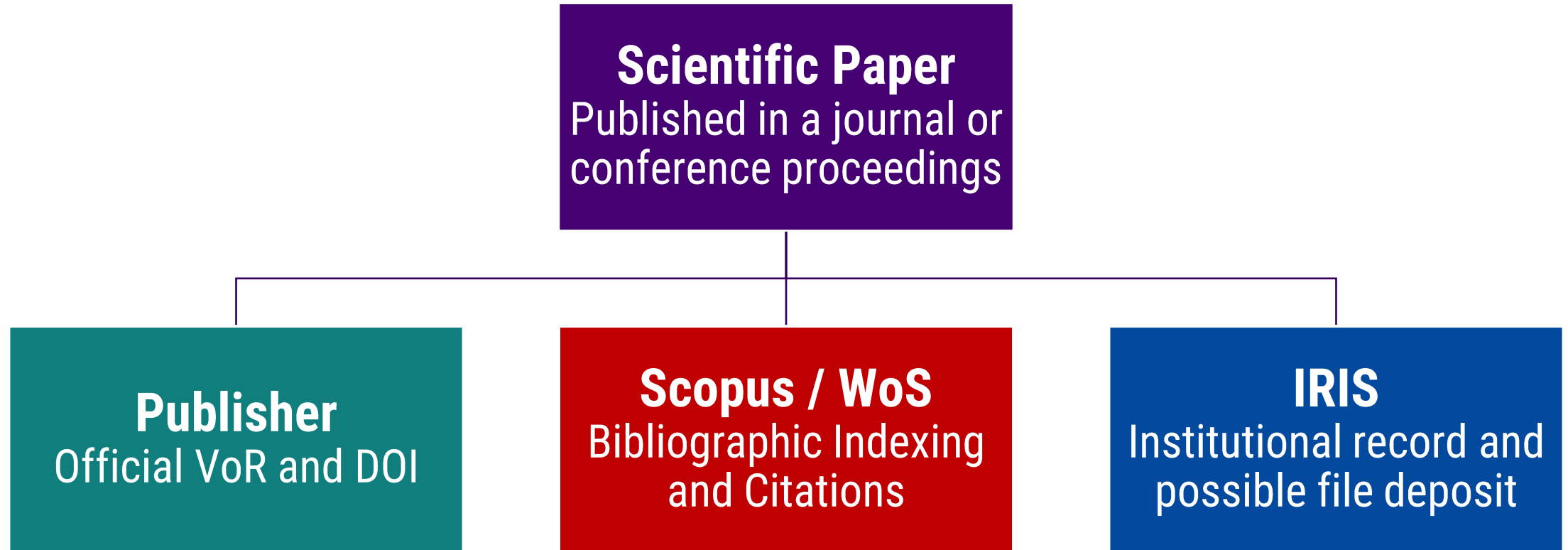
- Developed by **CINECA**
- Used by many Italian Universities and Research Institutions
- It enables institutions to:
 - Catalogue their scientific production.
 - Associate publications with their researchers.
 - Preserve and disseminate research outputs.
 - Support institutional reporting and research evaluation.



WHY DOES YOUR UNI NEED IRIS?

- Your university may need answers to the following questions:
 - How many journal articles its researchers produced last year?
 - Or which departments have collaborated with international institutions?
 - Or which publications should be considered in a national research evaluation exercise?
- The university needs reliable, structured information.
- IRIS helps maintain that information centrally.
- It also serves researchers
 - You can have an institutional catalogue of your publications instead of maintaining everything on personal websites and commercial platforms.

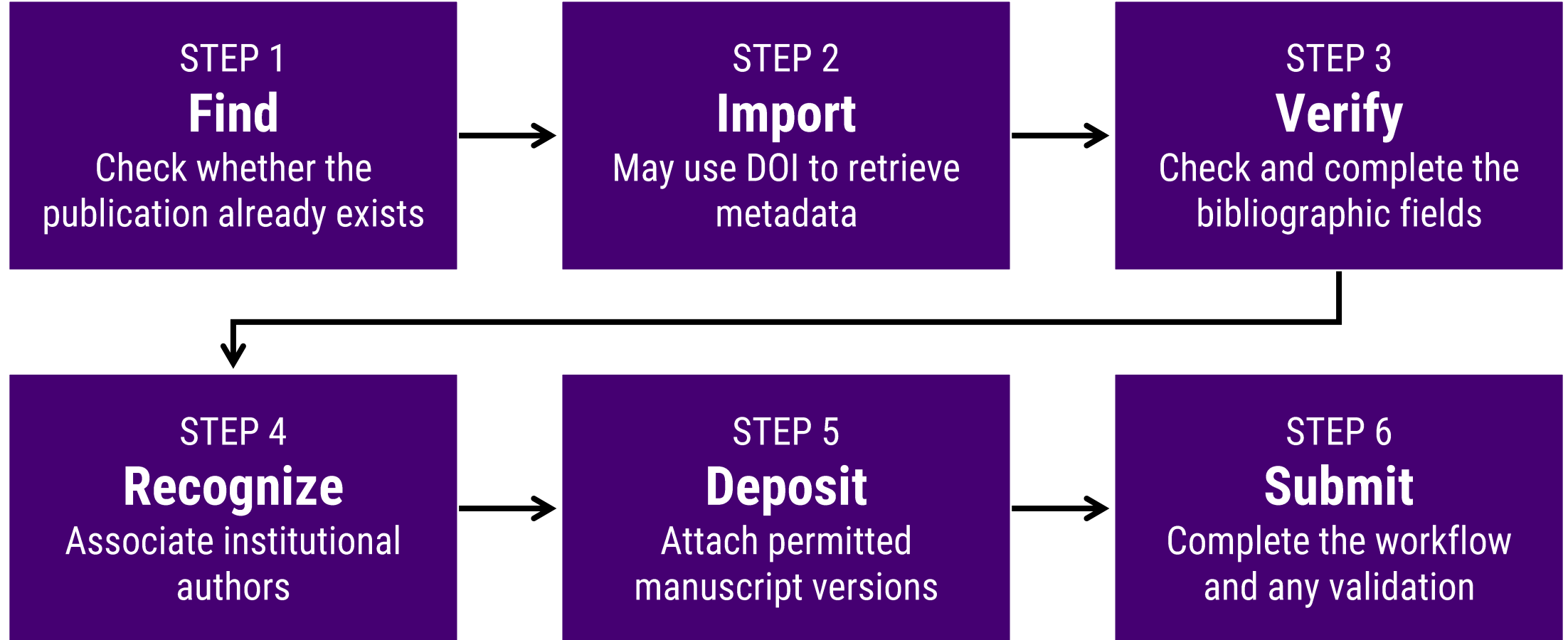
IRIS IS NOT ANOTHER PUBLISHER



ANATOMY OF AN IRIS PUBLICATION RECORD

- An IRIS record typically contains:
 - **Bibliographic metadata:** title, authors, year, venue, publication details.
 - **Publication type:** journal article, conference proceeding, book chapter, etc.
 - **Identifiers:** DOI, Handle, and potentially Scopus/WoS codes.
 - **Author associations:** researchers recognized within the institution.
 - **Files:** deposited manuscripts and their access conditions.
- Example: <https://www.iris.unisa.it/handle/11386/4874634>

REGISTERING A PUBLICATION IN IRIS



PRACTICAL DEMONSTRATION: IRIS

UniSa - IRIS Institutional Research Information System

IRIS è la soluzione IT che facilita la raccolta e la gestione dei dati relativi alle attività e ai prodotti della ricerca. Fornisce a ricercatori, amministratori e valutatori gli strumenti per monitorare i risultati della ricerca, aumentarne la visibilità e allocare in modo efficace le risorse disponibili.

Scopri

Tipologia	Rivista	Serie	Data di pubblicazione
1 Contributo su Rivista 67550	PHYSICS LETTERS. SECTION B 419	LECTURE NOTES IN COMPUTER SCIENCE 420	In corso di stampa 209
2 Contributo in volume (exArticol... 27613	AVVENIRE 376	LECTURE NOTES IN NETWORKS AND SYS... 140	2020 - 2027 35799
4 Contributo in Atti convegno(ex ... 22461	CHEMICAL ENGINEERING TRANSACTIONS 304	LECTURE NOTES IN ARTIFICIAL INTEL... 136	2010 - 2019 49754
3 Libro (ex Monografia) 4901	IURA AND LEGAL SYSTEMS 301	CEUR WORKSHOP PROCEEDINGS 126	2000 - 2009 32822
7 Altro 2749	MACROMOLECULES 243	LECTURE NOTES IN CIVIL ENGINEERING 68	1990 - 1999 8751
5 Curatela 2727	APPLIED SCIENCES 237	COMMUNICATIONS IN COMPUTER AND IN... 64	1980 - 1989 2540
8 Tesi di dottorato 1829	COMPARAZIONE E DIRITTO CIVILE 233	VEDERE E RIVEDERE 63	1970 - 1979 267
6 Brevetto 345	PHYSICAL REVIEW. B, CONDENSED MAT... 219	AIP CONFERENCE PROCEEDINGS 59	1966 - 1969 8
	SCIENTIFIC REPORTS 218	LECTURE NOTES IN ELECTRICAL ENGIN... 58	
	MOLECULES 216		

Any final remarks / questions?

NEXT SESSIONS

- See you again for part II on **Monday October 19**
- Time is **14.00 to 17.00, Room F8**
- We'll talk about:
 - Metrics and research assessment / evaluation (esp. in the Italian academia)
 - Strategic considerations when choosing publication venues
 - How to interact with advisors / colleagues effectively
 - How to make you and your research visible