



Building a solid foundation for better monitoring: Utilizing Persistent Identifiers in Serbian National CRIS to advance metadata quality and authorship association

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euroCRIS 16th, TU Wien, 16th, 2024

About eNauka (eScience)

- ❑ The eNauka platform is the national CRIS in Serbia
- ❑ Designed to harvest, store and enrich scientific metadata gathered from various sources
- ❑ This is not the first attempt to develop national CRIS
- ❑ Is built upon previous experience, good practices and international standards
- ❑ eNauka is continually upgraded because it tends to fulfill need of the scientific community



Highlights of eNauka



- ☐ Digitalisation of administrative tasks
- ☐ Strive for full automation

- ☐ Monitoring
- ☐ Evaluation
- ☐ Metadata enrichment

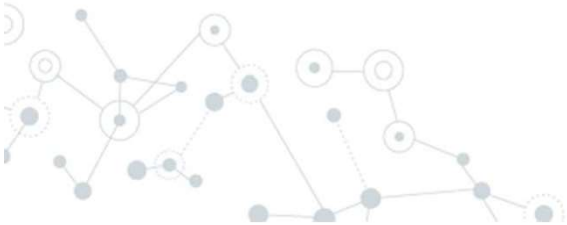
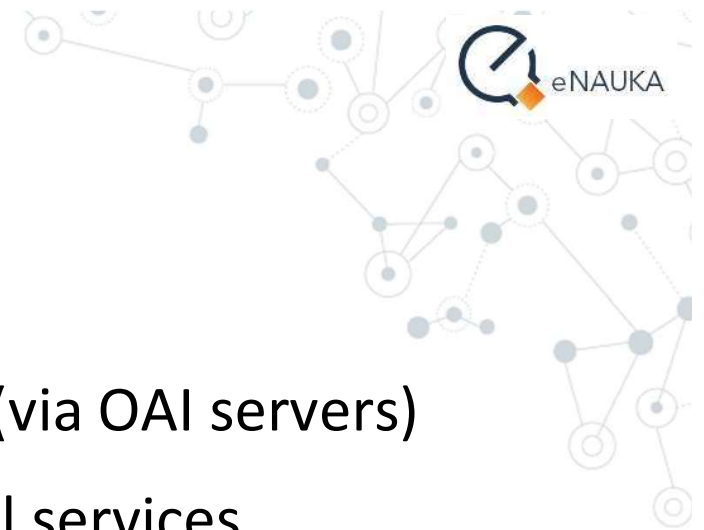
Entities in eNauka

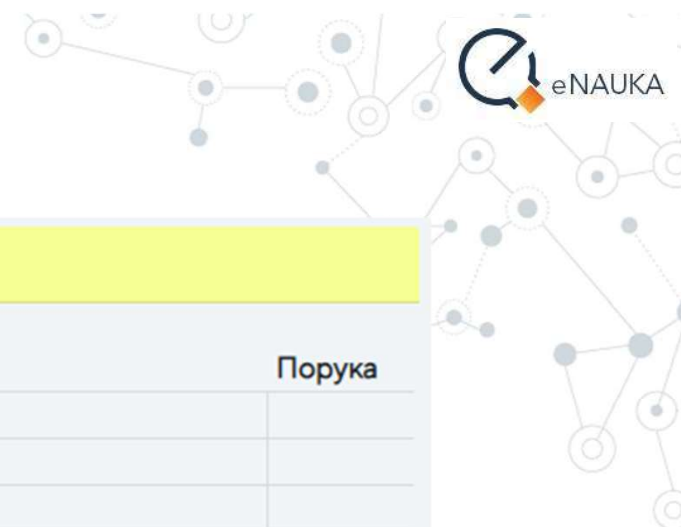


Interoperability	Enrichment
Verifiability	Visibility

Collecting metadata

- ❑ Depends on institutions infrastructure:
 - ❑ Automatic harvest from a repository (via OAI servers)
 - ❑ Semi-automatic harvest from external services
- ❑ Minimal technical requirements for depositing records
- ❑ By streamlining metadata collection, eNauka saves valuable time for researchers and administrators





Metadata quality

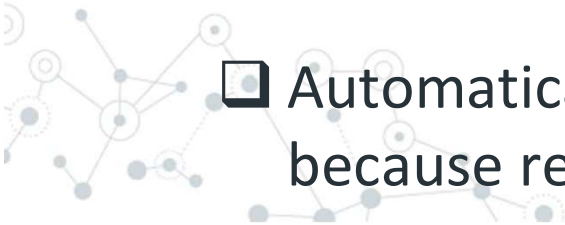
oai:dais.sanu.ac.rs:123456789/13401

Статус	Поље	Вредност поља	Порука
✓	title	Still not ready for EOSC? Experiences from one co-creation activity	
✓	creator	Vučkovac, Obrad	
✓	creator	Ševkušić, Milica authority=orcid::0000-0002-2888-6611	
✓	creator	Otašević, Vladimir	
✓	creator	Miljković, Nadica	
✓	creator	Lazarević, Ljiljana	
✓	date	2021	
✓	type	conferenceObject	
✓	version	publishedVersion	
✓	uri	https://dais.sanu.ac.rs/123456789/13401	
✓	doi	10.5281/zenodo.7315376	
?	isbn		
?	issn		
✓	handle	https://hdl.handle.net/21.15107/rcub_dais_13401	
?	scopus		
?	wos		
?	rank		
✓	access	openAccess	

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Enriching metadata

- ❑ For eNauka, PIDs (**P**ersistent **I**dentifiers**s**) are valuable sources of information
- ❑ PIDs provides:
 - ❑ Citations
 - ❑ Associations
 - ❑ Validation
 - ❑ Tracking
- ❑ Automatically providing PIDs whenever it is possible, because records sometimes come with minimal metadata



PIDs and eNauka

❑ Identifying scientific results via PIDs

❑ DOI, Scopus, Web of Science (ISI, UT), Pubmed (Pmid, Pmcid)

❑ Authorship association

❑ ORCiD, eCRIS, KNRiD, RIS id

❑ Citations

❑ Altmetric, Dimensions, Scopus, WoS, OpenCitations, PubMed



❑ Enrichment

CrosReff, Mcategory, Unpaywall

23

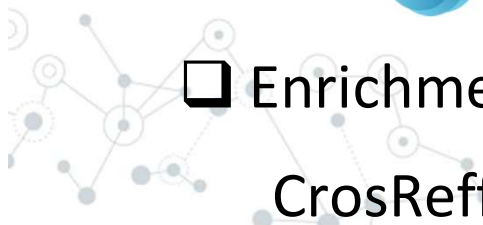
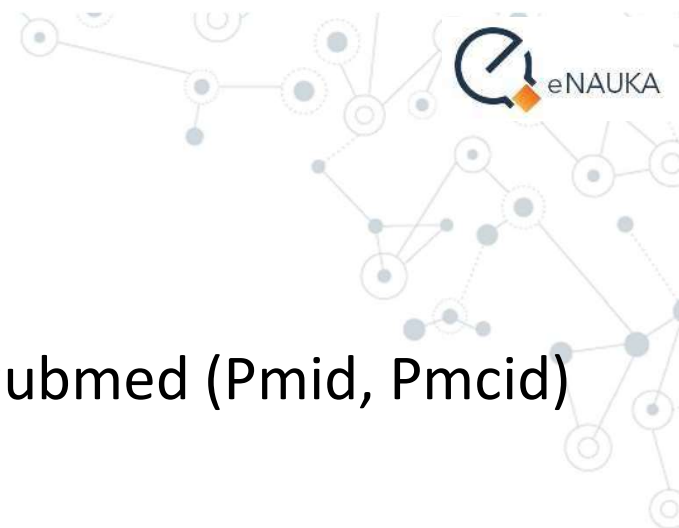
52

51

21



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Authorship disambiguation

 Jovanović, Zoran

- Profile
- Details
- Publications
- Secondary authorships
- Indicators
- Statistics

Profile summary

Status	AKTIVAN	ORCID iD	 0000-0003-1727-4852
IBI (Researcher Identification Number)	AF086	Scopus ID	56806511000

 Jovanović, Zoran

- Profile
- Details
- Publications
- Secondary authorships
- Indicators
- Statistics

Profile summary

Status	AKTIVAN	ORCID iD	 0000-0003-3684-8823
IBI (Researcher Identification Number)	BA920		

Researchers

Jovanović, Zoran

Jovanović, Zoran

Jovanović, Zoran

Jovanović, Zoran

Jovanović, Zoran

Jovanović, Zoran [Univerzitet u Prištini, Filozofski fakultet]

Jovanović, Zoran [Univerzitet u Nišu, Elektronski fakultet]

Jovanović, Zoran [Univerzitet u Kragujevcu, Pravni fakultet]

Jovanović, Zoran [Univerzitet u Beogradu, Institut za nuklearne nauke Vinča]

Jovanović, Zoran [Univerzitet u Prištini, Poljoprivredni fakultet „Lešak”]

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ORCiD

- ❑ transformed “how” researchers engage with their work
- ❑ boosted visibility and credibility in the scientific community
- ❑ ensures accurate attribution of contributions
- ❑ eliminating confusion caused by similar names
- ❑ Two requirements:
 - ❑ the ORCiD must be listed in the metadata of the harvested scientific records in eNauka
 - ❑ the ORCiD must be assigned to a researcher registered in the national registry of researchers





Practical Challenges

- ❑ eNauka encounters practical challenges that impact the quality of results presented within the system
- ❑ Practical challenges include:
 - ❑ establishing and maintaining relationships between different entities
 - ❑ Defining a foundation for monitoring and evaluating researchers and organizations
- ❑ The success of the eNauka platform critically depends on its ability to effectively address practical challenges that impact the quality of the results





deduplication



validation



PIDs within Results

Title:	Monte Carlo calculation of organ and effective doses due to photon and neutron point sources and typical X-ray examinations: Results of an international intercomparison exercise
Authors:	Huet, Christelle; Eakins, Jonathan; Zankl, Maria; G'omez-Ros, Jos'e Maria; Jansen, Jan; Moraleda, Montserrat; Struelens, Lara; Akar, Deepak K.; Borbinha, Jorge; Brkić, Hrvoje; Show less... Bui, Duc Ky; Capello, Kevin; Linh Dang, Thi My; Desorgher, Laurent; Di Maria, Salvatore; Epstein, Lior; Faj, Dario; Fantinova, Karin; Ferrari, Paolo; Gossio, Sebastian; Hunt, John; Jovanović, Zoran ; Sung Kim, Han; Krstić, Dragana ; Thiem Le, Ngoc; Lee, Yi-Kang; Murugan, Manohari; Nadar, Minal Y.; Nguyen, Ngoc-Quynh; Nikezić, Dragoslav ; Patni, Hemant K.; Santos, Denison Souza; Tremblay, Marilyn; Trivino, Sebastian; Tymí'nska, Katarzyna;
Issue Date:	2021
Publication:	Radiation Measurements 150
ISSN:	1350-4487
Type:	Article
Collation:	vol. 150 str. 106695-106695
DOI:	10.1016/j.radmeas.2021.106695
WoS-ID:	000804682100007
Scopus-ID:	2-s2.0-85120957302
URI:	https://enauka.gov.rs/handle/123456789/745855 https://phaidrabg.bg.ac.rs/o:29069



SCOPUS™



OpenCitations



WEB OF SCIENCE™



Altmetric



Dimensions



Unpaywall

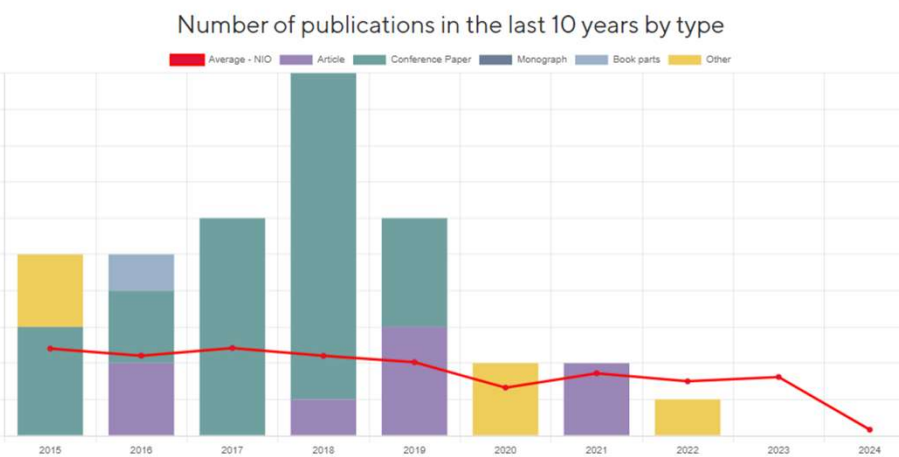
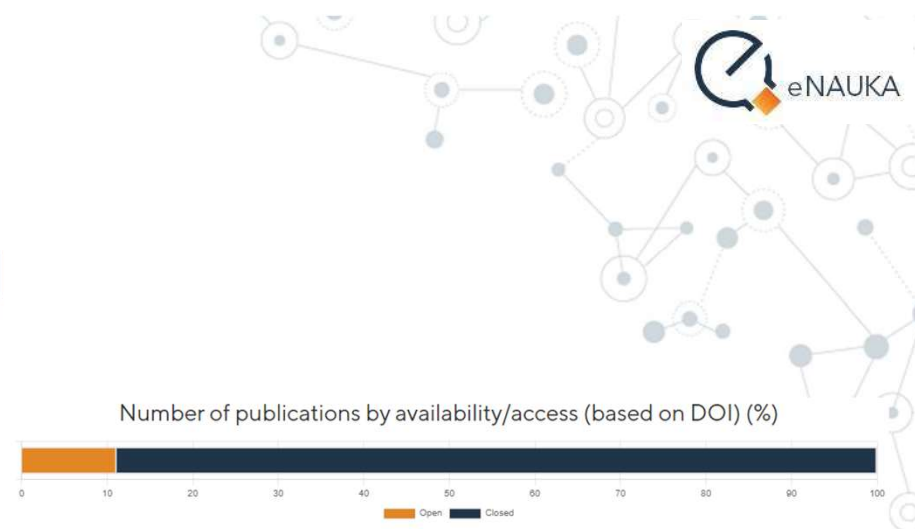
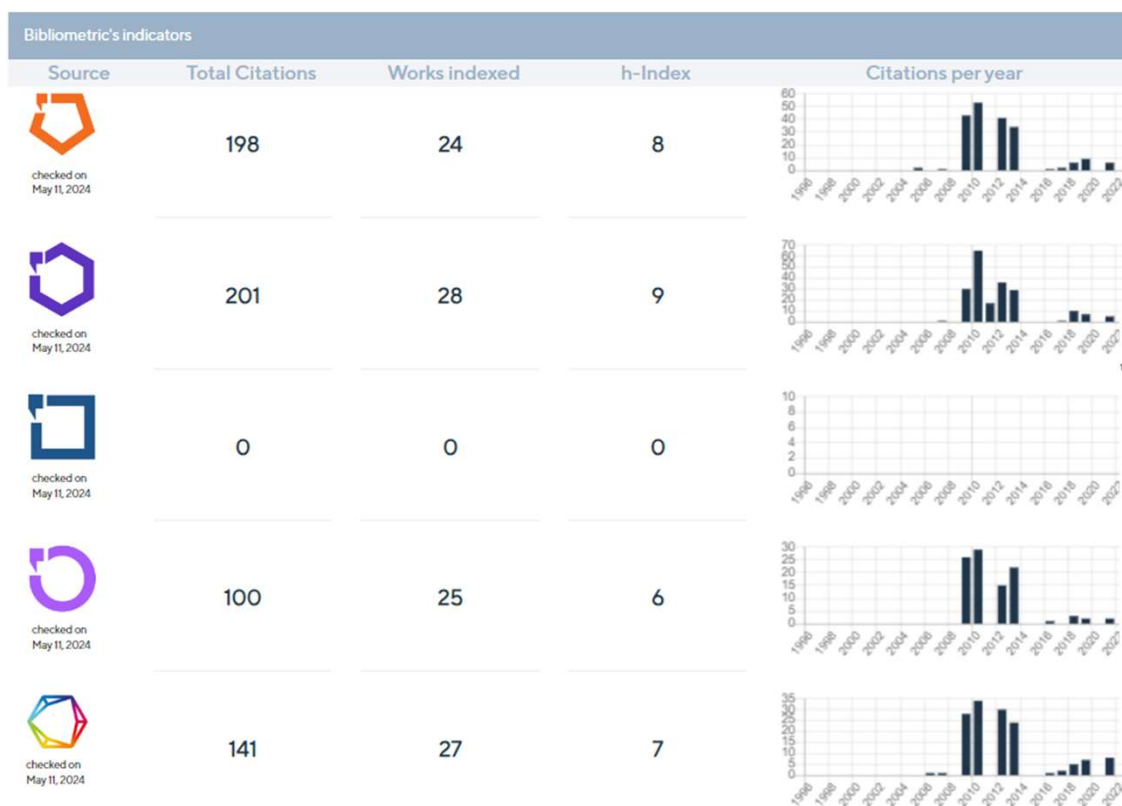
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M-
category:

21

<https://enauka.gov.rs/handle/123456789/745855?locale=en>

PIDs within Researchers



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PIDs (and others) in numbers



121

58.17%

Number (and
percentage) of
organisations that have
their own repository



166

79.81%

Number (and
percentage) of
organisations that
have an EC PIC
(Participant
Identification Code)



201

96.63%

Number (and
percentage) of
organisations that
have set their NIO
editor



204

98.08%

Number (and
percentage) of
organisations that
have set their NIO
administrator



Publications - cumulative by PIDs



177.625

24.61%

Number (and
percentage) of
submissions that
have a DOI



141.860

19.65%

Number (and
percentage) of
submissions that have
a WOS-UT



126.704

17.55%

Number (and
percentage) of
submissions that
have a ScopusID



222.313

30.8%

Number (and
percentage) of
submissions that
have a CobissID



22.869

3.17%

Number (and
percentage) of
submissions that
have a PMID



9.831

1.36%

Number (and
percentage) of
submissions that
have a PMCID



108.276

15%

Number (and
percentage) of
submissions that have
an Unpaywall ID

Researchers - cumulative in eNauka



18.267

89.76%

Number (and
percentage) of
researchers that have
ORCID



19.115

93.93%

Number (and
percentage) of
researchers that have
an eCrisID



1.553

7.63%

Number (and
percentage) of
researchers that have
a ResearchID (WOS)
identifier



4.595

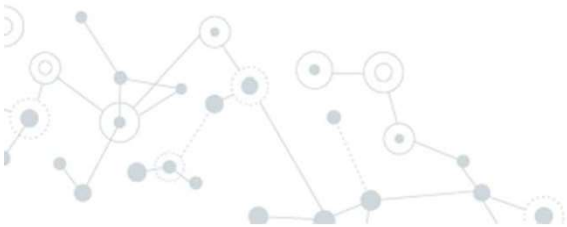
22.58%

Number (and
percentage) of
researchers that have
a ScopusID (Scopus
Author Identifier)

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Thank you
vladimir.otasevic@rcub.bg.ac.rs



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