

한국DOI센터

KOREA DOI CENTER



연구 연결 (Connected Research)

November 2, 2021

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Korea Institute of Science and Technology Information

Definition

DOI(Digital Object Identifier)

- Digital identifier of an Object (ISO 26324)
E.g.) 10.1000/182

Resolution

- Resolution is the process in which an identifier is the input — a request — to a network service to receive in return a specific output of one or more pieces of current information (state data) related to the identified entity: e.g., a location (URL)
(<https://doi.org/10.1000/182>)

Landing Page

- A single web page that appears in response to clicking on a search engine optimized search result, marketing promotion, marketing email or an online advertisement("Search Engine Optimization Terminology". 2016-07-15. Retrieved 2016-09-28.).
- A web page where you can view the information of the content through DOI resolution
E.g.) Web pages of research articles, data, and patents, etc.

DOI Proxy Server

- The DOI proxy server is a web server that knows how to communicate with the handle system.
- DOI names are included in URLs that use a proxy server to resolve DOI names

E.g.) <https://doi.org/10.1000/182> -> <https://www.doi.org/hb.html>

Resolution

Landing page

Contents

- **Introduction to KDC**
- **Services**
- **DOI Applications**
- **Summary**

Introduction to KDC

Vision, Objective, & Strategy

Improving access and influence of Korean research achievements globally

By applying the International Standard Identification System to the research content.

Collaboration with

- Content holders
- DOI registration agencies(RA)
- Other identification systems as ISNI, ORCID

DOI Service

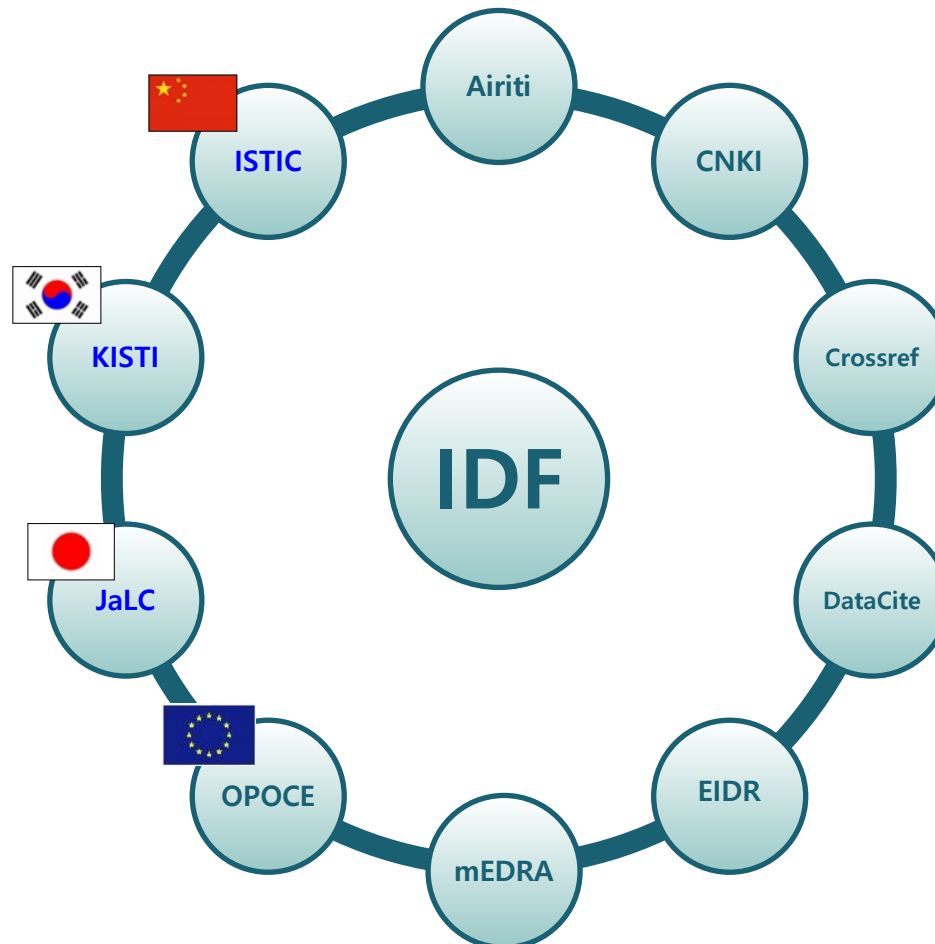
- DOI registration service
- Developing services by scholarly info., scientific data, and public data areas
- Supporting DOI system-based information service industry

Data Curation

- Supporting data identification, standardization, and linking
- Digital curation support for data collection, preservation, and reuse
- Dissemination of data sharing and citation culture through DOI system

KOREA DOI CENTER

- KISTI established the DOI registration agency promotion plan in 2015.
- As of January 1, 2016, KISTI has served as the unique DOI registration agency in Korea.



DOI Service Target Area

Scholarly Information

- Enhancing the use, citation, and influence of national research results.
- E.g.) Research papers, conference proceedings, reports, etc.

Scientific Data

- Building a basis for access, sharing, and citation of research data.
- E.g.) Experiment, observation, simulation data, etc.

Public Data

- standardizing the public organization data and improving easy and persistent accessibility.
- E.g.) Patents, statistics, food and drug information, etc.

Service Industry

- Supporting for business model of information service industries.
- E.g.) information dissemination, IoT content, logistics, etc.

Members = Partners of KDC

Members ≠ Customers of KDC

Statistics

- 1,364 members
- 20,323,795 registrations
- 1,028,190 resolutions / month

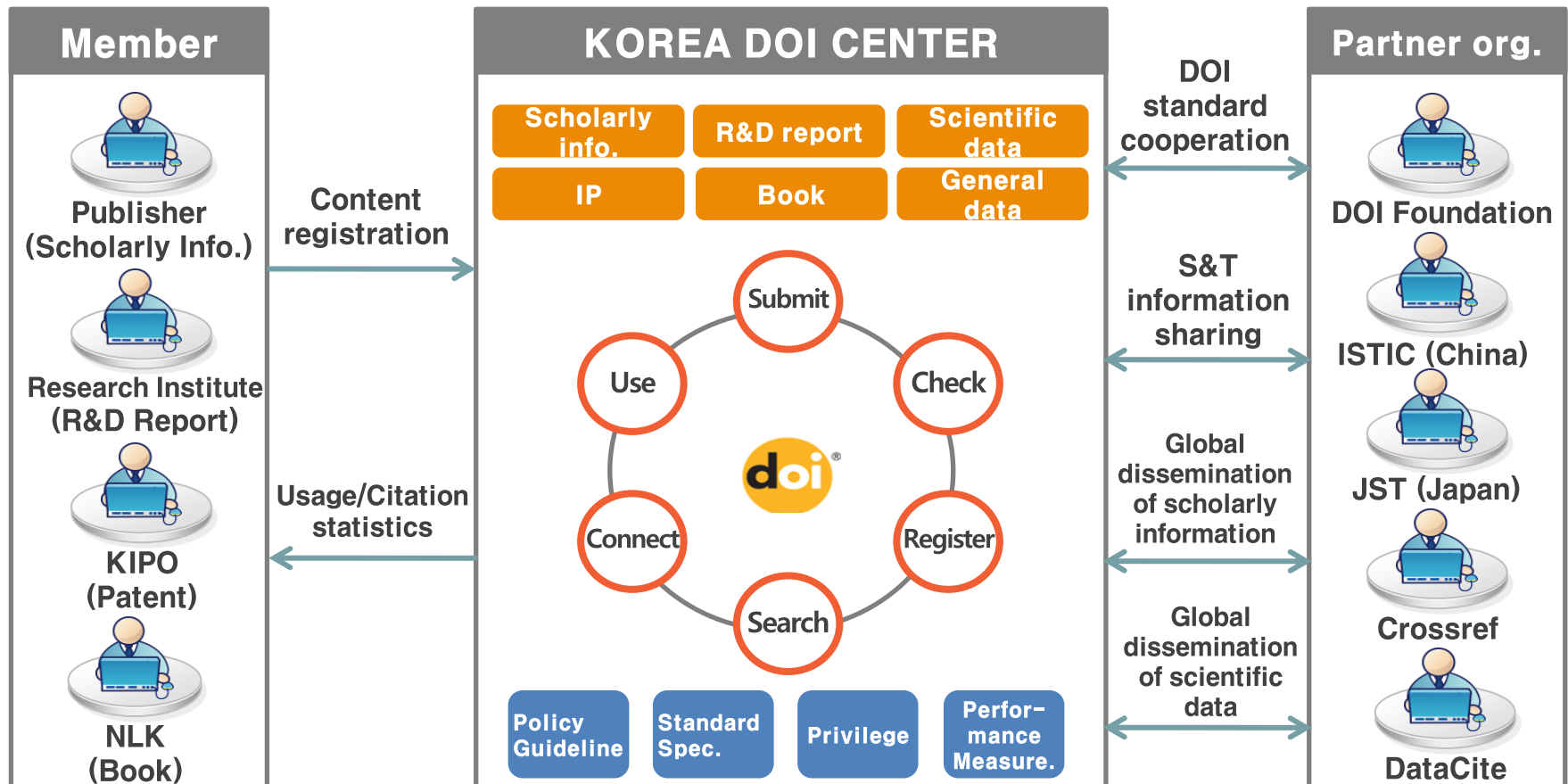
As of October 31, 2021

Research article	Proceeding paper	R&D report	Scientific data	Book	Patent	Dissertation	General data	DMP
553,807	326	51,938	2,566,199	3,095,503	13,865,470	312	190,239	1

Services

DOI Service Overview

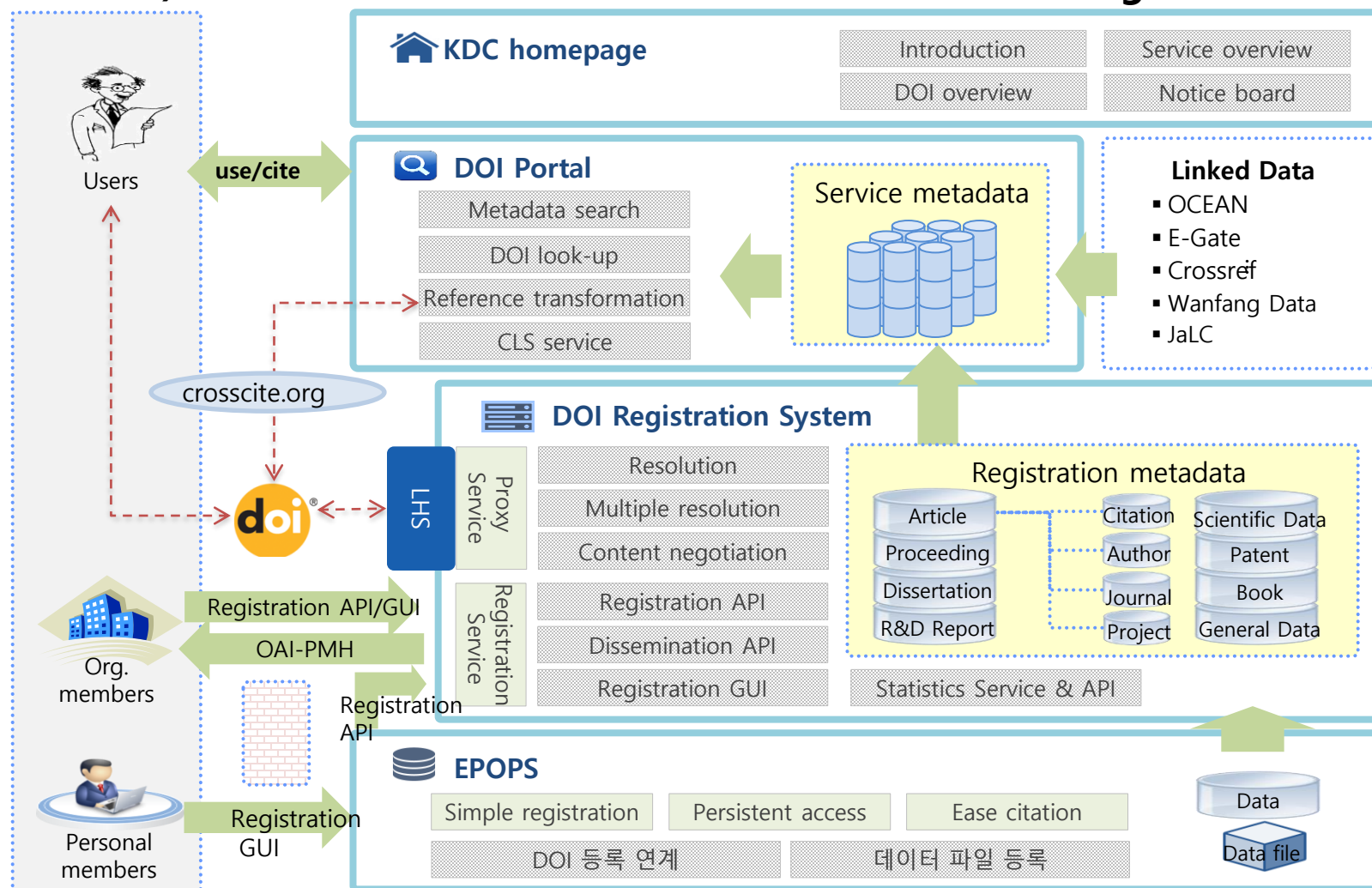
- A series of activities that RA carries out to enhance the influence of content holders globally by ensuring easy and persistent access to content through the DOI system.
- Activities that provide ease of use and usefulness to users by combining DOI, interpretation, and landing pages.



DOI System Configuration

(DOI Registration) System to register and manage content metadata, DOI, and URL

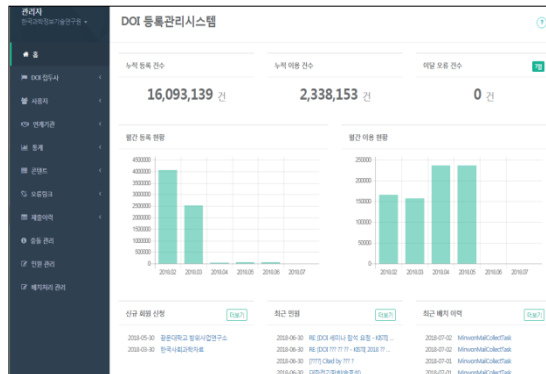
(DOI Portal) Services to browse, connect, and utilize DOI-registered content



DOI Service Pages

DOI Registration : <http://doi.or.kr/manage/>
DOI Portal : <http://data.doi.or.kr>
EPOPS : <http://epops.kr>

※ Guidelines : <https://doi.org/10.22655/EDU>



[DOI registration main page]



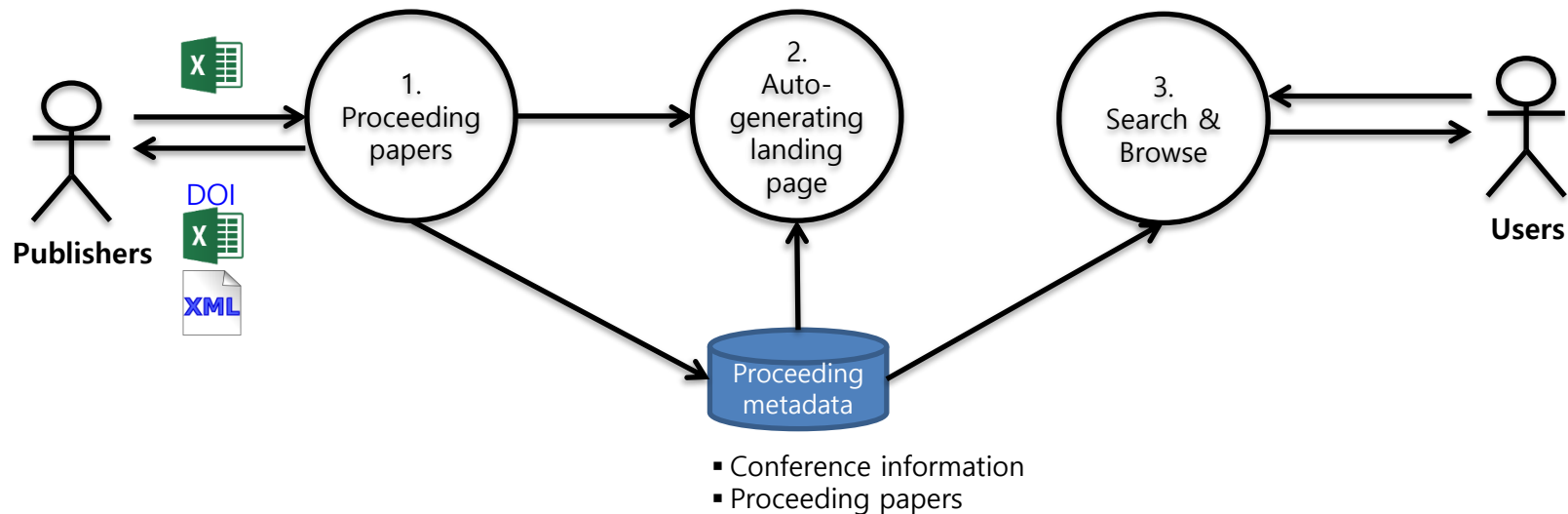
[DOI Portal Search]



[EPOPS main page]

Auto-generated Landing Page

- When DOI is registered, a landing page is automatically generated.
- If there is no landing page for the content, it is used for the purpose of quickly publishing the content.
- The url is <http://data.doi.or.kr/{doi}>



[Concept diagram for automatically generating the conference proceeding papers landing page]

DOI Service URL

DOI registration	: http://doi.or.kr/manage/
Landing page	: http://data.doi.or.kr/{DOI}
Citation	: http://data.doi.or.kr/cite/{DOI}
Cited-by	: http://data.doi.or.kr/citedby/{DOI}
History	: http://data.doi.or.kr/history/{DOI}
QR Code	: http://data.doi.or.kr/qr/{DOI}
HTML	: http://data.doi.or.kr/text/html/{DOI}
JSON	: http://data.doi.or.kr/application/json/{DOI}
BibTeX	: http://data.doi.or.kr/application/x-bibtex/{DOI}
RIS	: http://data.doi.or.kr/application/x-Research-Info-Systems/{DOI}
Citeproc+json	: http://data.doi.or.kr/application/citeproc+json/{DOI}

E.g.)

<https://data.doi.or.kr/10.3743/KOSIM.2011.28.2.117>

<https://data.doi.or.kr/cite/10.3743/KOSIM.2011.28.2.117>

DOI Applications

Research Article Identification and Reference Linking

- A DOI is assigned when an article is published.
- References with DOI name can be accessed with one click.
- It is recommended to register references to obtain Cited-by information.

Analysis of Outdoor Positioning Results using Deep Learning Based LTE CSI-RS Data

Jeon, Juil (Senior Researcher, Electronics and Telecommunications Research Institute); Ji, Myungin (Senior Researcher, Electronics and Telecommunications Research Institute); Cho, Youngsu (Ph.D. Candidate, Electronics and Telecommunications Research Institute)
Received : 2020.08.13 Accepted : 2020.08.29 Published : 2020.09.15
<https://doi.org/10.11003/JPNT.2020.9.3.169> [Copy](#) [Citation](#) [HTML](#)

Abstract

Location-based services are used as core services in various fields. In particular, in the field of public services such as emergency rescue, accurate location estimation technology is very important. Recently, the technology of tracking the location of self-isolation subjects for COVID-19 has become a major issue. Therefore, location estimation technology using personal smart devices is being studied in various ways, and the most widely used method is to use GPS. Other representative methods are using Wi-Fi, Pedestrian Dead Reckoning (PDR), Bluetooth Low Energy (BLE) beacons, and LTE signals. In this paper, we introduced a positioning technology using deep learning based on LTE Channel State Information-Reference Signal (CSI-RS) data, and confirmed the possibility through an outdoor location estimation experiment using a commercial LTE signal.

Keywords

LBS; CSI-RS; deep learning

1. INTRODUCTION

위치를 기반으로 서비스는 현대 사회에서 가장 널리 활용되고 있는 서비스 중 하나이다. 특히 최근에는 정확한 위치 기반 서비스를 위해 수많은 장치들이 서로 유기적으로 연결되어 활용되고 있다. 차량의 자율 주행이나 큰 건물의 실내 내비게이션을 포함한 다양한 유형의 서비스는 실외 및 실내 환경에서 정확한 측위 정보를 필요로 하며 최근 몇 년 간 지속적으로 연구되고 있다 (Ericsson White Paper 2011). Global Positioning System (GPS)와 같은 Global Navigation Satellite Systems (GNSS)는 비교적 정확한 위치 정보를 제공할 수 있지만, 일부 복잡한 도심이나 실내 환경에서는 GNSS 신호를 수신하기 어렵기 때문에 다른 인프라를 이용한 측위 기술이 필요하다.

사람을 대상으로 하는 위치 추정 기술은 사용자의 스마트 단말을 기반으로 무선 통신 인프라를 활용하는 방안 위주로 연구되어 왔다 (Gu et al. 2009). 주요 측위 기술 중 하나인 Wi-Fi 기반 측위를 수행하기 위해서 Wi-Fi AP별 신호의 세기를 수집하여 신호 세기 패턴 맵핑 기반의 데이터 베이스를 구축한다 (Vo & De 2016). 사용자는 자신의 단말을 이용하여 현재 위치의 Wi-Fi 신호 세기 패턴을 수집한 후, 측위된 무선 통신 인프라 중 하나인 셀룰러 신호 기반 위치 추정은 Wi-Fi 신호 세기의 분포를 이용하여 위치를 추정하는 기술이다. 본 논문에서는 셀룰러 신호 데이터 중 하나인 LTE Channel State Information-Reference Signal (CSI-RS) 데이터를 이용하여, 위치를 추정하는 방법을 소개하고 실험을 통해 타당성을 검증한다 (Wu et al. 2013, Pecorello et al. 2018). CSI-

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[Previous](#) [Next](#)

Abstract

Keywords

1. INTRODUCTION

2. CSI-RS 데이터를 이용한 측위

2.1 CSI-RS

2.2 CSI-RS 데이터를 이용한 딥러닝 기반 측위 기술

3. 실험 결과

3.1 LTE CSI-RS 데이터 수집 장치 구성 및 실험 방법

3.2 LTE CSI-RS 데이터 특성 파악 실험 결과

3.3 측위 실험 결과

4. 결론

ACKNOWLEDGMENTS

AUTHOR CONTRIBUTIONS

CONFLICTS OF INTEREST

References

Vo, Q. S. & De, P. 2016. A survey of fingerprint-based outdoor localization. IEEE Communications Surveys & Tutorials, 18, 491-506.
<https://doi.org/10.1109/COMST.2015.2448632>

Wu, Q. S. & De, P. 2016. A survey of fingerprint-based outdoor localization. IEEE Communications Surveys & Tutorials, 18, 491-506.

Wu, Q. S. & De, P. 2016. A survey of fingerprint-based outdoor localization. IEEE Communications Surveys & Tutorials, 18, 491-506.

Wu, Q. S. & De, P. 2016. A survey of fingerprint-based outdoor localization. IEEE Communications Surveys & Tutorials, 18, 491-506.

Reference Linking

Journals & Magazines > IEEE Communications Surveys & Tutorials > Volume: 18 Issue: 1

A Survey of Fingerprint-Based Outdoor Localization

Publisher: IEEE [Cite This](#) [PDF](#)

Quoc Duy Vo; Pradypta De [All Authors](#)

106 Paper Citations 3485 Full Text Views

Abstract

A growing number of sensors on smart mobile devices has led to rapid development of various mobile applications using location-based or context-aware services. Typically, outdoor localization techniques have relied on GPS or on cellular infrastructure support. While GPS gives high positioning accuracy, it can quickly deplete the battery on the device. On the other hand, base station based localization has low accuracy. In search of alternative techniques for outdoor localization, several approaches have explored the use of data gathered from other available sensors, like accelerometer, microphone, compass, and even daily patterns of usage, to identify unique signatures that can locate a device. Signatures, or fingerprints of an area, are hidden cues existing around a user's environment. However, under different operating scenarios, fingerprint-based localization techniques have variable performance in terms of accuracy, latency of detection, battery usage. The main contribution of this survey is to present a classification of existing fingerprint-based localization approaches which intelligently sense and match different clues from the environment for location identification. We describe how each fingerprinting technique works, followed by a review of the merits and demerits of the systems built based on these techniques. We conclude by identifying several improvements and application domain for fingerprinting based localization.

Published in: IEEE Communications Surveys & Tutorials (Volume: 18, Issue: 1, Firstquarter 2016)

Page(s): 491 - 506

INSPEC Accession Number: 15730358

Date of Publication: 23 June 2015

DOI: 10.1109/COMST.2015.2448632

Publisher: IEEE

ISSN Information:

Funding Agency:

Section I. Introduction

Smartphone-BASED outdoor localization has been gaining attention as increasing number of in-built sensors make it easier to locate a smartphone and its user. It is common for most location-based applications, like Poido and MapQuest Map, to use GPS on a smartphone. Although GPS is the preferred mode of outdoor localization, GPS-based techniques often do not perform well in crowded cities or in unfavorable weather, like overcast conditions. When the satellite signals are delayed due to multi-path or blocked by obstacles, GPS-based localization service can suffer. In addition, it is well known that GPS is extremely power hungry.

<https://doi.org/10.11003/JPNT.2020.9.3.169>

<https://doi.org/10.1109/COMST.2015.2448632>

Auto-registration of ORCID Records with DOI

Users can automatically register their works in the ORCID profile through the DOI names of their works.

- Researchers can conveniently manage their research results.
- KDC supports for automatic registration of ORCID records for patents and books as well as research papers for the first time in the world
- From 2022, automatic update of ORCID profile will be implemented in KDC

The image shows a two-step process for adding a work to an ORCID profile. On the left, a box titled "ADD WORK" contains the instruction "Add work from DOI" and "Type or paste the full DOI URL or just the identifier value". A text input field contains the DOI "10.8080/1020130072961". Below the field are two buttons: "Retrieve work details" and "Cancel". A large green arrow points from this box to the right, where a more detailed form is shown. This form has two main sections. The left section contains fields for "Work category*" (set to "Intellectual property"), "Work type*" (set to "Patent"), "Title*" (with Korean text "인제 백의 3차원 영상과 음성 정보 제작 방법 및 장치" and a link to "add translated title"), "Subtitle" (with "Add subtitle"), "Journal title" (with "Add journal title"), and "Publication date" (set to 2013, 06, 25). The right section, titled "WORK IDENTIFIERS", contains fields for "Identifier type" (set to "doi: Digital object identifier"), "Identifier value" (set to "10.8080/1020130072961"), "Identifier URL" (set to "https://doi.org/10.8080/1020130072961"), "Relationship" (with radio buttons for "Self", "Part of", and "Version of", and a link to "Add other identifier"), "URL" (set to "https://doi.org/10.8080/1020130072961"), and "Language used in this form" (set to "Korean").

[ORCID ADD Work]

Linking documents, data, and researchers using DOI and ORCID

- Contributors of data and authors of papers are linked through ORCID.
- ORCID is suitable for researchers who want to actively disclose their profile.

<https://doi.org/10.8888/EPOPS201802221JL>

EPOPS
Publish It Yourself!

상세보기

Determination and exposure assessment of 16 perfluorinated compounds in food simulants after migration from fluorocarbon resin-coated frying pans, baking utensils, and non-stick baking paper in Korean market.

김미경(식품의약품안전평가원) | 44 인용

<https://doi.org/10.8888/EPOPS201802221JL>

설명
Food Additives & Contaminants Part B 논문의 Supplementary Data

데이터 파일
파일이름: 파일설명
[Supplementary_Data.xlsx](#)

절차
Method development and Monitoring

관련링크
<https://doi.org/10.1080/19393210.2018.1499677>

권리기관
National Institute of Food and Drug Safety Evaluation

분류
농림수산식품 > 식품과학 > 식품화학

Data to Article

Document to Data

Data to Person

<http://orcid.org/0000-0001-5960-8692>

ORCID
Connecting Research and Researchers

MeeKyung Kim

ORCID ID
<https://orcid.org/0000-0001-5960-8692>

Print view

Employment (3)

Ministry of Food and Drug Safety: Osong
2013-03 to present
Employment
Source: MeeKyung Kim Preferred source

Animal, Plant, and Fisheries Quarantine and Inspection Agency: Anyang
2011-08 to 2013-03
Employment
Source: MeeKyung Kim Preferred source

National Veterinary Research and Quarantine Service: Anyang
2000-05 to 2011-08
Employment
Source: MeeKyung Kim Preferred source

Education and qualifications (1)

State University of New York: Albany, NY
to 1997 | Ph. D. (Environmental Health and Toxicology)
Education
Source: MeeKyung Kim Preferred source

<https://doi.org/10.1080/19393210.2018.1499677>

Taylor & Francis Online
Access provided by Korea Institute of Science and Technology Information (KISTI)

Journal
Food Additives & Contaminants: Part B
Surveillance
Volume 11, 2018 - Issue 4

103 Views
0 CrossRef citations to date
0 Altmetric

Original Articles

Perfluorinated compounds in food simulants after migration from fluorocarbon resin-coated frying pans, baking utensils, and non-stick baking papers on the Korean market

Heeju Choi, In-Ae Bae, Jae Chun Choi, Se-jong Park & MeeKyung Kim

Pages 264-272 | Received 28 Feb 2018, Accepted 09 Jul 2018, Accepted author version posted online: 27 Jul 2018, Published online: 10 Aug 2018

Download citation <https://doi.org/10.1080/19393210.2018.1499677>

Full Article | Figures & data | References | Citations | Metrics | Reprints & Permissions | Get access

ABSTRACT

Perfluorinated compounds (PFCs) are used in manufacturing food contact materials, including non-stick cookware coatings, oil and moisture-resistant paper coatings. The chemical stability of PFCs poses an issue for human safety, as they do not degrade well naturally and hence may accumulate in the body. In terms of food safety, since dietary intake is thought to be a major source of exposure to PFCs, it is necessary to assess the migration of PFCs from food packaging articles to food under typical cooking and storage conditions. An analytical method was developed for assessing the migration of 16 PFCs from food contact materials to food simulants using liquid chromatography-tandem mass spectrometry. The applicability of the method for regular inspection was assessed by monitoring 312 samples. Based on the results of the exposure assessment, all food contact materials deemed to be safe for use, which evaluated migrated concentrations and dietary food intake.

WORDS: Perfluorinated compound, food contact material, migration, consumption factor, food-type distribution factor, exposure assessment, PFOA, PFOS

Article to Person

DLI (Data Literature Interlinking)

- KDC member organizations can already register DOI on scientific data.
- Individual researchers can register data and DOI at EPOPS (<http://epops.kr>)

The screenshot shows the EPOPS (E-Publishing Open Platform) website. The main content area displays a data record titled "Determination and exposure assessment of 16 perfluorinated compounds in food simulants after migration from fluorocarbon resin-coated frying pans, baking utensils, and non-stick baking paper in Korean market." The record includes a DOI link: <https://doi.org/10.8888/EPOPS201802221JL>. Below the title, there is a section for "데이터 파일" (Data File) with a table showing the file name "Supplementary_Data.xlsx" and the number of downloads "28".

Data to Document

Document to Data



<https://doi.org/10.8888/EPOPS201802221JL>

The screenshot shows the Taylor & Francis Online website. The main content area displays a scientific article titled "Perfluorinated compounds in food simulants after migration from fluorocarbon resin-coated frying pans, baking utensils, and non-stick baking papers on the Korean market" by Heeju Choi, In-Ae Bae, Jae Chun Choi, Se-jong Park & MeeKyung Kim. The article includes an abstract and keywords. The DOI link is <https://doi.org/10.1080/19393210.2018.1499677>.



<https://doi.org/10.1080/19393210.2018.1499677>

Connect space – Phaya Thone Zu Temple in Bagan, Myanmar



<https://www.youtube.com/watch?v=kUJoOKN3TOE>



문화재청

Cultural Heritage
Administration

미얀마 바간유적 벽화 보존처리 사업

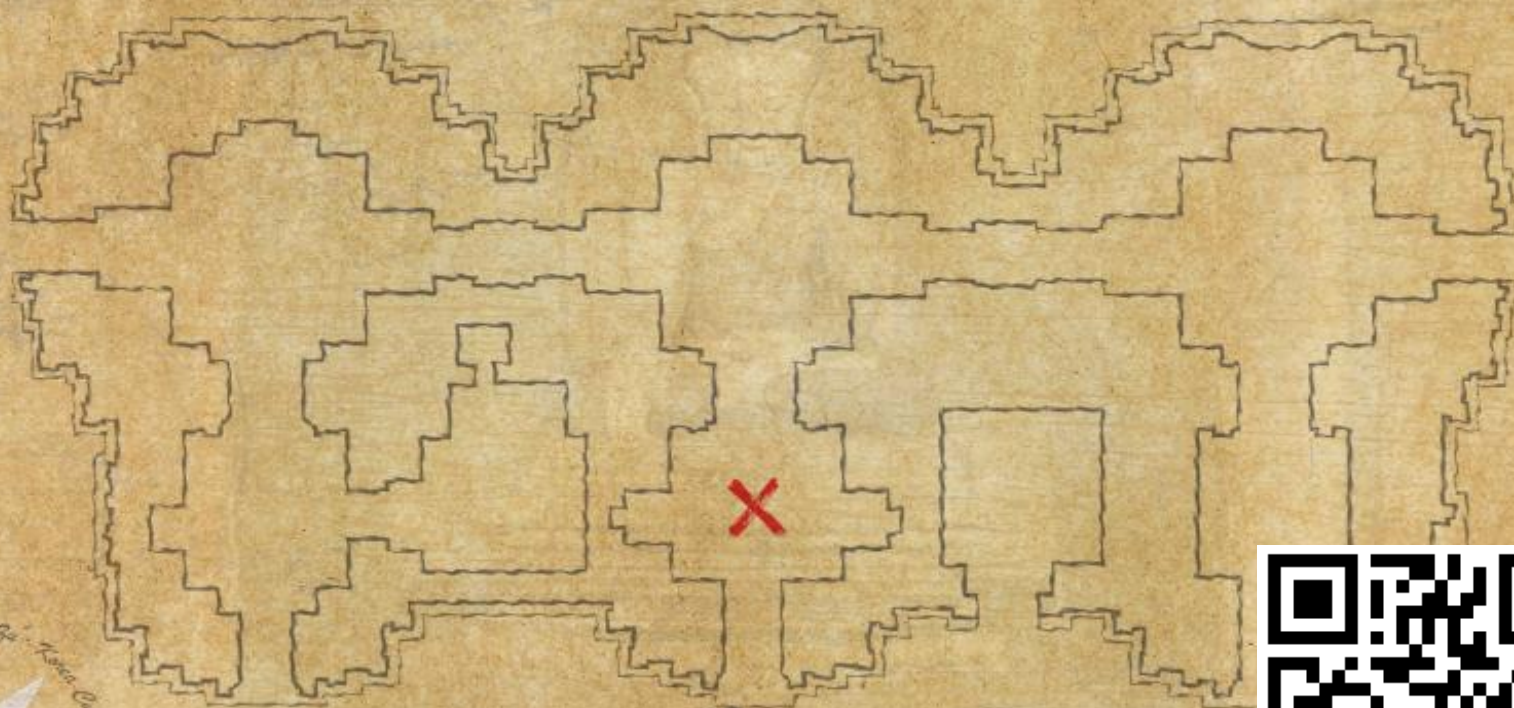
기간 : 2018년부터 2023년까지

대상 : 파야톤주사원 Phaya Thon Zu

한국문화재단



Korea
Cultural Heritage
Foundation



1/1000



<https://doi.org/10.22701/PAYA001>

특허청, '짜통' 한류 브랜드 근절 나선다

이준기 기자 bongchu@dt.co.kr | 입력: 2016-02-22 14:14



중소 패션 가방·의류 제조업체인 갤러리에이엠은 국내 유명 동양화가 육심원 작가의 일러스트를 활용해 가방, 의류, 문구 등을 생산·판매해 왔다. 2014년에는 한 방송 드라마 간접광고(PPL)로 인지도가 급상승하면서 중국인들에게 널리 알려지기 시작했다. 그러나, 주력제품인 가방 모조품이 정가의 20~40% 수준에서 중국 내 온·오프라인 도매상을 중심으로 유통되고, 심지어 중국 오픈마켓에 게시된 판매목록의 70% 이상이 위조상품인 것을 발견했다.

특허청, 짜통 가공 포장육 제조·유통업자 적발

8개월간 가짜 포장육 총 6만여 점(시가 11억원 상당, 약 67톤) 판매

김정환 기자 | 기사입력 2018/08/23 [18:58]

특허청(청장 성윤모) 상표권 특별사법경찰(이하 특사경)은 국내 유명 대기업 제품인 것처럼 속인 가짜 양념 포장육을 제조한 A(35세)씨와 이를 유통시킨 B(52세)씨를 상표법 위반혐의로 입건했다고 밝혔다.

Certificate of Patents, Trademark Registration

KIPO (Korean Intellectual Property Office) assigns DOI QR codes to all patent certificates and trademark registration certificates so that the right holder can be identified.

특허증
CERTIFICATE OF PATENT

특허 제 10-1757253 호
Patent Number

출원번호 제 10-2016-0174842 호
Application Number

출원일 2016년 12월 20일
Filing Date

등록일 2017년 07월 06일
Registration Date

발명의 명칭 Title of the Invention
다차원 데이터를 관리하기 위한 장치 및 그 방법

특허권자 Patentee
한국과학기술정보연구원 (114171-*****)
대전광역시 유성구 대학로 245 (여은동)

발명자 Inventor
등록사항란에 기재

위의 발명은 「특허법」에 따라 특허등록원부에 등록되었음을 증명합니다.
This is to certify that, in accordance with the Patent Act, a patent for the invention has been registered at the Korean Intellectual Property Office.

2018년 04월 02일
특허청장
COMMISSIONER,
KOREAN INTELLECTUAL PROPERTY OFFICE

특허청
Korean Intellectual Property Office

Printed by OZ Designer

상표등록증
CERTIFICATE OF TRADEMARK REGISTRATION

등록 제 40-0923625 호
Registration Number

출원번호 제 40-2011-0031198 호
Application Number

출원일 2011년 06월 09일
Filing Date

등록일 2012년 06월 15일
Registration Date

상표권자 Owner of the Trademark Right
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대전광역시 유성구 대학로 245 (여은동)

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COMMUNICATION SYSTEM USING WIRELESS POWER

상세정보 공개전문 공고전문 등록사항 통합행정정보

서지정보 인명정보 행정처리 청구항 지정국 인용/피인용 패밀리정보 국가R&D 연구정보

(51) Int. CL H04L 27/00(2006.01.01) H04B 5/02(2006.01.01)

(52) CPC

(21) 출원번호/일자 1020180017277 (2018.02.12)

(71) 출원인 삼성전자주식회사

(11) 등록번호/일자 1018393820000 (2018.03.12)

(65) 공개번호/일자 1020180018646 (2018.02.21) 전문다운

(11) 공고번호/일자 (2018.03.16) 전문다운

(86) 국제출원번호/일자

(87) 국제공개번호/일자

(30) 우선권정보

법적상태 등록

심사진행 상태 등록결정(일반)

심판사항

구분/원출원권리 신규 / 특허

원출원번호/일자 1020110084695 (2011.08.24)

관련 출원번호 1020110084695

기술이전 희망

심사청구여부/일자 Y(2018.02.12)

심사청구할수 20

다운로드 크게보기

변조부 310, 320, 330, 340, 350, 360, 361, 363

전송부, 수신부, 에너지 보상부, 감출부, 보상부

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<https://doi.org/10.8080/1020180017277>

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ISBN : 9791186326022

ISBN-A : 10.979.1186326/022

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▪ ISBN 정보	979-11-86326-02-2 [93500] 가격 : 25000
▪ ISBN-A	https://doi.org/10.979.1186326/022
▪ 발행사항	피엔포드, 발행일 : 20161216
▪ CIP 제어번호	CIP2016029287
▪ 분류 기호	한국십진분류법-> 005.133 듀이십진분류법-> 005.133
▪ 출판사 홈페이지	http://www.pnpod.com
▪ 납본여부	납본



<https://doi.org/10.979.1186326/022>

<http://data.doi.or.kr/cite/10.22677/THESIS.2228890>



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FAQ

홈 > 검색 > 검색 상세

검색 상세

Low-Power Neural Recording Amplifier Design Based on Advanced Noise Modeling

잡음 모델링 기반 저전력 신경 신호 증폭기

이태조 (Taeju Lee, 대구경북과학기술원 (DGIST))

[원문보기](#)

<ul style="list-style-type: none"> 주제(키워드) 발행기관 논문지도교수 논문지도교수 공동논문지도교수 공동논문지도교수 발행년도 학위수여연월 학위명 학과 및 전공 세부전공 원문페이지 실제URI 본문면어 저작권 	<p>Brain machine interface, low-noise, low-power analog circuit, tissue-electrode interface, neural recording amplifier, noise modeling, 뇌-기계 인터페이스, 저잡음, 저전력 아날로그 회로, 조직-전극 인터페이스, 신경 신호 증폭기, 잡음 모델링</p> <p>DGIST</p> <p>제민규</p> <p>Minkyu Je</p> <p>최홍수</p> <p>Hongsoo Choi</p> <p>2016</p> <p>2016. 2</p> <p>석사</p> <p>대학원 정보통신융합공학전공</p> <p>Analog Integrated Circuits</p> <p>98</p> <p>http://www.dcollection.net/handler/dgist/000002228890</p> <p>영어</p> <p>대구경북과학기술원 논문은 저작권에 의해 보호받습니다.</p>
--	--

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Neural recording is an indispensable function required for the brain machine interface (BMI) and neuroscience research. In order to obtain his low-noise performance needs to be provided by a front-end amplifier used for neural recording. At the same time...

초록 [more >](#)

뇌-기계 인터페이스 및 신경 과학 연구에서 신경 신호 측정은 반드시 수행되어야 하는 부분이다. 미세한 크기의 신경 신호를 획득하기 위해서는 저잡음 성능을 시에 세로 조성을 줄이기 위해 저전력으로 구동되는 아날로그 프린트-앎드가 필요하다. 이 논문은 잡음 모델링에 기반하여 높은 신호 대 잡음비를 얻기 위해, 모델링은 조직-전극 인터페이스에 의해 발생되는 일관성을 고려하여 최적의 신호 대 잡음비를 얻을 수 있도록 한다. 조직-전극 인터페이스...

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1.2 Developed Neural Systems 8





<http://data.doi.or.kr/cite/10.22677/THESIS.2228890>

APA	Lee, T. J. (2016, February). Low-Power Neural Recording Amplifier Design Based on Advanced Noise Modeling. DGIST. https://doi.org/10.22677/THESIS.2228890
Harvard	Lee, T. J. (2016) "Low-Power Neural Recording Amplifier Design Based on Advanced Noise Modeling." DGIST. doi: 10.22677/THESIS.2228890.
IEEE	[1]T. J. Lee, "Low-Power Neural Recording Amplifier Design Based on Advanced Noise Modeling." DGIST, Feb-2016.
MLA	Lee, Tae Ju. <i>Low-Power Neural Recording Amplifier Design Based on Advanced Noise Modeling</i> . DGIST, Feb. 2016, doi:10.22677/THESIS.2228890.
Vancouver	1. Lee TJ. Low-Power Neural Recording Amplifier Design Based on Advanced Noise Modeling [Internet]. DGIST; 2016. Available from: https://doi.org/10.22677/THESIS.2228890
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<https://doi.org/10.22677/THESIS.2228890>

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Journal : ACS Catalysis, 7(4)
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Fe-Treated Heteroatom (S/N/B/P)-Doped Graphene Electro-catalysts for Water Oxidation

Fatemeh Razmjooei, Kiran Pal Singh, Dae-Soo Yang, Wei Cui, Yun Hee Jang, and Jong-Sung Yu*

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ACS Catal. 2017, 7 (4), pp 2381–2391
DOI: 10.1021/acscatal.6b03291
Publication Date (Web): February 16, 2017
Copyright © 2017 American Chemical Society

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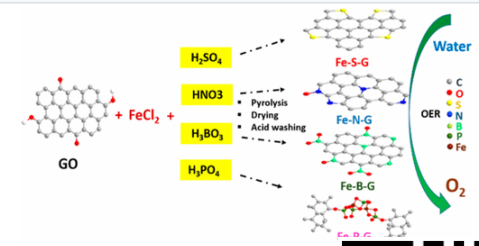
Cite this: ACS Catal. 2017, 7, 4, 2381-2391

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Synopsis

Different Fe-treated mono-heteroatom (S/N/B/P)-doped RGO catalysts have been prepared and investigated for their OER electrocatalytic activity. Fe-S-G catalyst shows the highest OER activity among all the prepared catalysts owing to high electrical conductivity and optimal C–O₂ adsorption-desorption energy associated with the S-doped RGO.

Abstract



Anodic water splitting is driven by hydroxide (OH⁻) adsorption on the catalyst surface, leading to the consequent O₂ desorption. In this work, various heteroatoms (S/N/B/P) with different electronegativities and oxophilicities are introduced to alter the catalytic activity of graphene oxide (RGO) as a catalyst for the oxygen evolution reaction (OER). Surprisingly, S-doped RGO outperforms the other RGOs doped with more electronegative and more oxophilic heteroatoms, and this effect becomes more pronounced after the treatment of the respective catalysts. Herein, we evaluate the OER activity of the prepared catalysts.



<https://doi.org/10.1021/acscatal.6b03291>

Summary

Summary

Term definition

- DOI (Digital Object Identifier)
- Resolution
- Landing Page
- DOI Proxy Server

Introduction to KDC

- Unique regional DOI registration agency in Korea

DOI services

- Activities that provide ease of use and usefulness to users by combining DOI, interpretation, and landing pages.

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