

岡山大学におけるaltmetricsの導入について

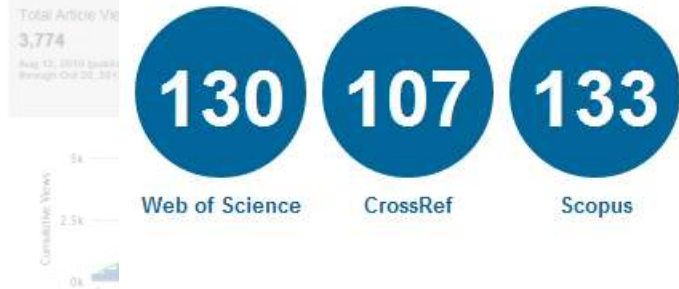
DRF, 岡山大学附属図書館 鹿田分館
大園 隼彦

altmetricsとは

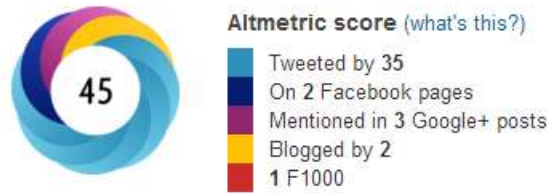
- Bibliometrics、Webometricsと比較して、Altmetrics (Alternative Metrics)と呼ばれる。
- ソーシャルメディア等における研究成果への反応をリアルタイムで収集し、そのインパクトを定量的に表示する新しい研究評価指標。
- 引用等の従来の指標を補完する働きを期待されている。

altmetricsとは

Viewed ● Total citations



Online attention

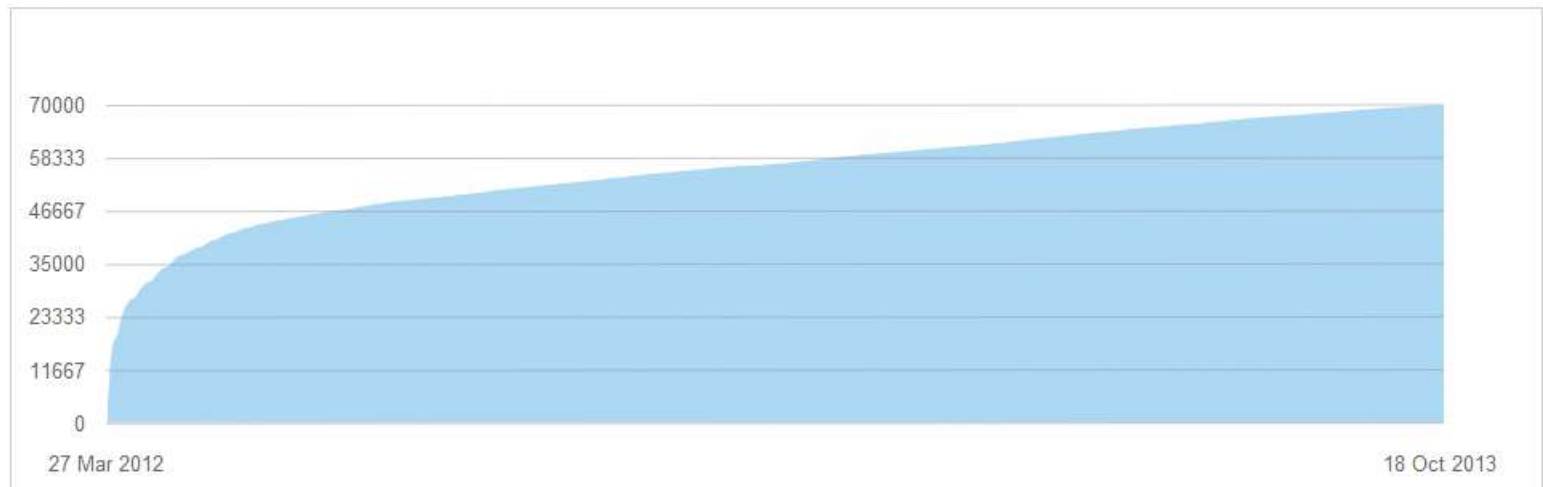


This Altmetric score means that the article is:

- in the 98 percentile of a sample of 10,000 of the 64,104 tracked articles of a similar age in all journals
- in the 71 percentile (ranked 228th) of the 797 tracked articles of a similar age in *Nature*

PDF	XML
330	47
59	-
24 VIEWS	
20 VIEWS	
16 VIEWS	
12 VIEWS	
8 VIEWS	
4 VIEWS	
0 VIEWS	

Page views



Cited ●



Saved ●



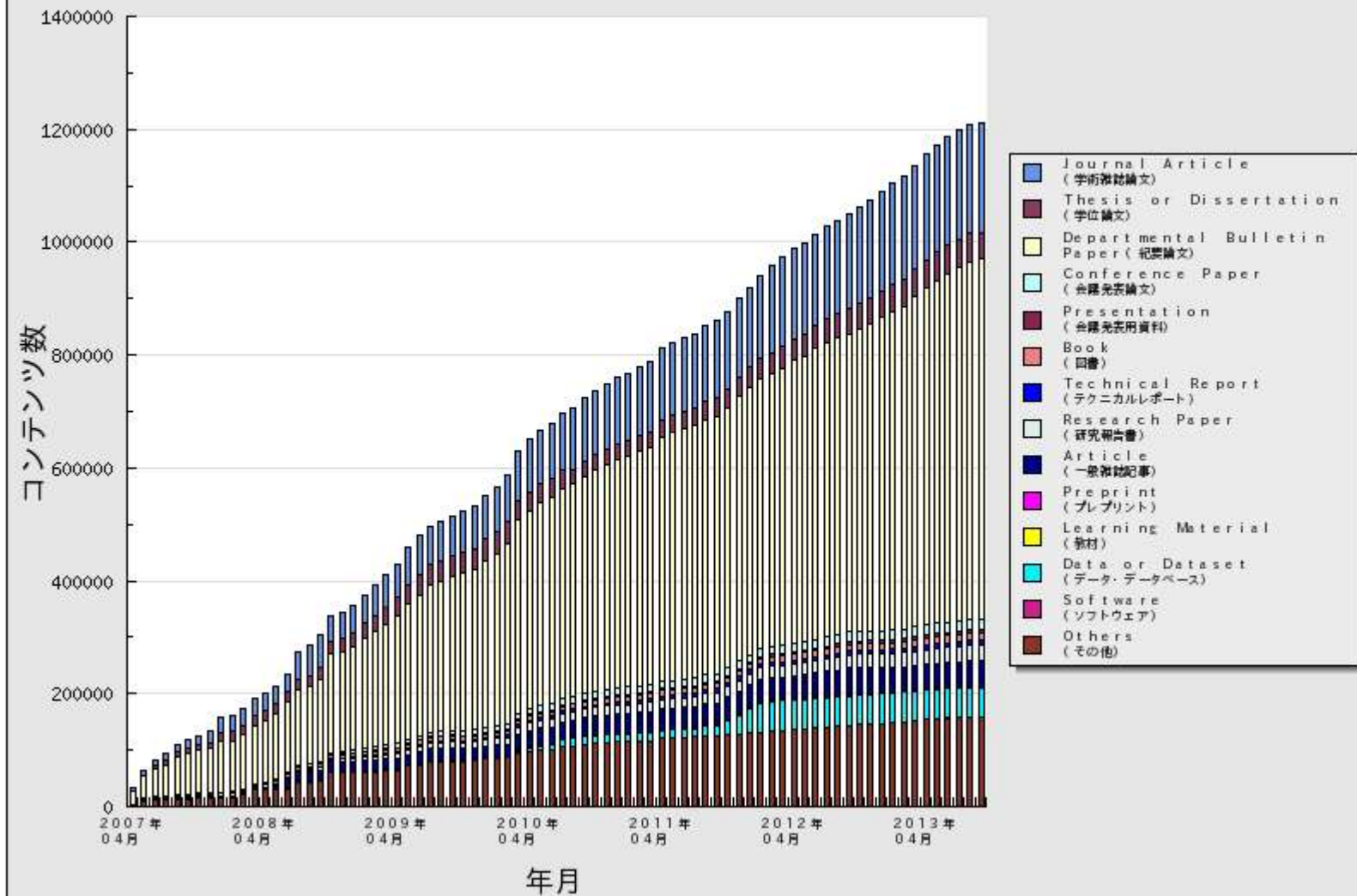
様々なAltmetricsサービス

- Altmetric.com
<http://altmetric.com/>
- ImpactStory
<http://impactstory.org/>
- PlumAnalytics
<http://www.plumanalytics.com/>
- PLOS ALM
<http://article-level-metrics.plos.org/>

IRのコンテンツの特徴

- 国内のIRは紀要のリポジトリとなっている傾向がある。
- 学術雑誌論文の割合があまり多くない。

I R D B 全体のコンテンツ増減 (本文あり)



なぜIRに導入

- 紀要のリポジトリとなっている傾向がある。
- 一方では学術雑誌論文の割合があまり多くない。



- IRのコンテンツに新しい評価指標を追加
- 紀要以外の論文OA化のきっかけにならないか

岡山大学における導入

- Altmetric.comを利用
 - 無償
 - 導入のしやすさ
 - 管理ツール(Altmetric Explore):図書館員は無償
 - 見た目のインパクト
- 利用方法
 - ①Badgeの表示
 - ②APIの利用

導入画面① 一覧表示

プロジェクト一覧

Improvement in sulfur desorption of NOX storage and reduction catalysts using a Ba-Ti composite oxide

状態：公開 著者：Tanaka,Toshiyuki / Tajima,Ichirou / Kato,Yuichi / Nishihara,Yasushi / Shinjoh,Hirofumi / et al. 出版物タイトル：Applied Catalysis B: Environmental 巻：102 号：3-4 発行日：2011-02-22 資料タイプ：学術雑誌論文

Altmetric 0
cited 2 times in WoS

Studies on the Synthesis of DMAP Derivatives by Diastereoselective Ugi Reactions

状態：公開 著者：Mandai,Hiroki / Irie,Shunsuke / Mitsudo,Koichi / Suga,Seiji 出版物タイトル：Molecules 巻：16 号：10 発行日：2011-10-20 資料タイプ：学術雑誌論文

Altmetric 1
cited 2 times in WoS

Electrochemical generation of silver acetylides from terminal alkynes with a Ag anode and integration into sequential Pd-catalysed coupling with arylboronic acids

状態：公開 著者：Mitsudo,Koichi / Shiraga,Takuya / Mizukawa,Jun-ichi / Suga,Seiji / Tanaka,Hideo / et al. 出版物タイトル：Chemical Communications 巻：46 号：48 発行日：2010 資料タイプ：学術雑誌論文

Altmetric 0
cited 11 times in WoS

導入画面② ー 詳細表示 ー

詳細

[マージ対象に追加](#) | [マージ先に設定](#) | [更新履歴](#)
[Download\(JStage Format\)](#)

ツイート | いいね! | 1 | 共有 | 0 |

Altmetric | 54

cited 483 times in WoS
Cited 516 times in SCOPUS

ログ統計

状態	公開	
URI	http://ousar.lib.okayama-u.ac.jp/metadata/47455	
フルテキストURL	Nature 473 55-60.pdf (530.6KB) 公開日 2012-01-23	
タイトル	Crystal structure of oxygen-evolving photosystem II at a resolution of 1.9 Å	
著者	著者	
	Author	Umena Yasufumi
	著者	
	Author	Kawakami Keisuke
	著者	
	Author	Shen Jian-Ren
	著者	
Author	Kamiya Nobuo	

導入画面③ ー利用統計ページー



導入方法

- badgeの表示

```
<script type='text/javascript'  
    src='https://d1bxh8uas1mnw7.cloudfront.net/assets/embed.js'></script>
```

```
<div class='altmetric-embed' data-badge-type='donut'  
    data-doi="10.1038/nature.2012.9872"></div>
```

○基本 : 表示したいHTMLページに2行追加するのみ。

○追加処理 : メタデータからDOI等のIDを抜き出す。
IDがある場合のみ、badgeを表示する。

<http://api.altmetric.com/embeds.html>

導入方法

Most basic badge, DOI 10.1038/nature.2012.9872

Click on the badge to see more information about this article.



```
<div class='altmetric-embed' data-doi='10.1038/nature.2012.9872'></div>
```

Donut style badge, arXiv ID 1209.4191

This is an arXiv ID.



```
<div class='altmetric-embed' data-badge-type='donut' data-arxiv-id='1209.4191'></div>
```

Donut style badge, PubMed ID

This is a PubMed ID.



```
<div class='altmetric-embed' data-badge-type='donut' data-pmid='21771119'></div>
```

Donut style badge, Handle

This is a Handle.



```
<div class='altmetric-embed' data-badge-type='donut' data-handle='2022/14471'></div>
```

Altmetrics in libraries and institutional repositories

There are few limitations you'll need to bear in mind:

- You'll need to tell us your domain e.g. myrepo.university.edu before we can start tracking links to your repository. Otherwise the badges will still work, they'll just only reflect attention paid to the published versions of items.
- Right now we can only track items with a DOI, handle or other recognized scholarly identifier (SSRN, arXiv, RePEc and PubMed IDs are all OK too). Though we're looking at supporting items identified by URL alone this is a little while off.
- We started collecting data in July 2011 and coverage of papers published before that date isn't great, so be prepared to only really see results on more recent material.
- We can't offer citation counts: as much as we'd like to unfortunately if you want to include this data you need to negotiate with Scopus and/or Web of Science separately, we aren't able to do this on your behalf.

<http://www.altmetric.com/blog/altmetrics-in-academic-libraries-and-institutional-repositories/>

導入方法

- APIの利用

Data license

Please:

- **Do** feel free to use the basic, free Altmetric data for commercial, academic or non-commercial projects.
- **Do** apply for an API key; this will drastically increase rate limits.
- **Do** [attribute](#) the data to Altmetric.com.
- **Do not** redistribute the data in bulk.

Attribution

If you use the Altmetric API or datasets in an app, mashup or report please attribute us somewhere appropriate on the page where the data is being displayed.

A simple namecheck and link to altmetric.com is fine. The exact location and style of the attribution is up to you!

<http://api.altmetric.com/index.html#datalicense>

http://api.altmetric.com/docs/call_doi.html





Altmetric Explore

Acta Medica Okayama

Articles 25 Activity 42 Journals 2

Export articles Save these filters as a report API

Standard Tiled Condensed

-  The effect of L-carnitine on platelet activating factor concentration in the immature rat model of hypoxic-ischemic brain injury. *Acta medica Okayama*
-  Low serum concentrations of vitamin b6 and iron are related to panic attack and hyperventilation attack. *Acta Med Okayama*
-  Intraprostatic botulinum neurotoxin type a injection for benign prostatic hyperplasia: preliminary results with a newly purified neurotoxin. *Acta Med Okayama*
 - Otro uso de #Toxina botulinica: mejora la hipertrófia prostática benigna, aplicada de forma intralesional.
 - (neurotox purificada) también para tratamiento de hipretrofia prostática benigna. Disminuye tamaño con inyección local
-  Menaquinone (vitamin K2) therapy for bronchial asthma. II. Clinical effect of menaquinone on bronchial asthma. *Acta medica Okayama*
 - Menaquinone (vitamin K2) therapy for bronch... [Acta Med Okayama. 1975] - PubMed - NCBI

ダウンロード数 対 altmetricスコア Acta Medica Okayama (2011.4-2013.3)

論文タイトル	DL	alm
Pathophysiological studies on ferric iron. Part 4. Bio-logical observation of serum iron colloid (1958)	1,985	—
A New Method for Sex Determination Based on Detection of SRY, STS and Amelogenin Gene Regions with Simultaneous Amplification of Their Homologous Sequences by a Multiplex PCR (2011)	970	0
Ectopic Cervical Thymoma:A Case Report with ¹⁸ F-fluorodeoxyglucose Positron Emission Tomography Findings (2012)	659	0
Influence of exposure to new circumstances on pharmacokinetics of plasma drugs concentrations in rats (2000)	572	0
Prognosis of Hepatocellular Carcinoma with Portal Vein Tumor Thrombus:Assessment Based on Clinical and Computer Tomography Characteristics (2012)	383	0
Mastectomy in Female-to-male Transsexuals (2009)	366	0
Is Adenosine Deaminase in Pleural Fluid a Useful Marker for Differentiating Tuberculosis from Lung Cancer or Mesothelioma in Japan, a Country with Intermediate Incidence of Tuberculosis? (2011)	338	0
Biofilm formation among methicillin-resistant Staphylococcus aureus isolates from patients with urinary tract infection (2004)	325	0
Clinical Features of Acute Myocardial Infarction in Elderly Patients (2011)	279	0
Natural antioxidants may prevent posttraumatic epilepsy: a proposal based on experimental animal studies (2004)	276	0

ダウンロード数 対 ImpactStory Acta Medica Okayama (2011.4-2013.3)

論文タイトル	DL	M	C
Pathophysiological studies on ferric iron. Part 4. Bio-logical observation of serum iron colloid (1958)	1,985	-	-
A New Method for Sex Determination Based on Detection of SRY, STS and Amelogenin Gene Regions with Simultaneous Amplification of Their Homologous Sequences by a Multiplex PCR (2011)	970	5	0
Ectopic Cervical Thymoma:A Case Report with ¹⁸ F-fluorodeoxyglucose Positron Emission Tomography Findings (2012)	659	0	0
Influence of exposure to new circumstances on pharmacokinetics of plasma drugs concentrations in rats (2000)	572	0	0
Prognosis of Hepatocellular Carcinoma with Portal Vein Tumor Thrombus:Assessment Based on Clinical and Computer Tomography Characteristics (2012)	383	0	0
Mastectomy in Female-to-male Transsexuals (2009)	366	7	0
Is Adenosine Deaminase in Pleural Fluid a Useful Marker for Differentiating Tuberculosis from Lung Cancer or Mesothelioma in Japan, a Country with Intermediate Incidence of Tuberculosis? (2011)	338	2	0
Biofilm formation among methicillin-resistant Staphylococcus aureus isolates from patients with urinary tract infection (2004)	325	4	3
Clinical Features of Acute Myocardial Infarction in Elderly Patients (2011)	279	4	0
Natural antioxidants may prevent posttraumatic epilepsy: a proposal based on experimental animal studies (2004)	276	5	4

ダウンロード数 対 WoS引用数

Acta Medica Okayama (2011.4-2013.3)

論文タイトル	DL	WoS
Pathophysiological studies on ferric iron. Part 4. Bio-logical observation of serum iron colloid (1958)	1,985	0
A New Method for Sex Determination Based on Detection of SRY, STS and Amelogenin Gene Regions with Simultaneous Amplification of Their Homologous Sequences by a Multiplex PCR (2011)	970	3
Ectopic Cervical Thymoma:A Case Report with ¹⁸ F-fluorodeoxyglucose Positron Emission Tomography Findings (2012)	659	0
Influence of exposure to new circumstances on pharmacokinetics of plasma drugs concentrations in rats (2000)	572	0
Prognosis of Hepatocellular Carcinoma with Portal Vein Tumor Thrombus:Assessment Based on Clinical and Computer Tomography Characteristics (2012)	383	0
Mastectomy in Female-to-male Transsexuals (2009)	366	1
Is Adenosine Deaminase in Pleural Fluid a Useful Marker for Differentiating Tuberculosis from Lung Cancer or Mesothelioma in Japan, a Country with Intermediate Incidence of Tuberculosis? (2011)	338	1
Biofilm formation among methicillin-resistant Staphylococcus aureus isolates from patients with urinary tract infection.(2004)	325	23
Clinical Features of Acute Myocardial Infarction in Elderly Patients (2011)	279	1
Natural antioxidants may prevent posttraumatic epilepsy: a proposal based on experimental animal studies (2004)	276	27

Mendeley readership 対 ダウンロード数 Acta Medica Okayama (2011.4-2013.3)

論文タイトル	M	DL
Factors that influence primary cilium length (2011)	31	181
Regulation of mitochondrial dynamics and neurodegenerative diseases. (2011)	27	210
Targeting angiogenesis in cancer therapy (2011)	17	135
Parasitic Worms mainly from Celebes. Part 6. Cestodes of Fishes (1954)	12	48
Ataxia-telangiectasia mutated and the Mre11-Rad50-NBS1 complex: promising targets for radiosensitization (2012)	11	144
Parasitic Worms mainly from Celebes. Part 3. Digenetic Trematodes of Fishes, II (1953)	7	125
Early rehabilitation with weight-bearing standing-shaking-board exercise in combination with electrical muscle stimulation after anterior cruciate ligament reconstruction (2012)	7	206
Preferable Forms of Relaxation for Health Promotion, and the Association between Recreational Activities and Self-perceived Health. (2012)	6	65
Severe superimposed preeclampsia with obesity, diabetes and a mild imbalance of angiogenic factors (2012)	6	251
Heat Shock Protein Magic in Antigen Trafficking within Dendritic Cells: Implications in Antigen Cross-presentation in Immunity (2012)	6	168

Altmetricスコア 対 ダウンロード数

Acta Medica Okayama (2011.4-2013.3)

論文タイトル	alm	DL
The effect of L-carnitine on platelet activating factor concentration in the immature rat model of hypoxic-ischemic brain injury (1998)	6	16
Low serum concentrations of vitamin b6 and iron are related to panic attack and hyperventilation attack (2011)	5	9
Intraprostatic botulinum neurotoxin type a injection for benign prostatic hyperplasia:preliminary results with a newly purified neurotoxin. (2012)	2	83
Menaquinone (vitamin K2) therapy for bronchial asthma. II. Clinical effect of menaquinone on bronchial asthma (2000)	2	-
Phantom erectile penis after sex reassignment surgery (2008)	1	86
Targeting angiogenesis in cancer therapy. (2011)	1	135
Dominant Vertebral Artery Injury during Posterior Atlantoaxial Transarticular Screw Fixation in a Juvenile Rheumatoid Arthritis Patient with Atlantoaxial Subluxation (2012)	1	111
The Pretreatment of Maximum Standardized Uptake Values (SUVmax) of the Primary Tumor Is Predictor for Poor Prognosis for Patients with Epithelial Ovarian Cancer (2012)	1	64
Preclinical Safety and Efficacy of in Situ REIC/Dkk-3 Gene Therapy for Prostate Cancer (2012)	1	96
Clinical implications of biofilm formation by Enterococcus faecalis in the urinary tract (2005)	1	99

IR利用の傾向 (Acta Medica Okayama)

- ダウンロード数大 → altmetric スコア大 ではない
- ダウンロード数大 → 引用数大 ではない
- ダウンロード数大 → readership大 ではない

○ソーシャルメディア (Twitter等) の反応は多くない。

altmetricsスコアのある論文数 : 25

(Altmetric Exploreより)

○Mendeleyでの利用はある程度ある。

MendeleyReadershipのある論文数 : 159

(Mendeleyで検索)

- 多様な指標として表示することは意味がある。

なぜIRに導入

- 紀要のリポジトリとなっている傾向がある。
- 一方では学術雑誌論文の割合があまり多くない。



- IRのコンテンツに新しい評価指標を追加
(多様な指標)
- 紀要以外の論文OA化のきっかけにならないか

岡山大学学術成果リポジトリ

ダウンロード数 TOP100 雑誌別 (2011.4-2013.3)

タイトル	論文数	ダウンロード数
岡山医学会雑誌	30	52,231
岡山大学医学部保健学科紀要	16	39,688
岡山大学医療技術短期大学部紀要	7	25,324
岡山大学経済学会雑誌	6	8,159
岡大三朝医療センター研究報告	5	37,043
岡山大学教育実践総合センター紀要	5	8,648
岡山大学大学院教育学研究科研究集録	5	7,519
環境病態研報告	4	4,695
岡山大学教師教育開発センター紀要	3	9,171
岡山大学農学部学術報告	2	3,799
岡山大学大学院社会文化科学研究科紀要	2	3,382
Okayama University Earth Science Report	2	3,285
岡山大学環境理工学部研究報告	2	3,035
Acta Medica Okayama	2	2,955
その他	8	16,146

さらに今後の課題

- IRを研究評価の基盤とできないか
 - 研究者一覧 著者ID (ORCID等) で識別
 - 研究一覧 DOIで識別
- 研究者ごとに論文レベルの多様な指標を確認できる
- 評価指標の普及がコンテンツの拡大につながるか
- まずはIDの普及に努める必要があるか。