



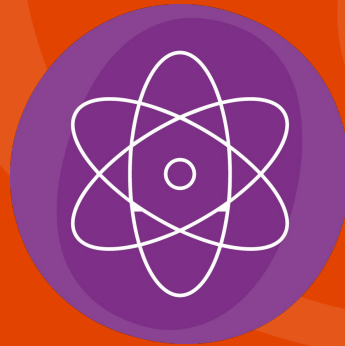
The
University
Of
Sheffield.

ORDA: a custom figshare frontend for the University of Sheffield

Jez Cope, *Research Data Manager, University Library*
Marcelo Paulino, *Software Developer, CiCS*

figshare webinar, Friday 12 May 2017

About the University



The University of Sheffield

We're a **Russell Group University** with **big ideas** and **great ambition**

We're a leading UK University with a global reputation, ranked in the **World Top 100** (QS World Rankings 2016–17)

We're in the top **10 per cent** of UK universities for research excellence

A global university

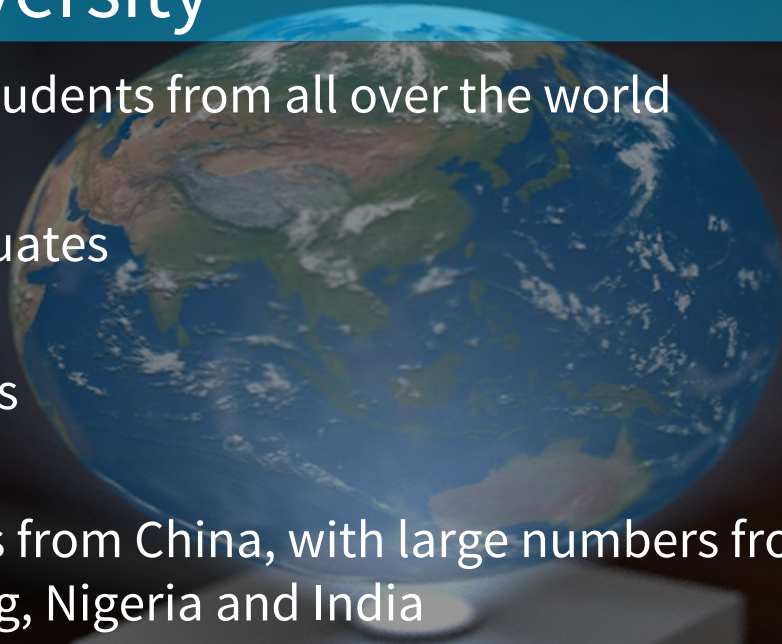
More than **27,000** students from all over the world

19,000+ undergraduates

8,000 postgraduates

Over **3,000** students from China, with large numbers from Malaysia, Hong Kong, Nigeria and India

Our collaborative work with global partners has an international impact. These include cutting-edge businesses such as Siemens, Rolls-Royce and Boeing and partnerships with universities like Tokyo, Cape Town and Sydney



World-class research

We are driven to make a difference through world-class research to solve big global issues

86 per cent of our research submitted to the 2014 Research Excellence Framework was rigorously assessed as being world-leading or internationally excellent; we are in the top 10% of UK universities for research excellence

We are committed to investing in life-changing research, supporting and nurturing innovative projects through our 2022 Futures programme

How we use figshare



Research data expectations



In the UK, researchers must:

1. Write a data management plan before a project
2. Look after data during a project
3. Curate, preserve and share data after a project

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ORDA

Online Research Data @ Sheffield

Registry for *all* datasets

Repository for long-tail data

Connected to Ex Libris Rosetta for preservation

Coming soon!



The
University
Of
Sheffield.

The
University
Library.

Get your research data in ORDA

powered by figshare

**The hub for managing and sharing research
data at Sheffield.**

Learn more about looking after your data at: sheffield.ac.uk/library/rdm

or upload your data now at: sheffield.figshare.com

Any questions? email us: rdm@sheffield.ac.uk

ORDA frontend development



Discover research from **The University of Auckland** ▾

NEW

POPULAR

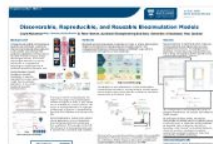
CATEGORIES

SEARCH 🔍

34159 views

5737 downloads

more stats...



Discoverable, Reproducible, and Reusable Biosimulation Models

David Nickerson ▾

20/04/2017



PROJECT

Project: Amplitude dependence of GCLAD measurements

Jamii Johnson

13/04/2017



CODE

Python script to compute proportionality of source energy t...

Jamii Johnson

13/04/2017



DATASET

Laser-ultrasound waves generated with various energy densities and...

Jamii Johnson

13/04/2017



PROJECT

Project: GCLAD measurement of air



DATASET

Python script to calculate the



DATASET

Laser-ultrasound measurements

Managing research data
Introduction, services and support



Research Data Management

Why build a custom frontend?

What we had:

- User-friendly, robust data registry and repository (**figshare**)
- DOI minting
- Versioned records
- Options for metadata-only records and embargoes

What we needed:

- Look-and-feel consistent with University of Sheffield web presence
- Platform to build new functionality
 - Conference proceedings
 - Cross-faculty institute pages
 - Featured items



Browse ORDA

- All items
- Faculties
- Categories
- Conferences
- Institutes

Recently Added

- Dataset
"Dataset SRACC: Synchrotron microCT for testing acc" by Enrico Dall'Asta et al on 24/04/2017 10:20 AM
- Dataset
"Data for paper Linear + Linear = Chaos" by Graeme Manson on 15/04/2017 01:02 PM
- Dataset
"Videos of Magnetohydrodynamics Simulations of Solar" by Michael Griffin et al on 12/04/2017 01:00 PM
- Dataset
"Bit Error Rate Performance of Quadrature Modulation" by Stephen Henthorn et al on 12/04/2017 10:20 AM
- Dataset
"Old Bailey Online XML Data" by Sharon Howard on 06/04/2017 10:17 AM

The hub for managing and sharing research data at **The University of Sheffield**

Discover our research

Search: All fields Search term...



<https://orda.shef.ac.uk/>

Commuter Megaregions of the United States



ORDA (Online Research Data) allows you to find, publish and share datasets, software code, reports, creative works, presentations, posters and much more.

Journal and conference papers are available through [White Rose Research Online](#). University of Sheffield researchers can deposit these outputs through [myPublications](#).

[More about Research Data Management](#)



Development process

Partnership between CiCS (IT Services) and Library

Product owner: Jez Cope (Library)

Scrummaster: Tim Snow (CiCS)

Developer: Marcelo Paulino (CiCS)

Technical details



ORDA

What and How?

- Mobile first application
- Bootstrap 4
- PHP
- Slim Framework
- Figshare API

ORDA

Main Features

- List of Publications
- Faculties
- Categories
- Conferences
- Full-text Search
- Citations
- Stats

All Items

List of all publications

The screenshot shows the ORDA (Online research data) website interface. The header includes the University of Sheffield logo and the text 'The University Library. ORDA (Online research data)'. A navigation bar contains links: Home, About, Upload, Help, Feedback. A left sidebar titled 'Browse ORDA' lists: All Items, Faculties, Categories, Conferences, and Institutes. The main content area is titled 'All items' and includes a 'Sort: Date published' dropdown. It displays a list of five publications, each with a thumbnail icon, title, author, date, and download/view statistics.

Thumbnail	Title	Author	Date	Download	View	Share	Like
	Dataset SRACC: Synchrotron microCT for testing accuracy of Digital Volume Correlation (DVC) methods	Dataset by Enrico Dall'Ara et al	24/04/2017 10:26:10	4	42		
	Data for paper "Linear + Linear = Chaos"	Fileset by Graeme Manson	18/04/2017 13:02:16	10	44		
	Videos of Magnetohydrodynamics Simulations of Solar Atmosphere Wave Dynamics Generated by Solar Global Oscillating Eigenmodes	Media by Michael Griffiths et al	12/04/2017 13:00:20	17	52		
	Bit Error Rate Performance of Quadrature Modulation Transmission Using Reconfigurable Frequency Selective Surfaces- AWPL2017	Dataset by Stephen Henthorn et al	12/04/2017 10:20:17	4	45		
	Old Bailey Online XML Data	Fileset by Sharon Howard	06/04/2017 10:17:56	12	297		

At the bottom, there is a pagination bar showing numbers 1 through 20, with '1' highlighted.

- <https://api.figshare.com/v2/articles?{param}={value}>
 - List of articles
 - Parameters: [institution, page_size, order_direction, order]
- <https://api.figshare.com/v2/articles/{id}>
 - Get article details
- <https://stats.figshare.com/{institution}/total/article/{id}>
 - Get views and downloads stats

Faculties

Publications by Departments

Browse ORDA


- All items
- Faculties
 - Arts and Humanities
 - Engineering**
 - Medicine Dentistry & Health
 - Science
 - Social Sciences
- Categories
- Conferences
- Institutes

Home / Faculties / Faculty of Engineering


Faculty of Engineering

Department of Automatic Control and Systems Engineering 5	Department of Chemical and Biological Engineering 0
Department of Civil and Structural Engineering 4	Department of Computer Science 12
Department of Electronic and Electrical Engineering 5	Department of Materials Science and Engineering 4
Department of Mechanical Engineering 84	

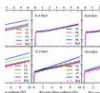
Sort: Date published ↓



Bit Error Rate Performance of Quadrature Modulation Transmission Using Reconfigurable Frequency Selective Surfaces- AWPL2017
Dataset by Stephen Henthorn et al on 12/04/2017 10:20:17
4 45 1 1



VPH-DARE@IT Biomedical Research Platform - Architectural Framework Design and Interoperability
Paper by Alejandro F Frangi et al on 20/03/2017 15:47:08
4 37 1 1



Data for paper: Proton radiation effect on InAs avalanche photodiodes
Fileset by Xinxin Zhou et al on 18/01/2017 13:12:06
38 187 1 1

- /v2/account/institution/groups?institution={value}&id_parent={value}
 - List of Departments by Faculty
 - Authorization token must be present
- </v2/articles?group={values}&institution={value}>
 - List of Articles by Departments

Categories

Publications by Categories



Browse ORDA

All items

Faculties

Categories

Conferences

Institutes

Home / Categories

List of Categories

+ Astronomy, Astrophysics, Space Science

+ Biological Sciences

+ Built Environment and Design

+ Chemistry

+ Commerce, Management, Tourism and Services

+ Earth and Environmental Sciences

+ Engineering

+ Health Sciences



List of Categories
<div><div>— Astronomy, Astrophysics, Space Science</div><div>Astrobiology</div><div>Astronomical and Space Instrumentation</div><div>Astronomical and Space Sciences not elsewhere classified</div><div>Astrophysics</div><div>Cosmology</div><div>Cosmology and Extragalactic Astronomy</div><div>Extragalactic Astronomy</div><div>Galactic Astronomy</div><div>General Relativity and Gravitational Waves</div><div>High Energy Astrophysics; Cosmic Rays</div><div>Instrumentation, Techniques, and Astronomical Observations</div><div>Interstellar and Intergalactic Matter</div></div>

- </v2/account/institution/categories?institution={value}>
 - List of categories and subcategories

Categories

Publications by Categories

Browse ORDA

All items

Faculties

Categories


Conferences

Institutes

Home / Categories / Biomechanical Engineering / Articles





Back to the list of Categories


Sort: Date published ↓



Data for paper 'Sensitivity of a juvenile subject -specific musculoskeletal model of the ankle joint to the variability of operator dependent input'





Dataset by Iain Hannah et al on 21/03/2017 12:48:14


 101  5  



The Standardised Tibia





Fileset by Hans Gray et al on 03/02/2017 13:31:26


 335  27  



The "Muscle Standardised Femur" model





Fileset by Marco Viceconti on 30/01/2017 16:38:43

 381  24  



Failure strength of infant femurs under 4 point bending of 15 cases

Fileset by Xinshan Li on 28/10/2016 13:52:17

 182  7  

- POST to `/v2/articles/search`
 - Search by “category”
 - Post fields:
 - institution
 - search_for

Search options



Home / Search result

Discover our research

Search: All fields technology

Filter: All types Sort: Date published

Results:

- Ability of optical tracking systems for monitoring deformations of a...
Paper by V. Gattulli et al on 28/03/2017 16:19:16
- Design criteria for structural monitoring system: a preliminary approach
Paper by V. Gattulli et al on 28/03/2017 16:18:28
- EACS 2016 paper - Energy Harvesting based on the Hybridisation of two Smart Materials
Paper by Julian Gosliga et al on 28/03/2017 16:18:16

- POST to [/v2/articles/search](#)
 - Search by option selected
 - Post fields:
 - institution
 - search_for

Filter and Sort options

Filter

Filter: All types ▼

- ✓ All types
- Figure
- Media
- Dataset
- Fileset
- Poster
- Paper
- Presentation
- Thesis
- Code
- Metadata record

- POST to [/v2/articles/search](#)
 - Filter by :item_type:

Sort

Sort: Date published ▼

- ✓ Date published
- Date modified

- Ascending
- ✓ Descending

Parameter: order
{published_date, modified_date}

Parameter: order_direction
{asc, desc}

Conferences

[Home](#) [About](#) [Upload](#) [Help](#) [Feedback](#)

[Browse ORDA](#)

[All Items](#)

[Faculties](#)

[Categories](#)

[Conferences](#)

[Institutes](#)

[Home](#) / [Conferences](#)

Technology for Independence Communications 2016 (T4I2016)

Published on: 10 Apr 2017 - 17:04:19

Authors: T4I2016

Categories: Rehabilitation Engineering, Rehabilitation and Therapy (excl. Physiotherapy), Health Care, Aged Health Care, Social Policy, Health Policy, Research, Science and Technology Policy, Care for Disabled, Disability Studies, Digital and Interaction Design, Computer-Human Interaction, Web Technologies (excl. Web Search)

Tags: T4I2016, Technology for Independence, Assistive technology, Rehabilitation Engineering

[Browse all 22 items from this conference](#)

Technology for Independence Conference 2016
Monday 28th November 2016 (08.30 to 17.30) St. Mary's Church and Conference Centre, Bramall Ln, Sheffield S2 4QZ.

Technology for Independence Communications 2016 documents the contributions presented at T4I2016. These T4I conference contents are published and made openly accessible through the University of Sheffield's repository ORDA (Online Research Data). Each communication will have a unique DOI number and be citeable.

EACS 2016 Conference Proceedings

Published on: 10 Apr 2017 - 16:04:07

Authors: David Wagg, Andrea Del Grosso, Robert Barthorpe, Elizabeth Cross

Categories: Dynamics, Vibration and Vibration Control, Structural Engineering, Earthquake Engineering

Tags: EACS2016, Structural health monitoring, SHM, Active structural control, Vibration control, passive structural control, Hybrid structural control, Earthquake engineering, Dynamics research, Smart materials, Tuned mass dampers, Nonlinear dynamics, Hybrid testing, Inerters

[Browse all 67 items from this conference](#)

6th European Conference on Structural Control (EACS 2016)
Sponsored by the European Association for the Control of Structures
The University of Sheffield Diamond Building
11th - 13th July 2016

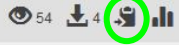
- [/v2/collections?group={id_group}](#)
 - Create a Group (id_group)
 - Relate collections to that Group
 - Reference that group as a “Conferences” group

Citations



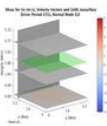
Dataset SRACC: Synchrotron microCT for testing accuracy of Digital Volume Correlation (DVC) methods

Dataset by Enrico Dall'Ara et al on 24/04/2017 10:26:10



Data for paper "Linear + Linear = Chaos"

Fileset by Graeme Manson on 18/04/2017 13:02:16



Videos of Magnetohydrodynamics Simulations of Solar Atmosphere Wave Dynamics Generated by Solar Global Oscillating Eigenmodes

Media by Michael Griffiths et al on 12/04/2017 13:00:20



Bit Error Rate Performance of Quadrature Modulation Transmission Using Reconfigurable Frequency Selective Surfaces- AWPL2017

Dataset by Stephen Henthorn et al on 12/04/2017 10:20:17



- Generate a citation in a preferred referencing format
- Third party API DOI Citation Formatter
<http://citation.crosscite.org/>

Citations



Citation Formatter

DOI

10.15131/shef.data.4865300.v1

Select Formatting Style

AIP
APA
Cell
Harvard
MHRA Author-Date
MHRA
OSCOLA
RSC

Citation

Citation Formatter

DOI

10.15131/shef.data.4865300.v1

Select Formatting Style

AIP

Citation

1 Enrico Dall'Ara, Marco Palanca, Marco Viceconti, Damien Lacroix, Mario Giorgi, and Luca Cristofolini, (2017).

 Copy to Clipboard

Close



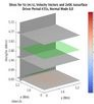
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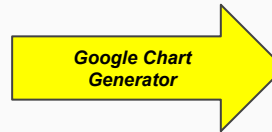
Videos of Magnetohydrodynamics Simulations of Solar Atmosphere Wave Dynamics Generated by Solar Global Oscillating Eigenmodes

Media by Michael Griffiths et al on 12/04/2017 13:00:20

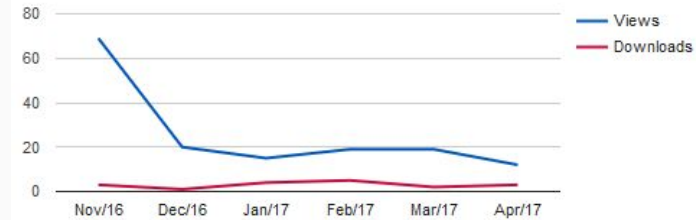


Bit Error Rate Performance of Quadrature Modulation Transmission Using Reconfigurable Frequency Selective Surfaces- AWPL2017

Dataset by Stephen Henthorn et al on 12/04/2017 10:20:17



Stats of Views and Downloads



- stats.figshare.com/sheffield/timeline/{granularity}/{counter}/article/{id}?start_date={date_from}&end_date={date_to}
 - Timeline endpoint
 - Granularity : [year, month, day]
 - Counter: [views, downloads]
 - Filter by publication id, start and end date

Lessons learned



Project management

Small, experimental project

Clear direction of travel but unclear specifics

Ideally suited for agile development

Project management: scrum

2 week sprint cycle

Small, focussed development group

Broad stakeholder group for sprint reviews

Took some adjustment for all of us, but worked very well!

Collaboration between departments



New way of collaborating on development projects for us!

CiCS & Library personnel in the same team

Big success story for this way of working

figshare API development

The API hasn't always done what we want

fig**share** have been very responsive

Quick response; 2–4 week turnaround wherever possible

Lesson: if it's not available, just ask!

Work in progress

Next step: researcher engagement!

Only a few hundred deposits so far

Launch event planned for June

Roll out and scale up

Any questions?



The screenshot displays the ORDA portal interface. At the top, a navigation bar includes links for Home, About, Upload, Help, and Feedback. A left sidebar titled 'Browse ORDA' contains icons and labels for 'All items', 'Faculties', 'Categories', 'Conferences', and 'Institutes'. The main content area shows the 'Insigneo Institute collection' with the following details:

- Published on:** 15 Mar 2017 - 15:03:48
- Authors:** Marco Viceconti
- Categories:** Biomechanical Engineering, Biomechanics, Regenerative Medicine (incl. Stem Cells and Tissue Engineering), Biomedical Engineering not elsewhere classified
- Tags:** Virtual Physiological Human, Computational Medicine, Predictive Medicine, in silico medicine, in silico clinical trial, personal health forecasting

A button labeled 'Browse all 9 items from this institute' is present. Below this, a paragraph describes the Insigneo Institute for *In Silico* Medicine as a leading research institution dedicated to predictive medicine technologies. A final paragraph states that the collection includes all datasets from Insigneo members available in Open Access via the University of Sheffield ORDA portal, based on the FigShare system.

- /v2/collections?group={id_group}
 - Create a Group (id_group)
 - Relate collections to that Group
 - Reference that group as a “Institutes” group

A proud heritage

Our history dates back to 1828, with the founding of The School of Medicine

In 1904, the working people in the city each donated a penny to ensure their city wasn't left behind and the University of Sheffield received its Royal Charter in 1905 to help make a global impact to benefit the city

At that time there were 114 full-time students reading for degrees in Arts, Pure Science, Medicine and Applied Science