

The Brief But Helpful Guide to Using ISIS Data DOIs

aka 'Why it would be great if all papers produced from work done at ISIS cited one or more data DOIs'

Short summary

- *Data DOIs are issued for every ISIS experiment*
- *If the relevant DOI(s) are cited in publications which use ISIS data, it provides a link from the publication back to the data. This has various benefits, including helping ISIS to find publications and enabling users to demonstrate data sources*
- *We would like to try to ensure that every publication coming from ISIS cites the relevant data DOI.*

What is an ISIS Data DOI?

Every experiment (RB number) run on an ISIS instrument is given a DOI (Digital Object Identifier). The DOI is a permanent reference to the data taken during that experiment. It can be used by others to get further information on the data and where it came from by providing a link back to the data (actual access to the data is determined by the [ISIS Data Policy](#)).

For example, below is a portion of the reference list from a paper which used ISIS and which cited the relevant data DOI (reference 18):

THICKNESS-DEPENDENT MAGNETIC PROPERTIES OF ...	PHYSICAL REVIEW B 84 , 075219 (2011)
¹⁸ doi: 10.5286/ISIS.E.24066298 (2009).	²⁶ See Supplemental Material at http://link.aps.org/supplemental/10.1103/PhysRevB.84.075219 for a best-fit of the PNR data with intermixed layers.
¹⁹ T. S. Santos, J. S. Moodera, K. V. Raman, E. Negusse, J. Holroyd, J. Dvorak, M. Liberati, Y. U. Idzerda, and E. Arenholz, <i>Phys. Rev. Lett.</i> 101 , 147201 (2008).	²⁷ See Supplemental Material at http://link.aps.org/supplemental/10.1103/PhysRevB.84.075219 for a best-fit of the PNR data with the FeO layer split into an inner layer and two surface layers with
²⁰ M. Müller, G.-X. Miao, and J. S. Moodera, <i>J. Appl. Phys.</i> 105 , 07C017 (2009).	

Someone clicking on this link in the paper gets taken to an ISIS data journal page where they can see more information on the experiment, and in principle can click on the 'download' button to get access to the dataset – whether they are allowed to do this depends on the ISIS data policy. Clicking on the DOI in the above paper takes you to the screen below:



RB820232

Investigation title: Magnetic moment of EuO in spin filtering magnetic tunnel structures.

Release date: Sun Feb 26 08:05:26 GMT 2012

Creator: Dr Adrian Ionescu

Creator: Dr Stuart Easton

Creator: Dr Crispin Barnes

DOI: 10.5286/ISIS.E.24066298

Date of Experiment: Thu Feb 19 13:34:31 GMT 2009

Publisher: STFC ISIS Facility

Data format: RAW/Nexus

Select the data format above to find out more about it.

Data Citation

The recommended format for citing this dataset in a research publication is as:
[author], [date], [title], [publisher], [doi]

For Example:

Dr Adrian Ionescu et al; (2009); 820232, STFC ISIS Facility, doi:10.5286/ISIS.E.24066298



Data collected on the
CRISP instrument
at the ISIS facility



DOWNLOAD

download
the dataset

Abstract

EuO is the ferromagnetic oxide semiconductor with the highest demonstrated value of conduction band exchange splitting (0.6 eV), which makes it at present one of the most promising material for achieving high spin filtering in magnetic tunnelling junctions. We intend to study the tunnelling of single electrons in quantum dots through a spin filtering EuO barrier, as a collaboration merging the expertise in our group on ferromagnetic thin film structures with the Semiconductor Physics group expertise on quantum dots at the Cavendish Laboratory in Cambridge. In this light we strongly believe that it is now necessary to study how EuO interacts with different metallic electrodes such as NiFe, Co and Y, and with substrates commonly used in spintronic devices, Si and GaAs, and how the magnetic moment of EuO is influenced by and influences the adjacent layers.

Why do we need ISIS data DOIs and why should we use them?

Increasingly, research funders and journals are increasingly requiring the origins of the data used in papers (both the raw data plus processed or intermediate versions of the data) to be made clear. Open access to data for transparency, particularly where the data were provided through public funds, is becoming increasingly important. Citing the data DOI for relevant ISIS experiments in a publication is one way of satisfying these requirements, and we expect that ISIS users will be required more and more to make their data sources transparent in this way.

From ISIS' point of view, having data DOIs cited in publications means that we can find these publications much more easily, as the DOIs we give to experiments form a unique set which can be searched for in journal articles. This could mean that we find more publications arising from ISIS work – one measure of our outputs – as well as saving a lot of work trying to find our publications. We would also be able to find theses and other outputs which are hard for us to search for. The DOI also allows us to link a publication back to an experiment, something that is very difficult for us to do at the moment.

How can I find the DOI for an experiment?

DOIs for experiments after April 2019 are of the format: **10.5286/ISIS.E.RBxxxxxxx** where xxxxxxx is the 7-digit RB number. So to know your experiment's DOI you only need to know the RB number. E.g. experiment with RB 1870596 will have DOI 10.5286/ISIS.E.RB1870596. The full link would then be <https://doi.org/10.5286/ISIS.E.RB1870596>.

Prior to April 2019, the DOIs for ISIS experiments were in a 'less friendly' format. However, we are creating DOIs for all experiments in the above format back to 2015 - this 'backdating' will come into effect again from April 2019.

If you want to check your data DOI, log into <https://data.isis.stfc.ac.uk> and you can see the DOI for your experiment. ISIS staff can also find DOIs – do ask your local contact if you want to check the DOI for your experiment.



My Data

Browse

Search

My Data

	Title ▲ ₁ ▼	Doi ▼	Visit Id ▼	RB Number
	Containing...	Containing...	Containing...	Containing...
✓	Ce(Os(1-x)Fe(x)) x=0.2: 807 pos 2	10.5286/ISIS.E.24088856	1 - GEM	1290014
✓	Confirmation of poly(3-hexyl thi...		1 - GEM	800086

In addition to this, emails sent pre- and post-experiment will, from Spring 2019, also contain the experiment data DOI, including beamtime award letters from June 2019 (ISIS Round 19/2) onwards.

ISIS staff can also find experiment DOIs – do ask your local contact if you can't find your DOI.

How do you cite a DOI in a publication?

The DOI could be put in several different places within a publication – e.g. in the body of the text, in the references or in the acknowledgements section. In general, citing the DOI as a reference is recommended, as this is the most likely area of a paper to be indexed and searchable.

We would like every paper coming from ISIS to have the relevant DOI(s) cited. This will help us hugely in finding publications, as well as providing publication readers with more information about the data they are looking at.

Philip King, Feb 2019