

# Neutron Reflectometers - a bibliography

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## *Background*

A short catalogue of neutron reflectometers has been made available on the world wide web for a number of years by Rennie:

<http://www.reflectometry.net/reflect.htm>

The list has given only brief information about sample geometry and the scattering plane, whether polarised beams are available and the modes of operation (monochromatic at a defined wavelength or time-of-flight measurements with a polychromatic beam). The catalogue has also provided links to web pages that give more detailed information about specific instruments. The web pages that are maintained by neutron facilities often provide detailed, updated technical data for the instruments, as well scientific results and information about the procedures for users to apply for access. However information on the internet is often transient.

## *Journal Literature*

A separate valuable source of further information in this area is provided by papers in scientific journals. These often give more detailed descriptions and explain the motivation for particular designs of instruments. The archive of scientific papers also provides information about instruments that have been decommissioned that is not easy to find as web pages are updated or removed. Reading this literature can give a good perspective on the evolution of the design of neutron reflectometers.

The papers listed in this bibliography are restricted to scientific journals rather than internal laboratory reports. Although these papers are widely available in academic libraries to assist access, apart from the usual citations, where possible, the digital object identifier (DOI) has been provided to give hyperlinks to the full text of the papers. This access usually requires a paid subscription. The facilities and instruments are also identified. The list is available sorted either by date or by instrument name.

[http://www.reflectometry.net/biblio/Neutron\\_reflectometer\\_bibliography\\_date\\_sort.pdf](http://www.reflectometry.net/biblio/Neutron_reflectometer_bibliography_date_sort.pdf)

[http://www.reflectometry.net/biblio/Neutron\\_reflectometer\\_bibliography\\_instrument\\_sort.pdf](http://www.reflectometry.net/biblio/Neutron_reflectometer_bibliography_instrument_sort.pdf)

The papers included in the list are not necessarily comprehensive but rather come from personal reading. However I will be very pleased to receive information about corrections or suggestions for updates.

Reflectometer Papers

Seq. No.	Instrument	Reference	Digital Source DOI	Year	Source	Country
10	ADAM	R. Siebrecht, A. Schreyer, U. Englisch, U. Pietsch, H. Zabel 'The new reflectometer ADAM at the ILL' <i>Physica B</i> , <b>241-243</b> , (1998), 169-171.	<a href="http://dx.doi.org/10.1016/S0921-4526(97)00541-3">http://dx.doi.org/10.1016/S0921-4526(97)00541-3</a>	1998	ILL	France
11	ADAM	A. Schreyer, R. Siebrecht, U. Englisch, U. Pietsch, H. Zabel 'ADAM, the new reflectometer at the ILL' <i>Physica B</i> , <b>248</b> , (1998), 349-354.	<a href="http://dx.doi.org/10.1016/S0921-4526(98)00263-4">http://dx.doi.org/10.1016/S0921-4526(98)00263-4</a>	1998	ILL	France
13	AMOR	D. Clemens 'Conceptional design of a flexible neutron reflectometer at 'SINQ' <i>Physica B</i> , <b>221</b> , (1996), 507-513.	<a href="http://dx.doi.org/10.1016/0921-4526(95)00972-8">http://dx.doi.org/10.1016/0921-4526(95)00972-8</a>	1996	SINQ	Switzerland
14	AMOR	D. Clemens, P. Gross, P. Keller, N. Schlumpf, M. Könecke 'AMOR - the versatile reflectometer at SINQ' <i>Physica B</i> , <b>276-278</b> , (2000), 140-141.	<a href="http://dx.doi.org/10.1016/S0921-4526(99)01386-1">http://dx.doi.org/10.1016/S0921-4526(99)01386-1</a>	2000	SINQ	Switzerland
15	AMOR	Mukul Gupta, T. Gutberlet, J. Stahn, P. Keller, D. Clemens 'AMOR - the time-of-flight neutron reflectometer at SINQ/PSI' <i>Pramana Journal of Physics</i> , <b>63</b> , (2004), 57-63.	<a href="http://dx.doi.org/10.1007/BF02704051">http://dx.doi.org/10.1007/BF02704051</a>	2004	SINQ	Switzerland
81	AMOR	J. Stahn, A. Glavic 'Focusing neutron reflectometry: Implementation and experience on the TOF-reflectometer Amor' <i>Nuclear Instruments and Methods in Physics Research A</i> <b>821</b> , (2016), 44-54.	<a href="http://dx.doi.org/10.1016/j.nima.2016.03.007">http://dx.doi.org/10.1016/j.nima.2016.03.007</a>	2016	SINQ	Switzerland
22	AND/R	Joseph A. Dura, Donald J. Pierce, Charles F. Majkrzak, Nicholas C. Maliszewskyj, Duncan J. McGillivray, Mathias Lösche, Kevin V. O'Donovan, Mihaela Mihailescu, Ursula Perez-Salas, David L. Worcester, Stephen H. White 'AND/R: Advanced neutron diffractometer/reflectometer for investigation of thin films and multilayers for the life sciences' <i>Review of Scientific Instruments</i> , <b>77</b> , (2006), 074301.	<a href="http://dx.doi.org/10.1063/1.2219744">http://dx.doi.org/10.1063/1.2219744</a>	2006	NCNR	USA
26	ARISA	N. Torikai, M. Furusaka, H. Matsuoka, Y. Matsushita, M. Shibayama, A. Takahara, M. Takeda, S. Tasaki, H. Yamaoka Instrumental design and performance of a new pulsed-neutron reflectometer (ARISA) at KENS for studying free surfaces <i>Appl. Phys. A</i> <b>74</b> suppl., (2002), S264-S266.	<a href="http://dx.doi.org/10.1007/s003390101095">http://dx.doi.org/10.1007/s003390101095</a>	2002	KENS	Japan
72	BioRef	M. Strobl, R. Steitz, M. Kreuzer, A. Nawara, F. Mezei, M. Rose, P. Amitesh, M. Grunze, R. Dahint 'BioRef – a time-of-flight neutron reflectometer combined with in-situ infrared spectroscopy at the Helmholtz Centre Berlin' <i>J. Phys.: Conf. Ser.</i> <b>251</b> , (2010), 012059.	<a href="http://dx.doi.org/10.1088/1742-6596/251/1/012059">http://dx.doi.org/10.1088/1742-6596/251/1/012059</a>	2010	BER II	Germany

Seq. No.	Instrument	Reference	Digital Source DOI	Year	Source	Country
31	BioRef	M. Strobl, R. Steitz, M. Kreuzer, M. Rose, H. Herrlich, F. Mezei, M. Grunze, R. Dahint 'BioRef: A versatile time-of-flight reflectometer for soft matter applications at Helmholtz-Zentrum Berlin' <i>Review of Scientific Instruments</i> , <b>82</b> , (2011), 055101.	<a href="http://dx.doi.org/10.1063/1.3581210">http://dx.doi.org/10.1063/1.3581210</a>	2011	BER II	Germany
84	BioRef	M. Trapp, R. Steitz, M. Kreuzer, M. Strobl, M. Rose, R. Dahint 'BioRef II—Neutron reflectometry with relaxed resolution for fast, kinetic measurements at HZB' <i>Rev. Sci. Instrum.</i> <b>87</b> , (2016), 105112.	<a href="http://dx.doi.org/10.1063/1.4964294">http://dx.doi.org/10.1063/1.4964294</a>	2016	BER II	Germany
66	BT-7 / NG7	J. F. Ankner, C. F. Majkrzak, S. K. Satija, 'Neutron Reflectivity and Grazing Angle Diffraction' <i>J. Res. NIST</i> , <b>98</b> , (1993), 47-58.	<a href="http://dx.doi.org/10.6028/jres.098.004">http://dx.doi.org/10.6028/jres.098.004</a>	1993	NCNR	USA
52	C3-1-2	T. Ebisawa, S. Tasaki, Y. Otake H. Funahashi, K. Soyama, N. Torikai, Y. Matushita 'The neutron reflectometer (C3-1-2) at the JRR-3M reactor at JAERI' <i>Physica B</i> , <b>213 &amp; 214</b> , (1995), 901-903.	<a href="http://dx.doi.org/10.1016/0921-4526(95)00318-4">http://dx.doi.org/10.1016/0921-4526(95)00318-4</a>	1995	JRR-3	Japan
76	CN REF-V	Jeong-Soo Lee, Jaseung Koo, Ji-Yong So, Tae Ho Kim, Sungkyun Park 'Development of a cold-neutron reflectometer (CN REF-V) at the HANARO' <i>Journal of the Korean Physical Society</i> <b>67</b> , (2015), 1574-1582.	<a href="http://dx.doi.org/10.3938/jkps.67.1574">http://dx.doi.org/10.3938/jkps.67.1574</a>	2015	HANARO	South Korea
82	CN REF-V	Jeong Soo Lee 'Instrument Resolution of the Vertical-type Cold-neutron Reflectometer at HANARO' <i>Journal of the Korean Physical Society</i> , <b>68</b> , (2016), 1099-1108.	<a href="http://dx.doi.org/10.3938/jkps.68.1099">http://dx.doi.org/10.3938/jkps.68.1099</a>	2016	HANARO	South Korea
1	CRISP	J. Penfold, R. C. Ward, W. G. Williams 'A time-of-flight neutron reflectometer for surface and interfacial studies' <i>J. Phys. E: Sci. Instrum.</i> <b>20</b> , (1987), 1411-1417.	<a href="http://dx.doi.org/10.1088/0022-3735/20/11/024">http://dx.doi.org/10.1088/0022-3735/20/11/024</a>	1987	ISIS	UK
2	CRISP	R. Felici, J. Penfold, R. C. Ward, W. G. Williams 'A polarised neutron reflectometer for studying surface magnetism' <i>Applied Physics A</i> , (1988), <b>45</b> , 169-174.	<a href="http://dx.doi.org/10.1007/BF02565206">http://dx.doi.org/10.1007/BF02565206</a>	1988	ISIS	UK
64	CRISP	V. Nunez, A. T. Boothroyd, J. Reynolds, J. Penfold, S. Langridge, D. G. Bucknall, P. Böni, D. Clemens, M. Senthil Kumar 'Improvements to the polarised-neutron reflectometer CRISP' <i>Physica B</i> , <b>241-243</b> , (1998), 148-150.	<a href="http://dx.doi.org/10.1016/S0921-4526(97)00535-8">http://dx.doi.org/10.1016/S0921-4526(97)00535-8</a>	1998	ISIS	UK
7	D17	R. Cubitt, G. Fragneto 'D17: the new reflectometer at the ILL' <i>Appl. Phys. A</i> <b>74</b> (Suppl.) (2002), S329-S331.	<a href="http://dx.doi.org/10.1007/s003390201611">http://dx.doi.org/10.1007/s003390201611</a>	2002	ILL	France
77	D50	J. Segura-Ruiz, J. Beaucour, B. Giroud, D. Atkins, R. Cubitt 'D50, an innovative ILL prototype for a white beam neutron reflectometer' <i>Neutron News</i> <b>26</b> , (2015), 3, 27.	<a href="http://dx.doi.org/10.1080/10448632.2015.1057053">http://dx.doi.org/10.1080/10448632.2015.1057053</a>	2015	ILL	France

Seq. No.	Instrument	Reference	Digital Source DOI	Year	Source	Country
86	Diting	Xinxi Li, Chaoqiang Huang, Yan Wang, Bo Chen, Guang'ai Sun, Yaoguang Liu, Jian Gon, Wu Kang, Hangang Liu 'Diting: A polarized time-of-flight neutron reflectometer at CMRR reactor in China' <i>Eur. Phys. J. Plus</i> <b>131</b> , (2016), 407.	<a href="http://dx.doi.org/10.1140/epjp/i2016-16407-9">http://dx.doi.org/10.1140/epjp/i2016-16407-9</a>	2016	CMRR	China
18	EROS	T. D. Doan, F. Ott, A. Menelle, P. Humbert, C. Fermon, I. L. Prejbeanu, U. Rücker 'New evanescent neutron wave diffractometer at LLB' <i>Appl. Phys. A</i> <b>74</b> , [Suppl.], S186–S188 (2002)	<a href="http://dx.doi.org/10.1007/s003390101088">http://dx.doi.org/10.1007/s003390101088</a>	2002	LLB	France
17	EROS	Alain Menelle 'Upgrade of the time-of-flight reflectometer at LLB' <i>Physica B</i> , <b>350</b> , (2004), e767–e769.	<a href="http://dx.doi.org/10.1016/j.physb.2004.03.199">http://dx.doi.org/10.1016/j.physb.2004.03.199</a>	2004	LLB	France
19	EROS	F. Cousin, F. Ott, F. Gibert, A. Menelle 'EROS II: A boosted time-of-flight reflectometer for multi-purposes applications at the Laboratoire Léon Brillouin' <i>Eur. Phys. J. Plus</i> , <b>126</b> , (2011), 109.	<a href="http://dx.doi.org/10.1140/epjp/i2011-11109-6">http://dx.doi.org/10.1140/epjp/i2011-11109-6</a>	2011	LLB	France
75	ESS	D. Nekrassov, M. Trapp, K. Lieutenant, J.-F. Moulin, M. Strobl, R. Steitz 'Design of a horizontal neutron reflectometer for the European Spallation Source' <i>Nuclear Instruments and Methods in Physics Research A</i> , <b>755</b> , (2014), 85-96.	<a href="http://dx.doi.org/10.1016/j.nima.2014.04.003">http://dx.doi.org/10.1016/j.nima.2014.04.003</a>	2014	ESS	Sweden
9	EVA	H. Dosch, K. Al Usta, A. Lied, W. Drexel, J. Peisl 'The evanescent neutron wave diffractometer: On the way to surface sensitive neutron scattering' <i>Review of Scientific Instruments</i> , <b>63</b> , (1992), 5533-5542.	<a href="http://dx.doi.org/10.1063/1.1143841">http://dx.doi.org/10.1063/1.1143841</a>	1992	ILL	France
8	Figaro	R. A. Campbell, H. P. Wacklin, I. Sutton, R. Cubitt and G. Fragneto 'FIGARO: The new horizontal neutron reflectometer at the ILL' <i>Eur. Phys. J. Plus</i> , <b>126</b> , (2011) 107.	<a href="http://dx.doi.org/10.1140/epjp/i2011-11107-8">http://dx.doi.org/10.1140/epjp/i2011-11107-8</a>	2011	ILL	France
85	Figaro	R. A. Campbell, H. P. Wacklin, I. Sutton, R. Cubitt, G. Fragneto 'Erratum to: FIGARO: The new horizontal neutron reflectometer at the ILL' <i>Eur. Phys. J. Plus</i> <b>130</b> , (2015), 220.	<a href="http://dx.doi.org/10.1140/epjp/i2015-15220-4">http://dx.doi.org/10.1140/epjp/i2015-15220-4</a>	2015	ILL	France
67	G2.2	C. Fermon 'Neutron reflectometry with polarization analysis: A theory and a new spectrometer' <i>Physica B</i> , <b>213 &amp; 214</b> , (1995), 910-913.	<a href="http://dx.doi.org/10.1016/0921-4526(95)00320-9">http://dx.doi.org/10.1016/0921-4526(95)00320-9</a>	1995	LLB	France
70	GINA	L. Bottyán, D. G. Merkel, B. Nagy, J. Major 'Neutron Reflectometer with Polarization Option at the Budapest Neutron Centre', <i>Neutron News</i> , <b>23:1</b> , (2012), 21-24.	<a href="http://dx.doi.org/10.1080/10448632.2012.645693">http://dx.doi.org/10.1080/10448632.2012.645693</a>	2012	BNC	Hungary
58	GINA	L. Bottyán, D. G. Merkel, B. Nagy, J. Füzi, Sz. Sajti, L. Deák, G. Endröczi, A. V. Petrenko, J. Major 'GINA - A polarized neutron reflectometer at the Budapest Neutron Centre' <i>Review of Scientific Instruments</i> , <b>84</b> , (2013), 015112.	<a href="http://dx.doi.org/10.1063/1.4770129">http://dx.doi.org/10.1063/1.4770129</a>	2013	BNC	Hungary

Seq. No.	Instrument	Reference	Digital Source DOI	Year	Source	Country
57	GORIZONT	V. S. Litvin, V. A. Trounov, V. A. Ulyanov, A. P. Boulkine, S. I. Kalinin, A. A. Alekseev, R. A. Sadykov, E. A. Koptelov 'A new time-of-flight neutron reflectometer and SANS instrument GORIZONT at IN-06 spallation neutron source' <i>Journal of Physics: Conference Series</i> , <b>340</b> , (2012) 012032.	<a href="http://dx.doi.org/10.1088/1742-6596/340/1/012032">http://dx.doi.org/10.1088/1742-6596/340/1/012032</a>	2012	IN-06	Russia
56	GRAINS	M. V. Avdeev, V. I. Bodnarchuk, V. V. Lauter-Pasyuk, H. Lauter, V. L. Aksenov, S. P. Yaradaikin, V. A. Ulyanov, V. A. Trounov, S. I. Kalinin 'Project of the new multifunctional reflectometer GRAINS with horizontal sample plane at the IBR-2M pulsed reactor in Dubna' <i>Journal of Physics: Conference Series</i> , <b>251</b> , (2010) 012060.	<a href="http://dx.doi.org/10.1088/1742-6596/251/1/012060">http://dx.doi.org/10.1088/1742-6596/251/1/012060</a>	2010	IBR-2M	Russia
63	Gravity Mirror	Heinz Scheckenhofer and Albert Steyerl 'A "Gravity Diffractometer" for Ultracold-Neutron Optics' <i>Nuclear Instruments and Methods</i> , <b>179</b> , (1981), 393-396.	<a href="http://dx.doi.org/10.1016/0029-554X(81)90066-5">http://dx.doi.org/10.1016/0029-554X(81)90066-5</a>	1981	FRM	Germany
64	H9-A	E. M. Lee, C. F. Majkrzak, M. Elmiger, L. Passell 'The Brookhaven neutron reflection spectrometer' <i>Nuclear Instruments and Methods in Physics Research B</i> , <b>93</b> , (1994), 75-81.	<a href="http://dx.doi.org/10.1016/0168-583X(94)95459-3">http://dx.doi.org/10.1016/0168-583X(94)95459-3</a>	1994	HFBR	USA
35	H9-A	Oh-Sun Kwon, Kwanwoo Shin, Dong-Jin Choi, Kwang Pho Hong, Myung Kook Moon, Sang Jin Cho, Young Hyun Choi, Jeong Soo Lee, Change-Hee Lee 'The HANARO neutron reflectometer with horizontal sample geometry; engineering designs and performance simulation' <i>Thin Solid Films</i> , <b>515</b> , (2007), 5707-5711.	<a href="http://dx.doi.org/10.1016/j.tsf.2006.12.123">http://dx.doi.org/10.1016/j.tsf.2006.12.123</a>	2007	HANARO	South Korea
60	HADAS	U. Rücker, B. Alefeld, W. Bergs, E. Kentzinger, T. Brückel 'The new polarized neutron reflectometer in Jülich' <i>Physica B</i> , <b>276-278</b> , (2000) 95-97.	<a href="http://dx.doi.org/10.1016/S0921-4526(99)01257-0">http://dx.doi.org/10.1016/S0921-4526(99)01257-0</a>	2000	FRJ-2 DIDO	Germany
88	HERITAGE	S. Mattauch, A. Ioffe, D. Lott, L. Bottyán, J. Daillant, M. Markó, A. Menelle, S. Sajti, T. Veres 'HERITAGE: the concept of a giant flux neutron reflectometer for the exploration of 3-d structure of free-liquid and solid interfaces in thin films' <i>Nuclear Instruments and Methods in Physics Research A</i> <b>841</b> , (2017), 34-46.	<a href="http://dx.doi.org/10.1016/j.nima.2016.09.043">http://dx.doi.org/10.1016/j.nima.2016.09.043</a>	2017	ESS	Sweden
5	INTER	John Webster, Stephen Holt, Robert Dalglish 'INTER the chemical interfaces reflectometer on target station 2 at ISIS' <i>Physica B</i> <b>385-386</b> , (2006), 1164-1166.	<a href="http://dx.doi.org/10.1016/j.physb.2006.05.400">http://dx.doi.org/10.1016/j.physb.2006.05.400</a>	2006	ISIS	UK
4	INTER, Polref, Offspec	J. R. P. Webster, S. Langridge, R. M. Dalglish, and T. R. Charlton 'Reflectometry techniques on the Second Target Station at ISIS: Methods and science' <i>Eur. Phys. J. Plus</i> , <b>126</b> , (2011), 112.	<a href="http://dx.doi.org/10.1140/epjp/i2011-11112-y">http://dx.doi.org/10.1140/epjp/i2011-11112-y</a>	2011	ISIS	UK

Reflectometer Papers

Seq. No.	Instrument	Reference	Digital Source DOI	Year	Source	Country
38	Liquids Reflectometer	J. F. Ankner, M. Jansma, E. D. Blakeman, R. L. Kellogg 'The optical design of the SNS liquids reflectometer' <i>Appl. Phys. A</i> , <b>74</b> , suppl., (2002), S1610-S1612.	<a href="http://dx.doi.org/10.1007/s003390101258">http://dx.doi.org/10.1007/s003390101258</a>	2002	SNS	USA
40	Liquids Reflectometer	J. F. Ankner, X. Tao, C. E. Halbert, J. F. Browning, S. M. Kilbey II, O. A. Swader, M. S. Admun, E. Kharlampieva, and S. A. Sukhishvili, 'The SNS liquids reflectometer' <i>Neutron News</i> , <b>19</b> (3), (2008), 14-16.	<a href="http://dx.doi.org/10.1080/10448630802210545">http://dx.doi.org/10.1080/10448630802210545</a>	2008	SNS	USA
39	Liquids Reflectometer	Piotr A. Zolnierczuk, Bogdan Vacaliuc, Madhan Sundaram, Andre A. Parizzi, Candice E. Halbert, Michael C. Hoffmann, James F. Browning, John Francis Ankner "Old wine in new wineskins:" Upgrading the liquids reflectometer instrument user control software at the Spallation Neutron Source' <i>Future of Instrumentation International Workshop (FIIW) Proceedings</i> Pages: 4 IEEE (2012).	<a href="http://dx.doi.org/10.1109/FIIW.2012.6378322">http://dx.doi.org/10.1109/FIIW.2012.6378322</a>	2012	SNS	USA
41	Magnetism Reflectometer	F. Klose, W.-T. Lee 'Optimization of the SNS magnetism reflectometer neutron-guide optics using Monte Carlo simulations' <i>Appl. Phys. A</i> <b>74</b> , (Suppl.), (2002), S1486-S1488.	<a href="http://dx.doi.org/10.1007/s003390201798">http://dx.doi.org/10.1007/s003390201798</a>	2002	SNS	USA
42	Magnetism Reflectometer	Valeria Lauter, Hailemariam Ambaye, Richard Goyette, Wai-Tung Hal Lee, Andre Parizzi 'Highlights from the magnetism reflectometer at the SNS' <i>Physica B</i> , <b>404</b> , (2009), 2543-2546.	<a href="http://dx.doi.org/10.1016/j.physb.2009.06.021">http://dx.doi.org/10.1016/j.physb.2009.06.021</a>	2009	SNS	USA
78	MARIA	Stefan Mattauich, Alexandros Koutsoubas, Sabine Pütter 'MARIA: Magnetic reflectometer with high incident angle' <i>Journal of large-scale research facilities</i> , <b>1</b> , (2015), A8.	<a href="http://dx.doi.org/10.17815/jlsrf-1-29">http://dx.doi.org/10.17815/jlsrf-1-29</a>	2015	FRM II	Germany
47	MIRA	Robert Georgii, Peter Böni, Marc Janoschek, Christian Schanzer, Shah Valloppilly 'MIRA - A flexible instrument for VCN' <i>Physica B</i> , <b>397</b> , (2007) 150-152.	<a href="http://dx.doi.org/10.1016/j.physb.2007.02.088">http://dx.doi.org/10.1016/j.physb.2007.02.088</a>	2007	FRM II	Germany
37	MIRROR	W. A. Hamilton, G. S. Smith, G. B. Taylor, B. M. Larkins, L. Porcar 'Current and future capabilities of the neutron reflectometer MIRROR at Oak Ridge National Laboratory's High Flux Isotope Reactor' <i>Physica B</i> , <b>385-386</b> , (2006), 1007-1009.	<a href="http://dx.doi.org/10.1016/j.physb.2006.05.321">http://dx.doi.org/10.1016/j.physb.2006.05.321</a>	2006	HFIR	USA
74	MIT reflectometer	Chwen-Yuan Ku, Xiao-Lin Zhou 'The MIT Specular and Diffuse Neutron Reflectometer for the Investigation of Surfaces & Interfaces' <i>MRS Proceedings</i> <b>376</b> , (1994), 107-112.	<a href="http://dx.doi.org/10.1557/PROC-376-107">http://dx.doi.org/10.1557/PROC-376-107</a>	1994	MIT	USA
33	NERO	D. Solina, D. Lott, U. Tietze, O. Frank, V. Leiner, A. Schreyer 'The new neutron reflectometer NERO' <i>Physica B</i> , <b>385-386</b> , (2006), 1167-1169.	<a href="http://dx.doi.org/10.1016/j.physb.2006.05.401">http://dx.doi.org/10.1016/j.physb.2006.05.401</a>	2006	GKSS	Germany

Seq. No.	Instrument	Reference	Digital Source DOI	Year	Source	Country
62	NR	Guangcui Yuan, Hongxia Zhang, He Cheng, Charles C. Han, Tianfu Li, Linfeng He, Yun Tao Liu, Dongfeng Chen 'A neutron reflectometer with horizontal sample geometry at CARR' <i>Nuclear Instruments and Methods in Physics Research A</i> , <b>656</b> , (2011), 65–68.	<a href="http://dx.doi.org/10.1016/j.nima.2011.08.003">http://dx.doi.org/10.1016/j.nima.2011.08.003</a>	2011	CARR	China
69	NR-4M	N. K. Pleshanov, L. A. Axel'rod, V. N. Zabenkin, V. G. Syromyatnikov, V. A. Ul'yanov 'Neutron reflectometry with vector polarization analysis: First steps' <i>Journal of Surface Investigation. X-ray, Synchrotron and Neutron Techniques</i> <b>2</b> , (2008), 846-855.	<a href="http://dx.doi.org/10.1134/S1027451008060049">http://dx.doi.org/10.1134/S1027451008060049</a>	2008	Gatchina	Russia
80	NREX	Yury Khaydukov, Olaf Soltwedel, Thomas Keller 'NREX: Neutron reflectometer with X-ray option' <i>Journal of large-scale research facilities</i> , <b>1</b> , (2015), A38.	<a href="http://dx.doi.org/10.17815/jlsrf-1-30">http://dx.doi.org/10.17815/jlsrf-1-30</a>	2015	FRM II	Germany
6	Offspec	R. M. Dalgliesh, S. Langridge, J. Plomp, V. O. de Haan, A. A. van Well 'Offspec, the ISIS spin-echo reflectometer' <i>Physica B</i> , <b>406</b> , (2011), 2346–2349.	<a href="http://dx.doi.org/10.1016/j.physb.2010.11.031">http://dx.doi.org/10.1016/j.physb.2010.11.031</a>	2011	ISIS	UK
73	Offspec	Andrew J. Parnell, Adam Hobson, Robert M. Dalgliesh, Richard A. L. Jones, Alan D. F. Dunbar, 'Using neutron spin echo resolved grazing incidence scattering to investigate organic solar cell materials.' <i>Journal of Visualized Experiments</i> Issue: <b>83</b> , (2014), e51129.	<a href="http://dx.doi.org/10.3791/51129">http://dx.doi.org/10.3791/51129</a>	2014	ISIS	UK
87	Optics Facility	W. C. Dickinson, L. Passell, O. Halpern 'Studies of the Optics of Neutrons. I. Measurement of the Neutron-Proton Coherent Scattering Amplitude by Mirror Reflection' <i>Phys. Rev.</i> <b>126</b> , (1962), 632-642.	<a href="http://dx.doi.org/10.1103/PhysRev.126.632">http://dx.doi.org/10.1103/PhysRev.126.632</a>	1962	Lawrence Radiation Laboratory	USA
44	Platypus	M. James, A. Nelson, S. A. Holt, T. Saerbeck, W. A. Hamilton, F. Klose 'The multipurpose time-of-flight neutron reflectometer Platypus at Australia's OPAL reactor' <i>Nuclear Instruments and Methods in Physics Research</i> , <b>A632</b> , (2011), 112–123.	<a href="http://dx.doi.org/10.1016/j.nima.2010.12.075">http://dx.doi.org/10.1016/j.nima.2010.12.075</a>	2011	OPAL	Australia
45	Platypus	T. Saerbeck, F. Klose, A. P. Le Brun, J. Füzi, A. Brule, A. Nelson, S. A. Holt, M. James 'Polarization "Down Under": The polarized time-of-flight neutron reflectometer PLATYPUS' <i>Review of Scientific Instruments</i> , <b>83</b> , (2012), 081301.	<a href="http://dx.doi.org/10.1063/1.4738579">http://dx.doi.org/10.1063/1.4738579</a>	2012	OPAL	Australia
32	PNR	C. Bittorf, M. Stamm, R. Kampmann 'PNR — a novel neutron reflectometer with spin analysis of the reflected neutrons' <i>Physica B</i> , <b>234-236</b> , (1997), 1168-1170.	<a href="http://dx.doi.org/10.1016/S0921-4526(97)00206-8">http://dx.doi.org/10.1016/S0921-4526(97)00206-8</a>	1997	GKSS	Germany
69	Polarised Reflectometer	L. Cser, J. Füzi, L. Riecsánszky, Gy. Török 'Polarized neutron reflectometer at the Budapest Research Reactor', <i>Appl. Phys. A</i> , <b>74</b> , suppl., (2002), S213–S214.	<a href="http://dx.doi.org/10.1007/s003390201540">http://dx.doi.org/10.1007/s003390201540</a>	2002	BNC	Hungary

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Seq. No.	Instrument	Reference	Digital Source DOI	Year	Source	Country
50	Polarized Reflectometer	S. Basu and S. Singh 'A new polarized neutron reflectometer at Dhruva for specular and off-specular neutron reflectivity studies' <i>Journal of Neutron Research</i> , <b>14</b> , (2006), 109-120.	<a href="http://dx.doi.org/10.1080/10238160500475301">http://dx.doi.org/10.1080/10238160500475301</a>	2006	Dhruva	India
51	Polarized Reflectometer	Saibal Basu 'Specular neutron reflectivity and beyond' <i>Pramana Journal of Physics</i> , <b>63</b> , (2008), 777-784.	<a href="http://dx.doi.org/10.1007/BF02705003">http://dx.doi.org/10.1007/BF02705003</a>	2008	Dhruva	India
25	PORE	Takeda Masayasu, Endoh Yasuo 'A new pulsed polarized neutron reflectometer, PORE, at KENS' <i>Physica B</i> , <b>267-268</b> , (1999), 185-189.	<a href="http://dx.doi.org/10.1016/S0921-4526(99)00058-7">http://dx.doi.org/10.1016/S0921-4526(99)00058-7</a>	1999	KENS	Japan
23	POSY	G. P. Felcher, R. O. Hilleke, R. K. Crawford, J. Haumann, R. Kleb, G. Ostrowski 'Polarized neutron reflectometer: A new instrument to measure magnetic depth profiles' <i>Review of Scientific Instruments</i> , <b>58</b> , (1987), 609-619.	<a href="http://dx.doi.org/10.1063/1.1139225">http://dx.doi.org/10.1063/1.1139225</a>	1987	IPNS	USA
24	POSY II	Alamgir Karim, B. H. Arendt, Rick Goyette, Y. Y. Huang, R. Kleband, G. P. Felcher 'An automated neutron reflectometer (POSY II) at the Intense Pulsed Neutron Source' <i>Physica B</i> , <b>173</b> (1991), 17-24.	<a href="http://dx.doi.org/10.1016/0921-4526(91)90030-1">http://dx.doi.org/10.1016/0921-4526(91)90030-1</a>	1991	IPNS	USA
20	PRISM	C. Fermon, F. Ott, G. Legoff, H. Glättli, V. Wintenberger 'Polarized reflectometer for the investigation of surface magnetism, the new polarized neutron reflectometer with polarization analysis at the Laboratoire Léon Brillouin' <i>Review of Scientific Instruments</i> , <b>71</b> , (2000), 3797-3800.	<a href="http://dx.doi.org/10.1063/1.1310342">http://dx.doi.org/10.1063/1.1310342</a>	2000	LLB	France
21	PRISM	C. Fermon, F. Ott, G. Legoff, H. Glättli, V. Wintenberger 'New polarised neutron reflectometer with polarisation analysis PRISM' <i>Physica B</i> , <b>283</b> , (2000), 372-375.	<a href="http://dx.doi.org/10.1016/S0921-4526(00)00342-2">http://dx.doi.org/10.1016/S0921-4526(00)00342-2</a>	2000	LLB	France
54	Reflectometer	S. Tasaki, T. Ebisawa, T. Akiyoshi, T. Kawai, S. Okamoto 'Facility for the development of the multilayer neutron mirror at KUR' <i>Nuclear Instruments and Methods in Physics Research A</i> , <b>355</b> , (1995), 501-505.	<a href="http://dx.doi.org/10.1016/0168-9002(94)01009-9">http://dx.doi.org/10.1016/0168-9002(94)01009-9</a>	1995	KUR	Japan
43	Reflectometer	M. James, A. Nelson, J. C. Schulz, M. J. Jones, A. J. Studer, P. Hathaway 'A new neutron reflectometer at Australia's HIFAR research reactor' <i>Nuclear Instruments and Methods in Physics Research A</i> <b>536</b> , (2005) 165-175.	<a href="http://dx.doi.org/10.1016/j.nima.2004.07.208">http://dx.doi.org/10.1016/j.nima.2004.07.208</a>	2005	HIFAR	Australia
48	Reflectometer	M. Izerrouken, B. Guedioura, B. Saichi, A. Nedjar, A. Meftah, M. Nekab 'NUR reflectometer for neutron optics device investigations' <i>Physica B</i> <b>364</b> , (2005), 29-32.	<a href="http://dx.doi.org/10.1016/j.physb.2005.03.005">http://dx.doi.org/10.1016/j.physb.2005.03.005</a>	2005	NUR	Algeria



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Seq. No.	Instrument	Reference	Digital Source DOI	Year	Source	Country
34	Reflectometer	J. S. Lee, K. P. Hong, B. H. Choi, C. H. Lee, H. R. Kim, K. Shin 'A new thermal neutron reflectometer at HANARO' <i>Physica B</i> , <b>385-386</b> , (2006), 1158-1160.	<a href="http://dx.doi.org/10.1016/j.physb.2006.05.398">http://dx.doi.org/10.1016/j.physb.2006.05.398</a>	2006	HANARO	South Korea
89	Reflectometer	M. Makhloufi, H. Salah 'Development of a polarized neutron beam line at Algerian research reactors using McStas software' <i>Journal of Magnetism and Magnetic Materials</i> <b>423</b> , (2017), 118-123.	<a href="http://dx.doi.org/10.1016/j.jmmm.2016.09.002">http://dx.doi.org/10.1016/j.jmmm.2016.09.002</a>	2017	NUR	Algeria
55	REFLEX	V. L. Aksenov, Daniel A. Korneev, L. P. Chernenko 'Time-of-flight four-beam neutron reflectometer REFLEX at the high-flux pulsed reactor IBR-2: some polarized neutron reflectometry applications' <i>Proc. SPIE</i> <b>1738</b> , <i>Neutron Optical Devices and Applications</i> , 335 (November 23, 1992).	<a href="http://dx.doi.org/10.1117/12.130643">http://dx.doi.org/10.1117/12.130643</a>	1992	IBR-2M	Russia
46	REFSANS	R. Kampmann, M. Haese-Seiller, V. Kudryashov, B. Nickel, C. Daniel, W. Fenzl, A. Schreyer, E. Sackmann, J. Rädler 'Horizontal ToF-neutron reflectometer REFSANS at FRM-II Munich/Germany: First tests and status' <i>Physica B</i> , <b>385-386</b> , (2006), 1161-1163.	<a href="http://dx.doi.org/10.1016/j.physb.2006.05.399">http://dx.doi.org/10.1016/j.physb.2006.05.399</a>	2006	FRM II	Germany
79	REFSANS	Jean-François Moulin, Martin Haese 'REFSANS: Reflectometer and evanescent wave small angle neutron spectrometer' <i>Journal of large-scale research facilities</i> , <b>1</b> , (2015), A9.	<a href="http://dx.doi.org/10.17815/jlsrf-1-31">http://dx.doi.org/10.17815/jlsrf-1-31</a>	2015	FRM II	Germany
36	REF-V	Jeong Soo Lee, Ki Yeon Kim, Jaseung Koo 'Evaluation of the Neutron Beam Characteristics for the Vertical-type Neutron Reflectometer at HANARO' <i>New Physics: Sae Mulli</i> (The Korean Physical Society), <b>62</b> , (2012) 1112-1123.	<a href="http://dx.doi.org/10.3938/NPSM.62.1112">http://dx.doi.org/10.3938/NPSM.62.1112</a>	2012	HANARO	South Korea
49	Reverans	A. K. Radzhabov, G. P. Gordeev, I. M. Lazebnik, L. A. Axelrod, V. N. Zabenkin 'The polarized neutron reflectometer 'Reverans'' <i>Physica B</i> <b>397</b> , (2007), 156-158.	<a href="http://dx.doi.org/10.1016/j.physb.2007.02.094">http://dx.doi.org/10.1016/j.physb.2007.02.094</a>	2007	VVR-M	Russia
29	SHARAKU	Takeda Masayasu, Yamazaki Dai, Soyama Kazuhiko, Maruyama Ryuji, Hayashida Hiroto, Asaoka Hidehito, Yamazaki Tatsuya, Kubota Masato, Aizawa Kazuya, Arai Masatoshi Inamura Yasuhiro, Itoh Takayoshi, Kaneko Koji, Nakamura Tatsuya, Nakatani Takeshi, Oikawa Kenichi, Ohhara Takashi, Sakaguchi Yoshifumi, Sakasai Kaoru, Shinohara Takena, Suzuki Junichi, Suzuya Kentaro, Tamura Itaru, Toh Kentaro, Yamagishi Hideshi, Yoshida Noboru, Hirano Tatsumi 'Current Status of a New Polarized Neutron Reflectometer at the Intense Pulsed Neutron Source of the Materials and Life Science Experimental Facility (MLF) of J-PARC' <i>Chinese Journal of Physics</i> <b>50</b> , (2012) 161-170.		2012	J-PARC	Japan

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27	SOFIA	N.L. Yamada, N. Torikai, K. Mitamura, H. Sagehashi, S. Sato, H. Seto, T. Sugita, S. Goko, M. Furusaka, T. Oda, M. Hino, T. Fujiwara, H. Takahashi, A. Takahara 'Design and performance of horizontal-type neutron reflectometer SOFIA at J-PARC/MLF' <i>Eur. Phys. J. Plus</i> , <b>126</b> , (2011), 108.	<a href="http://dx.doi.org/10.1140/epjp/i2011-11108-7">http://dx.doi.org/10.1140/epjp/i2011-11108-7</a>	2011	J-PARC	Japan
28	SOFIA	Koji Mitamura, Norifui L Yamada, Hidenori Sagehashi, Naoya Torikai, Hiroshi Arita, Masami Terada, Motoyasu Kobayashi, Setsuo Sato, Hideki Seto, Shinji Goko, Michihiro Furusaka, Tatsuro Oda, Masahiro Hino, Hiroshi Jinnai, Atsushi Takahara 'Novel neutron reflectometer SOFIA at J-PARC/MLF for in-situ soft-interface characterization' <i>Polymer Journal</i> , <b>45</b> , (2013), 100–108.	<a href="http://dx.doi.org/10.1038/pj.2012.156">http://dx.doi.org/10.1038/pj.2012.156</a>	2013	J-PARC	Japan
16	SPEAR	M. Dubey, M. S. Jablin, P. Wang, M. Mocko, J. Majewski 'SPEAR - ToF neutron reflectometer at the Los Alamos Neutron Science Center', <i>Eur. Phys. J. Plus</i> , <b>126</b> , (2011), 110.	<a href="http://dx.doi.org/10.1140/epjp/i2011-11108-7">http://dx.doi.org/10.1140/epjp/i2011-11108-7</a>	2011	LANSCE	USA
53	SUIREN	D. Yamazaki, M. Takeda, I. Tamura, R. Maruyama, A. Moriai, M. Hino, K. Soyama 'Polarized neutron reflectometer SUIREN at JRR-3' <i>Physica B</i> , <b>404</b> , (2009), 2557–2560.	<a href="http://dx.doi.org/10.1016/j.physb.2009.06.022">http://dx.doi.org/10.1016/j.physb.2009.06.022</a>	2009	JRR-3	Japan
12	superADAM	A. Devishvili, K. Zhernenkov, A. J. C. Dennison, B. P. Toperverg, M. Wolff, B. Hjörvarsson, H. Zabel 'SuperADAM: Upgraded polarized neutron reflectometer at the Institut Laue-Langevin' <i>Review of Scientific Instruments</i> <b>84</b> , (2013), 025112.	<a href="http://dx.doi.org/10.1063/1.4790717">http://dx.doi.org/10.1063/1.4790717</a>	2013	ILL	France
3	SURF	J. Penfold, R. M. Richardson, A. Zarbakhsh, J. R. P. Webster, D. G. Bucknall, A. R. Rennie, R. A. L. Jones, T. Cosgrove, R. K. Thomas, J. S. Higgins, P. D. I. Fletcher, E. Dickinson, S. J. Roser, I. A. McLure, A. R. Hillman, R. W. Richards, E. J. Staples, A. N. Burgess, E. A. Simister, J. W. White 'Recent Advances in the Study of Chemical Surfaces by Specular Neutron Reflection'. <i>Journal of the Chemical Society Faraday Transactions</i> , <b>93</b> , (1997), 3899-3917.	<a href="http://dx.doi.org/10.1039/a702836j">http://dx.doi.org/10.1039/a702836j</a>	1997	ISIS	UK
61	TAS-9	D. Vaknin, K. Kjaer, J. Als-Nielsen, M. Lösche 'A new liquid surface neutron reflectometer and its application to the study of DPPC in a monolayer at the air/water interface' <i>Makromolekulare Chemie: Macromolecular Symposia</i> , <b>46</b> , (1991), 383-388.	<a href="http://dx.doi.org/10.1002/masy.19910460155">http://dx.doi.org/10.1002/masy.19910460155</a>	1991	DR-3	Denmark
59	TOREMA	Manfred Stamm, Stefan Hüttenbach, Günter Reiter 'TOREMA - A neutron reflectometer at Jülich' <i>Physica B</i> , <b>173</b> , (1991) 11-16.	<a href="http://dx.doi.org/10.1016/0921-4526(91)90029-E">http://dx.doi.org/10.1016/0921-4526(91)90029-E</a>	1991	FRJ-2 DIDO	Germany

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71	V6	F. Mezei, R. Golub, F. Klose, H. Toews 'Focussed beam reflectometer for solid and liquid surfaces' <i>Physica B: Condensed Matter</i> , <b>213-214</b> , (1995), 898-900.	<a href="http://dx.doi.org/10.1016/0921-4526(95)00317-3">http://dx.doi.org/10.1016/0921-4526(95)00317-3</a>	1995	BER II	Germany
30	V6	Amitesh Paul, Thomas Krist, Anke Teichert, Roland Steitz 'Specular and off-specular scattering with polarization and polarization analysis on reflectometer V6 at BER II, HZB' <i>Physica B</i> , <b>406</b> , (2011), 1598–1606	<a href="http://dx.doi.org/10.1016/j.physb.2011.02.005">http://dx.doi.org/10.1016/j.physb.2011.02.005</a>	2011	BER II	Germany
83	VERITAS	S. Mattauch, A. Ioffe, D. Lott, A. Menelle, F. Ott, Z. Medic 'VERITAS: a high-flux neutron reflectometer with vertical sample geometry for a long pulse spallation source' <i>Journal of Physics: Conference Series</i> <b>711</b> , (2016), 012009.	<a href="http://dx.doi.org/10.1088/1742-6596/711/1/012009">http://dx.doi.org/10.1088/1742-6596/711/1/012009</a>	2016	ESS	Sweden