

1. Record Nr.	UNINA9910960130503321
Titolo	Current status of neutron-scattering research and facilities in the United States / / Panel on Neutron Scattering, Solid State Sciences Committee, Board on Physics and Astronomy, Commission on Physical Sciences, Mathematics, and Resources, National Research Council
Pubbl/distr/stampa	Washington, D.C., : National Academy Press, 1984
ISBN	9786610186341 9781280186349 1280186348 9780309564465 0309564468
Edizione	[1st ed.]
Descrizione fisica	1 online resource (115 p.)
Disciplina	539.7213
Soggetti	Neutrons - Scattering Nuclear facilities Nuclear physics - Research
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Work supported by the U.S. Dept. of Energy, Division of Materials Sciences, under grant No. DE-FG01-81ER10844, and by the National Science Foundation under grant No. DMR-8119500.
Nota di contenuto	""Current Status of Neutron-Scattering Research and Facilities in the United States""; ""Copyright""; ""PREFACE""; ""Contents""; ""1. CONCLUSIONS AND RECOMMENDATIONS""; ""CONCLUSIONS""; ""RECOMMENDATIONS""; ""2. INTRODUCTION""; ""3. CURRENT STATUS OF NEUTRON-SCATTERING FACILITIES IN THE UNITED STATES""; ""FACILITY DESCRIPTIONS""; ""High Flux Beam Reactor (HFBR)--Brookhaven National Laboratory""; ""Intense Pulsed Neutron Source (IPNS)--Argonne National Laboratory""; ""Massachusetts Institute of Technology Reactor (MITR)""; ""National Bureau of Standards Reactor (NBSR)"" ""Oak Ridge National Laboratory Reactors (ORNL)""""University of Missouri Research Reactor (MURR)""; ""Weapons Neutron Research/Proton Storage Ring Facility (WNR/PSR) Los Alamos National

Laboratory"; "Summary of Facilities"; "THE USER COMMUNITY"; "COMPARISON WITH THE EUROPEAN COMMUNITY"; "4. OVERSEAS NEUTRON-SCATTERING FACILITIES"; "RESEARCH REACTORS"; "PULSED NEUTRON SOURCES"; "5. RECENT NEUTRON-SCATTERING RESEARCH IN THE UNITED STATES; COMPARISONS WITH EUROPE"; "CONDENSED-MATTER PHYSICS"; "Magnetic Systems"; "Phase Transition"; "New Materials and Phenomena"; "Crystal Dynamics""Defect Systems"; "Surfaces and Overlayers"; "Liquids and Glasses"; "Quantum Fluids"; "Classical Liquids"; "Glasses and Amorphous Solids"; "NEUTRON OPTICS"; "CHEMISTRY"; "Crystallographic Research"; "Hydrides, Organometallic Compounds, and Heteropoly Complexes"; "Ionic Conductors and Ceramics"; "Superconductors"; "Framework Structures"; "Charge-Density Studies"; "Hydrogen-Bonded Compounds"; "High-Precision Structure Studies"; "Molecular Fluids and Molten Salts"; "Chemical Spectroscopy"; "Vibrational Spectroscopy"; "Low-Energy Spectroscopy"; "BIOLOGY"; "Protein Crystallography"; "Solution Scattering"; "The Ribosome"; "Partially Ordered Systems"; "Inelastic Scattering"; "Conclusion"; "POLYMER AND COLLOID SCIENCE"; "Areas of Special Interest"; "Some Results from Neutron Scattering"; "Instrumentation Needs"; "MATERIALS SCIENCE AND ENGINEERING"; "Studies of Microstructural Changes Produced by Temperature and Deformation"; "Use of SANS in the Detection and Analysis of Damage"; "Measurement of Texture and Residual Stresses by Neutron Diffraction"; "Investigations of Phase Decomposition"; "6. FUTURE OPPORTUNITIES: FACILITIES AND RESEARCH"; "CONDENSED-MATTER PHYSICS"; "CHEMISTRY"; "BIOLOGY"; "POLYMERS"; "MATERIALS SCIENCE"; "NEUTRON OPTICS"; "Role of Pulsed Sources"; "Concluding Remarks"; "APPENDIX A INSTITUTIONAL SPONSORS OF USERS OF MAJOR NEUTRON-SCATTERING FACILITIES IN THE UNITED STATES (JULY 1982-JUNE 1983)"; "UNIVERSITIES"; "INDUSTRIES"
