1. Record Nr.	UNINA990000524570403321
Autore	Calow, Peter
Titolo	Handbook of environmental risk assessment and management / edited by Peter Calow
Pubbl/distr/stampa	Oxford : Blackwell Science, c1998
ISBN	0-86542-732-1
Descrizione fisica	X, 590 p. : ill. ; 25 cm
Disciplina	333.7'14
Locazione	DINEL
Collocazione	10 D II 582
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
2. Record Nr.	UNINA9910300414903321
Autore	Grange Joseph
Titolo	First Measurement of the Muon Anti-Neutrino Charged Current Quasielastic Double-Differential Cross Section // by Joseph Grange
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2015
ISBN	3-319-09573-0
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (185 p.)
Collana	Springer Theses, Recognizing Outstanding Ph.D. Research, , 2190-5053
Disciplina	539.7215
Soggetti	Particles (Nuclear physics) Quantum field theory Particle acceleration Elementary Particles, Quantum Field Theory Particle Acceleration and Detection, Beam Physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Introduction -- Neutrino Overview -- Neutrino Oscillations -- Neutrino Interactions in MiniBooNE -- The MiniBooNE Experiment -- Introduction to the Cross-Section Measurement -- Background Measurements and Constraints -- μ CCQE Cross-Section Measurement -- Combined ν_μ and μ CCQE Measurements -- Conclusion.
Sommario/riassunto	This book presents a major step forward in experimentally understanding the behavior of muon neutrinos and antineutrinos. Apart from providing the world's first measurement of these interactions in a mostly unexplored energy region, the data presented advances the neutrino community's preparedness to search for an asymmetry between matter and anti-matter that may very well provide the physical mechanism for the existence of our universe. The details of these measurements are preceded by brief summaries of the history of the neutrino, the phenomenon of neutrino oscillations, and a description of their interactions. Also provided are details of the experimental setup for the measurements and the muon antineutrino cross-section measurement which motivates the need for dedicated in situ background constraints. The world's first measurement of the neutrino component of an antineutrino beam using a non-magnetized detector, as well as other crucial background constraints, are also presented. By exploiting correlated systematic uncertainties, combined measurements of the muon neutrino and antineutrino cross sections described in the book maximize the precision of the extracted information from both results.