Record Nr.	UNINA9910784658603321
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Titolo	Nuclear energy in the 21st century [[electronic resource] ] : the World Nuclear University primer / / Ian Hore-Lacy
Pubbl/distr/stampa	London, : World Nuclear University Press
	Burlington, Mass., : Elsevier, c2006
ISBN	1-281-01199-1
	9786611011994
	0-08-049753-5
Descrizione fisica	1 online resource (169 p.)
Disciplina	333.7924
	621.48
Soggetti	Nuclear energy - Study and teaching
	Nuclear power plants - Study and teaching
	Power resources - Study and teaching
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 and index.
Nota di contenuto	Front Cover; Nuclear Energy in the 21st Century; Copyright Page; Contents; Foreword; Introduction; Chapter 1. Energy use; 1.1 Sources of energy; 1.2 Sustainability of energy; 1.3 Energy demand; 1.4 Energy supply; 1.5 Changes in energy demand and supply; 1.6 Future energy demand and supply; Chapter 2. Electricity today and tomorrow; 2.1 Electricity demand; 2.2 Electricity supply; 2.3 Fuels for electricity generation today; 2.4 Provision for future base-load electricity; 2.5 Renewable energy sources; 2.6 Coal and uranium compared; 2.7 Energy inputs to nuclear electricity; 2.8 Economic factors Chapter 3. Nuclear power3.1 Mass to energy in the reactor core; 3.2 Nuclear power reactors; 3.3 Uranium availability; 3.4 Nuclear weapons as a source of fuel; 3.5 Thorium as a nuclear fuel; 3.6 Accelerator- driven systems; 3.7 Physics of a nuclear reactor; Chapter 4. The "front end" of the nuclear fuel cycle; 4.1 Mining and milling of uranium ore; 4.2 The nuclear fuel cycle; 4.3 Advanced reactors; 4.4 High temperature gas-cooled reactors; 4.5 Fast neutron reactors; 4.6 Very small nuclear power plants; 4.7 Thorium cycle; Chapter 5. The "back

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	end" of the nuclear fuel cycle; 5.1 Nuclear "wastes"
	5.2 Reprocessing used fuel5.3 High-level wastes from reprocessing; 5.4 Storage and disposal of used fuel as "waste"; 5.5 Disposal of solidified wastes; 5.6 Decommissioning reactors; Chapter 6. Other nuclear energy applications; 6.1 Hydrogen for transport; 6.2 Desalination; 6.3 Marine propulsion; 6.4 Space; 6.5 Research reactors for radioisotopes; Chapter 7. Environment, health and safety issues; 7.1 Greenhouse gas emissions; 7.2 Other environmental effects; 7.3 Health and environmental effects; 7.4 Radiation; 7.5 Reactor safety; Chapter 8. Avoiding weapons proliferation 8.1 International cooperation8.2 International nuclear safeguards; 8.3 Fissile materials; 8.4 Recycling military uranium and plutonium for electricity; 8.5 Australian and Canadian nuclear safeguards policies; Chapter 9. History of nuclear energy; 9.1 Exploring the nature of the atom; 9.2 Harnessing nuclear fission; 9.3 Nuclear physics in Russia; 9.4 Conceiving the atomic bomb; 9.5 Developing the concepts; 9.6 The Manhattan Project; 9.7 The Soviet bomb; 9.8 Revival of the "nuclear boiler"; 9.9 Nuclear energy goes commercial; 9.10 The nuclear power brown-out; 9.11 Nuclear renaissance Appendices1. Ionizing radiation and how it is measured; 2. Some radioactive decay series; 3. Environmental and ethical aspects of radioactive waste management; 4. Some useful references; Glossary; Index
Sommario/riassunto	The onset of the 21st century has coincided with mounting scientific evidence of the severe environmental impact of global energy consumption. In response, governments and environmentalists on every continent have begun to re-evaluate the benefits of nuclear power as a clean, non-emitting energy resource. Today nuclear power plants operate in some 30 countries, and nuclear energy has become a safe and reliable source of one-sixth of the world's electricity. This base has the potential to be expanded widely as part of a worldwide clean-energy revolution. Nuclear Energy in the 21st Cen