Uranium War Energy And The Rock That Shaped The W

Uranium
Uranium
Uranium
Yellow Dirt
Nature at War
Seven Elements That Have Changed The World
Being Nuclear
Yellowcake Towns
Uranium Wars
Plutonium
The Colder War
Sustainable Nuclear Power
Uranium
Closing the Circle on the Splitting of the Atom
Uranium Frenzy
Forty Years of Uranium Resources, Production and Demand in Perspective
The Girls of Atomic City
Romancing the Atom
Atoms for Peace and War, 1953-1961
Bomb (Graphic Novel)
Our History Is the Future
Nuclear Power Is Not the Answer
Environmental Contamination from Uranium Production Facilities and Their Remediation
The Heartless Stone
Strange Glow
LIVING WITH RADIATION
Military Geosciences and Desert Warfare
Uranium 2011
The Health Hazards of Depleted Uranium Munitions
The Alchemy of Air

The Boy Who Played with Fusion
Chemical Separation Technologies and Related Methods of Nuclear Waste Management
Analytical Chemistry of Uranium
The Nicholson Mine
Island on Fire
Energies Beyond the State
The Navajo People and Uranium Mining
Improving the Scientific Basis for Managing DOE's Excess Nuclear Materials and Spent Nuclear Fuel
Chemistry of Uranium
The Rise of Nuclear Fear

As recognized, adventure as capably as experience practically lesson, amusement, as without difficulty as union can be gotten by just checking out a book **Uranium War Energy And The Rock That Shaped The W** as a consequence it is not directly done, you could undertake even more roughly this life, concerning the world.

We have enough money you this proper as capably as easy pretentiousness to get those all. We pay for Uranium War Energy And The Rock That Shaped The W and numerous book collections from fictions to scientific research in any way. in the middle of them is this Uranium War Energy And The Rock That Shaped The W that can be your partner.

2009-03-05 Tom Zoellner The fascinating story of the most powerful source of energy the earth can yield Uranium is a common element in the earth's crust and the only naturally occurring mineral with the power to end all life on the planet. After World War II, it reshaped the global order-whoever could master uranium could master the world. Marie Curie gave us hope that uranium would be a miracle panacea, but the Manhattan Project gave us reason to believe that civilization would end with apocalypse. Slave labor camps in Africa and Eastern Europe were built around mine shafts and America would knowingly send more than six hundred uranium miners to their graves in the name of national security. Fortunes have been made from this yellow dirt; massive energy grids have been run from it. Fear of it panicked the American people into supporting a questionable war with Iraq and its specter threatens to create another conflict in Iran. Now, some are hoping it can help avoid a global warming catastrophe. In Uranium, Tom Zoellner takes readers around the globe in this intriguing look at the mineral that can sustain life or destroy it.
2010-02-23 Tom Zoellner The astonishing biography of a mineral that can sustain our world- or destroy it Uranium occurs naturally in the earth's crust-yet holds the power to end all life on the planet. This is its fundamental paradox, and its story is a fascinating window into the valor, greed, genius, and folly of humanity. A problem for miners in the Middle Ages, an inspiration to novelists and a boon to medicine, a devastating weapon at the end of World War II, and eventually a polluter, killer, excuse for war with Iraq, potential deliverer of Armageddon and a possible last defense against global warming-Uranium is the riveting story of the most powerful element on earth, and one which will shape our future, for better or worse.
2009 Tom Zoellner A history of the powerful mineral element explores its role as a virtually limitless energy source, its controversial applications as a

healing tool and weapon, and the ways in which its reputation has been used to promote war agendas in the middle east.
2011-07-05 Judy Pasternak Tells the story of uranium mining on the Navajo reservation and its legacy of sickness and government neglect, documenting one of the darker chapters in 20th century American history. --From publisher description.
2020-04-02 Thomas Robertson "World War II was the largest and most destructive conflict in human history. It was an existential struggle that pitted irreconcilable political systems and ideologies against one another across the globe in a decade of violence unlike any other. There is little doubt today that the United States had to engage in the fighting, especially after the Japanese attack on Pearl Harbor on December 7, 1941. The conflict was, in the words of historians Allan Millett and Williamson Murray, "a war to be won." As the world's largest industrial power, the United States put forth a supreme effort to produce the weapons, munitions, and military formations essential to achieving victory. When the war finally ended, the finale signaled by atomic mushroom clouds over Hiroshima and Nagasaki, upwards of 60 million people had perished in the inferno. Of course, the human toll represented only part of the devastation; global environments also suffered greatly. The growth and devastation of the Second World War significantly changed American landscapes as well. The war created or significantly expanded a number of industries, put land to new uses, spurred urbanization, and left a legacy of pollution that would in time create a new term: Superfund site"--
2013-04-25 John Browne 'Fascinating and enjoyable ... enthused with insight' - Brian Cox Uranium, carbon, iron, titanium, gold, silver and silicon - former BP CEO John Browne explains how seven elements are shaping the 21st century, for good and for bad. Humans have put the Earth's resources to extraordinary use, but not always for the benefit of humankind. SEVEN ELEMENTS vividly describes how iron, carbon, gold, silver, uranium, titanium and silicon have shaped the world around us - for good and for bad. This book takes you on an adventure of human passion, ingenuity and discovery, but it is a journey that is far from over: we continue to find surprising new uses for each of these seven key elements. Discover how titanium pervades modern consumer society, how natural gas is transforming the global energy sector and how an innovative new form of carbon could be starting a technological revolution. SEVEN ELEMENTS is a unique mix of science, history and politics, interwoven with the author's extensive personal and professional experience.
2014-08-29 Gabrielle Hecht The hidden history of African uranium and what it means—for a state, an object, an industry, a workplace—to be “nuclear.” Uranium from Africa has long been a major source of fuel for nuclear power and atomic weapons, including the bomb dropped on Hiroshima. In 2003, after the infamous “yellow cake from Niger,” Africa suddenly became notorious as a source of uranium, a component of nuclear weapons. But did that admit Niger, or any of Africa's other uranium-producing countries, to the select society of nuclear states? Does uranium itself count as a nuclear thing? In this book, Gabrielle Hecht lucidly probes the question of what it means for something—a state, an object, an industry, a workplace—to be “nuclear.” Hecht shows that questions about being nuclear—a state that she calls “nuclearity”—lie at the heart of today's global nuclear order and the relationships between “developing nations” (often former colonies) and “nuclear powers” (often former colonizers). Hecht enters African nuclear worlds, focusing on miners and the occupational hazard of radiation exposure. Could a mine be a nuclear workplace if (as in some South African mines) its radiation levels went undetected and unmeasured? With this book, Hecht is the first to put Africa in the nuclear world, and the nuclear world in Africa. By doing so, she remakes our understanding of the nuclear age.
2004-02-25 Michael A. Amundson Yellowcake Towns provides a look at the supply side of the Atomic Age and serves as an important contribution to the growing bibliography of atomic history.
2009-09-01 Amir D. Aczel Called "one of our best science popularizers" by Publishers Weekly, Amir D. Aczel tackles the cause of one of last century's most destructive events--the scientific discovery of nuclear power. Drawing on his rich storytelling skills, Aczel presents the fascinating and

suspenseful story of the scientists who first uncovered the potential of uranium. Uranium Wars takes the reader on a whirlwind tour of 1920s Europe where the scientific elite of the day were embroiled in a fierce rivalry to achieve nuclear fission. Leading us to an understanding of both the processes that take place inside a uranium nucleus and its destructive power are the brilliant men and women at the heart of the race--mammoth figures such as Marie Curie, Enrico Fermi, and Lise Meitner. Enmeshed in the story of scientific intrigue is the complex and ongoing story of uranium itself, which Aczel presents as a dynamic, dual natured force, capable of providing both abundant usable energy and generating unfathomable destructive power. From the nuclear programs in the Middle East to plans for nuclear reactors at home, the element uranium is never far from today's headlines.

2009 Jeremy Bernstein One girl's search to find her father, using the internet, some boys and quite a lot of hairspray from debut YA novelist Ellie Phillips. Sadie Nathanson spends her life trying to survive the excruciating embarrassment of simply existing. It's hard enough being a bit of a shrinking violet within a loud and outspoken extended family, but the unexpected card from 'Dad' on her 15th birthday is the last straw. As 'Dad' was an Internet sperm-donor, it doesn't take a genius to work out that this is a bad joke, probably set up by her ex-best-friend Shonna. But it starts Sadie wondering - just who was her father? Is he the cause of her worry crinkle and wonky bum? What would happen if she tracked him down? So she decides to do just that. With help from her nerd cousin Billy, his friend Nodding Tony and a regular dose of 'Haironomics' (Sadie's own hairstyle-related philosophy system), they uncover a lot more than they bargain for... A story with wit, warmth and knicker-wetting embarrassment , Ellie Phillips is a vibrant new voice in teen fiction. Dad's, Geeks and Blue Haired Freaks is one of the most original books for young adults you'll ever read - perfect for girls moving on from Louise Rennison and Cathy Cassidy.

2014-11-10 Marin Katusa How the massive power shift in Russia threatens the political dominance of the United States There is a new cold war underway, driven by a massive geopolitical power shift to Russia that went almost unnoticed across the globe. In The Colder War: How the Global Energy Trade Slipped from America's Grasp, energy expert Marin Katusa takes a look at the ways the western world is losing control of the energy market, and what can be done about it. Russia is in the midst of a rapid economic and geopolitical renaissance under the rule of Vladimir Putin, a tenacious KGB officer turned modern-day tsar. Understanding his rise to power provides the keys to understanding the shift in the energy trade from Saudi Arabia to Russia. This powerful new position threatens to unravel the political dominance of the United States once and for all. Discover how political coups, hostile takeovers, and assassinations have brought Russia to the center of the world's energy market Follow Putin's rise to power and how it has led to an upsetting of the global balance of trade Learn how Russia toppled a generation of robber barons and positioned itself as the most powerful force in the energy market Study Putin's long-range plans and their potential impact on the United States and the U.S. dollar If Putin's plans are successful, not only will Russia be able to starve other countries of power, but the BRIC countries (Brazil, Russia, India, and China) will replace the G7 in wealth and clout. The Colder War takes a hard look at what is to come in a new global energy market that is certain to cause unprecedented impact on the U.S. dollar and the American way of life.

2006-12-08 Galen J. Suppes Sustainable Nuclear Power provides non-nuclear engineers, scientists and energy planners with the necessary information to understand and utilize the major advances in the field. The book demonstrates that nuclear fission technology has the abundance and attainability to provide centuries of safe power with minimal greenhouse gas generation. It also addresses the safety and disposal issues that have plagued the development of the nuclear power industry and scared planners and policy makers as well as the general public for more than two decades. No need for a background in nuclear science! This book guides engineers, scientists and energy professionals through a concise and easy-to-understand overview of key safety and sustainability issues affecting their work. Details the very latest information about today's safest and most

energy-efficient reactor designs and reprocessing procedures. Brings to light the fears and hesitation of using nuclear energy and explains that technologies and procedures for safe production and processing are available today.

2017-07-03 Anthony Burke Uranium, the most atomically unstable natural element on earth, has a unique place in the global geopolitics of resources. It provides energy to millions of people and its isotopes are used to power spacecraft and in nuclear medicine. But it is also at the heart of many of the planet's most deadly threats, including nuclear devastation and radioactive waste. Its mining has caused bitter conflict with indigenous peoples and its testing in nuclear weapons has left a toxic legacy. Yet the nonproliferation regime which aims to phase out nuclear weapons and manage the risks of nuclear energy is at risk of unravelling. In this book, Anthony Burke explores the geopolitical intrigue around uranium and the dilemmas of justice and security to which its development has given rise. The twenty-first century, he cautions, will be a time of reckoning and new reserves of political will must be found to manage the impact of this extraordinary mineral. Only by cooperating to achieve multilateral disarmament and greater international control over nuclear power can we ward off nuclear catastrophe and harness the potential of nuclear energy to help address, rather than create, some of the world's most pressing problems.

1995-03 DIANE Publishing Company Describes environmental, safety, and health problems throughout the nuclear weapons complex and what the U.S. Dept. of Energy is doing to address them. Covers: building nuclear warheads: the process; wastes and other byproducts of the cold war (spent nuclear fuel, plutonium residues, radioactive waste, transuranic waste, hazardous waste, etc.); contamination and cleanup; an international perspective; transition to new missions; and looking to the future. Over 100 b/w photos. Extensive glossary and bibliography.

2002-08-15 Raye Ringholz Now expanded to include the story of nuclear testing and its consequences, Uranium Frenzy has become the classic account of the uranium rush that gripped the Colorado Plateau region in the 1950s. Instigated by the U.S. government's need for uranium to fuel its growing atomic weapons program, stimulated by Charlie Steen's lucrative Mi Vida strike in 1952, manned by rookie prospectors from all walks of life, and driven to a fever pitch by penny stock promotions, the boom created a colorful era in the Four Corners region and Salt Lake City (where the stock frenzy was centered) but ultimately went bust. The thrill of those exciting times and the good fortune of some of the miners were countered by the darker aspects of uranium and its uses. Miners were not well informed regarding the dangers of radioactive decay products. Neither the government nor anyone else expended much effort educating them or protecting their health and safety. The effects of exposure to radiation in poorly ventilated mines appeared over time.

2006 OECD Nuclear Energy Agency The "Red Book", jointly prepared by the OECD Nuclear Energy Agency and the International Atomic Energy Agency, is a recognised world reference source on the uranium industry. This publication collates and analyses key information drawn from the twenty editions of the Red Book published between 1965 and 2004, in order to set out a comprehensive review of developments in the world uranium industry from the birth of civilian nuclear energy through to the beginning of the 21st century. It summarises developments in the major uranium-producing countries and topics covered include: installed nuclear capacity, reactor-related uranium requirements, market price, exploration, resources, production, natural and enriched uranium inventories, thorium, mine start-up and closure histories, environmental aspects of uranium mining and processing.

2013-03-05 Denise Kiernan The New York Times bestseller, now available in paperback—an incredible true story of the top-secret World War II town of Oak Ridge, Tennessee, and the young women brought there unknowingly to help build the atomic bomb. “The best kind of nonfiction: marvelously reported, fluidly written, and a remarkable story…As meticulous and brilliant as it is compulsively readable.” —Karen Abbott, author of Sin in the Second City At the height of World War II, Oak Ridge, Tennessee, was home to 75,000 residents, and consumed more electricity than New York City,

yet it was shrouded in such secrecy that it did not appear on any map. Thousands of civilians, many of them young women from small towns across the U.S., were recruited to this secret city, enticed by the promise of solid wages and war-ending work. What were they actually doing there? Very few knew. The purpose of this mysterious government project was kept a secret from the outside world and from the majority of the residents themselves. Some wondered why, despite the constant work and round-the-clock activity in this makeshift town, did no tangible product of any kind ever seem to leave its guarded gates? The women who kept this town running would find out at the end of the war, when Oak Ridge's secret was revealed and changed the world forever. Drawing from the voices and experiences of the women who lived and worked in Oak Ridge, The Girls of Atomic City rescues a remarkable, forgotten chapter of World War II from obscurity. Denise Kiernan captures the spirit of the times through these women: their pluck, their desire to contribute, and their enduring courage. "A phenomenal story," and Publishers Weekly called it an "intimate and revealing glimpse into one of the most important scientific developments in history." "Kiernan has amassed a deep reservoir of intimate details of what life was like for women living in the secret city...Rosie, it turns out, did much more than drive rivets." —The Washington Post

2012 Robert R. Johnson

2021-05-28 Richard G. Hewlett This title is part of UC Press's Voices Revived program, which commemorates University of California Press's mission to seek out and cultivate the brightest minds and give them voice, reach, and impact. Drawing on a backlist dating to 1893, Voices Revived makes high-quality, peer-reviewed scholarship accessible once again using print-on-demand technology. This title was originally published in 1989.

2023-01-24 Steve Sheinkin A riveting graphic novel adaptation of the award-winning nonfiction book, Bomb—the fascinating and frightening true story of the creation behind the most destructive force that birthed the arms race and the Cold War. In December of 1938, a chemist in a German laboratory made a shocking discovery: When placed next to radioactive material, a Uranium atom split in two. That simple discovery launched a scientific race that spanned three continents. In Great Britain and the United States, Soviet spies worked their way into the scientific community; in Norway, a commando force slipped behind enemy lines to attack German heavy-water manufacturing; and deep in the desert, one brilliant group of scientists was hidden away at a remote site at Los Alamos. This is the story of the plotting, the risk-taking, the deceit, and genius that created the world's most formidable weapon. This is the story of the atomic bomb. New York Times bestselling author Steve Sheinkin's award-winning nonfiction book is now available reimagined in the graphic novel format. Full color illustrations from Nick Bertozzi are detailed and enriched with the nonfiction expertise Nick brings to the story as a beloved artist, comic book writer, and commercial illustrator who has written a couple of his own historical graphic novels, including Shackleton and Lewis & Clark. Accessible, gripping, and educational, this new edition of Bomb is perfect for young readers and adults alike. Praise for Bomb (2012): "This superb and exciting work of nonfiction would be a fine tonic for any jaded adolescent who thinks history is 'boring.' It's also an excellent primer for adult readers who may have forgotten, or never learned, the remarkable story of how nuclear weaponry was first imagined, invented and deployed—and of how an international arms race began well before there was such a thing as an atomic bomb." —The Wall Street Journal "This is edge-of-the seat material that will resonate with YAs who clamor for true spy stories, and it will undoubtedly engross a cross-market audience of adults who dozed through the World War II unit in high school." —The Bulletin (starred review) Also by Steve Sheinkin: Fallout: Spies, Superbombs, and the Ultimate Cold War Showdown The Port Chicago 50: Disaster, Mutiny, and the Fight for Civil Rights Undefeated: Jim Thorpe and the Carlisle Indian School Football Team Most Dangerous: Daniel Ellsberg and the Secret History of the Vietnam War Born to Fly: The First Women's Air Race Across America The Notorious Benedict Arnold: A True Story of Adventure, Heroism & Treachery Which Way to the Wild West?: Everything Your Schoolbooks Didn't Tell You About Westward Expansion King George: What Was His Problem?: Everything Your Schoolbooks Didn't Tell You About the American Revolution Two Miserable Presidents: Everything Your Schoolbooks Didn't Tell You

About the Civil War
2019-03-05 Nick Estes Winner of the Oakland “Blue Collar” PEN Award A work of history, a manifesto, and an intergenerational story of resistance that shows how two centuries of Indigenous struggle created the movement proclaiming “Water is Life” In 2016, a small protest encampment at the Standing Rock reservation in North Dakota, initially established to block construction of the Dakota Access oil pipeline, grew to be the largest Indigenous protest movement in the twenty-first century, attracting tens of thousands of Indigenous and non-Native allies from around the world. Its slogan “Mni Wiconi”—Water is Life—was about more than just a pipeline. Water Protectors knew this battle for Native sovereignty had already been fought many times before, and that, even after the encampment was gone, their anti-colonial struggle would continue. In Our History is the Future, Nick Estes traces traditions of Indigenous resistance leading to the #NoDAPL movement from the days of the Missouri River trading forts through the Indian Wars, the Pick-Sloan dams, the American Indian Movement, and the campaign for Indigenous rights at the United Nations. While a historian by trade, Estes also draws on observations from the encampments and from growing up as a citizen of the Oceti Sakowin (the Nation of the Seven Council Fires), making Our History is the Future at once a work of history, a personal story, and a manifesto.
2010-10-29 Helen Caldicott The world-renowned antinuclear activist's expertly argued(The Guardian) case against nuclear energy. In a world torn apart by wars over oil, politicians have increasingly begun to look for alternative energy sources and their leading choice is nuclear energy. Among the myths that have been spread over the years about nuclear-powered electricity are that it does not cause global warming or pollution, that it is inexpensive, and that it is safe. Helen Caldicott's look at the actual costs and environmental consequences of nuclear energy belies the incessant barrage of nuclear industry propaganda. Caldicott reveals truths, Martin Sheen has said, that confirm we must take positive action now if we are to make a difference. In fact, nuclear power contributes to global warming; the true cost of nuclear power is prohibitive, with taxpayers picking up most of the tab; there's simply not enough uranium in the world to sustain nuclear power over the long term; and the potential for a catastrophic accident or a terrorist attack far outweighs any benefits. Concluding chapters detail alternative sustainable energy sources that are the key to a clean, green future.
2005 The legacies of past uranium mining and milling continue to be of concern and require assessment and remedial action. This problem has been recognized in many parts of the world over the past three decades, but has received increased attention since the end of the Cold War. Considerable effort and resources have been expended in dealing with this legacy. However, it has to be noted that the search for uranium has covered almost all countries on the globe. The result in some countries is a legacy of numerous small scale mines and mills. For economic and other reasons, including less stringent environmental standards and awareness at the time, these operations may not have been properly closed out and made safe. The remediation strategies and techniques developed by major problem holders, such as the USA or Germany, often would be out of scale for the problems in other countries. Therefore an international workshop was organized in Lisbon from 11 to 13 February 2004 as a forum for the exchange of views and experiences of countries with smaller scale uranium mining legacies.
2007-04-01 Tom Zoellner In 2000, Tom Zoellner purchased a diamond engagement ring and proposed. His girlfriend said, "yes" and then, suddenly, walked out of his life making Tom the owner of a used engagement ring. Instead of hitting the self-help shelves of his local bookstore, he hit the road travelling to diamond mines in Africa, Canada, India, Brazil and Russia to discover the true worth of this shining gem. He travelled to Japan to understand how diamonds were linked with engagements and delved into the history of our own American romance with the diamond ring. He gained entry to DeBeers, the London diamond merchants. He visited shopping mall jewellers with starry-eyed couples. Through all of his travels, he searched for an answer to the question "How has one stone created empires, ruined lives, inspired lust and emptied wallets throughout history?" A

diamond version of Susan Orleans's The Orchid Thief, Tom Zoellner's The Heartless Stone is a journey to the cold heart of the world's most unyielding gem.

2017-08-22 Timothy J. Jorgensen The fascinating science and history of radiation More than ever before, radiation is a part of our modern daily lives. We own radiation-emitting phones, regularly get diagnostic x-rays, such as mammograms, and submit to full-body security scans at airports. We worry and debate about the proliferation of nuclear weapons and the safety of nuclear power plants. But how much do we really know about radiation? And what are its actual dangers? An accessible blend of narrative history and science, Strange Glow describes mankind's extraordinary, thorny relationship with radiation, including the hard-won lessons of how radiation helps and harms our health. Timothy Jorgensen explores how our knowledge of and experiences with radiation in the last century can lead us to smarter personal decisions about radiation exposures today. Jorgensen introduces key figures in the story of radiation—from Wilhelm Roentgen, the discoverer of x-rays, and pioneering radioactivity researchers Marie and Pierre Curie, to Thomas Edison and the victims of the recent Fukushima Daiichi nuclear power plant accident. Tracing the most important events in the evolution of radiation, Jorgensen explains exactly what radiation is, how it produces certain health consequences, and how we can protect ourselves from harm. He also considers a range of practical scenarios such as the risks of radon in our basements, radiation levels in the fish we eat, questions about cell-phone use, and radiation's link to cancer. Jorgensen empowers us to make informed choices while offering a clearer understanding of broader societal issues. Investigating radiation's benefits and risks, Strange Glow takes a remarkable look at how, for better or worse, radiation has transformed our society.

Charles Pope Charles Pope a well know expert on Non-destructive radiation expels a few myths surrounding the fears associated with the use of radiation. Charles is what you would discribe, a Nuclear Greenie. He has written a layman’s guide in plain English to ionising radiation over the last 4 billion years via prehistoric Gabon, Einstein, Hiroshima, Chernobyl and Fukushima. We really do stress ourselves too much about nuclear radiation simply because we don’t understand it. In the process we forfeit our best get-out-of-jail card for base load carbon-free energy until the hoped-for renewables can fill the gap. Charles Pope is a nuclear environmentalist and has used radioactive materials and X-ray equipment for his working life and trained others in their safe use. He is more convinced by arithmetic than emotion. It’s time to stop shouting slogans and start understanding the manageable risks of nuclear energy.

2016-02-10 Eric V. McDonald This book is a collection of papers presented at the 9th International Conference of Military Geoscience that was held in 2011. The conference included discussion on a diverse range of geosciences, including military history, military geology, teaching geology from a military prospective, geological influence on the battlefield, and environmental and cultural issues related to management of military lands. Geology and geography have played a significant role in military history, from providing the stone for primitive tools and weapons, to the utilization of terrain in offensive and defensive strategies. Specific to this volume, deserts comprise nearly a third of the Earth’s surface and have been the site of numerous battles where the dust, heat, and a lack of food and water have provided challenges to military leaders and warriors. This book examines the role of deserts in past and modern warfare, the problems and challenges in managing military lands in desert regions, and how desert environmental conditions can impact military equipment and personnel. This proceedings volume should be of interest to scholars, professionals, and those interested in military history, warfare, geology, geography, cultural resources, general science, and military operations.

2012-07 In the wake of the Fukushima Daiichi nuclear power plant accident, questions are being raised about the future of the uranium market, including as regards the number of reactors expected to be built in the coming years, the amount of uranium required to meet forward demand, the adequacy of identified uranium resources to meet that demand and the ability of the sector to meet reactor requirements in a challenging investment

climate. This 24th edition of the "Red Book", a recognised world reference on uranium jointly prepared by the OECD Nuclear Energy Agency and the International Atomic Energy Agency, provides analyses and information from 42 producing and consuming countries in order to address these and other questions. It offers a comprehensive review of world uranium supply and demand as well as data on global uranium exploration, resources, production and reactor-related requirements. It also provides substantive new information on established uranium production centres around the world and in countries developing production centres for the first time. Projections of nuclear generating capacity and reactor-related requirements through 2035, incorporating policy changes following the Fukushima accident, are also featured, along with an analysis of long-term uranium supply and demand issues

2001 "The first of two reports that the Royal Society has published examining the health effects of depleted uranium munitions ... Due to the lack of experimental data, the approach taken was to estimate the typical levels of exposure on the battlefield over a wide range of scenarios, and the 'worst-case' exposures that individuals are unlikely to exceed. These estimated values have then been used to assess the potential health risks from radiation. The report also considers epidemiological studies of occupational exposures to uranium in other situations as an independent source of information on the risks of inhaling DU particles, although it recognises that the parallels may not be precise. Part II deals with the risks from the chemical toxicity of uranium, non-malignant radiation effects from DU intakes, the long-term environmental consequences of the deployment of DU munitions and responses to Part I."--Web site.

2008-09-09 Thomas Hager A sweeping history of tragic genius, cutting-edge science, and the Haber-Bosch discovery that changed billions of lives—including your own. At the dawn of the twentieth century, humanity was facing global disaster: Mass starvation was about to become a reality. A call went out to the world’ s scientists to find a solution. This is the story of the two men who found it: brilliant, self-important Fritz Haber and reclusive, alcoholic Carl Bosch. Together they discovered a way to make bread out of air, built city-sized factories, and saved millions of lives. But their epochal triumph came at a price we are still paying. The Haber-Bosch process was also used to make the gunpowder and explosives that killed millions during the two world wars. Both men were vilified during their lives; both, disillusioned and disgraced, died tragically. The Alchemy of Air is the extraordinary, previously untold story of a discovery that changed the way we grow food and the way we make war–and that promises to continue shaping our lives in fundamental and dramatic ways.

2015-06-09 Tom Clynes This story of a child prodigy and his unique upbringing is “an engrossing journey to the outer realms of science and parenting” (Paul Greenberg, author of Four Fish). A PEN/E. O. Wilson Literary Science Writing Award Finalist Like many young children, Taylor Wilson dreamed of becoming an astronaut. Only Wilson mastered the science of rocket propulsion by the age of nine. When he was eleven, he tried to cure his grandmother’s cancer—and discovered new ways to produce medical isotopes. Then, at fourteen, Wilson became the youngest person in history to achieve nuclear fusion, building a 500-million-degree reactor—in his parents’ garage. In The Boy Who Played with Fusion, science journalist Tom Clynes narrates Wilson’s extraordinary story. Born in Texarkana, Arkansas, Wilson quickly displayed an advanced intellect. Recognizing their son’s abilities and the limitations of their local schools, his parents took a bold leap and moved the family to Reno, Nevada. There, Wilson could attend a unique public high school created specifically for academic superstars. Wilson is now designing devices to prevent terrorists from shipping radioactive material and inspiring a new generation to take on the challenges of science. If you’re wondering how someone so young can achieve so much, The Boy Who Played with Fusion has the answer. Along the way, Clynes’ narrative teaches parents, teachers, and society how and why we urgently need to support high-achieving kids. “An essential contribution to our understanding of the most important underlying questions about the development of giftedness, talent, creativity, and intelligence.” —Psychology Today “A compelling study of the thrills—and

burdens—of being born with an alpha intellect." —Financial Times
1999-02-28 Gregory R. Choppin Separation technologies are of crucial importance to the goal of significantly reducing the volume of high-level nuclear waste, thereby reducing the long-term health risks to mankind. International co-operation, including the sharing of concepts and methods, as well as technology transfer, is essential in accelerating research and development in the field. The writers of this book are all internationally recognised experts in the field of separation technology, well qualified to assess and criticize the current state of separation research as well as to identify future opportunities for the application of separation technologies to the solution of nuclear waste management problems. The major emphases in the book are research opportunities in the utilization of innovative and potentially more efficient and cost effective processes for waste processing/treatment, actinide speciation/separation methods, technological processing, and environmental restoration.
2014-11-21 Zeev Karpas Accurate uranium analysis, and particularly for isotope measurements, is essential in many fields, including environmental studies, geology, hydrogeology, the nuclear industry, health physics, and homeland security. Nevertheless, only a few scientific books are dedicated to uranium in general and analytical chemistry aspects in particular. Analytical Chemistry of Uranium: Environmental, Forensic, Nuclear, and Toxicological Applications covers the fascinating advances in the field of analytical chemistry of uranium. Exploring a broad range of topics, the book focuses on the analytical aspects of industrial processes that involve uranium, its presence in the environment, health and biological implications of exposure to uranium compounds, and nuclear forensics. Topics include: Examples of procedures used to characterize uranium in environmental samples of soil, sediments, vegetation, water, and air Analytical methods used to examine the rigorous specifications of uranium and its compounds deployed in the nuclear fuel cycle Health aspects of exposure to uranium and the bioassays used for exposure assessment Up-to-date analytical techniques used in nuclear forensics for safeguards in support of non-proliferation, including single particle characterization Each chapter includes an overview of the topic and several examples to demonstrate the analytical procedures. This is followed by sample preparation, separation and purification techniques where necessary. The book supplies readers with a solid understanding of the analytical chemistry approach used today for characterizing the different facets of uranium, providing a good starting point for further investigation into this important element.
2018-04-13 Laurier L Schramm The first discovery of uranium in Saskatchewan was at Nicholson Bay, in a remote northern location on the shore of Lake Athabasca. Uranium was first noted at what became the Nicholson site in 1929 when uranium was only of interest as an indicator of radium potential. When uranium ores became of strategic national interest in about 1940, a cross-Canada search was launched to find uranium deposits. The first to be found and developed was in the Northwest Territories. The second arose from a return to exploration at the Nicholson site in the Beaverlodge area in 1944. The Nicholson mine was the first uranium mine to be developed in Saskatchewan and, in 1949 was the only active uranium mine in Canada outside of the Northwest Territories. By 1959 the Nicholson ore body had been essentially depleted, but the Nicholson mine had played its role in helping Canada become one of the largest uranium producers in the world. It produced about 12,800 tonnes of uranium ore, yielding about 50 tonnes of uranium (as U3O8), and an estimated 60- to 90 thousand m3 of waste rock. Following closure in 1960, the Nicholson site was abandoned with little remediation and no reclamation being done. Forty-five years would pass before the governments of Saskatchewan and Canada reached an agreement to fund the remediation (clean-up) of the Nicholson site, and contracted the management of the project to the Saskatchewan Research Council (SRC). At the time of writing this book the clean-up was about to begin, with several years of clean-up activity anticipated, and then a period subsequent monitoring activity, before the site is expected to be released into a long-term management and monitoring program.
2020-05-12 Tom Zoellner From a New York Times bestselling author, a gripping account of the slave rebellion that led to the abolition of slavery in

the British Empire. For five horrific weeks after Christmas in 1831, Jamaica was convulsed by an uprising of its enslaved people. What started as a peaceful labor strike quickly turned into a full-blown revolt, leaving hundreds of plantation houses in smoking ruins. By the time British troops had put down the rebels, more than a thousand Jamaicans lay dead from summary executions and extrajudicial murder. While the rebels lost their military gamble, their sacrifice accelerated the larger struggle for freedom in the British Atlantic. The daring and suffering of the Jamaicans galvanized public opinion throughout the empire, triggering a decisive turn against slavery. For centuries bondage had fed Britain’s appetite for sugar. Within two years of the Christmas rebellion, slavery was formally abolished. Island on Fire is a dramatic day-by-day account of this transformative uprising. A skillful storyteller, Tom Zoellner goes back to the primary sources to tell the intimate story of the men and women who rose up and tasted liberty for a few brief weeks. He provides the first full portrait of the rebellion's enigmatic leader, Samuel Sharpe, and gives us a poignant glimpse of the struggles and dreams of the many Jamaicans who died for liberty.

2021-11-16 Jennifer Mateer This volume contributes to advancing an ‘ecology of freedom,’ which can critique current anthropocentric environmental destruction, as well as focusing on environmental justice and decentralized ecological governance.

2007 Doug Brugge Based on statements given to the Navajo Uranium Miner Oral History and Photography Project, this revealing book assesses the effects of uranium mining on the reservation beginning in the 1940s.

2003-06-09 National Research Council The production of nuclear materials for the national defense was an intense, nationwide effort that began with the Manhattan Project and continued throughout the Cold War. Now many of these product materials, by-products, and precursors, such as irradiated nuclear fuels and targets, have been declared as excess by the Department of Energy (DOE). Most of this excess inventory has been, or will be, turned over to DOE's Office of Environmental Management (EM), which is responsible for cleaning up the former production sites. Recognizing the scientific and technical challenges facing EM, Congress in 1995 established the EM Science Program (EMSP) to develop and fund directed, long-term research that could substantially enhance the knowledge base available for new cleanup technologies and decision making. The EMSP has previously asked the National Academies' National Research Council for advice for developing research agendas in subsurface contamination, facility deactivation and decommissioning, high-level waste, and mixed and transuranic waste. For this study the committee was tasked to provide recommendations for a research agenda to improve the scientific basis for DOE's management of its high-cost, high-volume, or high-risk excess nuclear materials and spent nuclear fuels. To address its task, the committee focused its attention on DOE's excess plutonium-239, spent nuclear fuels, cesium-137 and strontium-90 capsules, depleted uranium, and higher actinide isotopes.

1958 Joseph Jacob Katz

2012-04-02 Spencer R. Weart After a tsunami destroyed the cooling system at Japan's Fukushima Nuclear Power Plant, triggering a meltdown, protesters around the world challenged the use of nuclear power. Germany announced it would close its plants by 2022. Although the ills of fossil fuels are better understood than ever, the threat of climate change has never aroused the same visceral dread or swift action. Spencer Weart dissects this paradox, demonstrating that a powerful web of images surrounding nuclear energy holds us captive, allowing fear, rather than facts, to drive our thinking and public policy.Building on his classic, Nuclear Fear, Weart follows nuclear imagery from its origins in the symbolism of medieval alchemy to its appearance in film and fiction. Long before nuclear fission was discovered, fantasies of the destroyed planet, the transforming ray, and the white city of the future took root in the popular imagination. At the turn of the twentieth century when limited facts about radioactivity became known, they produced a blurred picture upon which scientists and the public projected their hopes and fears. These fears were magnified during the Cold War, when mushroom clouds no longer needed to be imagined; they appeared on the evening news. Weart examines nuclear anxiety in sources

as diverse as Alain Resnais's film Hiroshima Mon Amour, Cormac McCarthy's novel The Road, and the television show The Simpsons.Recognizing how much we remain in thrall to these setpieces of the imagination, Weart hopes, will help us resist manipulation from both sides of the nuclear debate.