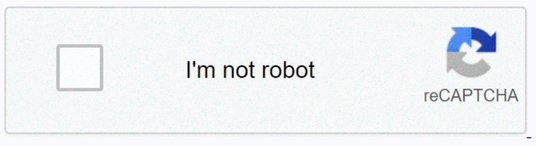

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Asteroid mining 101 pdf

Show 1-30 Start your review of Asteroid Mining 101: Wealth for New Space Economy Feb 04, 2015 S. Stoner evaluates it is amazing In Asteroid Mining 101: Wealth for New Space Economy Dr. John Lewis presents cogent, quite easy to read the guide to what might be in the next few decades The main focus is on location, orbit, behavior and asteroid composition, including the latest information in this evolving science. This is the basis for conceiving innovative techniques and methods for catching, catching, and extracting resources they can provide for exploration and exploitation of space by the huma In Asteroid Mining 101: Wealth for New Space Economy Dr. John Lewis presents cogent, quite easy to read what guidance is possible in the next few decades. The main focus is on location, orbit, behavior and asteroid composition, including the latest information in this evolving science. This is fundamental to the techniques of bounce and innovating methods for capturing, capturing, and extracting resources they can provide for the exploration and exploitation of space by the human race. Although he does not go into depth on the engineering aspects of mining asteroids, beneficiaries, etc., he is careful to note that this, too, will require a new approach that will differ significantly from the practice of electrical mining. Similarly, the post-processing methods are sketches, although impressive graphics for Asteroid Processing Architecture are prepared and well thought out. Perhaps in a binding on the book the architectural details will be presented more clearly with proposals for equipment engineering needed to bring about the process of producing outcomes. It is not said that this process will require either ships or facilities/ies in orbit or on the moon with the ability to implement them. Drivers for asteroid mining, and other planetary or planetoid bodies for that matter, will almost always arise from profit motives for private companies rather than governments, although I suspect it will grow as a private public partnership, especially given that control governments run on launch and airspace. However, it would be an entrepreneurial risk-rampage that would accelerate efforts. To that end, Dr. Lewis presents some interesting numbers about the economic value of asteroid mining, especially the difference between the cost of transporting material to space from Earth (which is now about $10K per pound according to NASA figures) and the cost of getting it from NEAs in the near term. Mining asteroids and other bodies will be a complex undertaking, but for the long-term future of mankind, the first step that includes in the book is a step necessary and important towards that goal. Asteroid Mining 101 is an excellent primer that will stretch your mind and, hopefully, your horizon. well done. ... over Feb 27, 2019 Costin Manda rates it If you're interested in astronomy and the kind of space science that can be used now, not in the future, this is a book for you. It describes the technical aspects of asteroid mining, an industry that is in its early days (or should we call it still in the womb?), but is the only thing that can connect humanity to space. There will be no habitat on Mars, no solar system colonization, no interstellar journey - not for humans, not for robots, without cont sources If you are interested in astronomy and the kind of space science that can be used now, not on a distant future, this is a book for you. It describes the technical aspects of asteroid mining, an industry that is in its early days (or should we call it still in the womb?), but is the only thing that can connect humanity to space. There will be no habitat on Mars, no solar system colonization, no interstellar journey - not for humans, not for robots, without the resources contained in the asteroid. It's a short book, but filled with information and, as Lewis says itself, You might not buy this book to be heralded by some huckster. If you do, I hope you'll be very disappointed and don't recommend the book to like-minded friends.Dr. John S. Lewis is chief scientist for Deep Space Industries, a space mining company that requires separate blog posts just to get used to people with it. He is a world-renowned asteroid source scientist, with many written papers in the field, as well as authors of Iron rain and Ice and Sky Mining. I hear you can consider both parts of the same series and, with that in case, you should probably try to get them before you read this book, even if it stands alone well. Asteroid Mining 101 is filled with numerous pages about geology, minerals and general chemistry. I have to admit it's not what I expected, yet true to its title. I thought I'd read a little about the asteroid, get used to the general concept beyond my general knowledge, then read about DSI's technical design for the spacecraft to be used to find and mining asteroids. On the other hand, it is a description of the concept of asteroid mining, followed by an in-depth analysis of the issues involved and possible solutions. Reading it, someone realizes how far we are from designing robotic miners when we haven't yet developed mining techniques that will work in space. Almost universally, the method used on Earth depends on either gravity or the use of heavy air fuel, water or liquid. Therefore, it is my first intention to criticize the book for being too geological in nature so, but I ended up praising him for it. The book is structured as follows:- a very brief introduction to the structure of the Solar System and the various spacecraft that can help the prospect of asteroids- heavy geological illumination of asteroid composition, mineralogy and asteroid origin, including a list of excellent techniques used calculate the various features used- actual statistics on the asteroid in the solar system- economic analysis of economic space-based economics- a real scenario to find, land and mining asteroids- attachments with more detailed informationFrom this, mineralogical and classification takes more than half of the book. The mining scenario section is small, but understandably so: Lewis is trying to make this book as a lack of possible speculation, and I have to admire him for it. This isn't a book to make you dream, it's a book to make you think. This has a disadvantage that there is no discussion on the politics of the matter, except that the nuclear fission energy cannot be politically implemented for the generation of spacecraft. Despite requiring speculation, I would welcome discussions about the possibility of the use of asteroids as planetary weapons, conflicts in space or even legal chaos that own what and what enforces the law. The author is not a military man, nor a lawyer, so this is the subject for others. Some ideas stand out in the book. One is that the true source of precious in space is water. It's a lot and useful for everything from reasoning to radiation shields and maintaining life. So-called precious minerals are completely different in space, yet bringing platinum metals to Earth will have very little profit margins and very short ones, until the market is stable on the planet. On the opposite side of the spectrum, nitrogen will be a factor limiting the industry that could theoretically retain millions of people, while fisionable materials such as uranium or plutonium will almost disappear. Energy has the same problem. In space, solar power would be primary if not the only source of energy, while the type of fuel used on Earth would be either too expensive to use, impossible to produce or irrational to produce (such as high-energy fuel containing nitrogen). Metals such as titanium and aluminium require too much energy to be extracted from stable compounds they find and a bit of common use in space. The return on the investment cycle will be long in space, perhaps longer than the average political cycle. And so on. In fact, I would say that this is the book's main idea: how different the space economy will be, from technical to administration. The problems that cannot be overcome on Earth are easy in space and vice versa. What we need to do this work is to develop the necessary techniques, from the ground up (I know that this expression of gravity presupposes and planetary surfaces, but let's go with it), because out there we need to ease everything from scratch. It shows the potential of asteroids in the system The possibility of developing human civilizations millions of times the current size, then it presents you with difficulty planning all of this from Earth, where everything is different. It is one of the The books show decisively why we need to go out in space and why we need to stay there: we need to start getting it. By the way, and that was my speculative contribution to the subject, it was also a sad book. It makes it clear how difficult it is, if not impossible, it is for the average joe, commute to work every day, worry about mortgages and children's educational choices, to understand what awaits us in space. By extension, how impossible it is for politicians to do anything about it, even if they understand the concept and want to really do something. Therefore, the need for private initiatives is proved clear and clear. ... more fun reading this book. The error of reading the evidence aside, it is clearly written with a lot of information about the rich resources that await us in the asteroid. The book is intended for the general public: no pre-existent knowledge of chemical or geological existence is required; more technical goods are reserved for attachments. We get a thorough breakdown of where the asteroid is located and, through the meteorite analysis taken, what they are made of. If this book doesn't inspire a resourcing I like to read this book. The error of reading the evidence aside, it is clearly written with a lot of information about the rich resources that await us in the asteroid. The book is intended for the general public: no pre-existent knowledge of chemical or geological existence is required; more technical goods are reserved for attachments. We get a thorough breakdown of where the asteroid is located and, through the meteorite analysis taken, what they are made of. If this book doesn't inspire the resources we have out there in space then nothing will happen. If you want an introduction to the Solar System asteroid then you can do worse than take this book. ... Over Dec 28, 2016 David Hoag rated it as a supporter of a company like Planetary Resources, I was interested in how technology for asteroid mining would come together. A website like Asterank.com way of making me curious, but this book is sown out my understanding a little bit more. That asteroid mission has flown and already landed is known to me, but various technologies, space agencies, and future missions are quite unknown. I can't wait to read more about NASA's ARM mission in 2019. Frank Carey rated it amazing March 28, 2017 Tom rated it really liked it Nov 03, 2018 Nick Pascucci judged it really liked it March 17, 2017 Panagiwths assessed it was amazing Sep 11, 2018 Scott judged it really liked it June 08, 2020 Mathias Sundin evaluated it really liked it Oct 09, 2016 Alexandre rated it really liked it 24 Dec, 2015 Dennis Ima evaluated it really 05, 2017 Galen assesses he really likes it Nov 18, 2020 Mark rate he really likes it May 19, 2017 Nikos rate he doesn't like it 13 August 2016 Antonio Stark rate he really likes it 27 Dis, 2017 yuling wang rate he is amazing Jun 12, 2020 Edward Nicolle rate he really likes it , 2018 2018 rate he really likes it Feb 03, 2017 Jonny rate he is amazing Apr 17, 2018 Henrik rate he likes it 22 May 2020 Anthony Murphy rate he really likes it Sep 01, 2015 Carl Agmén rate he really likes it Mar 09, 2019 2019