Article:
"Demonstration designs for the remediation of space debris from the International Space Station" Acta Astronautica 112 (2015)

Press Response

Journals:

Space Station lasers to shoot down junk in orbit
Irish Independent - Apr 22, 2015
Scientists want to fit huge lasers to the International Space Station (ISS) and use them to blast away the estimated 3,000 tons of space debris that flies around the Earth and could be putting it in danger.

International Space Station could be fitted with lasers to shoot down space junk ...
Daily Mail - Apr 20, 2015
Tokyo researchers have proposed a laser system to attach to the ISS. It would be used to shoot down pieces of debris in Earth orbit (artist's illustration shown). The system would have a range of 62 miles (100km) and could target things less than 0.4 inches ...

Scientists propose to blast space junk with ISS-mounted laser
Delhi Daily News - Apr 18, 2015
To tackle the increasingly dense layer of miscellaneous space debris and dead satellites that are covering our planet, a team of researchers led by Japan's Riken research institute has put forward what might be the most ambitious plan to date.

International Space Station could be fitted with huge lasers to shoot down space ...
The Independent - Apr 20, 2015
When that spots a piece of dangerous debris, a laser would be used to fire at bits of space junk until it goes out of orbit and burns up as it goes back towards the Earth. The plan is one of a number of proposals for dealing with the huge amounts of "space junk" ...

International Space Station could be fitted with lasers to shoot down space junk
Belfast Telegraph - Apr 21, 2015
Scientists want to fit lasers to the International Space Station (ISS) and use them to blast away the estimated 3,000 tons of space debris that flies around the Earth and could be putting it in danger.

Fiber Optic Laser could be used to remove Space Junk
Maine News - Apr 20, 2015
A paper published in the journal Acta Astronautica proposed a method as per which around 3,000 tons of debris with the help of a fiber optic laser mounted on the ISS. The procedure would involve tracking the space junk using the infrared telescope of the ...

Laser's blast could destroy space debris
The Herald-Times (Indiana USA) - Apr 21, 2015

To test their system, researchers plan to send a small version of their telescope and laser to the ISS. Eventually, they hope to install a 3-meter telescope and laser with 10,000 fibers on the station, which would be able to deorbit debris that comes within 100 ...

Fiber-Optics technology will help clean space junks by zapping them with laser ...
Empire State Tribune - Apr 23, 2015
Japanese scientists from the Riken Institute in Japan plans for the conversion of the Extreme Universe Space Observatory's telescope aboard the ISS into a fiber-optic laser to shoot space junk, just what was done in the movie Gravity, out of orbit. It will then ...

International Space Station could be fitted with HUGE LASERS to blast ...
Express.co.uk - Apr 20, 2015
Researchers from the Riken Institute in Japan want to convert the Extreme Universe Space Observatory's telescope onboard the ISS into a fibre-optic laser to fire space junk, just like that seen in the film Gravity, out of orbit. It will then burn up as it comes back ...

Websites:

Laser's blast could destroy space debris
Central Kentucky News - Apr 21, 2015
To test their system, researchers plan to send a small version of their telescope and laser to the ISS. Eventually, they hope to install a 3-meter telescope and laser with 10,000 fibers on the station, which would be able to deorbit debris that comes within 100 ...

A blueprint for clearing the skies of space debris
Phys.Org - Apr 17, 2015
"If that goes well," says Ebisuzaki, "we plan to install a full-scale version on the ISS, incorporating a three-meter telescope and a laser with 10,000 fibers, giving it the ability to deorbit debris with a range of approximately 100 kilometers. Looking further to the ...

Scientists Want to Use Lasers to Shoot Down Space Junk
Smithsonian - Apr 20, 2015
Should the laser-plan move forward, the telescope would be doing double duty. "During twilight, thanks to EUSO's wide field of view and powerful optics, we could adapt it to the new mission of detecting high-velocity debris in orbit near the ISS." This isn't the ...

Lasers could blast space junk out of orbit
The Space Reporter - Apr 19, 2015
The Riken research institute in Japan has suggested a new idea for ridding orbital space of the junk. They propose using a fiber optic laser mounted onto the International Space Station to blast the debris out of the sky with essentially a point-and-shoot ...

ISS may be fitted with lasers to shoot space junk out of orbit
RT - Apr 20, 2015

Space debris could be conquered by a laser mounted to the International Space Station (ISS), which would remove it from Earth's orbit entirely, according to Japanese scientists. While it may sound like a script from a Sci-Fi movie, researchers from Tokyo's ...

ISS laser plan to clear space debris
The Engineer - Apr 22, 2015
A plan to use high-powered lasers to clear space debris could be tested on the International Space Station. Proposed by scientists at the RIKEN research institute near Tokyo, the plan would use a space telescope designed to study the effects of cosmic rays ...

Riken-led team to test space debris clearing system at ISS
Aerospace Technology - Apr 20, 2015
An international team of scientists led by Japan's Riken institute is planning to trial a telescope and laser system on the International Space Station (ISS) to clear space debris. Scientists plan to use the super-wide field-of-view Euso (Extreme Universe Space ...

Scientists Want To Fit A Laser Into The ISS To Destroy Space Junk
Bitbag - Apr 22, 2015
The group propose blasting tons of space junk out of orbit using fiber optic lasers mounted on the International Space Station. The plan will make use of the Extreme Universe Space Observatory (EUSO) telescope that is presently integrated into the ISS; the ...

Scientists Propose a Laser for the ISS to Vaporize Space Junk
Gizmodo - Apr 21, 2015
Now, lasers have been proposed as a space junk solution before, but these lasers were based on on land. And this idea hasn't gained much political traction because, well, you can imagine how they could easily double as weapons. But perhaps a laser on ...

Japanese scientists want to shoot space junk back towards Earth with a laser
Fusion - Apr 21, 2015
Pollution is not an Earth-specific problem. For years, scientists have been sounding the alarm on the dangers of space junk — specifically, the risk of collision between the International Space Station (ISS) and debris from old satellites and other objects.

Space laser weapon to protect International Space Station from debris proposed
Market Business News - Apr 21, 2015
Space technology may soon reach its first weapons milestone if a proposal to fit a laser gun on the International Space Station to protect it from orbiting debris, also known as 'space junk', goes ahead. An international team of researchers from the Riken ...

Scientists: Shoot Space Junk With Laser From International Space Station
Brevard Times - Apr 21, 2015
But don't look forward to any laser-induced explosions is space. After locating a piece of floating space junk with a super-wide field-of-view telescope, scientists propose shooting the debris with a laser pulse to slow down its orbit; thereby causing the space ...

Laser Device Could Shoot Down Space Debris
ENGINEERING.com - Apr 22, 2015
The amount of space debris as a result of human activity has nearly doubled over the last 15 years, posing a threat to the International Space Station and satellites around it. The debris – consisting of satellites, rocket bodies and fragments from collisions ...

Laser's blast could destroy space debris
Petoskey News-Review - Apr 21, 2015
To test their system, researchers plan to send a small version of their telescope and laser to the ISS. Eventually, they hope to install a 3-meter telescope and laser with 10,000 fibers on the station, which would be able to deorbit debris that comes within 100 ...

Laser's blast could destroy space debris
Daily American Online - Apr 21, 2015
To test their system, researchers plan to send a small version of their telescope and laser to the ISS. Eventually, they hope to install a 3-meter telescope and laser with 10,000 fibers on the station, which would be able to deorbit debris that comes within 100 ...

Scientists plan to Remove Space Debris by using Laser
Uncover Michigan - Apr 20, 2015
Now scientists have found a way to remove the space debris. The idea came from a team led by scientists from Japan's Riken research institute. According to the scientists, a fiber optic laser will blast 3,000 tons of debris. The laser is currently mounted on the ...

Researchers propose lasers to tackle space debris problem
Techie News - Apr 21, 2015
“If that goes well,” says Ebisuzaki, “we plan to install a full-scale version on the ISS, incorporating a three-meter telescope and a laser with 10,000 fibers, giving it the ability to deorbit debris with a range of approximately 100 kilometers. Looking further to the ...

'Space Junk' Orbiting Earth to Be Blasted Away
teleSUR English - Apr 21, 2015
A small proof-of-concept experiment on the ISS, using a small, 20 centimeter version of the EUSO telescope and a laser with 100 fibers, will be deployed soon. A full-scale version on the ISS, incorporating a three-meter telescope and a laser with 10,000 fibers ...

Scientists Suggest Mounting Lasers on the International Space Station to Solve ...
CDA News - Apr 20, 2015
Scientists suggests that high-powered lasers mounted on the International Space Station (ISS) can be a very efficient tool to blast thousands of tons of space junk out of the orbit. The proposal made by an international research team led by scientists at Japan's ...

ISS Could be Armed with a Laser Gun to Shoot at Space Junk
News Every day - Apr 20, 2015

Researchers at Riken research institute have suggested using a laser gun mounted on International Space Station (ISS) to fire at debris and decimate it. Once powdered, the debris would burn away during earth re-entry. A paper recently published in the ...

Fit lasers to International Space Station to shoot at space debris, say scientists
Market Business News - Apr 20, 2015
If an international team of scientists has its way, the International Space Station will be fitted with a laser weapon to shoot at space debris, which has become a growing hazard for orbiting satellites. So, are humans about to have their first space weapon?

Scientists plan to destroy dangerous space debris with fiber optic laser attached ...
Covered Globe - Apr 20, 2015
Eventually most of these space experts agree that blasting the space debris with fiber optic laser from the International Space Station (ISS) would be a workable initiative, and this appears to be the favored option at the moment. Space scientists say there are ...

Laser's blast could destroy space debris
KSL.com - Apr 20, 2015
Space debris poses a threat because the objects can collide with space infrastructure like the International Space Station and satellites, according to researchers. A team of scientists from the Japan-based RIKEN research institute described a plan to tackle ...

Blasting the space debris out of orbit with a fiber optic laser
Rapid News Network - Apr 20, 2015
The system is having two main components: extremely reliable fiber optic based laser, an incredibly vast field of sight telescope appeared by the EUSO group at Japan's Riken research institute. Space debris, comprising bits and piece of various man-made ...

Scientists Propose Removing Space Debris from Orbit with Fiber Optic Laser
AZoOptics.com (press release) - Apr 20, 2015
“If that goes well,” says Ebisuzaki, “we plan to install a full-scale version on the ISS, incorporating a three-meter telescope and a laser with 10,000 fibers, giving it the ability to deorbit debris with a range of approximately 100 kilometers. Looking further to the ...

ISS to get a laser system?
iAfrica.com - Apr 20, 2015
Aside from the cool factor (space lasers!), the system will be used to blast space debris out of the sky, Engadget reported. The concept, created by a team from Japan's Riken research institute, would see a fibre-optic "CAN laser" (used in particle accelerators) ...

Powerful Laser Beam Zaps Out Dangerous Space Junk in Orbit
Yibada (English Edition) - Apr 19, 2015
To date, there are an estimated 500,000 pieces of space junk orbiting Earth travelling at speeds of 17,500 miles per hour as this dangerous speeding debris can apparently cause serious damage to other satellites and even to the International Space Station.

Giant fiber optic lasers may soon be used to blast space debris

Big News Network.com - Apr 19, 2015
Researchers have proposed blasting the space debris out of orbit with a fiber optic laser, in order to combat the increasing amount of miscellaneous trash orbiting around the planet. An international team of scientists have put forward a blueprint for a purely ...

Riken To Use Laser To Wipe Clear Space Debris
International Business Times AU - Apr 19, 2015
Because of the danger posed to Earth and the International Space Station, or ISS, by up to 500,000 pieces of space debris, some of which are travelling at the speed of 17,500 miles per hour, Japanese researchers from the Riken Research Institute are ...

How lasers could be the future of space cleanup
Christian Science Monitor - Apr 19, 2015
The study proposes using EUSO to spot the debris and then shooting them with powerful laser pulses from a high-efficiency fiber laser, also aboard the space station. The pulses would knock objects into the Earth's atmosphere, where they would burn up.

Space Laser to Destroy Dangerous Space Junk Orbiting the Earth; Prevent ...
Yibada (English Edition) - Apr 19, 2015
Scientists at Riken, a Japanese government natural science research institution based in Tokyo, have developed a new fiber optic laser they propose should be installed on the International Space Station to destroy the mass of space junk surrounding the ...

Giant lasers may soon be used to blast space debris
ANINEWS - Apr 19, 2015
The new method combining these two instruments will be capable of tracking down and deorbiting the most dangerous space debris, around the size of one centimeter. The intense laser beam focused on the debris will produce high-velocity plasma ablation, ...

Researchers to Use Lasers to Clear Space Debris
Chinatopix - Apr 19, 2015
"The new method combining these two instruments will be capable of tracking down and deorbiting the most dangerous space debris, around the size of one centimeter. The intense laser beam focused on the debris will produce high-velocity plasma ablation, ...
Giant lasers may soon be used to blast space debris
New Kerala - Apr 19, 2015
The new method combining these two instruments will be capable of tracking down and deorbiting the most dangerous space debris, around the size of one centimeter. The intense laser beam focused on the debris will produce high-velocity plasma ablation, ...

Space Debris To Be Wiped Clear Using Lasers
Daily Science Journal - Apr 19, 2015
According to NASA, there are up to 500,000 pieces of debris of different sizes, currently orbiting Earth. This space debris is a collection of defunct parts of old satellites, rockets and spacecraft, which has been a major headache for space agencies around the ...

What's the solution to space debris?
Science Recorder - Apr 19, 2015

If that goes well," said the Riken team leader Toshikazu Ebisuzaki in a press statement, "we plan to install a full-scale version on the ISS, incorporating a three-meter telescope and a laser with 10,000 fibers, giving it the ability to deorbit debris with a range of ...

Blasting the space debris out of orbit with a fiber optic laser
Ibcworldnews - Apr 19, 2015
Researchers have proposed blasting the space debris out of orbit with a fiber optic laser, in order to combat the increasing amount of miscellaneous trash orbiting around the planet. An international team of scientists have put forward a blueprint for a purely ...
Giant lasers may soon be used to blast space debris
Business Standard - Apr 19, 2015
Researchers have proposed blasting the space debris out of orbit with a fiber optic laser, in order to combat the increasing amount of miscellaneous trash orbiting around the planet. An international team of scientists have put forward a blueprint for a purely ...

Laser Proposed to Blast Away Space Junk
Science Times - Apr 18, 2015
The Institute plans to create a trial run with a small laser to see how well it works in destroying space junk. If successful, a full-scale version will be installed on the ISS that would have a range of approximately 100 kilometers. The smaller version comes ...

Fiber Optic Lasers Will Blast Space Junk Out Of Orbit - Study
Design & Trend - Apr 18, 2015
... theorized a plan to eliminate the space debris. In a paper published in the latest issue of the journal Acta Astronautica, the researchers proposed a method that involves using a fiber optic laser mounted on the ISS to blast an estimated 3,000 tons of debris.

Researchers Want To Clear Space Debris By Using Lasers To Shoot It Down
Voice Chronicle - Apr 18, 2015
"If that goes well, we plan to install a full-scale version on the ISS, incorporating a three-meter telescope and a laser with 10,000 fibers, giving it the ability to deorbit debris with a range of approximately 100 kilometers (62 miles)," added Ebisuzaki. The findings ...

Cleaning up Space with a Giant Laser. Better Yet, Blasting Into Space
Latinos Post - Apr 18, 2015
While 3000 tons seems like alot, that's only the junk in range along the path of the ISS. The ideal final step to a project like this would be a standalone satellite equipped with an equivalently powered telescope and laser. Putting such a satellite in a polar orbit ...

Fiber Optic Lasers Soon to Blast Space Junk
Times Gazette - Apr 18, 2015
An international team of researchers led by Japan's Riken Research Institute is making an ambitious plan to clear the increasingly dense layer of space junk around the planet by blasting it with fiber optic lasers. Nets, lassos, ballistic gas clouds, dead satellites ...

Japanese researchers plan to obliterate space debris by shooting space lasers at it
Techworm - Apr 18, 2015

In a paper published in the latest issue of the journal Acta Astronautica, the researchers proposed a method that basically involves blasting an estimated 3,000 tons of debris through a fiber optic laser mounted on the ISS. The researchers have proposed a two ...

Bzzzt! Scientists Want To Use Laser To Clear Space Debris
Tech Times - Apr 18, 2015
When debris is spotted and located, the system gives instruction for the laser to focus intense pulses of light into it. The process, also called plasma ablation, would result in one side of the object heating up and turning into plasma, which would eventually ...

Space Lasers To Remove Space Debris? Japanese Researchers Present ...
International Business Times - Apr 18, 2015
In a paper published in the latest issue of the journal Acta Astronautica, the researchers proposed a method that basically involves blasting an estimated 3,000 tons of debris through a fiber optic laser mounted on the ISS. This, the researchers claimed, would ...

Scientists Want to Go at Space Debris with Lasers – Yes, You Read it Right
Modern Readers - Apr 18, 2015
And if the Riken group's plans do pan out, a full-scale version may be installed on the ISS. Team leader Toshikazu Ebisuzaki says that this will include a three-meter telescope and a 10,000-fiber laser, with the system capable of de-orbiting debris within 100 ...

Space Debris to be blasted by lasers to ensure safety of ISS and clear up the ...
Times Gazette - Apr 18, 2015
Researchers are proposing a novel method to do away with the layer of space junk or debris including dead satellites orbiting our planet. Japan's Riken research institute has proposed to blast the space debris estimated to be almost 3000 tons using fiber ...

Laser mounted on ISS to blast 3000 tons of Space Junk
Maine News - Apr 18, 2015
According to reports, the fiber optic laser mounted on the International Space Station (ISS) will blast about 3,000 tons of space junk out of the sky. The idea to clean the space with lasers came from a team of researchers led by Japan's Riken research institute.

Blasting away space junk with freakin' lasers
RedOrbit - Apr 18, 2015
Tiny bits of space junk are continuously orbiting the Earth, and you can imagine this is dangerous for spacewalking astronauts. So, an international team of scientists has recently developed a blueprint for cleaning up the mess with a high-powered laser, ...

Space Debris Can Be Removed, Destroyed Using Fiber Optic Laser: Study
Pioneer News - Apr 18, 2015
Getting rid of space debris is a serious issue for scientists who are concerned for the protection of Earth. Our planet too is equipped with rings like that of Saturn, but these are debris of no longer functioning man-made satellites and other such similar remains.

Lasers Might Be Used To Rid Of Space Debris Soon
CrazyEngineers - Apr 18, 2015

The Japanese researchers believe that since this system has wide field of view and powerful optics it can be modified to detect high-velocity debris fragments at twilight. The second part of the proposed system requires a fibre optic CAN laser that is found in ...

Space debris: Track and shoot system that is fast and cheap being studied
International Business Times UK - Apr 18, 2015
Combining data from the super-wide field-of-view EUSO telescope with a high-efficiency laser system that shoots high power beams and removes the objects, the team is confident of removing dangerous debris in low earth orbits. The intense laser beam ...

Scientists wants to blast debris in space with the laser
The Market Business - Apr 17, 2015
Now, a global team of analysisers semiconductor diode by Japan's Riken research institute has recommend what is also the foremost bold conceive to date. They propose blasting associate calculable three,000 heaps of area junk out of orbit with a fiber optic ...

Scientists want to blast space junk with lasers
National Monitor - Apr 17, 2015
"If that goes well," Riken team leader Toshikazu Ebisuzaki said in a statement, "we plan to install a full-scale version on the ISS, incorporating a three-meter telescope and a laser with 10,000 fibers, giving it the ability to deorbit debris with a range of ...

Scientists Propose Blasting Space Debris With A Laser
Immortal News - Apr 17, 2015
The Riken team's plan, which was recently published in the journal Acta Astronautica, entails the fastening of a fiber optic CAN laser to the International Space Station (ISS). Once mounted, it would be used to blast space junk identified by the Extreme ...

Scientists propose new way to clear space debris
American Register - Apr 17, 2015
Whether it's old satellites, parts of rockets, or even smaller fragments of trash caused by collisions between larger bits of flotsam and jetsam, space debris is growing by leaps and bounds. Official figures say that the amount of detritus in orbit almost doubled ...

Scientists want to blast space debris with frickin' lasers
Engadget - Apr 17, 2015
If that goes well," Riken team leader Toshikazu Ebisuzaki said in a statement, "we plan to install a full-scale version on the ISS, incorporating a three-meter telescope and a laser with 10,000 fibers, giving it the ability to deorbit debris with a range of ...

New 'Space Trash' Laser May Tidy Up Earth's Orbit
Sputnik International - Apr 17, 2015
“We realized,” said lead researcher Toshikazu Ebisuzaki, “that we could put it to another use. During twilight, thanks to EUSO's wide field of view and powerful optics, we could adapt it to the new mission of detecting high-velocity debris in orbit near the ISS.” ...

A blueprint for clearing the skies of space debris
(e) Science News (press release) (registration) - Apr 17, 2015

"If that goes well," says Ebisuzaki, "we plan to install a full-scale version on the ISS, incorporating a three-meter telescope and a laser with 10,000 fibers, giving it the ability to deorbit debris with a range of approximately 100 kilometers. Looking further to the ...

A blueprint for clearing the skies of space debris
ECNmag.com - Apr 17, 2015
"If that goes well," says Ebisuzaki, "we plan to install a full-scale version on the ISS, incorporating a three-meter telescope and a laser with 10,000 fibers, giving it the ability to deorbit debris with a range of approximately 100 kilometers. Looking further to the ...

A blueprint for clearing the skies of space debris
ScienceBlog.com (blog) - Apr 17, 2015
“If that goes well,” says Ebisuzaki, “we plan to install a full-scale version on the ISS, incorporating a three-meter telescope and a laser with 10,000 fibers, giving it the ability to deorbit debris with a range of approximately 100 kilometers. Looking further to the ...

New Laser May Blast Space Junk Out of Orbit from the ISS
Science World Report - Apr 17, 2015
Space debris is continuously accumulating as a result of human space activities. It consists of artificial objects orbiting Earth. In fact, the number of objects in orbit has nearly doubled from 2000 to 2014 and has become a major obstacle to space development.

A blueprint for clearing the skies of space debris
R & D Magazine - Apr 17, 2015
"If that goes well," says Ebisuzaki, "we plan to install a full-scale version on the ISS, incorporating a three-meter telescope and a laser with 10,000 fibers, giving it the ability to deorbit debris with a range of approximately 100 kilometers. Looking further to the ...

A blueprint for clearing the skies of space debris
Nanowerk - Apr 17, 2015
“If that goes well,” says Ebisuzaki, “we plan to install a full-scale version on the ISS, incorporating a three-meter telescope and a laser with 10,000 fibers, giving it the ability to deorbit debris with a range of approximately 100 kilometers. Looking further to the ...