

# Science China Newsletter, March 2020

## Trends in education, research, innovation and policy



Guizhou, China

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## Swiss Spotlight

### Scientist: Intellectual Property and Competition Law

(Peter Georg Picht, March 31, 2020)

Peter Georg Picht holds a chair for Business and Commercial Law at the University of Zurich and is head of the University's Center for Intellectual Property and Competition Law (CIPCO). He is affiliated to the Max Planck Institute for Innovation and Competition (Munich) as a Senior Research Fellow, he works as Of Counsel at the law firm Schellenberg Wittmer (Zurich), and is visiting professor at King's College (London). Peter Georg Picht studied law in Munich, holds a master's degree from Yale Law School, and did his PhD at Munich University / the Max Planck Institute. In autumn 2018 and 2019, he visited Shanghai International College of Intellectual Property at Tongji University for a seminar of international competition law. Peter Georg Picht's academic teaching and writing, as well as his counseling activity, focus on intellectual property law, competition law, international private and procedural law.



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### Startup: Authenticity and Transparency through Blockchain-Technology

(collectID, March 31, 2020)

Founded by University of St. Gallen alumnus David Geisser, collectID is a product authentication ecosystem with currently over 10 employees. collectID safeguards consumers from accidentally buying fakes and gives them the possibility to collect their beloved items and trade them easily with their smartphone. collectID helps Brands to guarantee the authenticity of their products at any time by creating a digital twin of the products on the blockchain. Additionally, brands create a unique and continuous communication channel based on their products through which they can communicate individually with their consumers. collectID is constantly expanding into new markets and has already built up a strong collector's community in Europe. With the help of Swissnex China, we will continue our expansion strategy in China. China is an emerging and fast-growing market for limited edition items such as sneakers, clothing, handbags and watches. China is responsible for 50% of the demand in the luxury industry worldwide. This means collectID needs to expand its business to China.



[/web/2020/00-200331-94](#)

### Latest Data on Novel Coronavirus

(China Daily, March 19, 2020)

[https://www.chinadaily.com.cn/china/special\\_coverage/2020latestdata](https://www.chinadaily.com.cn/china/special_coverage/2020latestdata)

[/web/2020/00-200319-32](#)



## 1. Policy

### Protection of IP Rights Gets Further Boost

(China Daily, March 02, 2020)

China is speeding up the processing of patent and trademark reviews and improving legal protection for intellectual property rights owners after the nation saw such applications grow rapidly in recent years, the country's top IP regulator said. By the end of 2022, the processing time for an invention patent application will be cut to 16.5 months and that for a high-value patent application to about 13.8 months, the National Intellectual Property Administration said in a recent statement. In addition, the average time for reviewing a trademark application will also be reduced to within four months - the fastest worldwide, according to the statement.



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### Biosecurity Seen as Top Legal Priority

(China Daily, March 02, 2020)

China will speed up its legislative process for creating biosecurity laws and relevant legal mechanisms so as to integrate biosecurity risk management into overall national security, Senior Colonel Wu Qian, spokesman of the Ministry of National Defense, said on 2nd March. Wu said enhancing biosecurity is a common practice by many nations, and the international community has always attached great importance to biosecurity issues. China has recently integrated biosecurity into its overall national security, thus systematically ensuring better protection for public health, national security and the long-term stability and prosperity of the nation, he said.

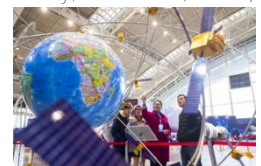


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### Beijing to Support for Beidou Navigation Satellite Industry

(China Daily, March 05, 2020)

The Beijing municipal government has released a three-year plan to promote the innovation and development of industries related to the BeiDou Navigation Satellite System. Beijing will foster breakthroughs in key and core technologies, and create a sound ecology for Beidou-related industries via cultivating competitive enterprises, according to the plan. The total output value of the Beidou navigation and location service industry in Beijing will exceed 100 billion yuan (about \$14.4 billion) by 2022, it said. Beijing will also build an innovation center for Beidou-related industries with global influence and set up a standard application system. Beijing will set up seven major demonstration projects to promote the application of the Beidou system in smart transportation, environment protection and intelligent logistics, according to the plan.



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## Empowering SMEs With Digital Technologies

(China Daily, March 19, 2020)

China detailed measures on 19th March in a guideline to fuel the use of digital technologies among small and medium-sized enterprises (SMEs), as part of efforts to tide them over the tough time. The country will support the use of information technology in controlling the novel coronavirus so that SMEs can resume work in an orderly manner, according to the Ministry of Industry and Information Technology (MIIT). The ministry will support SMEs in applying digital tools such as video conference to resume operation and encourage online office software developers to upgrade services and lower the costs for SMEs. The MIIT will also promote the use of cloud services among SMEs to allow them access more resources and launch training programs to help them be more digital-savvy.



[/web/2020/01-200319-2a](#)

## 2. Education

### Schools start Classes again

(China Daily, March 12, 2020)

Classes resumed at some schools in Qinghai province, and more provinces are expected to follow suit, as the novel coronavirus outbreak is brought under control. Qinghai's provincial government said its senior high schools and secondary vocational schools had been given the green light to resume classes, followed by junior middle schools to reopen as well. The province's colleges and universities, including vocational colleges, started e-learning classes on March 1 in accordance with Ministry of Education regulations, the government said in a statement issued on Feb 28, adding that the starting date for the new semester for primary schools, special education schools and kindergartens had yet to be decided. Other provinces where the risk of virus transmission is low will follow suit soon.



[/web/2020/02-200312-dc](#)

### Ministry Moves to Ensure Pay Raise for Teachers

(China Daily, March 17, 2020)

An education supervising office under China's Ministry of Education has issued a circular, urging the implementation of measures and policies to boost the income of teachers in compulsory education schools. A round of inspection and guidance work will be launched to check local work progress in meeting a previously set goal scheduled to be achieved by the end of the year, which promised that the average salaries of teachers in compulsory education schools shall be no lower than the average salaries of civil servants in the same region, according to the circular. Both local self-checks and national inspection will be carried out, and regions with serious problems will be held accountable, the circular said. China's nine-year free compulsory education system covers primary school and junior middle school.



[/web/2020/02-200317-83](#)

## Retired Teachers to Support Universities

(China Daily, March 26, 2020)

The Chinese Ministry of Education has launched a campaign recruiting a batch of retired teachers to support the development of universities in western regions. The veteran teachers are expected to impart advanced teaching methods and scientific research concepts to teachers of the aided universities in Xinjiang Uygur autonomous region and Yunnan province, said the ministry. The campaign aims to ease the pressure of talent shortages that are faced by industries and enterprises in the western areas, said the ministry. About 120 to 140 retired teachers will be selected, said the ministry, adding the first batch of the recruits is scheduled to start in the spring semester of 2020. In addition, the ministry called for more retired teachers to engage in this campaign to better promote the development of universities in western China.

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## 3. Life Sciences / Health Care

### First Lung Transplant for COVID-19 patient

(CGTN, March 01, 2020)

The world's first lung transplant for a patient infected with the COVID-19 was conducted by doctors from east China's Wuxi City. The male patient, 59, is in stable condition after the five-hour surgery. Experts believe that the lung transplant for the severe patient of COVID-19 is of great significance to reducing mortality in the future. The patient, from east China's Jiangsu province, was confirmed to be infected with COVID-19 on January 26. After a series of medical treatments, he had shown negative results for the virus in multiple nucleic acid tests. The patient will be further monitored and completing a follow-up treatment, meanwhile summarizing the experience so as to open the door of hope to more severe patients with COVID-19.

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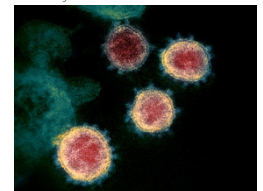


### 10 Rumors about Novel Coronavirus

(China Daily, March 10, 2020)

Since the outbreak of novel coronavirus pneumonia in Central China's Wuhan city, rumors and disinformation about the disease have been spreading, even more quickly than the virus. To dispel fake news and present the truth, here we list some of the rumors spread extensively such as: The novel coronavirus has mutated into a more deadly strain. Recovered patients who test positive again can transmit the virus or Asians are more vulnerable to novel coronavirus.

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### Robots safeguard People's Health after Work Resumes

(China Daily, March 11, 2020)

Robots have been widely used to monitor health conditions after more people have resumed work in Changsha, Central China's Hunan province. These robots can be applied to diverse scenarios and have many health-related functions including checking body temperature, recording data and sending feedback. Some can also



help to disinfect people's hands, which improves work efficiency and reduces human costs.

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## New Antimicrobial Coating to help Combat COVID-19

(China Daily, March 12, 2020)

The Hong Kong University of Science and Technology announced that their researchers had developed a multilevel antimicrobial polymer (MAP-1) coating that can effectively kill viruses, bacteria and even hard-to-kill spores, and may also be effective against the COVID-19. Developed by a team led by Yeung King Lun, a professor of the university's Department of Chemical and Biological Engineering and the Division of Environment and Sustainability, the new MAP-1 coating, using a special blend of anti-microbial polymers, is highly versatile with an effective period of up to 90 days. The coating is designed for use on different surfaces including metals, concrete, wood, glass, plastics as well as fabrics, leathers and textiles without changing the materials' appearance and tactile feel.

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## Universities to Develop virus Testing products

(Xinhuanet, March 17, 2020)

22 universities have been racing against time to develop testing products for the novel coronavirus, including detection kits for nucleic acid and antigen and antibody testing. So far, seven testing kits developed by universities in collaboration with enterprises have been put into clinical use after gaining the approval of the National Medical Products Administration. Apart from meeting the domestic needs for virus testing, the universities' products have played a part in mitigating the surging demand for detection abroad.

[/web/2020/03-200317-47](#)

## Effective Lung Ultrasonography on COVID-19 Patients

(Xinhuanet, March 17, 2020)

Chinese scientists have shared the ultrasonographic features of the novel coronavirus pneumonia and the treatment experience of lung ultrasonography on patients. A medical team used ultrasonography to treat patients severely infected with the novel coronavirus disease (COVID-19) in the long-term fight against the epidemic. Deaths caused by respiratory failure and multiple organ failure have become a major difficulty in the treatment of severe COVID-19 patients. Compared with the early chest computerized tomography (CT), ultrasonography is more effective in screening respiratory failure causes, assessing the severity of the disease, tracking its evolution, as well as providing individualized guidance for treatment.

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## 6 Effective Traditional Chinese Medicines for COVID-19

(China Daily, March 17, 2020)

Traditional Chinese medicine has been playing a critical role in the prevention, treatment and rehabilitation of the COVID-19. Official figures showed that, 91.6 percent of the patients in Hubei province, the epicenter of the outbreak, and 92.4 percent of the patients nationwide have been treated with TCM. "Three formulas and three medicines" have been proven to be effective in curbing the virus, according to the State Administration of Traditional Chinese Medicine.

[/web/2020/03-200317-2d](#)



## New Plant Genome Engineering System

(Xinhuanet, March 18, 2020)

A joint team from China and the United States has established CRISPR-Cas12b, a new genome engineering system for plants. Researchers from the University of Electronic Science and Technology of China and the University of Maryland in the United States said CRISPR-Cas12b is efficient in gene activation and repression. Often known as molecular scissors, the advance in CRISPR, using certain protein like Cas9 as the scissors, has revolutionized biology in recent years. The researchers reported in the journal Nature Plants that compared with the other two CRISPR systems, CRISPR-Cas12b enables researchers to target multiple genes in one step while retaining features of CRISPR-Cas12a. They said their study established CRISPR-Cas12b as the third promising system, after CRISPR-Cas9 and CRISPR-Cas12a, for plant genome editing.

[/web/2020/03-200318-af](#)

## Shenzhen Gene Bank joins Virus Data Program

(China Daily, March 19, 2020)

China National GeneBank in Shenzhen, Guangdong province, announced its strategic partnership with the Global Initiative on Sharing All Influenza Data, a key player in global health security. The CNGB, which began operating in 2016, is the first integrated gene bank in the country. It has played an important role in fighting the novel coronavirus since the epidemic began in China. Up to now, the CNGB has collected 178 sets of genome sequence data related to the virus, which is crucial to helping Chinese researchers identify, retrieve and analyze the virus quickly.



[/web/2020/03-200319-12](#)

## Science Ministry Releases Technologies for Epidemic Control

(China Daily, March 19, 2020)

China's Ministry of Science and Technology has launched an online public service platform to release the latest technologies and innovative products for novel coronavirus epidemic control. The first batch of 283 products was unveiled on the platform earlier this month, including rapid test kits for the virus infection, artificial intelligence-assisted diagnostic systems, efficient temperature check machines and self-cleaning materials used on walls and in elevators. These products cover nine aspects, such as diagnosis and treatment, epidemic prevention and control, work resumption, distribution of medical and living materials and community management, according to a ministry statement. Since its launch on March 2, the platform has solicited more than 2,000 technologies and products, providing sci-tech support for winning the battle against the epidemic, the ministry said.

[/web/2020/03-200319-b6](#)

## CRISPR 'deletes' Memories in Rats

(China Daily, March 25, 2020)

A Chinese research team has achieved "deleting" specific memories of rats in laboratory recently through a genome editing technique, and published a paper on the findings on the Science Advances website. The research team from the Neuroscience Research Institute of Peking University adopted the genome editing technique based on clustered regularly interspaced short palindromic repeats, or CRISPR, to successfully



wipe off fear memory of rats in the experiment. Yi Ming, a researcher in the experiment and co-author of the paper, said that the success would provide new thought in curing refractory pathological memories, such as chronic pain and addiction.

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## 4. Engineering / IT / Computer Science

### Robots, Drones, AI and Big Data bring modern Touch to Disease Control

(China Daily, March 12, 2020)

On Feb 3, medical workers at Wuhan Pulmonary Hospital in the central province of Hubei welcomed a new "comrade", one who had no fear of the novel coronavirus even though he wasn't wearing protective clothing - a robot designed to deliver medication and meals. "Please wear masks and wash your hands frequently during this special period. Let's conquer the difficulties together," the robot intoned as it moved around the Department of Respiratory Medicine.



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### Telecom Giants Accelerate Efforts to Development of 5G

(China Daily, March 19, 2020)

Chinese tech companies are answering the central authorities' call to accelerate efforts to build new telecom and IT infrastructure so as to lay a sound foundation for the development of emerging technologies and to inject new vitality into the nation's digital economy. China Mobile, China Unicom and China Telecom, the big-three telecom carriers, have launched their second phase 5G purchasing plans as part of their joint efforts to build at least 550,000 5G base stations this year. This year, China will invest about 120 billion yuan in 5G infrastructure. In addition to 5G base stations, internet data centers, infrastructure for artificial intelligence, and the industrial internet are also the focuses.



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### Drones are Changing Traditional Farming Methods

(China Daily, March 26, 2020)

The actual start of the season - which includes planting, fertilizing, weeding, and spraying pesticides and herbicides - varies across the country in line with different environments and conditions. Machinery is changing traditional farming methods, and gradually replacing cattle-drawn plows and manual spraying of pesticides. It is also playing an important role in fighting the epidemic, as drones and automatic sprayers have been used to spray disinfectants across large areas of countryside. Drones and automatic spraying machines are now commonly used to spray pesticides and herbicides.



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## AI helping those with Mental Stress Caused by Virus

(China Daily, March 30, 2020)

A new computer program is helping those weighed down by the mental stress caused by the virus. As an expert in artificial intelligence, Huang, senior researcher at Vrije University of Amsterdam, the Netherlands, has established a group of volunteers, including psychological counsellors and medical AI experts, to support critically ill patients who post messages online asking for help. Intelligent Agent uses algorithms to identify such messages on social media platforms and produce a report that details the subject's name, city, age, specific location, contact number and symptoms.

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## 5. Energy / Environment

### Expansion of Solar Production Capacities

(PV magazine, March 02, 2020)

Three more PV manufacturers are jostling to announce plans to invest in an expansion of production capacities as the industry appears to make light of coronavirus fears. State-owned China Hua Neng Group Hong Kong Ltd is no longer intending to acquire 51% of GCL-Poly Energy Holdings Ltd. They will only acquire the most profitable projects and business units. First-half figures published by the project development business in August revealed the attractiveness of some of those coveted Chinese PV projects, with the company reporting a 22% rise in the volume of energy generated compared to the second half of last year, from a 7,128 MW portfolio.

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### BYD has most Efficient Battery Storage Solution

(PV magazine, March 10, 2020)

Berlin University for Technology and Economy evaluated the efficiency of leading energy storage systems in combination with different inverters. The Battery-Box system by Chinese BYD Co Ltd, one of the world's largest manufacturer of rechargeable batteries, has been ranked as the most efficient energy storage system for the third consecutive time. They looked into general system efficiency, taking into account factors such as different energy conversion pathways, dynamic control losses and settling times. In a less-efficient tested system, almost 1,100 kWh would be lost annually due to high conversion losses. That's 600 kWh more than with the top-ranked combination of Fronius and the BYD Battery-Box.

[/web/2020/05-200310-db](#)

### 120 MW Glass-Glass Bifacial Module Order

(PV magazine, March 11, 2020)

United Renewable Energy has signed a memorandum of understanding to supply project developer Ye Heng Power with 120 MW of its solar panels. It plans to start shipping the PV modules in the second half. The 180 MW solar project that Ye Heng Power is building will be the largest offshore solar plant in Taiwan upon completion. Ye Heng Power - a project company owned by Partners Group, a Switzerland-based asset management firm - will install the solar panels at a site in Lunwei district, in the Changhua Coastal



Industrial Park, on the west coast of Taiwan.

[/web/2020/05-200311-da](#)

## China reduces Solar and Offshore Wind subsidies by Half

(Smart Energy International, March 13, 2020)

China's National Energy Administration (NEA) has confirmed the halving of solar subsidies to \$214 million for 2020, as well as the complete scrapping of subsidisation for offshore wind projects. \$143 million of the solar budget will be allocated to the construction of large scale projects, including industrial and commercial distributed generation plants. Residential rooftop solar has been allocated a total of \$71.48 million. Offshore wind will only become eligible for subsidisation in 2021, as per news site CX Tech.



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## Chinese-French Offshore Wind Farm

(4C Offshore, March 17, 2020)

China Energy, a state-owned mining and energy company, has signed an agreement with French electric utility company EDF Group to jointly develop offshore wind power projects in eastern China's Jiangsu Province. The agreement represents a total investment of USD 1.07 billion and is the first of its kind in offshore wind power with both domestic and foreign investment. It covers two projects with a combined installed capacity of 502 MW. The projects are located off the coast of the city of Dongtai in Jiangsu Province and are expected to generate 1.39 billion kilowatt-hours of electricity each year, meeting the annual electricity demands of nearly 2 million residents.

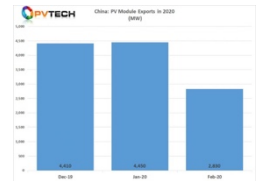


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## Solar Exports fall 57% in February 2020

(PV Tech, March 19, 2020)

China solar exports fall over 57% month-on-month in February 2020. COVID-19 and further restrictions to manufacturing re-starts and travel restrictions, as expected, had a significant impact on PV module exports from China in February, according to the latest official figures. Solar component shipments were up slightly in January from the previous month, which stood at around 4.45GW, yet were down 35% from around 6GW in the prior year period.



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## Polestar launches Serial Electric Car Production

(Electrive, March 24, 2020)

In Luqiao, China Polestar has kicked-off series production of the Polestar 2 BEV which is rolling off the assembly lines in Luqiao as of today. The Volvo subsidiary's all-electric car is to be launched on the European market first, with deliveries planned to start summer 2020 before coming to the US and China. The Luqiao plant is also intended to leverage synergies between Polestar, Volvo and the parent company Geely. For example, the plant is owned by Zhejiang Geely Holding and is operated by Volvo Cars and is now building the Polestar electric car. In its current version with four-wheel drive, two electric motors with a system output of 300 kW and a range of 470 kilometres, the Polestar 2 is available for \$63,000. A simpler version, probably with only one electric motor,



will follow later.

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## Tesla Model 3 is most Sold EV

(CleanTechnica, March 25, 2020)

Due to the coronavirus, Chinese EV sales took an expected beating, with only 15,000 passenger EVs registered in February, representing a 65% drop year over year. One positive sign from the February numbers was the return to a BEV-friendly market, with BEVs dropping only 57% while plug-in hybrids (PHEVs) fell 81%. February's top 5 best selling models: Tesla Model 3 delivered 2,284 units, BYD Qin Pro EV comes second with 1,477 sales, GAC Aion S, BAIC EU-Series and NIO ES6 take the places three to five.



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## BYD Claims New EV Battery Resists Fire While Maintaining Range

(Autoblog, March 30, 2020)

Chinese automaker BYD is heralding what it says is a breakthrough in battery safety in electric vehicles as it launches its Blade Battery, a design that it claims has 50% higher energy density than a conventional battery packs while safeguarding against thermal runaway-induced fires that have plagued some EVs. The new battery uses a lithium iron phosphate chemistry but does away with conventional battery-pack architecture. It removed the traditional modules and beams that normally give a battery pack its support and fixation to improve space utilization. Lithium iron phosphate has a very stable chemical structure that resists catching fire, heats up slowly, limits heat release during a collision and releases no oxygen, which is highly conducive to feeding fires.



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## 6. Physics / Chemistry / Material Science / Nano- & Micro Technology

### Lunar Rover Travels Nearly 400m on Moon's Far Side

(Xinhuanet, March 02, 2020)

China's lunar rover Yutu-2, or Jade Rabbit-2, has driven 399.788 meters on the far side of the moon to conduct scientific exploration of the virgin territory. Both the lander and the rover of the Chang'e-4 probe have ended their work for the 15th lunar day, and switched to dormant mode for the lunar night, according to the Lunar Exploration and Space Program Center of the China National Space Administration. China's Chang'e-4 probe, launched on Dec. 8, 2018, made the first-ever soft landing on the Von Karman Crater in the South Pole-Aitken Basin on the far side of the moon on Jan. 3, 2019.

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### Key Test completed for Nuclear Power Unit

(China Daily, March 05, 2020)

China's first nuclear power unit using Hualong One technology, a domestically developed third-generation reactor design, has completed a key test, according to China National Nuclear Corporation (CNNC). The successful hot functional test on the power unit, which was completed in the eastern Chinese city of Fuqing,

marked an important step in the development of the unit before the process of fuel loading, according to CNNC. Hualong One reactors were jointly designed by two nuclear power giants, China General Nuclear Power Group and the CNNC, and passed inspection by a national panel in August 2014. The nuclear power unit, which began construction in 2015, is expected to start operation this year. At present, CNNC has five Hualong One nuclear power units under construction.

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## New System to Find Fallen Rocket Debris

(China Daily, March 18, 2020)

China's Xichang Satellite Launch Center on 18th March announced the development of a new positioning system that can greatly shorten the time searching for rocket debris. The system has proved efficient in seeking out fallen rocket pieces after the center launched the 54th BeiDou satellite into space on March 9. The satellite was sent into space by a Long March-3B carrier rocket. With the guidance of the system, the center staff just spent 25 minutes finding the rocket boosters, while in the past, it would take them several hours or even half a month to complete such a task.



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## Spallation Neutron Source Starts New Experiments

(Xinhuanet, March 20, 2020)

The China Spallation Neutron Source (CSNS), located in Dongguan city, south China's Guangdong Province, has started this year's first round of user operation, according to the Institute of High Energy Physics (IHEP) under the Chinese Academy of Sciences. The first user of this year's field experiments, a research team from the University of Science and Technology of China, aims to use neutron imaging technology for archaeological research. The CSNS has taken measures to ensure the health and safety of users amid the COVID-19 outbreak, providing protective services including airport pick-up and drop-off, single room accommodation, meal delivery and free masks. A total of six experiments, mainly involving new materials, have been completed since the CSNS reached its design beam power of 100 KW in February, a year and a half ahead of schedule.

[/web/2020/06-200320-2c](#)

## Completes New Large Solar Telescope

(China Daily, March 24, 2020)

Scientists from the Chinese Academy of Sciences announced that they have built the country's first and one of the world's largest solar telescope, to better observe and forecast solar activity. The Chinese Large Solar Telescope (CLST), with a 1.8-meter aperture, was developed by the academy's Institute of Optics and Electronics. It caught the first batch of high-resolution images of the solar atmosphere on Dec. 10, 2019, an academy statement said. As solar activity are increasingly frequent, space weather events will become more severe. In the future, the solar telescope will be used to observe solar activity, offering data support for solar research and space weather forecast, Rao said.

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## 7. Economy, Social Sciences & Humanities

### China's Club Scene Learns to Livestream

(China Daily, March 12, 2020)

At 10 pm, Lu Yiting in her pajamas turned off the lights at her Beijing home, tuned in a livestreaming music remix channel on her iPhone and danced to the disco beats. "Online disco dancing, though not as intense as in nightclubs, offers an outlet for emotions, and adds some color to my dull, stay-at-home life," Lu says. Since the outbreak of the coronavirus disease, Lu has been at home for over a month. Nightclubs, among other entertainment venues across China, have also been closed to prevent the gathering of crowds. It was Lu's first "cloud disco dancing" experience. On her smartphone screen, participants sent their locations and comments, and some sent virtual presents to the DJ in order to let their profile pictures linger for a longer time.



[/web/2020/07-200312-d6](#)

### 'Contactless' Economy Spawns New Growth Drivers for Consumption

(Xinhuanet, March 19, 2020)

New consumption and retail models emerged from China's "contactless" economy amid its battle against the novel coronavirus outbreak are fueling consumption momentum as new growth drivers. Despite the short-term economic repercussions of the outbreak, China's consumption has showed strong resilience. The hard-won growth came amid a broader downturn in the country's retail sector. Affected by the outbreak, retail sales of China's consumer goods, a major indicator of consumption growth, declined 20.5 percent in the first two months of this year. Hotels, restaurants, barber shops, department stores and shopping centers were among the hardest-hit sectors, with far fewer customers since the outbreak. Facing the challenges, China's consumer industries have been revamping themselves, resorting to tech tools to adapt to the new consumption trend.

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### Fiscal Revenue Down in First Two Months

(Xinhuanet, March 24, 2020)

China's fiscal revenue went down 9.9 percent year on year to 3.52 trillion yuan (about 496.2 billion U.S. dollars) in the first two months of 2020, official data showed on 24th March. The central government collected 1.72 trillion yuan in fiscal revenue, down 11.2 percent year on year, while local governments saw fiscal revenue dip 8.6 percent to about 1.8 trillion yuan during the January-February period, according to data released by the Ministry of Finance (MOF). In breakdown, revenue from domestic value-added tax in the period slid 19 percent from one year earlier to about 1.17 trillion yuan, while that from domestic consumption tax stood at 334.6 billion yuan, down 10 percent from a year earlier, according to the ministry.

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### Wuhan starts Reopening Railway, Flight Services

(China Daily, March 28, 2020)

Wuhan, the capital city of Hubei province and the epicenter of the novel coronavirus outbreak in China, is starting to reopen its railway and flight services after more than two months of a lockdown and transportation suspension, according to local authorities and the country's civil aviation administrator. The city restarted its service



for trains arriving in its 17 railway stations, while departure service will not open until April 8 when the city's lockdown will be lifted, the local railway bureau said.

[/web/2020/07-200328-f0](#)

## Reverse Repo Rate cut to Facilitate Lending

(Xinhuanet, March 30, 2020)

China's central bank pumped liquidity into the market through seven-day reverse repos while cutting the interest rate by 20 basis points to lower lending costs and offset the economic shock of the novel coronavirus disease (COVID-19) outbreak. The People's Bank of China (PBOC) injected 50 billion yuan (about 7 billion U.S. dollars) into the market through the seven-day reverse repos at an interest rate of 2.2 percent, the central bank said in a statement on its website. Before Monday's move, the PBOC has skipped reverse repos for 29 straight trading days. A reverse repo is a process in which the central bank purchases securities from commercial banks through bidding, with an agreement to sell them back in the future.

[/web/2020/07-200330-6d](#)

## 8. Corporates / Startups / Technology Transfer

### Alibaba Launches New Lab on 5G Research

(China Daily, March 10, 2020)

Alibaba's scientific research arm Damo Academy announced on 10th March that it has established the XG Lab to study on next-generation network communication technologies. The new lab, which currently focuses on the collaborative development of 5G technologies and applications, will hammer at the research of video codec technology and network transmission protocols for the 5G era, as well as formulating relevant standards. Relying on Alibaba's application ecosystem, the research is expected to be adopted in various scenarios including ultra high definition video, online office, AR/VR, industrial internet, smart logistics and autonomous driving, the academy said.



[/web/2020/08-200310-60](#)

### Chinese Autonomous driving Startup Momenta partners with Toyota on HD Maps

(Xinhuanet, March 18, 2020)

Chinese autonomous driving solution provider Momenta established a strategic partnership with Japanese automaker Toyota Motor Corporation to develop a high definition mapping service for self-driving vehicles in China. The two companies will jointly promote the commercialization of Toyota's automated mapping platform in the Chinese market and better serve Chinese customers. Cao Xudong, CEO of Momenta, said the map, supported by visual positioning and perception technology based on deep learning, will achieve automatic high-precision mapping with a relative accuracy of 10 cm, using only consumer-grade sensors.

[/web/2020/08-200318-ec](#)

## MegEngine Deep Learning Platform now Open Source

(China Daily, March 25, 2020)

Chinese artificial intelligence pioneer Megvii Technology Ltd announced that it would open source its proprietary deep learning framework, MegEngine, to allow global developers to create AI solutions for industrial and commercial scenarios. The move also is tended to foster an ecosystem around its new generation AI productivity platform Brain, which the company said will build better new infrastructure for the development of AI in the country. Initially developed in 2014 and now in its eighth edition, MegEngine is one of three primary components of the Brain architecture that Megvii built from scratch to train computer vision algorithms at scale.



[/web/2020/08-200325-86](#)

## 9. Call for Grants/Awards

### China to Help World in Virus Battle

(China Daily, March 11, 2020)

State Councilor and Foreign Minister Wang Yi said on that China is paying close attention to the global development of the novel coronavirus pneumonia epidemic and that international cooperation is imperative in tackling the threat. Further, Iraqi Foreign Minister Mohamad A. Alhakim told Wang that Iraq and China have a long-standing friendship. At the most critical moment of the Iraqi people's fight against COVID-19, China provided selfless assistance by sending Baghdad supplies and a specialized medical team, he said.



[/web/2020/09-200311-18](#)

### China supports EU in Fight against COVID-19

(Xinhuanet, March 19, 2020)

China stands firmly with the European Union (EU) and supports its anti-epidemic efforts, Chinese Premier Li Keqiang said in a phone conversation with European Commission President Ursula von der Leyen. In the early days of China's fight against the COVID-19 epidemic, EU agencies offered sympathies and coordinated multiple batches of supplies to China. Now, as the epidemic is spreading in EU countries, China empathises with the EU which is in the epidemic situation and facing difficulties, Li said, adding that epidemic prevention and control have no borders.

[/web/2020/09-200319-c0](#)

## Upcoming Science and Technology Related Events

[webinar] Café des Sciences: Qubits and Entanglement

April 16, 2020

<https://is.gd/rWuXN3>

Quantum Computing, Research

Shanghai

[webinar] Exclusive Impact & Efficacy of Virtual Teamwork: How to overcome the challenges of COVID-19

April 29, 2020

<https://is.gd/xODY4M>

Innovation, Communication

Shanghai

[webinar] Future Waste: Smart & Sustainable Plastics and Organics

April 22, 2020

<https://is.gd/xODY4M>

Startups, food waste, recycling

Shanghai, Seoul

Sustainability Week at Tsinghua University

April 20th - 26th, 2020

<https://is.gd/Vtrzwr>

Lectures and conferences

Beijing

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