



2014广州国际车展，有几款引领潮流的概念车，展示新潮的技术方向。

### 广汽丰田领志纯电动概念车

广汽丰田自主研发的纯电动概念车定名为“领志”，英文名为“LEAHEAD”，量产版将在2015年正式发布。

In 2014's Guangzhou International Auto Show, there are some concept cars showing the new technical direction.

### GAC Toyota: LEAHEAD pure electric concept car

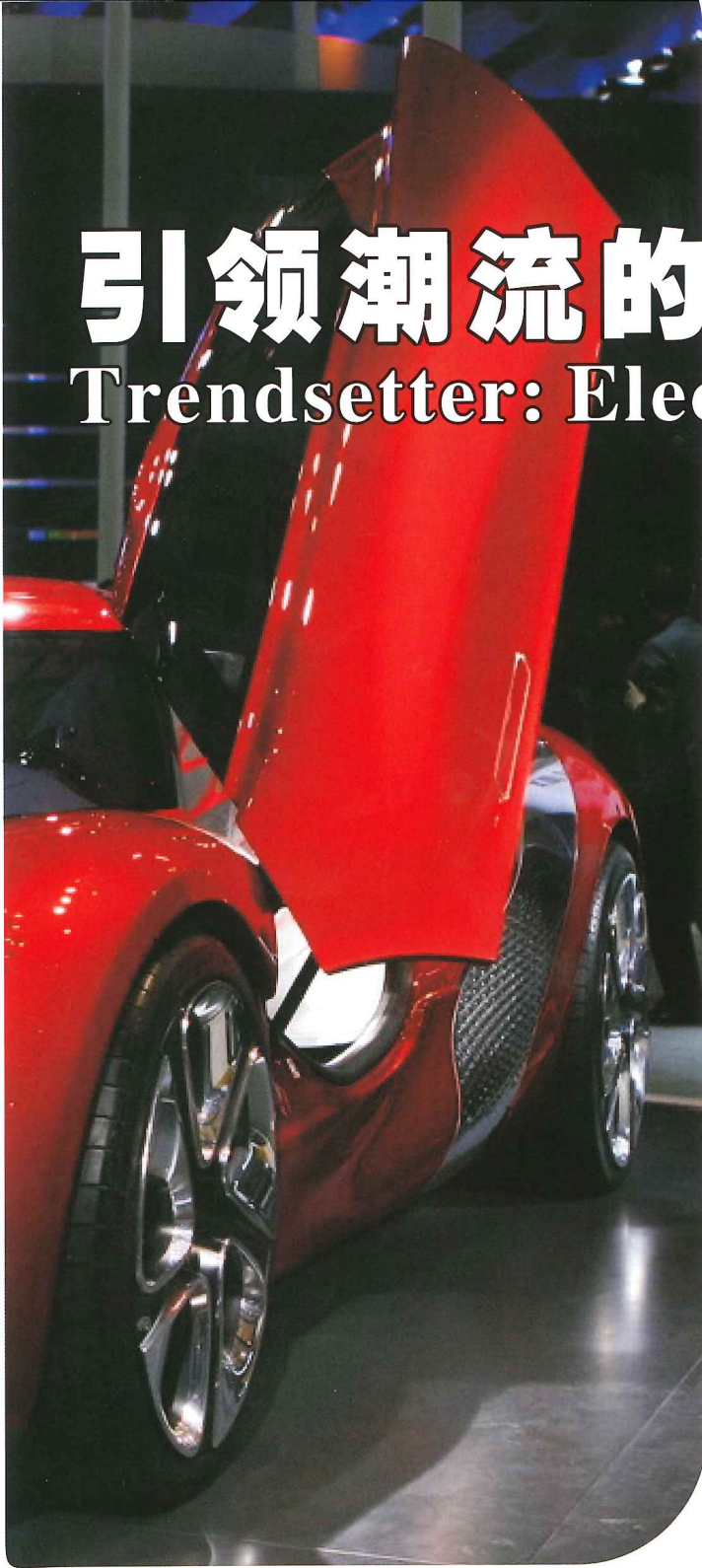
GAC Toyota independently develops its pure electric concept car called "LEAHEAD". Its production version will be released in 2015. The first production model will be developed the basis of the concept car.



# 引领潮流的电动概念车

## Trendsetter: Electric Concept Car

文/ 尚增明 Text/Shang Zengming



首款量产车型将在这款概念车的基础上进行研发。

领志的外观设计呈现浓郁的跨界风格，前脸采用时下流行的贯通式下格栅，雾灯与下格栅连成一体，前大灯造型犀利，整体造型动感十足。

首款车型定位于纯电动汽车，但并未公布的动力参数。

广汽丰田发布的中期规划称，将在2015年推出合资自主品牌“领志”纯电动车型。

Its appearance design presents a crossover style. The front adopts the popular grid. The fog lamps are integrated with the lower grid. The headlamps are impressive in design. The overall design is dynamic. It is a pure electric car, but its dynamic parameters are not yet released. GAC Toyota in its medium-term plan says it will be released in 2015.

### Toyota: FCV fuel cell concept car

Toyota FCV fuel cell concept car was shown in this auto show. Its production version will be listed in Japan in March 2015, then in Europe. This concept vehicle is a new sedan. In the appearance design, the large-size lower and side air intake grilles are used with a strong visual impact. Slender headlamps are integrated with air intake grilles, which stretch from the side to the waist line, so being very styled. Dimensions of the concept car are 4870/1810/1535 mm. The wheel base is 2780 mm.

The concept car just takes three minutes to complete the hydrogen refueling. Mileage is 700 km or so. During the run, it drains only water. It is equipped with two 70 MPA high-pressure hydrogen fuel piles. The motor can provide the output power of 100 KW (136 HP). It takes 10 seconds to accelerate from 0 to 100 km/h.

Toyota will take the lead in domestic sales in Japan. The price is expected to 7 million yen (about RMB 420000 yuan). 400 cars will be sold. In addition, the plan is that it will be sold in the United States and Europe in the summer of 2015. The filling stations and other related preparations are underway.

### Toyota: FT - EV III concept car

Toyota's third generation of FT - EV series concept car is suitable for short-distance travel. It is a kind of pure electric concept car featuring subminiature and lightweight.

Toyota FT - EV III is developed based on IQ platform. although only 3.1 meters long and less than 1.7 meters wide, it can achieve a capacious space for four people.

FT - EV III power system is equipped with lithium battery. After a charge, it can travel 105 km, so very suitable for short-distance travel.

### Audi Allroad Shooting Brake concept car





### 丰田FCV燃料电池概念车

丰田FCV燃料电池概念车在广州车展上国内首发亮相。量产版车型将于2015年3月在日本正式上市，随后在欧洲正式上市。

This concept car is equipped with a "virtual cockpit". It shows the concept of integration and digital technology. It has a new human-computer interaction system.

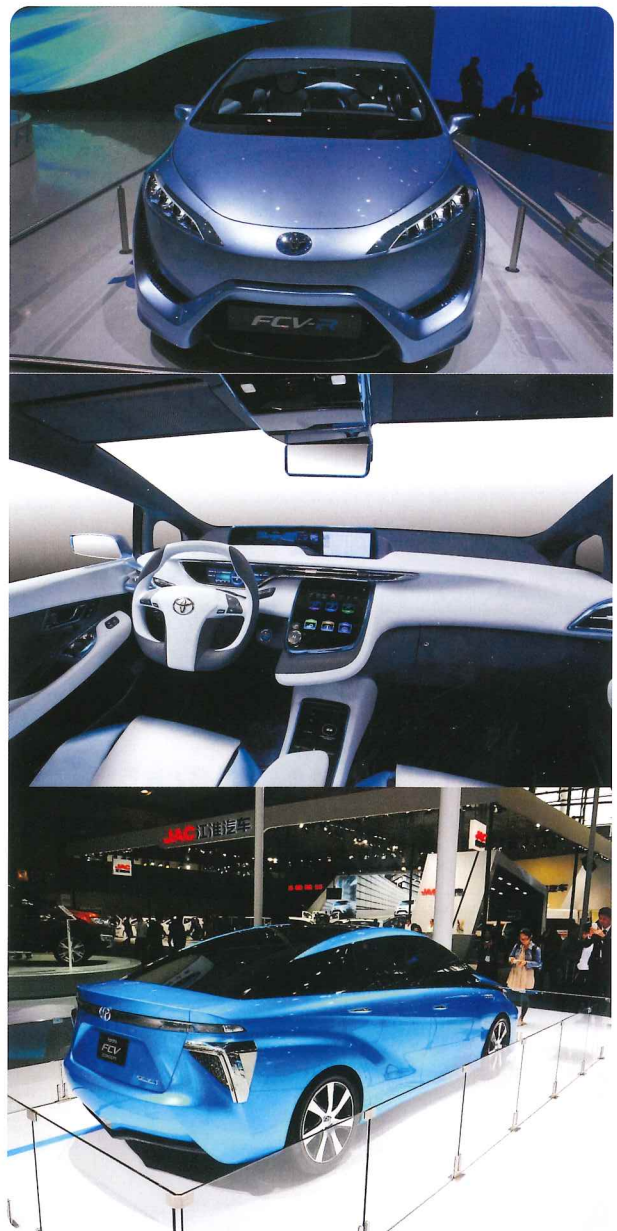
Bright lines, excellent grilles and lights show the low-key and elegance of this concept car. The design of the four headlights



该概念车是一款全新三厢轿车。外观设计采用大尺寸的下进气格栅和侧进气格栅，视觉冲击力很强；细长的前大灯与上进气格栅连为一体，从侧面一直延伸至腰线，极具个性。该概念车的长宽高尺寸分别为4870/1810/1535mm，轴距为2780mm。

该概念车只需3分钟就可以完成氢燃料补给，续航里程达到700km左右，在行驶中排放的只是水。该车将配备了两个70MPa的高压氢燃料堆，电动机可提供100kW(136马力)的输出功率。新车0-100km/h加速时间为10秒。

丰田将率先在日本本土销售，价格预计在700万日元(折合人民币约为42万元)左右，预计销量为400台。此外，计划于2015年夏季，在美国和欧洲地区发售，加氢站等相关准备工作正在进行之中。





## 丰田FT-EV III概念车

丰田FT-EV系列的第三代概念车，是适于短途行驶的“超小型轻量”纯电动概念车。

丰田FT-EV III基于IQ平台开发，车身长度虽然只有3.1米，宽也不到1.7米，却实现了可供4人乘坐的宽敞空间。



FT-EV III动力系统配备锂电池，一次充电可以行驶105公里，非常适合短途行驶。

## 奥迪allroad shooting brake概念车



亚洲首发的奥迪allroad shooting brake概念车，搭载的“虚拟驾驶舱”展现了集成化、数字化的未来科技理念和全新的人机交互系统。



derived from Quattro Model and the the third brake light design lift the lighting system of this concept car to a new level.

This concept car carries a 2.0 TFSI engine and a plug-in hybrid system consisted of two electric motors, and can realize a four-wheel drive, maximum power 408 horsepower and 650 N.m. peak torque. In the condition of being pure electric, it can run 50 kilometers. The mileage under the hybrid mode is 820 km. Ideally, the total output power is 300 kw, and the total torque output 650



N.m. The acceleration from zero to 100km takes just 4.6 seconds. The max speed is 250 km/h and the maximum mileage 50 km. In the acceleration from zero to 100km, it only consumes only 1.9L oil. Only 45 grams per km carbon dioxide is discharged.

## Audi Sport Quattro Laserlight concept car

Audi Sport quattro Laserlight concept car is developed based on the Sport quattro concept car. The rectangular head lamp is very impressive.

With the new Audi TT space frame structure which is light in weight, this concept car is safer, more efficient, and more intelligent. The new MMI multimedia system and the 3D display technology can provide a better man-machine interaction experience.

This concept car adopts a plug-in hybrid system. For the double turbocharged 4.0-liter V8 engine, the maximum power is 412. The maximum torque is 700 N.m. The electric motor can provide power output of 515 kw. The maximum torque is 800 N.m. It has a 8-speed automatic gearbox. Acceleration from zero to 100km is only 3.7 seconds. The top speed is 305 kilometers per hour.

## GAC E-jet range-extended concept car

After being released in the Beijing auto show, it came to





外形耀人眼睛的线条、精雕细琢的格栅及细节丰富的车灯，无不诠释着allroad shooting brake的低调和优雅。源自奥迪经典quattro车型的“四前灯”设计，配合车尾独特的第三刹车灯设计，将汽车的照明系统提升至一个全新的境界。

奥迪 allroad Shooting Brake概念车搭载一台2.0TFSI发动机与两台电动机组成的插电式混动系统，可实现四轮驱动，最大功率408马力，峰值扭矩650牛·米。在纯电动状态下可行驶50公里，混动模式下的总续航里程为820公里。理想状态下，该车总输出功率300kW，总扭矩输出650牛·米，百公里加速仅需4.6秒，极速可达250km/h，最大续航50km。百公里等速油耗只有1.9升，每公里的二氧化碳排放只有45克。

### 奥迪Sport quattro laserlight概念车



奥迪Sport quattro Laserlight概念车定位于双门轿跑，基于Sport quattro概念车改进打造而来，科技感十足的矩形头灯令人印象深刻。

搭载激光大灯的概念车和轻量化科技带入新时代的全新奥迪TT空间框架结构，勾勒出更高效、更安全、更智能的未来汽车生活场景。全新的MMI多媒体系统及3D显示技术可以提供更佳的人机交互体验。

这款概念车采用插电式混合动力系统，4.0升V8双涡轮增压发动机的最大功率为412，最大扭矩700牛·米，电动机可提供动力输出515kW，最大扭矩达800牛·米。与之匹配的是升级的8速自动变速箱，百公里加速时间仅3.7秒，最高时速达305公里每小时。

### 广汽传祺E-jet增程式概念车

传祺E-jet增程式概念车在北京车展发布后，又来到广州车展。这款车在美国大片《变形金刚》系列第四部《绝迹重生》中现身，提高了中国汽车在海外的知名度。

Guangzhou auto show. It appeared in Rebirth as the fourth part of American blockbuster "Transformers" series. So, it raised the public awareness on the Chinese car in overseas.

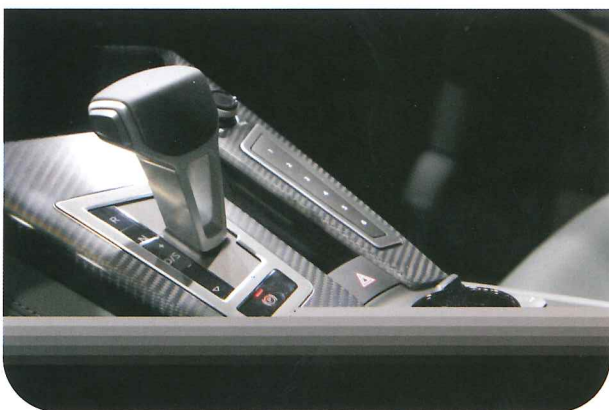
This concept car has four doors and four seats and is developed on the new A platform. It

has a range-extended pure electric drive system. It has two driving modes: pure electric drive and range-extended drive. Body size is 4570/1790/1490 mm, wheelbase 2620 mm. Its overall design is fashionable.

This concept car adopts a range-extended pure electric drive system. It has a 1.0 L inline four-cylinder engine featuring 45 kw maximum power and 82 n · m maximum torque. The peak power is 30 kw for the permanent magnet synchronous motor. It is equipped with the 13 kilowatt-hour lithium-ion battery pack. In the all-electric mode, the maximum mileage is 100km. For 100km, it consumes power of 11.8 kWh.

### GAC WitStar range-extended concept car

WitStar concept car design has a very highly technical sense. Its







传祺E-jet基于广汽自主开发的全新A级平台打造的四门四座车型，并搭载了广汽自主研发的增程式纯电动驱动系统，具备“纯电动驱动”和“增程式驱动”两种驱动模式。车身尺寸为4570/1790/1490mm，前后轴距2620mm，整体造型时尚前卫。

该概念车采用增程式纯电动驱动系统，电力由一台最大功率45kW，最大扭矩82N·m的1.0L直列四缸引擎提供，永磁同步电机峰值功率为30kW。配备的是13千瓦时锂电池组，在纯电动模式下最大续航里程为100公里，百公里电耗11.8kWh。

## 广汽传祺WitStar增程式概念车

传祺WitStar概念车的外形设计极具科技感，配备造型出众的鸥翼门，展示传祺品牌的智能汽车技术方向和设计思路。

该概念车由广汽研究院主导研发，基于自主研发的B级车平台而来，动力搭载增程式纯电驱动系统。

该车能够实现点到点的自动驾驶，驾驶者只需设定出发点和目的地，便可通过概念车内的智能地图识别系统，对目的地进行路线规划，并利用雷达和传感器等硬件识别障碍物，无人驾驶到达目的地。



door is of wing type. It shows the intelligent technical direction and design ideas.

This concept car is developed by GAC Institute based on the development platform for the B-class car. It has a range-extended pure electric drive system. It can realize the point-to-point automatic driving. The driver only needs to set the starting point and destination, then the car can be unmanned to arrive at the destination through the follows: map intelligent recognition system, route planning; radar, sensor and hardware to identify obstacles and so forth.





# 盐水介质电池 能量增大五倍

## Brine Medium Battery Energy to Increase 5-fold

——Quant.e-Sportlimousine概念超跑  
-- Quant. E - Sportlimousine concept supercar

文/ WASHA Text/WASHA

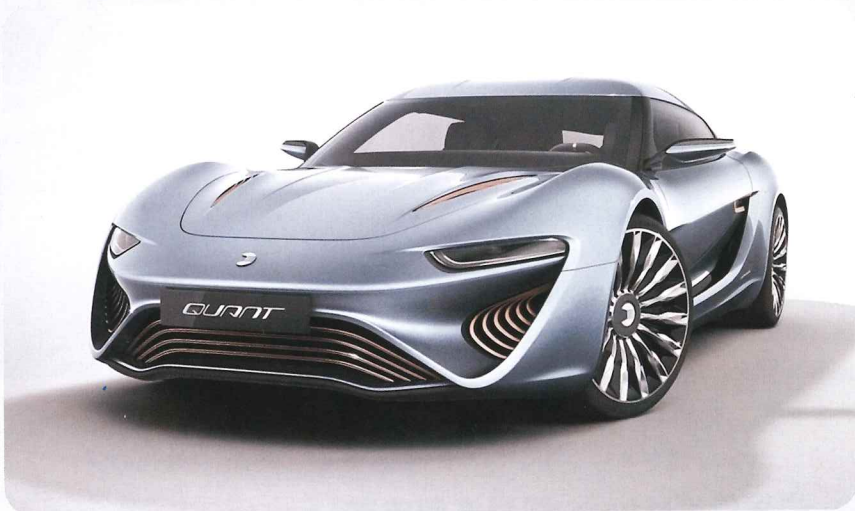
今年日内瓦车展上，列支敦士登能源公司 NanoFlowcell AG开发的 Quant.e-Sportlimousine概念超跑亮相。该车使用 NanoFlowcell-AG公司开发的新型液态电解质电池，这种电池采用盐水作为存储能量的介质，其能量密度比特斯拉的锂电池大5倍。宣告液态电池电动汽车来袭，挑战特斯拉的锂电池纯电动车！

特斯拉在高科技冲击人们生活的今天，它将高科技概念与高端商业模式相融合，迎合了诸多高端消费者的口味，促进电动车销量增加，无疑是成功的。

但是，特斯拉的成功并不代表电动汽车的成功，也不表明电动车型已经走向成熟。因为还有如续航里程、充电时间、成本控制等根本问题没有得到解决。

特斯拉取伟大科学家尼古拉·特斯拉之名，顶级型号 P85D电动车，全长4970mm，宽2187mm，1445mm，总质量为2108kg，搭载两台电动机，最大功率为515kW(700Ps)，最大扭矩为930Nm，从静止加速至96km/h时间为3.2s，最高时速为249km/h，最大行驶里程比P85减少32km，为443km。快充系统充电需要1小时充满电池。P85D售价为9.34万美元。特斯拉不过如此而已！

Quant.e-Sportlimousine超级跑车，全长5250mm，宽2200mm，高1350mm，重量达2300kg。可乘坐四人。跑车有



In this year's Geneva Motor Show, Liechtenstein energy company NanoFlowcell AG launched its Quant. E - Sportlimousine concept supercar. The vehicle uses a new type of liquid electrolyte battery developed by NanoFlowcell - AG, which adopts the brine as medium to store energy. The energy density in it as 5 times as that in lithium battery used by Tesla. It declares the arrival of the liquid battery electric vehicle, which can challenge Tesla's lithium battery type pure electric vehicle.

Tesla in this era when there is a high-tech impact people's lives combines the high-tech concept and the high-end business model, so catering the demand from a variety of high-end consumers, promoting the electric car sales. It is definitely successful.

However, Tesla's success doesn't mean the success of the electric car, and don't show that electric vehicles have been mature. The reason is that there are still some issues such as mileage, charging time and cost control so forth. These problems are not solved radically.

Tesla follows the name of the great scientist Nikola Tesla. Top model P85D electric vehicle features the total length of 4970 mm, 2187 mm wide, 1445 mm high; the total mass of 2108 kg; two electric motors; the maximum power of 515 kw (700 ps), maximum torque 930 nm, acceleration time from 0 to 96 km/h time being 3.2 s, top speed of 249 km/h, maximum mileage 443 km (when compared with P85, the difference is 32 km). Quick charge charging system takes 1 hour to complete the full charge to the battery. P85D is priced at \$93400. Tesla just is like this!

Quant. E - Sportlimousine supercar features the total length of 5250 mm, 2200 mm wide, 1350 mm high, weight 2300 kg. It can take four people. It has two impressive gull wing doors. The entire car is in crystal lake blue. It has a long





两扇令人印象深刻的鸥翼门，全车呈水晶湖蓝色。里面有通长的交互式仪表盘，木主题风格，以及基于Android的娱乐系统。它的售价估计约1.3万欧元左右。如此超跑谁敢应战？

Quant e-Sportlimousine动力系统十分强劲，最大功率680kW，最高350km/h。并且只需要2.8s就可以从0加速到100km/h，性能远超特斯拉，堪比McLaren P1。

Quant e-Sportlimousine与特斯拉的锂电池最大不同之处在于，它使用NanoFlowcell-AG公司开发的一种新型液态电解质电池。这种电池采用盐水作为存储能量的介质，盐水通过两个水箱之间的隔膜形成电荷，电力被储存和分配给超级电容器。它的能量密度比特斯拉的锂电池大5倍，而且充电速度更快，更稳定耐用，也更加环保。

Quant e-Sportlimousine自带两个200L盐水水箱，同时为四台电动机（每个车轮一台）提供能量，一次充电可以行驶600km。

NanoFlowcell AG公司董事长让-彼得·埃勒曼(Jens-Peter.Ellermann)表示：我们已经制定更大计划，盐水电池有巨大潜力，不仅可应用在汽车行业中，还可用在能源供应、海上、铁路以及航空领域。

特斯拉算是最成功的电动车，但是比起盐水电动汽车来仍然十分渺小。这款采用盐水为燃料的液态电池电动汽车，届时海水就成了能源，取之不尽，用之不竭。真的看上去很美？不妨拭目以待！



interactive dashboard of wooden style. It also has an entertainment system based on Android. Its price is estimated at about 13000 euros. Who dare to challenge it in the regard?

Quant. E - Sportlimousine power system is very strong. Maximum power 680 kw, max speed up to 350 km/h and only 2.8 s in acceleration from zero to 100 km/h can make it to be more excellent than Tesla and be comparable to McLaren P1.

Quant e - Sportlimousine, when compared with Tesla adopting the lithium-ion batteries has the largest difference in its use of a new type of liquid electrolyte battery developed by NanoFlowcell - AG. This battery uses brine as medium to store energy. The brine, by the diaphragm formed between two water tanks, can generate the charge. The power is stored and assigned to the super capacitor. Its energy density is 5 times larger than that in Tesla's lithium battery. The charging is faster, more stable and durable, also more environmentally friendly.

Quant e - Sportlimousine comes with two 200L brine tanks, which, at the same time, provide the energy for four motors (a motor in each wheel). It can cover a distance of 600 km on a single charge.

NanoFlowcell AG chairman Jens - Peter. Ellermann said, "We have more planning. The brine battery has great potential, being able to be used not only in the automotive industry, but also in energy supply, sea, rail and aviation.

Tesla is one of the most successful electric cars, but it is not comparable to the brine electric car. The brine used by this new liquid fuel cell electric vehicle can be from the sea which is inexhaustible and inexhaustible. It really looks very beautiful? We might as well wait and see!

