What advanced tech will dominate your car by 2025? IBM knows

Guan Zhou

Cars by 2025:

- The IBM study interviewed with 175 executives from automotive OEMs, suppliers, and other leaders in 21 countries.
- Results:
  - Learn
  - Heal and change color
  - Drive with other vehicles
  - Socialize with other vehicles
  - Safety

- Learn:

The cars’ software will learn the tricks that humans use to avoid hazards: for example, braking when a ball bounces into the road, because a child may be chasing it.

- Self-Driving Cars:

Audi Self-Driving Car Completes 560-Mile Trip To Las Vegas For CES 2015. Using GPS signals processed by an onboard computer, it can pass other cars, change lanes and adapt its speed as necessary for driving conditions. It stooped every 100 miles to pick up journalists and other people. Audi said all of the sensors and navigational systems built into its self-driving concept car are “near production ready.”

- Heal and Change color:

Audi A9 Concept Car

The most amazing feature of the car is the single-piece windscreen/roof which is to be designed using a currently undiscovered nanotechnology material. This material will allow the car to repair any damage automatically as well as change color and opacity, changing visibility in both directions.

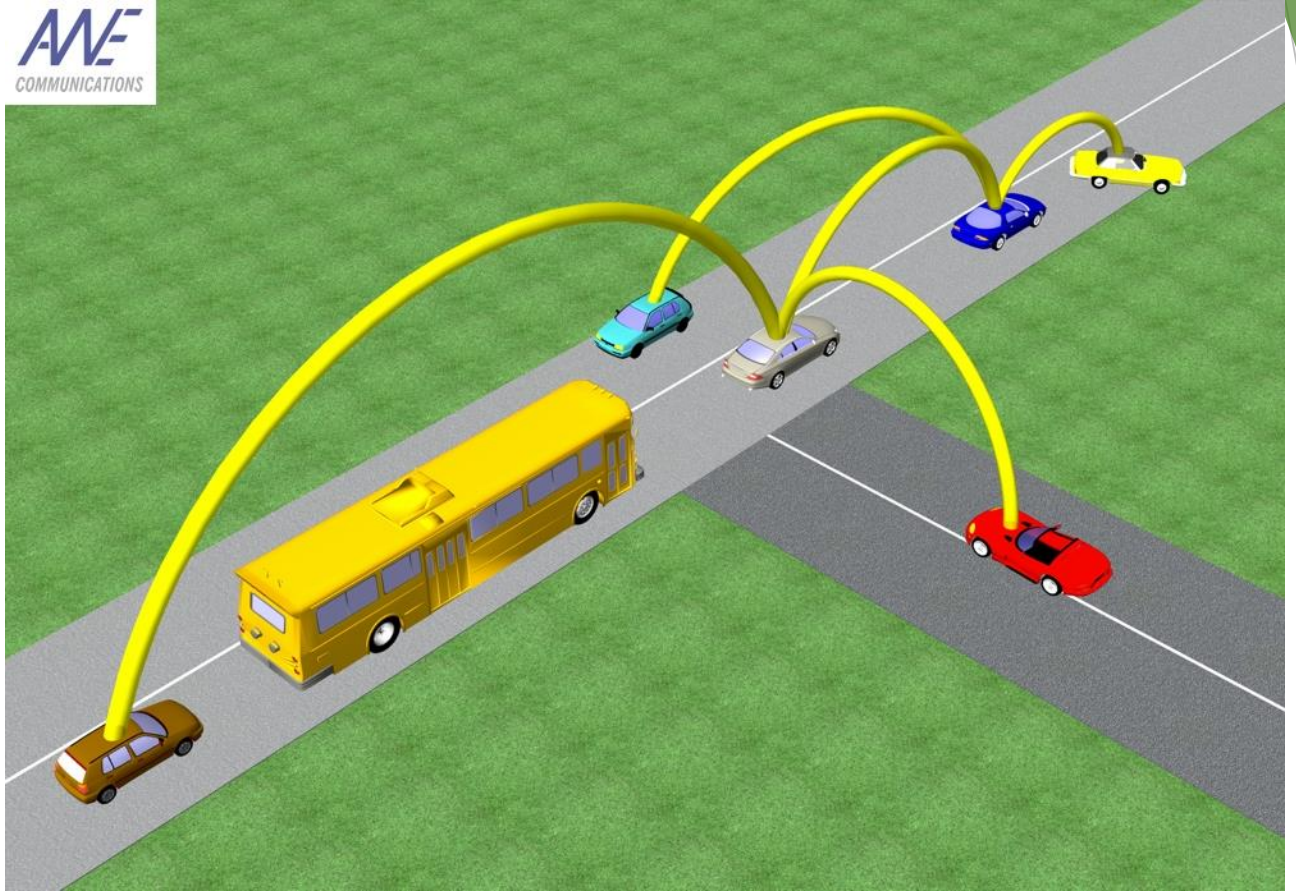
- Heal paint:

When a scratch occurs on the outer coating, the chemical structure is damaged and the chitosan responds to the UV component of sunlight. Chemical chains are then formed with other materials in the coating, eventually filling the scratch. This process can take less than an hour and may eventually lead the “scratch free car” or other products in the future.

- Drive with other vehicles:

'Following Mode' icon is lit on the dashboard screen of an Acura RLX sedan being towed by another car with Honda's virtual tow technology that creates a wireless link between two cars. Systems that enable vehicles to communicate with each other have been developed in recent years in parallel with features that enable cars to drive themselves. Manufacturers and suppliers now are putting the two together in novel ways, with broad implications for vehicle safety and convenience.

- Cars That Communicate with Each Other and the Road:



57% believe vehicle “social networks” would be in place where vehicles would communicate with each other, allowing vehicles to share not only traffic or weather conditions, but information specific to a given automaker. For instance, if a vehicle was experiencing some type of problem not recognized before, it could communicate with other vehicles of the same brand to seek help on what the issue might be.

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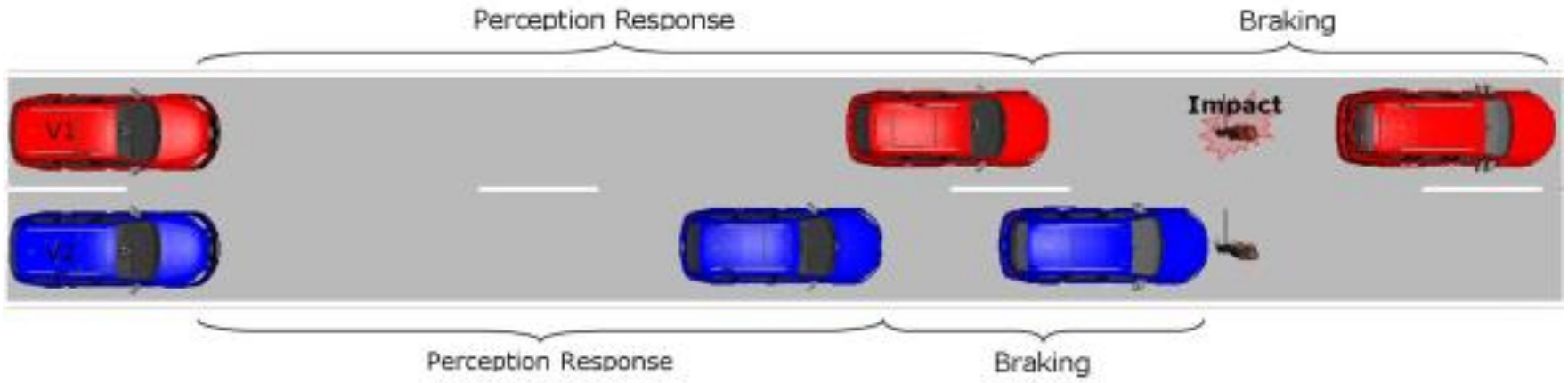


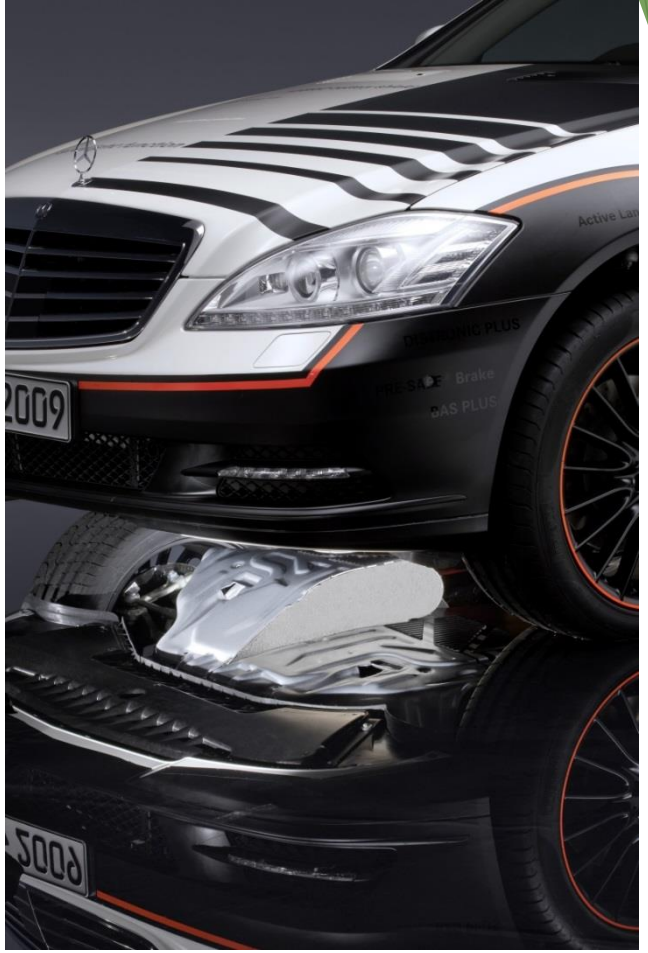
Imagine approaching an intersection as another car runs a red light. You don't see them at first, but your car gets a signal from the other car that it's directly in your path and warns you of the potential collision, or even hits the brakes automatically to avoid an accident. A developing technology called Vehicle-to-Vehicle communication, or V2V, is being tested by automotive manufacturers like Ford as a way to help reduce the amount of accidents on the road. V2V works by using wireless signals to send information back and forth between cars about their location, speed and direction. The information is then communicated to the cars around it in order to provide information on how to keep the vehicles safe distances from each other.

- Augmented Reality Dashboards:

More and more applications will be integrated into car dashboards.

If you're approaching a car too quickly, a red box may appear on the car you're approaching and arrows will appear showing you how to maneuver into the next lane before you collide with the other car.

- Airbags That Help Stop Cars:



Accident prevention has evolved so much in modern automobiles that Mercedes-Benz is now focusing its efforts on diminishing the effects of collisions. The most innovative safety advancement on the horizon may be the braking bag — an airbag for your car that inflates 80 to 100 milliseconds before collision to dilute the physics of impact.

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