

(Ref.) Major Exhibits

Environment and Fuel Efficiency	
System exhibition of various hybrid vehicle-oriented products that are installed in the new-model Prius	<ul style="list-style-type: none"> <li>• Electric four wheel drive unit</li> <li>• Torque limiter equipped dumper for hybrid vehicle</li> <li>• Exhaust manifold</li> <li>• 2-motor FWD motor hybrid transmission for small torque</li> <li>• Electronically controlled braking system</li> <li>• ABS modulator</li> </ul>
High torque capacity FWD 8-speed automatic transmission	Achieves improved dynamic performance and significant improvement in fuel efficiency
Door impact beam	Greater strength realized with the method of hardening through rapid cooling at the same time as press molding
Solid oxide Fuel cell (SOFC) cogeneration system (2016 model)	Power generation efficiency enhanced, and hot water storage tank for storing waste heat made more compact and built-in, achieving the world's smallest device of its type
Safety and Security	
Automatic evacuation to the road shoulder (under development) *Video	Automatically pulls the car over to the shoulder when the car senses that the driver is incapacitated
Remote parking (under development) *Video	Enables you to park your car remotely using a smartphone
Driver monitoring system	Detects the direction the driver is facing and whether eyelids are open or closed
Comfort and Convenience	
6-speed transverse manual gearbox for high torque application	Light-feeling shift, and among the world's lowest noise and vibration levels
Power back door system *Video	Uses an emblem sensor to reduce user's difficulty in opening back door
Super Real 3D city map and meter cluster cooperation (under development)	Makes verifying information and operating vehicle easier thanks to two coordinated displays, etc.
Coating-type foam filling material	Coating-type soundproofing material that prevents all kinds of noise pollution from entering the vehicle
Papers presented	
"Effects of vibratory stimulation-induced kinesthetic illusions on driver's drowsiness" (Aisin Seiki)	
"Application of stereo matching utilizing machine learning to surround view cameras: Pedestrian detection while turning right and left at intersection" (Aisin Seiki)	
"Development of the electrical water pump for HEV inverter system" (Aisin Seiki)	
"Electronic control braking achieve a favorable brake feeling" (ADVICS)	
"A Study for squeal reduction(Fourth Report)" (ADVICS)	