



**An International Academic Journal Exploring Vehicle and Mobility Innovation**

## About *Automotive Innovation*

### Aims & Scope

Sponsored by China SAE and published globally via Springer Nature, *Automotive Innovation* aims to be a world-class journal that provides abundant sources of innovative findings for automotive engineers and scientists. The journal is published quarterly, ensuring high-quality papers satisfying international standards. With the editorial board consisting of world-renowned experts, it has attracted readers from 72 countries and regions. The highest download of a single article wins more than 18,000. The journal is indexed in **Ei Compendex, ESCI, and SCOPUS**.

The journal is dedicated to the publication of peer-reviewed original papers and covers the principles, methodologies, designs, theoretical background and cutting-edge technologies in connection with the development of vehicle and mobility. The main topics include but are not limited to: energy-saving, electrification, intelligent and connected, safety and emerging technologies.

### Submission online and read for free

[www.ChinaSAEJournal.com.cn](http://www.ChinaSAEJournal.com.cn)

[www.springer.com/42154](http://www.springer.com/42154)

### Contacts

[Jai-editor@sae-china.org](mailto:Jai-editor@sae-china.org)

## Articles Index

All articles published in the journal since 2018 are **listed according to the publication time** and **technical field** as below.

### Articles Listed by Publication Time

#### Volume 4, Issue 4, 2021

[1] Wu, X., Wang, J., Zhang, Y. et al.: Review of DC-DC converter topologies based on impedance network with wide input voltage range and high gain for fuel cell vehicles. *Automot. Innov.* **4**(4), 351–372 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00163-z>

[2] Meyer, MA., Sauter, L., Granrath, C. et al.: Simulator coupled with distributed co-simulation protocol for

automated driving tests. *Automot. Innov.* **4**(4), 373–389 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00161-1>

[3] Yurchenko, N.F., Breed, D.S., Zhang, S.: Design of the airbag inflation system applicable to conventional and autonomous vehicles. *Automot. Innov.* **4**(4), 390–399 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00156-y>

[4] Chen, G., Chen, K., Zhang, L. et al.: VCANet: vanishing-point-guided context-aware network for small road object detection. *Automot. Innov.* **4**(4), 400–412 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00157-x>

[5] Wen, X., Li, Y., Yang, C.: Design, modeling, and characterization of a tubular linear vibration energy harvester for integrated active wheel system. *Automot. Innov.* **4**(4), 413–429 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00144-2>

[6] Zhang, L., Meng, Q., Chen, H. et al.: Kalman Filter-based fusion estimation method of steering feedback torque for steer-by-wire systems. *Automot. Innov.* **4**(4), 430–439 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00159-9>

[7] Li, J., He, H., Wei, Z. et al.: Hierarchical sizing and power distribution strategy for hybrid energy storage system. *Automot. Innov.* **4**(4), 440–447 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00164-y>

[8] Huang, Y., Yang, S., Zhou, S. et al.: An innovative state-of-charge estimation method of lithium-ion battery based on 5th-order Cubature Kalman Filter. *Automot. Innov.* **4**(4), 448–458 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00162-0>

### **Volume 4, Issue 3, 2021**

[1] Peng, L., Wang, H. & Li, J.: Uncertainty evaluation of object detection algorithms for autonomous vehicles. *Automot. Innov.* **4**(3), 241–252 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00154-0>

[2] Wang, Y., Wang, Y., Qin, H. et al.: A systematic risk assessment framework of automotive cybersecurity. *Automot. Innov.* **4**(3), 253–261 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00140-6>

[3] Zhang, D., Lv, C., Yang, T. et al.: Cyber-attack detection for autonomous driving using vehicle dynamic state estimation. *Automot. Innov.* **4**(3), 262–273 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00153-1>

[4] Quante, L., Zhang, M., Preuk, K. et al.: Human performance in critical scenarios as a benchmark for highly automated vehicles. *Automot. Innov.* **4**(3), 274–283 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00152-2>

[5] Liang, Y., Li, Y., Yu, Y. et al.: Path-following control of autonomous vehicles considering coupling effects and multi-source system uncertainties. *Automot. Innov.* **4**(3), 284–300 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00155-z>

[6] Biddle, L., Fallah, S.: A novel fault detection, identification and prediction approach for autonomous vehicle controllers using SVM. *Automot. Innov.* **4**(3), 301–314 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00138-0>

[7] Hu, J., Cai, S., Huang, T. et al.: Vehicle travel destination prediction method based on multi-source data. Automot. Innov. **4**(3), 315–327 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00136-2>

[8] Peng, B., Sun, Q., Li, S.E. et al.: End-to-end autonomous driving through dueling double Deep Q-Network. Automot. Innov. **4**(3), 328–337 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00151-3>

[9] Tang, J., Zhou, Q.: A computer graphics-based framework for 3D pose estimation of pedestrians. Automot. Innov. **4**(3), 338–349 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00142-4>

### **Volume 4, Issue 2, 2021**

[1] Xue, Q., Yang, D., Jiang, L. et al.: Modifying carbon supports of catalyst for the oxygen reduction reaction in vehicle PEMFCs. Automot. Innov. **4**(2), 119–130 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00149-x>

[2] Du, L., Zhang, G. & Sun, S.: Proton Exchange Membrane (PEM) fuel cells with Platinum Group Metal (PGM)-free cathode. Automot. Innov. **4**(2), 131–143 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00146-0>

[3] Wang, H., Wang, R., Sui, S. et al.: Cathode design for Proton Exchange Membrane fuel cells in automotive applications. Automot. Innov. **4**(2), 144–164 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00148-y>

[4] Yin, C., Gao, Y., Li, K. et al.: Experimental investigation on local behaviors of PEMFC with segmented cell. Automot. Innov. **4**(2), 165–175 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00145-1>

[5] Wu, G., Zhang, H., Xu, Y. et al.: Air-side fin geometry of a tube-strip heat exchanger for fuel cell vehicles. Automot. Innov. **4**(2), 176–188 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00147-z>

[6] Li, G., Liu, C., Wang, E. et al.: State of charge estimation for lithium-ion battery based on improved cubature kalman filter algorithm. Automot. Innov. **4**(2), 189–200 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00134-4>

[7] Bai, X., Chen, G., Li, W. et al.: Critical speeds of electric vehicles for regenerative braking. Automot. Innov. **4**(2), 201–214 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00143-3>

[8] Coratella, C., Parry, L., Li, Y. et al.: Experimental investigation of the rail pressure fluctuations correlated with fuel properties and injection settings. Automot. Innov. **4**(2), 215–226 (2021)

<https://link.springer.com/article/10.1007/s42154-020-00133-x>

[9] Qin, Y., Zhao, Z., Wang, Z. et al.: Study of longitudinal–vertical dynamics for in-wheel motor-driven electric vehicles. Automot. Innov. **4**(2), 227–237 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00141-5>

### **Volume 4, Issue 1, 2021**

[1] Cai, W., Wu, X., Zhou, M. et al.: Review and development of electric motor systems and electric powertrains for new energy vehicles. Automot. Innov. **4**(1), 3–22 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00139-z>

[2] Chen, H., Li, L. & Küçükay, F.: Study of series-parallel and power-split DHT for hybrid powertrains. *Automot. Innov.* **4**(1), 23–33 (2021)

<https://link.springer.com/article/10.1007/s42154-020-00126-w>

[3] Xu, X., Liang, J., Hao, Q. et al.: A novel electric dual motor transmission for heavy commercial vehicles. *Automot. Innov.* **4**(1), 34–43 (2021)

<https://link.springer.com/article/10.1007/s42154-020-00129-7>

[4] Wang, W., Zhang, Y., Sun, X. et al.: Model-based double closed-loop coordinated control strategy for the electro-mechanical transmission system of heavy power-split HEVs. *Automot. Innov.* **4**(1), 44–55 (2021)

<https://link.springer.com/article/10.1007/s42154-020-00130-0>

[5] Qi, B., Yang, L., Zhang, L. et al.: Adaptive fault-tolerant control during the mode switching for electric vehicle dual-mode coupling drive system. *Automot. Innov.* **4**(1), 56–69 (2021)

<https://link.springer.com/article/10.1007/s42154-020-00132-y>

[6] Dorsch, C., Wang, X. & Küçükay, F.: Objective rating of the launch behavior of conventional, hybrid and electric vehicles. *Automot. Innov.* **4**(1), 70–80 (2021)

<https://link.springer.com/article/10.1007/s42154-020-00131-z>

[7] Wang, W., Durack, J.M., Durack, M.J. et al.: Automotive traction drive speed reducer efficiency testing. *Automot. Innov.* **4**(1), 81–92 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00135-3>

[8] Hu, J., Wei, Z. & He, H.: An online adaptive internal short circuit detection method of lithium-ion battery. *Automot. Innov.* **4**(1), 93–102 (2021)

<https://link.springer.com/article/10.1007/s42154-020-00127-9>

[9] Che, Y., Foley, A., El-Gindy, M. et al.: Joint estimation of inconsistency and state of health for series battery packs. *Automot. Innov.* **4**(1), 103–116 (2021)

<https://link.springer.com/article/10.1007/s42154-020-00128-8>

### **Volume 3, Issue 4, 2020**

[1] Li, B., Kuo, H., Wang, X. et al.: Thermal management of electrified propulsion system for low-carbon vehicles. *Automot. Innov.* **4**(3), 299–316 (2020)

<https://link.springer.com/article/10.1007/s42154-020-00124-y>

[2] Yao, C., Dan, D., Zhang, Y. et al.: Thermal performance of a micro heat pipe array for battery thermal management under special vehicle-operating conditions. *Automot. Innov.* **4**(3), 317–327 (2020)

<https://link.springer.com/article/10.1007/s42154-020-00114-0>

[3] Chen, Y., Yan, Y. & Li, B.: Thermal analyses of power electronics integrated with vapour chamber cooling. *Automot. Innov.* **4**(3), 328–335 (2020)

<https://link.springer.com/article/10.1007/s42154-020-00123-z>

[4] Wang, G., Gao, Q., Yan, Y. et al.: Thermal management optimization of a lithium-ion battery module with graphite sheet fins and liquid cold plates. *Automot. Innov.* **4**(3), 336–346 (2020)

<https://link.springer.com/article/10.1007/s42154-020-00121-1>

[5] Shen, M., Gao, Q.: Simulation and analysis of dual-evaporator refrigeration system for electric vehicles. *Automot. Innov.* **4**(3), 347–355 (2020)

<https://link.springer.com/article/10.1007/s42154-020-00115-z>

- [6] Shah, R.M.R.A., Qubeissi, M.A., McGordon, A. et al.: Micro gas turbine range extender performance analysis using varying intake temperature. *Automot. Innov.* **4**(3), 356–365 (2020)  
<https://link.springer.com/article/10.1007/s42154-020-00119-9>
- [7] Zhao, Z., Liu, W., Li, F. et al.: Distributed gas ignition using injection strategy for high efficiency and clean combustion under lean condition. *Automot. Innov.* **4**(3), 366–373 (2020)  
<https://link.springer.com/article/10.1007/s42154-020-00116-y>
- [8] Li, G., Li, S., Li, S. et al.: Deep reinforcement learning enabled decision-making for autonomous driving at intersections. *Automot. Innov.* **4**(3), 374–385 (2020)  
<https://link.springer.com/article/10.1007/s42154-020-00113-1>
- [9] Chen, S., Chen, H. & Negrut, D.: Implementation of MPC-based path tracking for autonomous vehicles considering three vehicle dynamics models with different fidelities. *Automot. Innov.* **4**(3), 386–399 (2020)  
<https://link.springer.com/article/10.1007/s42154-020-00118-w>

**Volume 3, Issue 3, 2020**

- [1] Rosenthal, S., Maaß, F., Kamaliev, M. et al.: Lightweight in automotive components by forming technology. *Automot. Innov.* **3**(3), 195–209 (2020)  
<https://link.springer.com/article/10.1007/s42154-020-00103-3>
- [2] Sun, Y., Luzin, V., Duan, Y. et al.: Forming-induced residual stress and material properties of roll-formed high-strength steels. *Automot. Innov.* **3**(3), 210–220 (2020)  
<https://link.springer.com/article/10.1007/s42154-020-00112-2>
- [3] Li, M., Wang, Y., Niu, Z. et al.: Study on the weld-bonding process optimization and mechanical performance of aluminum alloy joints. *Automot. Innov.* **3**(3), 221–230 (2020)  
<https://link.springer.com/article/10.1007/s42154-020-00106-0>
- [4] Cui, J., Wang, S., Yuan, W. et al.: Effects of standoff distance on magnetic pulse welded joints between aluminum and steel elements in automobile body. *Automot. Innov.* **3**(3), 231–241 (2020)  
<https://link.springer.com/article/10.1007/s42154-020-00104-2>
- [5] Ma, Y., Niu, S., Shan, H. et al.: Impact of stack orientation on self-piercing riveted and friction self-piercing riveted Aluminum alloy and Magnesium alloy joints. *Automot. Innov.* **3**(3), 242–249 (2020)  
<https://link.springer.com/article/10.1007/s42154-020-00108-y>
- [6] Wang, D., Xie, C., Liu, Y. et al.: Multi-objective collaborative optimization for the lightweight design of an electric bus body frame. *Automot. Innov.* **3**(3), 250–259 (2020)  
<https://link.springer.com/article/10.1007/s42154-020-00105-1>
- [7] Shi, Z., Chen, G., Zhu, L. et al.: Sandwich structure design of a cooling fin for battery modules against impact loads. *Automot. Innov.* **3**(3), 260–269 (2020)  
<https://link.springer.com/article/10.1007/s42154-020-00107-z>
- [8] Li, J., Wang, L., Chen, Y. et al.: Research and application of lightweight index for passenger cars. *Automot. Innov.* **3**(3), 270–279 (2020)  
<https://link.springer.com/article/10.1007/s42154-020-00110-4>
- [9] Lin, Y., Min, J., Teng, H. et al.: Flexural performance of steel–FRP composites for automotive applications. *Automot. Innov.* **3**(3), 280–295 (2020)  
<https://link.springer.com/article/10.1007/s42154-020-00109-x>

**Volume 3, Issue 2, 2020**

- [1] Ma, F.W., Wang, J.W., Yang, Y., et al.: Stability design for the homogeneous platoon with communication time delay. *Automot. Innov.* **3**(2): 101–110 (2020)  
<https://link.springer.com/article/10.1007/s42154-020-00102-4>
- [2] Hao, D., Wang, X.B., Zhang, Y.Y., et al.: Experimental study on hydrogen leakage and emission of fuel cell vehicles in confined spaces. *Automot. Innov.* **3**(2): 111–122 (2020)  
<https://link.springer.com/article/10.1007/s42154-020-00096-z>
- [3] Mao, W.F., Yue, W., Pei, F., et al.: Manganese-based lithium-ion battery:  $Mn_3O_4$  anode versus  $LiNi_{0.5}Mn_{1.5}O_4$  cathode. *Automot. Innov.* **3**(2): 123–132 (2020)  
<https://link.springer.com/article/10.1007/s42154-020-00100-6>
- [4] Xu, N., Yang, Y.Y., Guo, K.H.: A discrete tire model for cornering properties considering rubber friction. *Automot. Innov.* **3**(2): 133–146 (2020)  
<https://link.springer.com/article/10.1007/s42154-020-00097-y>
- [5] Lei, Y.L., Song, P.X., Fu, Y.: Design of constant-speed control method for water medium hydraulic retarders based on neural network PID. *Automot. Innov.* **3**(2): 147–157 (2020)  
<https://link.springer.com/article/10.1007/s42154-020-00095-0>
- [6] Ye, Z.S., Xie, W.D., Yin, Y.M., et al.: Dynamic rollover prediction of heavy vehicles considering critical frequency. *Automot. Innov.* **3**(2): 158–168 (2020)  
<https://link.springer.com/article/10.1007/s42154-020-00099-w>
- [7] Noce, T., Hanriot, S.D.M., Sales, L.C.M., et al.: Energy conversion factor for gasoline engines in real-world driving emission cycle. *Automot. Innov.* **3**(2): 169–180 (2020)  
<https://link.springer.com/article/10.1007/s42154-020-00098-x>
- [8] Neumann, D., Schäfers, L., Muthyala, P., et al.: Reduction of transient engine-out  $NO_x$ -emissions by advanced digital combustion rate shaping. *Automot. Innov.* **3**(2): 181–190 (2020)  
<https://link.springer.com/article/10.1007/s42154-020-00101-5>

**Volume 3, Issue 1, 2020**

- [1] Liu, W.M., Yao, N.L., Shi, Y.W., et al.: Personality openness predicts driver trust in automated driving. *Automot. Innov.* **3**(1): 3–13 (2020)  
<https://link.springer.com/article/10.1007/s42154-019-00086-w>
- [2] Clark, J.R., Stanton, N.A., Revell, K.M.A.: Automated vehicle handover interface design: focus groups with learner, intermediate and advanced drivers. *Automot. Innov.* **3**(1): 14–29 (2020)  
<https://link.springer.com/article/10.1007/s42154-019-00085-x>
- [3] Allison, C.K., Stanton, N.A.: Constraining design: applying the insights of cognitive work analysis to the design of novel in-car interfaces to support eco-driving. *Automot. Innov.* **3**(1): 30–41 (2020)  
<https://link.springer.com/article/10.1007/s42154-020-00090-5>
- [4] Brown, J. W. H., Stanton, N. A., Revell, K. M. A.: Usability assessment of steering wheel control interfaces in motorsport. *Automot. Innov.* **3**(1): 42–52 (2020)  
<https://link.springer.com/article/10.1007/s42154-020-00088-z>
- [5] Terken, J., Pfleging, B.: Toward shared control between automated vehicles and users. *Automot. Innov.* **3**(1): 53–61 (2020)  
<https://link.springer.com/article/10.1007/s42154-019-00087-9>
- [6] Xue, W.Y., Zheng, L.: Active collision avoidance system design based on model predictive control with varying

sampling time. *Automot. Innov.* **3**(1): 62–72 (2020)

<https://link.springer.com/article/10.1007/s42154-019-00084-y>

[7] Wang, Y. Y., Pan, D., Deng, H. Y., et al.: Dynamic trajectory planning of autonomous lane change at medium and low speeds based on elastic soft constraint of the safety domain. *Automot. Innov.* **3**(1): 73–87 (2020)

<https://link.springer.com/article/10.1007/s42154-020-00091-4>

[8] Zhuang, W. C., Xu, L. W., Yin, G. D.: Robust cooperative control of multiple autonomous vehicles for platoon formation considering parameter uncertainties. *Automot. Innov.* **3**(1): 88–100 (2020)

<https://link.springer.com/article/10.1007/s42154-020-00093-2>

### **Volume 2, Issue 4, 2019**

[1] Yang, D., Jiao, X., Jiang, K. et al.: Driving space for autonomous vehicles. *Automot. Innov.* **2**(4): 241–253 (2019)

<https://link.springer.com/article/10.1007/s42154-019-00081-1>

[2] Qin, Y., Wang, Z., Yuan, K. et al.: Comprehensive analysis and optimization of dynamic vibration-absorbing structures for electric vehicles driven by in-wheel motors. *Automot. Innov.* **2**(4): 254–262 (2019)

<https://link.springer.com/article/10.1007/s42154-019-00079-9>

[3] Han, X., Feng, X., Ouyang, M. et al.: A comparative study of charging voltage curve analysis and state of health estimation of lithium-ion batteries in electric vehicle. *Automot. Innov.* **2**(4): 263–275 (2019)

<https://link.springer.com/article/10.1007/s42154-019-00080-2>

[4] Cai, Y., Zhang, T., Wang, H. et al.: 3D vehicle detection based on LiDAR and camera fusion. *Automot. Innov.* **2**(4): 276–283 (2019)

<https://link.springer.com/article/10.1007/s42154-019-00083-z>

[5] Li, F., Wang, Z., Wang, Y. et al.: High-efficiency and clean combustion natural gas engines for vehicles. *Automot. Innov.* **2**(4): 284–304 (2019)

<https://link.springer.com/article/10.1007/s42154-019-00075-z>

[6] Dong, G., Li, L., Zhu, D. et al.: Ion current features of HCCI combustion in a GDI engine. *Automot. Innov.* **2**(4): 305–313 (2019)

<https://link.springer.com/article/10.1007/s42154-019-00074-0>

[7] Zhao, Z., Meng, Z., Li, L. et al.: Experimental study on the combustion and energy flows of vehicle engine under NEDC of cold start. *Automot. Innov.* **2**(4): 314–327 (2019)

<https://link.springer.com/article/10.1007/s42154-019-00078-w>

[8] Liu, J., Huang, L., Zhou, R. et al.: Reliability growth test planning and verification of commercial vehicles. *Automot. Innov.* **2**(4): 328–337 (2019)

<https://link.springer.com/article/10.1007/s42154-019-00082-0>

### **Volume 2, Issue 3, 2019**

[1] Luo, Y., Yang, G., Xu, M., et al.: Cooperative lane-change maneuver for multiple automated vehicles on a highway. *Automot. Innov.* **2**(3), 157–168 (2019)

<https://link.springer.com/article/10.1007/s42154-019-00073-1>

[2] Qin, D., Li, J., Wang, T., et al.: Modeling and simulating a battery for an electric vehicle based on modelica. *Automot. Innov.* **2**(3), 169–177 (2019)

<https://link.springer.com/article/10.1007/s42154-019-00066-0>

[3] Ge, L., Ma, F., Shi, J., et al.: Numerical implementation of high-order Vold–Kalman filter using Python

arbitrary-precision arithmetic library. *Automot. Innov.* **2**(3), 178-189 (2019)

<https://link.springer.com/article/10.1007/s42154-019-00065-1>

[4] Wang, S., Guo, W., Zeng, K., et al.: Characterization of automotive brake discs with laser-machined surfaces. *Automot. Innov.* **2**(3), 190-200 (2019)

<https://link.springer.com/article/10.1007/s42154-019-00068-y>

[5] Liu, X., Liang, M. & Luo, Q.: Innovative electric vehicle body design based on insurance institute for highway safety side impact conditions. *Automot. Innov.* **2**(3), 201-211 (2019)

<https://link.springer.com/article/10.1007/s42154-019-00070-4>

[6] Tian, F., Sui, L., Zeng, Y., et al.: Hardware design and test of a gear-shifting control system of a multi-gear transmission for electric vehicles. *Automot. Innov.* **2**(3), 212-222 (2019)

<https://link.springer.com/article/10.1007/s42154-019-00072-2>

[7] Wang, C., Lian, Y., Ling, H., et al.: Multiphysics field co-simulation research based on electric drive system for a specific type of car. *Automot. Innov.* **2**(3), 223-230 (2019)

<https://link.springer.com/article/10.1007/s42154-019-00067-z>

[8] Li, L., Chen, H. & Küçükay, F.: Systematic synthesis of dedicated hybrid transmission. *Automot. Innov.* **2**(3), 231-239 (2019)

<https://link.springer.com/article/10.1007/s42154-019-00071-3>

### **Volume 2, Issue 2, 2019**

[1] Wu, Z., Zhao, W., Li, Z., et al.: A review of engine fuel injection studies using synchrotron radiation x-ray imaging. *Automot. Innov.* **2**(2), 79-92 (2019)

<https://link.springer.com/article/10.1007/s42154-019-00056-2>

[2] Gao, Z., Li, Z., Hu, H., et al.: Experimental and numerical study of cervical muscle contraction in frontal impact. *Automot. Innov.* **2**(2), 93-101 (2019)

<https://link.springer.com/article/10.1007/s42154-019-00060-6>

[3] Zhang, X., Huang, Y., Guo, K., et al.: Integrated spacing policy considering micro- and macroscopic characteristics. *Automot. Innov.* **2**(2), 102-109 (2019)

<https://link.springer.com/article/10.1007/s42154-019-00064-2>

[4] Mimuro, T., Taniguchi, N. & Takanashi, H.: Concept study of a self-localization system for snow-covered roads using a four-layer laser scanner. *Automot. Innov.* **2**(2), 110-120 (2019)

<https://link.springer.com/article/10.1007/s42154-019-00061-5>

[5] Yang, W.: Scale consistency quantification for subjective evaluation of vehicle dynamics. *Automot. Innov.* **2**(2), 121-126 (2019)

<https://link.springer.com/article/10.1007/s42154-019-00062-4>

[6] Wang, D., Wen, J., Wang, Y., et al.: End-to-end self-driving using deep neural networks with multi-auxiliary tasks. *Automot. Innov.* **2**(2), 127-136 (2019)

<https://link.springer.com/article/10.1007/s42154-019-00057-1>

[7] Qi, Y., Wang, B. & Wang, Z.: Impact resistance of spark plug's ceramic insulator during ultra-high-pressure combustion under deto-knock conditions. *Automot. Innov.* **2**(2), 137-145 (2019)

<https://link.springer.com/article/10.1007/s42154-019-00058-0>

[8] Zhao, B., Lv, C. & Hofman, T.: Driving-cycle-aware energy management of hybrid electric vehicles using a three-dimensional Markov chain model. *Automot. Innov.* **2**(2), 146-156 (2019)



<https://link.springer.com/article/10.1007/s42154-019-00059-z>

### Volume 2, Issue 1, 2019

[1] Ma, F., Ying, Z., Wang, G., et al.: Crashworthiness optimization design of thin-walled tube filled with re-entrant triangles honeycombs. *Automot. Innov.* **2**(1), 1-13 (2019)

<https://link.springer.com/article/10.1007/s42154-019-00051-7>

[2] Michelotti, A.C., da Silva, J.C., Nicolazzi, L.C.: Novel mechanical interface design for automotive starting systems. *Automot. Innov.* **2**(1), 14-25(2019)

<https://link.springer.com/article/10.1007/s42154-019-00052-6>

[3] Yang, W., Chen, J., Liu, Z., et al: Vibration characteristics of framed SUV cab based on coupled transfer path analysis. *Automot. Innov.* **2**(1) ,26-34(2019)

<https://link.springer.com/article/10.1007/s42154-019-00049-1>

[4] Zhu, M., Yao, P., Pu, Y.: Comparative study on the temperature rise of a dry dual clutch under different starting conditions. *Automot. Innov.* **2**(1), 35-44(2019)

<https://link.springer.com/article/10.1007/s42154-019-00053-5>

[5] Gong, H.: Estimation of residual exhaust gas of homogeneous charge compression ignition gasoline engine operating under negative valve overlap strategy. *Automot. Innov.* **2**(1), 45-54(2019)

<https://link.springer.com/article/10.1007/s42154-019-00048-2>

[6] Li, X., Lyu, J., Hong, J., et al.: MPC-based downshift control of automated manual transmissions. *Automot. Innov.* **2**(1), 55-63(2019)

<https://link.springer.com/article/10.1007/s42154-019-00050-8>

[7] Liu, J., Li, J., Wang, Y., et al.: Technology development analysis on low carbon for power of heavy-duty commercial vehicle. *Automot. Innov.* **2**(1), 64-70(2019)

<https://link.springer.com/article/10.1007/s42154-019-00054-4>

[8] Shen, Q., Li, X., Zhao, Y., et al.: Experimental and performance analyses on elastomer-strengthened polyethylene terephthalate/glass fiber blends. *Automot. Innov.* **2**(1), 71-78(2019)

<https://link.springer.com/article/10.1007/s42154-019-00047-3>

### Volume 1, Issue 4, 2018

[1] Shi, T., Zhao, F., Hao, H, et al.: Development trends of transmissions for hybrid electric vehicles using an optimized energy management strategy. *Automot. Innov.* **1**(4), 291-299(2018)

<https://link.springer.com/article/10.1007/s42154-018-0037-5>

[2] Xu, X., Sun, W., Cai, T., et al.: Design of a hydraulic control unit for a two-speed dedicated electric vehicle transmission. *Automot. Innov.* **1**(4), 300-310(2018)

<https://link.springer.com/article/10.1007/s42154-018-0039-3>

[3] Qiu, L., Qian, L., Abdollahi, Z., et al.: Engine-map-based predictive fuel-efficient control strategies for a group of connected vehicles. *Automot. Innov.* **1**(4), 311-319(2018)

<https://link.springer.com/article/10.1007/s42154-018-0042-8>

[4] Yu, C., Ji, G., Zhang, C., et al.: Cost-efficient thermal management for a 48v li-ion battery in a mild hybrid electric vehicle. *Automot. Innov.* **1**(4), 320-330(2018)

<https://link.springer.com/article/10.1007/s42154-018-0043-7>

[5] Wu, J., Kang, Z., Zhang, Z., et al.: Effects of vessel and water temperatures on direct injection in internal

combustion rankine cycle engines. Automot. Innov. **1**(4), 331-341(2018)

<https://link.springer.com/article/10.1007/s42154-018-0046-4>

[6] Zhou, J., Feng, L., Chen, J., et al.: Uncertainty optimization design of a vehicle body structure considering random deviations. Automot. Innov. **1**(4), 342-351(2018)

<https://link.springer.com/article/10.1007/s42154-018-0041-9>

[7] Gawande, S. H., MuleyR, A. A., Yerrawar, N.: Optimization of torsional stiffness for heavy commercial vehicle chassis frame. Automot. Innov. **1**(4), 352-361(2018)

<https://link.springer.com/article/10.1007/s42154-018-0044-6>

[8] Guo, Y., Kumazawa, I., Kaku, C.: Blind spot obstacle detection from monocular camera images with depth cues extracted by CNN. Automot. Innov. **1**(4), 362-373 (2018)

<https://link.springer.com/article/10.1007/s42154-018-0036-6>

[9] Chen, W., Lu, C., Liu, Z., et al.: Simplified method of simulating double-layer micro-perforated panel structure. Automot. Innov. **1**(4), 374-380(2018)

<https://link.springer.com/article/10.1007/s42154-018-0040-x>

[10] Patel, T.M., Bhatt, N.M.: Optimizing neural network parameters using taguchi's design of experiments approach: an application for equivalent stress prediction model of automobile chassis. Automot. Innov. **1**(4), 381-389(2018)

<https://link.springer.com/article/10.1007/s42154-018-0045-5>

### **Volume 1, Issue 3, 2018**

[1] Xu, X., Dong, P., Liu, Y., et al.: Progress in automotive transmission technology. Automot. Innov. **1**(3), 187-210 (2018)

<https://link.springer.com/article/10.1007/s42154-018-0031-y>

[2] Lian, Y., Zeng, D., Ye, S., et al.: High-voltage safety improvement design for electric vehicle in rear impact. Automot. Innov. **1**(3), 211-225(2018)

<https://link.springer.com/article/10.1007/s42154-018-0030-z>

[3] Qin, D., Cheng, L., Wang, T., et al.: Modeling and testing of the multi-pole field of a motor for pure electric vehicles. Automot. Innov. **1**(3), 226-236 (2018)

<https://link.springer.com/article/10.1007/s42154-018-0025-9>

[4] Wang, S., Min, J., Lin, J., et al.: Effect of atmospheric pressure plasma treatment on the lap-shear strength of adhesive-bonded sheet molding compound joints. Automot. Innov. **1**(3), 237-246(2018)

<https://link.springer.com/article/10.1007/s42154-018-0027-7>

[5] Zheng, G., Fan, Z., Zhang, H., et al.: Crashworthiness optimization of steel-magnesium hybrid double-hat-shaped tube. Automot. Innov. **1**(3), 247-254 (2018)

<https://link.springer.com/article/10.1007/s42154-018-0033-9>

[6] Ou, H., Tang, X., Xiao, J., et al.: Lightweight body-in-white design driven by optimization technology. Automot. Innov. **1**(3), 255-262(2018)

<https://link.springer.com/article/10.1007/s42154-018-0032-x>

[7] Shao, X., Xu, N., Liu, X.: Investigation and application on the vertical vibration models of the seated human body. Automot. Innov. **1**(3), 263-271(2018)

<https://link.springer.com/article/10.1007/s42154-018-0026-8>

[8] Zhang, S.: Parameter study and improvement of gearbox whine noise in electric vehicle. Automot. Innov.

1(3), 272-280(2018)

<https://link.springer.com/article/10.1007/s42154-018-0029-5>

[9] Pei, X., Hu, X., Liu, W., et al.: State estimation of vehicle's dynamic stability based on the nonlinear kalman filter. Automot. Innov. **1**(3), 281-289(2018)

<https://link.springer.com/article/10.1007/s42154-018-0028-6>

### **Volume 1, Issue 2, 2018**

[1] Shuai, S., Ma, X., Li, Y., et al.: Recent progress in automotive gasoline direct injection engine technology. Automot. Innov. **1**(2), 95-113(2018)

<https://link.springer.com/article/10.1007/s42154-018-0020-1>

[2] Dong, Y., Chen, Y., Yu, C., et al.: Performance of the transmission parking mechanism of a battery electric vehicle simulated with Adams software. Automot. Innov. **1**(2), 114-121(2018)

<https://link.springer.com/article/10.1007/s42154-018-0023-y>

[3] Qin, H., Liu, Z., Liu, Y., et al.: A Two-level cross-sectional optimization approach for automotive body concept design. Automot. Innov. **1**(2), 122-130(2018)

<https://link.springer.com/article/10.1007/s42154-018-0022-z>

[4] Gao, F., Ren, S., Lin, C., et al.: Metamodel-based multi-objective reliable optimization for front structure of electric vehicle. Automot. Innov. **1**(2), 131-139(2018)

<https://link.springer.com/article/10.1007/s42154-018-0018-8>

[5] Peng, B., Zhang, H., Xuan, F., et al.: Torque distribution strategy of electric vehicle with in-wheel motors based on the identification of driving intention. Automot. Innov. **1**(2), 140-146(2018)

<https://link.springer.com/article/10.1007/s42154-018-0024-x>

[6] Zhu, C., Zhu, P., Liu, Z., et al.: Prediction of the Elastic Properties of a Plain Woven Carbon Fiber Reinforced Composite with Internal Geometric Variability. Automot. Innov. **1**(2), 147-157(2018)

<https://link.springer.com/article/10.1007/s42154-018-0015-y>

[7] Mo, C., Li, Y., Zheng, L.: Simulation and analysis on overtaking safety assistance system based on vehicle-to-vehicle communication. Automot. Innov. **1**(2), 158-166(2018)

<https://link.springer.com/article/10.1007/s42154-018-0017-9>

[8] Zuo, S., Ni, T., Wu, X., et al.: Mechanism and conditions of the polygonal wear of vehicle tire. Automot. Innov. **1**(2), 167-176(2018)

<https://link.springer.com/article/10.1007/s42154-018-0016-x>

[9] Mu, Y., Li, L., Shi, S.: Modified tire-slip-angle model for chaotic vehicle steering motion. Automot. Innov. **1**(2), 177-186 (2018)

<https://link.springer.com/article/10.1007/s42154-018-0019-7>

### **Volume 1, Issue 1, 2018**

[1] Li, J., Cheng, H., Guo, H., et al.: Survey on artificial intelligence for vehicles. Automot. Innov. **1**(1), 2-14 (2018)

<https://link.springer.com/article/10.1007/s42154-018-0034-8>

[2] Wang, Y., Zhao, F., Yuan, Y., et al.: Analysis of typical automakers' strategies for meeting the dual-credit regulations regarding CAFC and NEVs. Automot. Innov. **1**(1), 15-23(2018)

<https://link.springer.com/article/10.1007/s42154-018-0010-3>

[3] Ma, F., Zhao, Y., Liang, H., et al: Effects of cell microtopology on the in-plane dynamic crushing analysis of

re-entrant square cellular material. *Automot. Innov.* **1**(1), 24-34(2018)

<https://link.springer.com/article/10.1007/s42154-018-0005-0>

[4] Küçükay, F., Lange, A., Li, L.: Highly fuel-efficient transmission and propulsion concepts. *Automot. Innov.* **1**(1), 35-42(2018)

<https://link.springer.com/article/10.1007/s42154-018-0004-1>

[5] Li, L., Gong, Y., Deng, J., et al.: CO<sub>2</sub> reduction request and future high-efficiency zero-emission Argon power cycle engine. *Automot. Innov.* **1**(1), 43-53(2018)

<https://link.springer.com/article/10.1007/s42154-018-0007-y>

[6] Huang, K., Yan, Y., Li, B., et al.: A novel design of thermoelectric generator for automotive waste heat recovery. *Automot. Innov.* **1**(1), 54-61(2018)

<https://link.springer.com/article/10.1007/s42154-018-0006-z>

[7] Huang, Y., Khazeraee, M., Wang, H., et al.: Design of a regenerative auxiliary power system for service vehicles. *Automot. Innov.* **1**(1), 62-69(2018)

<https://link.springer.com/article/10.1007/s42154-018-0008-x>

[8] Lu, H., Zhang, J., Tian, N., et al.: Recycle-friendly aluminum alloy sheets for automotive applications based on hemming. *Automot. Innov.* **1**(1), 70-75(2018)

<https://link.springer.com/article/10.1007/s42154-018-0012-1>

[9] Takeda, A., Kondo, M., Mimuro, T.: Evaluation of the effectiveness of awareness messages for road traffic hazards in experimental tests. *Automot. Innov.* **1**(1), 76-84(2018)

<https://link.springer.com/article/10.1007/s42154-018-0011-2>

[10] Lu, S., Cen, S., Zhang, Y.: Driver model-based fault-tolerant control of independent driving electric vehicle suffering steering failure, *Automot. Innov.* **1**(1), 85-94 (2018)

<https://link.springer.com/article/10.1007/s42154-018-0013-0>

## Articles Listed by Technical Field

### 1. Intelligent Vehicles

[1] Peng, L., Wang, H. & Li, J.: Uncertainty evaluation of object detection algorithms for autonomous vehicles. *Automot. Innov.* **4**(3), 241–252 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00154-0>

[2] Wang, Y., Wang, Y., Qin, H. et al.: A systematic risk assessment framework of automotive cybersecurity. *Automot. Innov.* **4**(3), 253–261 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00140-6>

[3] Zhang, D., Lv, C., Yang, T. et al.: Cyber-attack detection for autonomous driving using vehicle dynamic state estimation. *Automot. Innov.* **4**(3), 262–273 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00153-1>

[4] Quante, L., Zhang, M., Preuk, K. et al.: Human performance in critical scenarios as a benchmark for highly automated vehicles. *Automot. Innov.* **4**(3), 274–283 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00152-2>

[5] Liang, Y., Li, Y., Yu, Y. et al.: Path-following control of autonomous vehicles considering coupling effects and

multi-source system uncertainties. *Automot. Innov.* **4**(3), 284–300 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00155-z>

[6] Biddle, L., Fallah, S.: A novel fault detection, identification and prediction approach for autonomous vehicle controllers using SVM. *Automot. Innov.* **4**(3), 301–314 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00138-0>

[7] Hu, J., Cai, S., Huang, T. et al.: Vehicle travel destination prediction method based on multi-source data. *Automot. Innov.* **4**(3), 315–327 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00136-2>

[8] Peng, B., Sun, Q., Li, S.E. et al.: End-to-end autonomous driving through dueling double Deep Q-Network. *Automot. Innov.* **4**(3), 328–337 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00151-3>

[9] Tang, J., Zhou, Q.: A computer graphics-based framework for 3D pose estimation of pedestrians. *Automot. Innov.* **4**(3), 338–349 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00142-4>

[10] Ma, F.W., Wang, J.W., Yang, Y., et al.: Stability design for the homogeneous platoon with communication time delay. *Automot. Innov.* **3**(2): 101–110 (2020)

<https://link.springer.com/article/10.1007/s42154-020-00102-4>

[11] Liu, W.M., Yao, N.L., Shi, Y.W., et al.: Personality openness predicts driver trust in automated driving. *Automot. Innov.* **3**(1): 3–13 (2020)

<https://link.springer.com/article/10.1007/s42154-019-00086-w>

[12] Clark, J.R., Stanton, N.A., Revell, K.M.A. : Automated vehicle handover interface design: focus groups with learner, intermediate and advanced drivers. *Automot. Innov.* **3**(1): 14–29 (2020)

<https://link.springer.com/article/10.1007/s42154-019-00085-x>

[13] Allison, C.K., Stanton, N.A.: Constraining design: applying the insights of cognitive work analysis to the design of novel in-car interfaces to support eco-driving. *Automot. Innov.* **3**(1): 30–41 (2020)

<https://link.springer.com/article/10.1007/s42154-020-00090-5>

[14] Brown, J. W. H., Stanton, N. A., Revell, K. M. A. : Usability assessment of steering wheel control interfaces in motorsport. *Automot. Innov.* **3**(1): 42–52 (2020)

<https://link.springer.com/article/10.1007/s42154-020-00088-z>

[15] Terken, J., Pflöging, B.: Toward shared control between automated vehicles and users. *Automot. Innov.* **3**(1): 53–61 (2020)

<https://link.springer.com/article/10.1007/s42154-019-00087-9>

[16] Xue, W.Y., Zheng, L.: Active collision avoidance system design based on model predictive control with varying sampling time. *Automot. Innov.* **3**(1): 62–72 (2020)

<https://link.springer.com/article/10.1007/s42154-019-00084-y>

[17] Wang, Y. Y., Pan, D., Deng, H. Y., et al.: Dynamic trajectory planning of autonomous lane change at medium and low speeds based on elastic soft constraint of the safety domain. *Automot. Innov.* **3**(1): 73–87 (2020)

<https://link.springer.com/article/10.1007/s42154-020-00091-4>

[18] Zhuang, W. C., Xu, L. W., Yin, G. D.: Robust cooperative control of multiple autonomous vehicles for platoon formation considering parameter uncertainties. *Automot. Innov.* **3**(1): 88–100 (2020)

<https://link.springer.com/article/10.1007/s42154-020-00093-2>

- [19] Yang, D., Jiao, X., Jiang, K. et al.: Driving space for autonomous vehicles. *Automot. Innov.* **2**(4): 241-253 (2019)  
<https://link.springer.com/article/10.1007/s42154-019-00081-1>
- [20] Li, J., Cheng, H., Guo, H., et al.: Survey on artificial intelligence for vehicles. *Automot. Innov.* **1**(1), 2-14 (2018)  
<https://link.springer.com/article/10.1007/s42154-018-0034-8>
- [21] Cai, Y., Zhang, T., Wang, H. et al.: 3D vehicle detection based on LiDAR and camera fusion. *Automot. Innov.* **2**(4): 276–283 (2019)  
<https://link.springer.com/article/10.1007/s42154-019-00083-z>
- [22] Luo, Y., Yang, G., Xu, M., et al.: Cooperative lane-change maneuver for multiple automated vehicles on a highway. *Automot. Innov.* **2**(3), 157-168 (2019)  
<https://link.springer.com/article/10.1007/s42154-019-00073-1>
- [23] Ge, L., Ma, F., Shi, J., et al.: Numerical implementation of high-order Vold–Kalman filter using Python arbitrary-precision arithmetic library. *Automot. Innov.* **2**(3), 178-189 (2019)  
<https://link.springer.com/article/10.1007/s42154-019-00065-1>
- [24] Gao, Z., Li, Z., Hu, H., et al.: Experimental and numerical study of cervical muscle contraction in frontal impact. *Automot. Innov.* **2**(2), 93-101 (2019)  
<https://link.springer.com/article/10.1007/s42154-019-00060-6>
- [25] Mimuro, T., Taniguchi, N. & Takanashi, H.: Concept study of a self-localization system for snow-covered roads using a four-layer laser scanner. *Automot. Innov.* **2**(2), 110-120 (2019)  
<https://link.springer.com/article/10.1007/s42154-019-00061-5>
- [26] Wang, D., Wen, J., Wang, Y., et al.: End-to-end self-driving using deep neural networks with multi-auxiliary tasks. *Automot. Innov.* **2**(2), 127-136 (2019)  
<https://link.springer.com/article/10.1007/s42154-019-00057-1>
- [27] Mo, C., Li, Y., Zheng, L.: Simulation and analysis on overtaking safety assistance system based on vehicle-to-vehicle communication. *Automot. Innov.* **1**(2), 158-166(2018)  
<https://link.springer.com/article/10.1007/s42154-018-0017-9>
- [28] Qiu, L., Qian, L., Abdollahi, Z., et al.: Engine-map-based predictive fuel-efficient control strategies for a group of connected vehicles. *Automot. Innov.* **1**(4), 311-319(2018)  
<https://link.springer.com/article/10.1007/s42154-018-0042-8>
- [29] Guo, Y., Kumazawa, I., Kaku, C.: Blind spot obstacle detection from monocular camera images with depth cues extracted by CNN. *Automot. Innov.* **1**(4), 362-373 (2018)  
<https://link.springer.com/article/10.1007/s42154-018-0036-6>
- [20] Patel, T.M., Bhatt, N.M.: Optimizing neural network parameters using taguchi’s design of experiments approach: an application for equivalent stress prediction model of automobile chassis. *Automot. Innov.* **1**(4), 381-389(2018)  
<https://link.springer.com/article/10.1007/s42154-018-0045-5>
- [31] Takeda, A., Kondo, M., Mimuro, T.: Evaluation of the effectiveness of awareness messages for road traffic hazards in experimental tests. *Automot. Innov.* **1**(1), 76-84(2018)  
<https://link.springer.com/article/10.1007/s42154-018-0011-2>
- [32] Li, G., Li, S., Li, S. et al.: Deep reinforcement learning enabled decision-making for autonomous driving at intersections. *Automot. Innov.* **4**(3), 374–385 (2020)  
<https://link.springer.com/article/10.1007/s42154-020-00113-1>

- [33] Chen, S., Chen, H. & Negrut, D.: Implementation of MPC-based path tracking for autonomous vehicles considering three vehicle dynamics models with different fidelities. *Automot. Innov.* **4**(3), 386–399 (2020)  
<https://link.springer.com/article/10.1007/s42154-020-00118-w>
- [34] Meyer, MA., Sauter, L., Granrath, C. et al.: Simulator coupled with distributed co-simulation protocol for automated driving tests. *Automot. Innov.* **4**(4), 373–389 (2021)  
<https://link.springer.com/article/10.1007/s42154-021-00161-1>
- [35] Chen, G., Chen, K., Zhang, L. et al.: VCANet: vanishing-point-guided context-aware network for small road object detection. *Automot. Innov.* **4**(4), 400–412 (2021)  
<https://link.springer.com/article/10.1007/s42154-021-00157-x>
- [36] Zhang, L., Meng, Q., Chen, H. et al.: Kalman Filter-based fusion estimation method of steering feedback torque for steer-by-wire systems. *Automot. Innov.* **4**(4), 430–439 (2021)  
<https://link.springer.com/article/10.1007/s42154-021-00159-9>

## 2. Electric Vehicles

### Drive System

- [1] Qin, Y., Zhao, Z., Wang, Z. et al.: Study of longitudinal–vertical dynamics for in-wheel motor-driven electric vehicles. *Automot. Innov.* **4**(2), 227–237 (2021)  
<https://link.springer.com/article/10.1007/s42154-021-00141-5>
- [2] Cai, W., Wu, X., Zhou, M. et al.: Review and development of electric motor systems and electric powertrains for new energy vehicles. *Automot. Innov.* **4**(1), 3–22 (2021)  
<https://link.springer.com/article/10.1007/s42154-021-00139-z>
- [3] Chen, H., Li, L. & Küçükay, F.: Study of series-parallel and power-split DHT for hybrid powertrains. *Automot. Innov.* **4**(1), 23–33 (2021)  
<https://link.springer.com/article/10.1007/s42154-020-00126-w>
- [4] Xu, X., Liang, J., Hao, Q. et al.: A novel electric dual motor transmission for heavy commercial vehicles. *Automot. Innov.* **4**(1), 34–43 (2021)  
<https://link.springer.com/article/10.1007/s42154-020-00129-7>
- [5] Wang, W., Zhang, Y., Sun, X. et al.: Model-based double closed-loop coordinated control strategy for the electro-mechanical transmission system of heavy power-split HEVs. *Automot. Innov.* **4**(1), 44–55 (2021)  
<https://link.springer.com/article/10.1007/s42154-020-00130-0>
- [6] Qi, B., Yang, L., Zhang, L. et al.: Adaptive fault-tolerant control during the mode switching for electric vehicle dual-mode coupling drive system. *Automot. Innov.* **4**(1), 56–69 (2021)  
<https://link.springer.com/article/10.1007/s42154-020-00132-y>
- [7] Dorsch, C., Wang, X. & Küçükay, F.: Objective rating of the launch behavior of conventional, hybrid and electric vehicles. *Automot. Innov.* **4**(1), 70–80 (2021)  
<https://link.springer.com/article/10.1007/s42154-020-00131-z>
- [8] Wang, W., Durack, J.M., Durack, M.J. et al.: Automotive traction drive speed reducer efficiency testing. *Automot. Innov.* **4**(1), 81–92 (2021)  
<https://link.springer.com/article/10.1007/s42154-021-00135-3>
- [9] Hu, J., Wei, Z. & He, H.: An online adaptive internal short circuit detection method of lithium-ion battery. *Automot. Innov.* **4**(1), 93–102 (2021)  
<https://link.springer.com/article/10.1007/s42154-020-00127-9>

- [10] Che, Y., Foley, A., El-Gindy, M. et al.: Joint estimation of inconsistency and state of health for series battery packs. *Automot. Innov.* **4**(1), 103–116 (2021)  
<https://link.springer.com/article/10.1007/s42154-020-00128-8>
- [11] Tian, F., Sui, L., Zeng, Y., et al.: Hardware design and test of a gear-shifting control system of a multi-gear transmission for electric vehicles. *Automot. Innov.* **2**(3), 212-222 (2019)  
<https://link.springer.com/article/10.1007/s42154-019-00072-2>
- [12] Dong, Y., Chen, Y., Yu, C., et al.: Performance of the transmission parking mechanism of a battery electric vehicle simulated with Adams software. *Automot. Innov.* **1**(2), 114-121(2018)  
<https://link.springer.com/article/10.1007/s42154-018-0023-y>
- [13] Wang, C., Lian, Y., Ling, H., et al.: Multiphysics field co-simulation research based on electric drive system for a specific type of car. *Automot. Innov.* **2**(3), 223-230 (2019)  
<https://link.springer.com/article/10.1007/s42154-019-00067-z>
- [14] Zhang, S.: Parameter study and improvement of gearbox whine noise in electric vehicle. *Automot. Innov.* **1**(3), 272-280(2018)  
<https://link.springer.com/article/10.1007/s42154-018-0029-5>
- [15] Xu, X., Sun, W., Cai, T., et al.: Design of a hydraulic control unit for a two-speed dedicated electric vehicle transmission. *Automot. Innov.* **1**(4), 300-310(2018)  
<https://link.springer.com/article/10.1007/s42154-018-0039-3>
- [16] Li, L., Chen, H. & Küçükay, F.: Systematic synthesis of dedicated hybrid transmission. *Automot. Innov.* **2**(3), 231-239 (2019)  
<https://link.springer.com/article/10.1007/s42154-019-00071-3>
- [17] Peng, B., Zhang, H., Xuan, F., et al.: Torque distribution strategy of electric vehicle with in-wheel motors based on the identification of driving intention. *Automot. Innov.* **1**(2), 140-146(2018)  
<https://link.springer.com/article/10.1007/s42154-018-0024-x>
- [18] Qin, D., Cheng, L., Wang, T., et al.: Modeling and testing of the multi-pole field of a motor for pure electric vehicles. *Automot. Innov.* **1**(3), 226-236 (2018)  
<https://link.springer.com/article/10.1007/s42154-018-0025-9>

### Others

- [19] Xue, Q., Yang, D., Jiang, L. et al.: Modifying carbon supports of catalyst for the oxygen reduction reaction in vehicle PEMFCs. *Automot. Innov.* **4**(2), 119–130 (2021)  
<https://link.springer.com/article/10.1007/s42154-021-00149-x>
- [20] Du, L., Zhang, G. & Sun, S.: Proton Exchange Membrane (PEM) fuel cells with Platinum Group Metal (PGM)-free cathode. *Automot. Innov.* **4**(2), 131–143 (2021)  
<https://link.springer.com/article/10.1007/s42154-021-00146-0>
- [21] Wang, H., Wang, R., Sui, S. et al.: Cathode design for Proton Exchange Membrane fuel cells in automotive applications. *Automot. Innov.* **4**(2), 144–164 (2021)  
<https://link.springer.com/article/10.1007/s42154-021-00148-y>
- [22] Yin, C., Gao, Y., Li, K. et al.: Experimental investigation on local behaviors of PEMFC with segmented cell. *Automot. Innov.* **4**(2), 165–175 (2021)  
<https://link.springer.com/article/10.1007/s42154-021-00145-1>
- [23] Wu, G., Zhang, H., Xu, Y. et al.: Air-side fin geometry of a tube-strip heat exchanger for fuel cell vehicles.



Automot. Innov. **4**(2), 176–188 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00147-z>

[24] Li, G., Liu, C., Wang, E. et al.: State of charge estimation for lithium-ion battery based on improved cubature kalman filter algorithm. Automot. Innov. **4**(2), 189–200 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00134-4>

[25] Bai, X., Chen, G., Li, W. et al.: Critical speeds of electric vehicles for regenerative braking. Automot. Innov. **4**(2), 201–214 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00143-3>

[26] Hao, D., Wang, X.B., Zhang, Y.Y., et al.: Experimental study on hydrogen leakage and emission of fuel cell vehicles in confined spaces. Automot. Innov. **3**(2): 111–122 (2020)

<https://link.springer.com/article/10.1007/s42154-020-00096-z>

[27] Mao, W.F., Yue, W., Pei, F., et al.: Manganese-based lithium-ion battery:  $Mn_3O_4$  anode versus  $LiNi_{0.5}Mn_{1.5}O_4$  cathode. Automot. Innov. **3**(2): 123–132 (2020)

<https://link.springer.com/article/10.1007/s42154-020-00100-6>

[28] Qin, Y., Wang, Z., Yuan, K. et al.: Comprehensive analysis and optimization of dynamic vibration-absorbing structures for electric vehicles driven by in-wheel motors. Automot. Innov. **2**(4): 254–262 (2019)

<https://link.springer.com/article/10.1007/s42154-019-00079-9>

[29] Han, X., Feng, X., Ouyang, M. et al.: A comparative study of charging voltage curve analysis and state of health estimation of lithium-ion batteries in electric vehicle. Automot. Innov. **2**(4): 263–275 (2019)

<https://link.springer.com/article/10.1007/s42154-019-00080-2>

[30] Wang, Y., Zhao, F., Yuan, Y., et al.: Analysis of typical automakers' strategies for meeting the dual-credit regulations regarding CAFC and NEVs. Automot. Innov. **1**(1), 15–23(2018)

<https://link.springer.com/article/10.1007/s42154-018-0010-3>

[31] Zhao, B., Lv, C. & Hofman, T.: Driving-cycle-aware energy management of hybrid electric vehicles using a three-dimensional Markov chain model. Automot. Innov. **2**(2), 146–156 (2019)

<https://link.springer.com/article/10.1007/s42154-019-00059-z>

[32] Qin, D., Li, J., Wang, T., et al.: Modeling and simulating a battery for an electric vehicle based on Modelica. Automot. Innov. **2**(3), 169–177 (2019)

<https://link.springer.com/article/10.1007/s42154-019-00066-0>

[33] Lu, S., Cen, S., Zhang, Y.: Driver model-based fault-tolerant control of independent driving electric vehicle suffering steering failure, Automot. Innov. **1**(1), 85–94 (2018)

<https://link.springer.com/article/10.1007/s42154-018-0013-0>

[34] Yao, C., Dan, D., Zhang, Y. et al.: Thermal performance of a micro heat pipe array for battery thermal management under special vehicle-operating conditions. Automot. Innov. **4**(3), 317–327 (2020)

<https://link.springer.com/article/10.1007/s42154-020-00114-0>

[35] Shen, M., Gao, Q.: Simulation and analysis of dual-evaporator refrigeration system for electric vehicles. Automot. Innov. **4**(3), 347–355 (2020)

<https://link.springer.com/article/10.1007/s42154-020-00115-z>

[36] Wu, X., Wang, J., Zhang, Y. et al.: Review of DC-DC converter topologies based on impedance network with wide input voltage range and high gain for fuel cell vehicles. Automot. Innov. **4**(4), 351–372 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00163-z>

[37] Wen, X., Li, Y., Yang, C.: Design, modeling, and characterization of a tubular linear vibration energy harvester for integrated active wheel system. *Automot. Innov.* **4**(4), 413–429 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00144-2>

[38] Li, J., He, H., Wei, Z. et al.: Hierarchical sizing and power distribution strategy for hybrid energy storage system. *Automot. Innov.* **4**(4), 440–447 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00164-y>

[39] Huang, Y., Yang, S., Zhou, S. et al.: An innovative state-of-charge estimation method of lithium-ion battery based on 5th-order Cubature Kalman Filter. *Automot. Innov.* **4**(4), 448–458 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00162-0>

### 3. Car Body Design & Lightweight

#### Car Body Design

[1] Liu, X., Liang, M. & Luo, Q.: Innovative electric vehicle body design based on insurance institute for highway safety side impact conditions. *Automot. Innov.* **2**(3), 201–211 (2019)

<https://link.springer.com/article/10.1007/s42154-019-00070-4>

[2] Ou, H., Tang, X., Xiao, J., et al.: Lightweight body-in-white design driven by optimization technology. *Automot. Innov.* **1**(3), 255–262(2018)

<https://link.springer.com/article/10.1007/s42154-018-0032-x>

[3] Zhou, J., Feng, L., Chen, J., et al.: Uncertainty optimization design of a vehicle body structure considering random deviations. *Automot. Innov.* **1**(4), 342–351(2018)

<https://link.springer.com/article/10.1007/s42154-018-0041-9>

[4] Qin, H., Liu, Z., Liu, Y., et al.: A two-level cross-sectional optimization approach for automotive body concept design. *Automot. Innov.* **1**(2), 122–130(2018)

<https://link.springer.com/article/10.1007/s42154-018-0022-z>

[5] Gao, F., Ren, S., Lin, C., et al.: Metamodel-based multi-objective reliable optimization for front structure of electric vehicle. *Automot. Innov.* **1**(2), 131–139(2018)

<https://link.springer.com/article/10.1007/s42154-018-0018-8>

#### Lightweight Materials

[6] Rosenthal, S., Maaß, F., Kamaliev, M. et al.: Lightweight in automotive components by forming technology. *Automot. Innov.* **3**(3), 195–209 (2020)

<https://link.springer.com/article/10.1007/s42154-020-00103-3>

[7] Sun, Y., Luzin, V., Duan, Y. et al.: Forming-induced residual stress and material properties of roll-formed high-strength steels. *Automot. Innov.* **3**(3), 210–220 (2020)

<https://link.springer.com/article/10.1007/s42154-020-00112-2>

[8] Li, M., Wang, Y., Niu, Z. et al.: Study on the weld-bonding process optimization and mechanical performance of aluminum alloy joints. *Automot. Innov.* **3**(3), 221–230 (2020)

<https://link.springer.com/article/10.1007/s42154-020-00106-0>

[9] Cui, J., Wang, S., Yuan, W. et al.: Effects of standoff distance on magnetic pulse welded joints between aluminum and steel elements in automobile body. *Automot. Innov.* **3**(3), 231–241 (2020)

<https://link.springer.com/article/10.1007/s42154-020-00104-2>

- [10] Ma, Y., Niu, S., Shan, H. et al.: Impact of stack orientation on self-piercing riveted and friction self-piercing riveted Aluminum alloy and Magnesium alloy joints. *Automot. Innov.* **3**(3), 242–249 (2020)  
<https://link.springer.com/article/10.1007/s42154-020-00108-y>
- [11] Wang, D., Xie, C., Liu, Y. et al.: Multi-objective collaborative optimization for the lightweight design of an electric bus body frame. *Automot. Innov.* **3**(3), 250–259 (2020)  
<https://link.springer.com/article/10.1007/s42154-020-00105-1>
- [12] Shi, Z., Chen, G., Zhu, L. et al.: Sandwich structure design of a cooling fin for battery modules against impact loads. *Automot. Innov.* **3**(3), 260–269 (2020)  
<https://link.springer.com/article/10.1007/s42154-020-00107-z>
- [13] Li, J., Wang, L., Chen, Y. et al.: Research and application of lightweight index for passenger cars. *Automot. Innov.* **3**(3), 270–279 (2020)  
<https://link.springer.com/article/10.1007/s42154-020-00110-4>
- [14] Lin, Y., Min, J., Teng, H. et al.: Flexural performance of steel–FRP composites for automotive applications. *Automot. Innov.* **3**(3), 280–295 (2020)  
<https://link.springer.com/article/10.1007/s42154-020-00109-x>
- [15] Ma, F., Ying, Z., Wang, G., et al.: Crashworthiness optimization design of thin-walled tube filled with re-entrant triangles honeycombs. *Automot. Innov.* **2**(1), 1-13 (2019)  
<https://link.springer.com/article/10.1007/s42154-019-00051-7>
- [16] Shen, Q., Li, X., Zhao, Y., et al.: Experimental and performance analyses on elastomer-strengthened polyethylene terephthalate/glass fiber blends. *Automot. Innov.* **2**(1), 71-78(2019)  
<https://link.springer.com/article/10.1007/s42154-019-00047-3>
- [17] Wang, S., Min, J., Lin, J., et al.: Effect of atmospheric pressure plasma treatment on the lap-shear strength of adhesive-bonded sheet molding compound joints. *Automot. Innov.* **1**(3), 237-246(2018)  
<https://link.springer.com/article/10.1007/s42154-018-0027-7>
- [18] Zheng, G., Fan, Z., Zhang, H., et al.: Crashworthiness optimization of steel–magnesium hybrid double-hat-shaped tube. *Automot. Innov.* **1**(3), 247-254 (2018)  
<https://link.springer.com/article/10.1007/s42154-018-0033-9>
- [19] Zhu, C., Zhu, P., Liu, Z., et al.: Prediction of the Elastic Properties of a Plain Woven Carbon Fiber Reinforced Composite with Internal Geometric Variability. *Automot. Innov.* **1**(2), 147-157(2018)  
<https://link.springer.com/article/10.1007/s42154-018-0015-y>
- [21] Lu, H., Zhang, J., Tian, N., et al.: Recycle-friendly aluminum alloy sheets for automotive applications based on hemming. *Automot. Innov.* **1**(1), 70-75(2018)  
<https://link.springer.com/article/10.1007/s42154-018-0012-1>
- [22] Ma, F., Zhao, Y., Liang, H., et al.: Effects of cell microtopology on the in-plane dynamic crushing analysis of re-entrant square cellular material. *Automot. Innov.* **1**(1), 24-34(2018)  
<https://link.springer.com/article/10.1007/s42154-018-0005-0>

#### **4. Energy-saving and Eco-systems**

##### **Engine**

- [1] Noce, T., Hanriot, S.D.M., Sales, L.C.M., et al.: Energy conversion factor for gasoline engines in real-world driving emission cycle. *Automot. Innov.* **3**(2): 169–180 (2020)

<https://link.springer.com/article/10.1007/s42154-020-00098-x>

[2] Neumann, D., Schäfers, L., Muthyala, P., et al.: Reduction of transient engine-out NO<sub>x</sub>-emissions by advanced digital combustion rate shaping. *Automot. Innov.* **3**(2): 181–190 (2020)

<https://link.springer.com/article/10.1007/s42154-020-00101-5>

[3] Shuai, S., Ma, X., Li, Y., et al.: Recent progress in automotive gasoline direct injection engine technology. *Automot. Innov.* **1**(2), 95-113(2018)

<https://link.springer.com/article/10.1007/s42154-018-0020-1>

[4] Wu, Z., Zhao, W., Li, Z., et al.: A review of engine fuel injection studies using synchrotron radiation x-ray imaging. *Automot. Innov.* **2**(2), 79-92 (2019)

<https://link.springer.com/article/10.1007/s42154-019-00056-2>

[5] Li, F., Wang, Z., Wang, Y. et al. High-efficiency and clean combustion natural gas engines for vehicles. *Automot. Innov.* **2**(4): 284–304 (2019)

<https://link.springer.com/article/10.1007/s42154-019-00075-z>

[6] Dong, G., Li, L., Zhu, D. et al.: Ion current features of HCCI combustion in a GDI engine. *Automot. Innov.* **2**(4): 305–313 (2019)

<https://link.springer.com/article/10.1007/s42154-019-00074-0>

[7] Zhao, Z., Meng, Z., Li, L. et al.: Experimental study on the combustion and energy flows of vehicle engine under NEDC of cold start. *Automot. Innov.* **2**(4): 314–327 (2019)

<https://link.springer.com/article/10.1007/s42154-019-00078-w>

[8] Qi, Y., Wang, B. & Wang, Z.: Impact resistance of spark plug's ceramic insulator during ultra-high-pressure combustion under deto-knock conditions. *Automot. Innov.* **2**(2), 137-145 (2019)

<https://link.springer.com/article/10.1007/s42154-019-00058-0>

[9] Li, L., Gong, Y., Deng, J., et al.: CO<sub>2</sub> reduction request and future high-efficiency zero-emission Argon power cycle engine. *Automot. Innov.* **1**(1), 43-53(2018)

<https://link.springer.com/article/10.1007/s42154-018-0007-y>

[10] Wu, J., Kang, Z., Zhang, Z., et al.: Effects of vessel and water temperatures on direct injection in internal combustion Rankine cycle engines. *Automot. Innov.* **1**(4), 331-341(2018)

<https://link.springer.com/article/10.1007/s42154-018-0046-4>

[11] Gong, H.: Estimation of residual exhaust gas of homogeneous charge compression ignition gasoline engine operating under negative valve overlap strategy. *Automot. Innov.* **2**(1), 45-54(2019)

<https://link.springer.com/article/10.1007/s42154-019-00048-2>

### **Driveline**

[12] Xu, X., Dong, P., Liu, Y., et al.: Progress in automotive transmission technology. *Automot. Innov.* **1**(3), 187-210 (2018)

<https://link.springer.com/article/10.1007/s42154-018-0031-y>

[13] Küçükay, F., Lange, A., Li, L.: Highly fuel-efficient transmission and propulsion concepts. *Automot. Innov.* **1**(1), 35-42(2018)

<https://link.springer.com/article/10.1007/s42154-018-0004-1>

[14] Shi, T., Zhao, F., Hao, H, et al.: Development trends of transmissions for hybrid electric vehicles using an optimized energy management strategy. *Automot. Innov.* **1**(4), 291-299(2018)

<https://link.springer.com/article/10.1007/s42154-018-0037-5>

[15] Zhu, M., Yao, P., Pu, Y.: Comparative study on the temperature rise of a dry dual clutch under different starting conditions. *Automot. Innov.* **2**(1), 35-44(2019)

<https://link.springer.com/article/10.1007/s42154-019-00053-5>

[16] Li, X., Lyu, J., Hong, J., et al.: MPC-based downshift control of automated manual transmissions. *Automot. Innov.* **2**(1), 55-63(2019)

<https://link.springer.com/article/10.1007/s42154-019-00050-8>

### Others

[17] Liu, J., Li, J., Wang, Y., et al.: Technology development analysis on low carbon for power of heavy-duty commercial vehicle. *Automot. Innov.* **2**(1), 64-70(2019)

<https://link.springer.com/article/10.1007/s42154-019-00054-4>

[18] Yu, C., Ji, G., Zhang, C., et al.: Cost-efficient thermal management for a 48v li-ion battery in a mild hybrid electric vehicle. *Automot. Innov.* **1**(4), 320-330(2018)

<https://link.springer.com/article/10.1007/s42154-018-0043-7>

[19] Li, B., Kuo, H., Wang, X. et al.: Thermal management of electrified propulsion system for low-carbon vehicles. *Automot. Innov.* **4**(3), 299–316 (2020)

<https://link.springer.com/article/10.1007/s42154-020-00124-y>

[20] Wang, G., Gao, Q., Yan, Y. et al.: Thermal management optimization of a lithium-ion battery module with graphite sheet fins and liquid cold plates. *Automot. Innov.* **4**(3), 336–346 (2020)

<https://link.springer.com/article/10.1007/s42154-020-00121-1>

[21] Zhao, Z., Liu, W., Li, F. et al.: Distributed gas ignition using injection strategy for high efficiency and clean combustion under lean condition. *Automot. Innov.* **4**(3), 366–373 (2020)

<https://link.springer.com/article/10.1007/s42154-020-00116-y>

## 5. Vehicle Safety Technology

[1] Lei, Y.L., Song, P.X., Fu, Y.: Design of constant-speed control method for water medium hydraulic retarders based on neural network. *Automot. Innov.* **3**(2): 147–157 (2020)

<https://link.springer.com/article/10.1007/s42154-020-00095-0>

[2] Ye, Z.S., Xie, W.D., Yin, Y.M., et al.: Dynamic rollover prediction of heavy vehicles considering critical frequency. *Automot. Innov.* **3**(2): 158–168 (2020)

<https://link.springer.com/article/10.1007/s42154-020-00099-w>

[3] Zhang, X., Huang, Y., Guo, K., et al.: Integrated spacing policy considering micro- and macroscopic characteristics. *Automot. Innov.* **2**(2), 102-109 (2019)

<https://link.springer.com/article/10.1007/s42154-019-00064-2>

[4] Lian, Y., Zeng, D., Ye, S., et al.: High-voltage safety improvement design for electric vehicle in rear impact. *Automot. Innov.* **1**(3), 211-225(2018)

<https://link.springer.com/article/10.1007/s42154-018-0030-z>

[5] Gawande, S. H., Muley, R. A. A., Yerrawar, N.: Optimization of torsional stiffness for heavy commercial vehicle chassis frame. *Automot. Innov.* **1**(4), 352-361(2018)

<https://link.springer.com/article/10.1007/s42154-018-0044-6>

[6] Yurchenko, N.F., Breed, D.S., Zhang, S.: Design of the airbag inflation system applicable to conventional and autonomous vehicles. *Automot. Innov.* **4**(4), 390–399 (2021)

<https://link.springer.com/article/10.1007/s42154-021-00156-y>

## 6. Others

[1] Xu, N., Yang, Y.Y., Guo, K.H.: A discrete tire model for cornering properties considering rubber friction. *Automot. Innov.* **3**(2): 133–146 (2020)

<https://link.springer.com/article/10.1007/s42154-020-00097-y>

[2] Liu, J., Huang, L., Zhou, R. et al.: Reliability growth test planning and verification of commercial vehicles. *Automot. Innov.* **2**(4): 328–337(2019)

<https://link.springer.com/article/10.1007/s42154-019-00082-0>

[3] Wang, S., Guo, W., Zeng, K., et al.: Characterization of automotive brake discs with laser-machined surfaces. *Automot. Innov.* **2**(3), 190–200 (2019)

<https://link.springer.com/article/10.1007/s42154-019-00068-y>

[4] Yang, W.: Scale consistency quantification for subjective evaluation of vehicle dynamics. *Automot. Innov.* **2**(2), 121–126 (2019)

<https://link.springer.com/article/10.1007/s42154-019-00062-4>

[5] Huang, K., Yan, Y., Li, B., et al.: A novel design of thermoelectric generator for automotive waste heat recovery. *Automot. Innov.* **1**(1), 54–61(2018)

<https://link.springer.com/article/10.1007/s42154-018-0006-z>

[6] Huang, Y., Khazeraee, M., Wang, H., et al.: Design of a regenerative auxiliary power system for service vehicles. *Automot. Innov.* **1**(1), 62–69(2018)

<https://link.springer.com/article/10.1007/s42154-018-0008-x>

[7] Zuo, S., Ni, T., Wu, X., et al.: Mechanism and conditions of the polygonal wear of vehicle tire. *Automot. Innov.* **1**(2), 167–176(2018)

<https://link.springer.com/article/10.1007/s42154-018-0016-x>

[8] Mu, Y., Li, L., Shi, S.: Modified tire-slip-angle model for chaotic vehicle steering motion. *Automot. Innov.* **1**(2), 177–186 (2018)

<https://link.springer.com/article/10.1007/s42154-018-0019-7>

[9] Shao, X., Xu, N., Liu, X.: Investigation and application on the vertical vibration models of the seated human body. *Automot. Innov.* **1**(3), 263–271(2018)

<https://link.springer.com/article/10.1007/s42154-018-0026-8>

[10] Pei, X., Hu, X., Liu, W., et al.: State estimation of vehicle's dynamic stability based on the nonlinear Kalman filter. *Automot. Innov.* **1**(3), 281–289(2018)

<https://link.springer.com/article/10.1007/s42154-018-0028-6>

[11] Michelotti, A.C., da Silva, J.C., Nicolazzi, L.C.: Novel mechanical interface design for automotive starting systems. *Automot. Innov.* **2**(1), 14–25(2019)

<https://link.springer.com/article/10.1007/s42154-019-00052-6>

[12] Yang, W., Chen, J., Liu, Z., et al: Vibration characteristics of framed SUV cab based on coupled transfer path analysis. *Automot. Innov.* **2**(1) ,26–34(2019)

<https://link.springer.com/article/10.1007/s42154-019-00049-1>

[13] Chen, W., Lu, C., Liu, Z., et al.: Simplified method of simulating double-layer micro-perforated panel structure. *Automot. Innov.* **1**(4), 374–380(2018)

<https://link.springer.com/article/10.1007/s42154-018-0040-x>

[14] Chen, Y., Yan, Y. & Li, B.: Thermal analyses of power electronics integrated with vapour chamber cooling. *Automot. Innov.* **4**(3), 328–335 (2020)

<https://link.springer.com/article/10.1007/s42154-020-00123-z>

[15] Shah, R.M.R.A., Qubeissi, M.A., McGordon, A. et al.: Micro gas turbine range extender performance analysis using varying intake temperature. *Automot. Innov.* **4**(3), 356–365 (2020)

<https://link.springer.com/article/10.1007/s42154-020-00119-9>