


Brief CV

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Research Area	mechanical engineering and automation			
<p>Brief introduction of your research experience:</p> <p>Many innovative achievements have been made in mechanical principle, mechanical design, mechanical optimization design, mechanical innovation design, optimization method and innovation method.</p> <p>《mechanical principle》: The velocity ratio formula of universal joint is deduced. The kinematic parameters of the configuration are derived. The method of marking direction is put forward to calculate the transmission ratio of gear train. In this paper, a mosaic method is proposed to solve the vector equation of unknown variables. The motion law of the cam follower of quartic polynomial is put forward. The dynamic simulation of several mechanisms is carried out.</p> <p>《machine design》: The vibration stability of machinery is defined, and the mathematical and mechanical basis of strength calculation is supplemented.</p> <p>《Mechanical optimization design》: The blind walking method is put forward. Many optimization methods are proposed. The whole discipline system has been improved.</p> <p>《Mechanical innovation design》: The definition of innovation based on subconscious theory is put forward. This paper puts forward a method of innovation by using the characteristics of memory. The method of mining innovative ideas is put forward. Six kinds of general innovation methods are integrated. A new theoretical system of discipline is put forward.</p> <p>《Fundamentals of mechanical control engineering》: Based on the vibration theory, the discipline theory system is integrated.</p> <p>《Machine manufacturing》: The core concepts of various machining technology are cleared, such as the processing technology of the cutting with abnormal temperature is closely related to molecular motion, vibration cutting and ultrasonic cutting uses the resonance, the working principle of ultrasonic machining is similar to the explosion shock waves.</p> <p>: There are some representative papers as follows.</p> <p>[1]LI Chun-ming, YIN Xiao-li, YUN Ping-li, GUO Ying, CUI Yun-jing. Crank slider mechanism dynamics and its related problem of a machine[J]. Journal of Dezhou University, 2019, 35(6):40-46.</p> <p>[2]LI Chunming, LIU Qing, LI Wanteng. Fixed-point optimization method of fitting second-order</p>				

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