

**Research Papers**

The mechanical and thermodynamic properties of ZrAl₂ under pressure from first-principles investigation

Ning Wei, Xuefei Wang, Xuzhong Zuo

1650001

A meme propagation model to combine social affirmation with meme attractiveness and persistence

Aiguo Zheng, Shuangling Luo, Haoxiang Xia

1650002

Non-Newtonian effects of blood on LDL transport inside the arterial lumen and across multi-layered arterial wall with and without stenosis

Amin Deyranlou, Hamid Niazmand, Mahmood-Reza Sadeghi, Yaser Mesri

1650003

Analytical studies on an extended car following model for mixed traffic flow with slow and fast vehicles

Zhipeng Li, Xun Xu, Shangzhi Xu, Yeqing Qian, Juan Xu

1650004

Theoretical investigation of a tunable external cavity diode laser based on a single cavity all-dielectric thin-film Fabry–Perot filter

Zhao Heng, Xiao Xiao, Li Bo, Wang Wen Jin, Hu Yi, Wang Youqin

1650005

Targeting engineering synchronization in chaotic systems

Sourav K. Bhowmick, Dibakar Ghosh

1650006

Nonlocal electrical diffusion equation

J. F. Gómez-Aguilar, R. F. Escobar-Jiménez, V. H. Olivares-Peregrino, M. Benavides-Cruz, C. Calderón-Ramón

1650007

Chaotic attractors based on unstable dissipative systems via third-order differential equation

E. Campos-Cantón

1650008

Simulation study of traffic car accidents at a single lane roundabout

H. Echab, N. Lakouari, H. Ez-Zahraouy, A. Benyoussef

1650009

Adaptive impulsive cluster synchronization in community network with nonidentical nodes

Xiaoli Gong, Luyining Gan, Zhaoyan Wu

1650010

Influences of vehicles' fuel consumption and exhaust emissions on the trip cost without late arrival under car-following model

Tie-Qiao Tang, Qiang Yu

1650011

Numerical simulation of the leaky dielectric microdroplet generation in electric fields

Reza Kamali, Mohammad Karim Dehghan Manshadi

1650012