

2023 APS Outstanding Contribution Awards

APS (*Acta Pharmacologica Sinica*), published monthly in English, is an international peer-reviewed journal. With the leading by Professor [Jian Ding](#), Editor-in-Chief, and the support from a respected global [editorial board](#), APS is continuously growing to a high-level journal in the area of pharmacology and related life sciences. We owe all the journal progress to our authors and reviewers. To acknowledge their fine contributions to the journal, we set awards to outstanding papers and reviewers.

APS Outstanding Paper Award

[Sirtuin 3 deficiency exacerbates diabetic cardiomyopathy via necroptosis enhancement and NLRP3 activation](#)

Hai-xia Su, Sheng Yao, Wen-feng Zhao, Min-jun Li, Jia Liu, Wei-juan Shang, Hang Xie, Chang-qiang Ke, Hang-chen Hu, Mei-na Gao, Kun-qian Yu, Hong Liu, Jing-shan Shen, Wei Tang, Lei-ke Zhang, Geng-fu Xiao, Li Ni, Dao-wen Wang, Jian-ping Zuo, Hua-liang Jiang, Fang Bai, Yan Wu, Yang Ye & Ye-chun Xu Shu Song, Yue Ding, Guo-Liang Dai, Yue Zhang, Meng-Ting Xu, Jie-Ru Shen, Ting-Ting Chen, Yun Chen, Guo-Liang Meng

Acta Pharmacol Sin. 2021 Feb;42(2):230-241. doi:10.1038/s41401-020-0490-7. Epub 2020 Aug 7.

[Ganoderic acid hinders renal fibrosis via suppressing the TGF- \$\beta\$ /Smad and MAPK signaling pathways](#)

Xiao-Qiang Geng, Ang Ma, Jin-Zhao He, Liang Wang, Ying-Li Jia, Guang-Ying Shao, Min Li, Hong Zhou, Shu-Qian Lin, Jian-Hua Ran, Bao-Xue Yang

Acta Pharmacol Sin. 2020 May;41(5):670-677. doi:10.1038/s41401-019-0324-7. Epub 2019 Dec 5.

[NRF2-GPX4/SOD2 axis imparts resistance to EGFR-tyrosine kinase inhibitors in non-small-cell lung cancer cells](#)

Chun-Shuang Ma, Qian-Ming Lv, Ke-Ren Zhang, Ya-Bin Tang, Yu-Fei Zhang, Ying Shen, Hui-Min Lei, Liang Zhu

Acta Pharmacol Sin. 2021 Apr;42(4):613-623. doi: 10.1038/s41401-020-0443-1. Epub 2020 Jul 23.

[Cycloastragenol upregulates SIRT1 expression, attenuates apoptosis and suppresses neuroinflammation after brain ischemia](#)

Man Li, Shi-Chun Li, Bao-Kai Dou, Ying-Xiang Zou, Hao-Zhen Han, Dong-Xiang Liu, Zun-Ji Ke, Zhi-Fei Wang

Acta Pharmacol Sin. 2020 Aug;41(8):1025-1032. doi: 10.1038/s41401-020-0386-6. Epub 2020 Mar 16.

[DL-3-n-butylphthalide ameliorates diabetes-associated cognitive decline by enhancing PI3K/Akt signaling and suppressing oxidative stress](#)

Bei-Ni Wang, Cheng-Biao Wu, Zi-Miao Chen, Pei-Pei Zheng, Ya-Qian Liu, Jun Xiong, Jing-Yu Xu, Pei-Feng Li, Abdullah Al Mamun, Li-Bing Ye, Zhi-Long Zheng, Yan-Qing Wu, Jian Xiao, Jian Wang

Acta Pharmacol Sin. 2021 Mar;42(3):347-360. doi: 10.1038/s41401-020-00583-3. Epub 2021 Jan 18.

[Gut microbiota dysbiosis-induced activation of the intrarenal renin-angiotensin system is involved in kidney injuries in rat diabetic nephropathy](#)

Chen-Chen Lu, Ze-Bo Hu, Ru Wang, Ze-Hui Hong, Jian Lu, Pei-Pei Chen, Jia-Xiu Zhang, Xue-Qi Li, Ben-Yin Yuan, Si-Jia Huang, Xiong-Zhong Ruan, Bi-Cheng Liu, Kun-Ling Ma
Acta Pharmacol Sin. 2020 Aug;41(8):1111-1118. doi: 10.1038/s41401-019-0326-5. Epub 2020 Mar 17.

[Artesunate attenuates LPS-induced osteoclastogenesis by suppressing TLR4/TRAF6 and PLC \$\gamma\$ 1-Ca \$^{2+}\$ -NFATc1 signaling pathway](#)

Xiang-Zhou Zeng, Yue-Yang Zhang, Qin Yang, Song Wang, Bin-Hua Zou, Yan-Hui Tan, Min Zou, Shu-Wen Liu, Xiao-Juan Li
Acta Pharmacol Sin. 2020 Feb;41(2):229-236. doi: 10.1038/s41401-019-0289-6. Epub 2019 Aug 20.

[ATF3 contributes to brucine-triggered glioma cell ferroptosis via promotion of hydrogen peroxide and iron](#)

Shan Lu, Xuan-Zhong Wang, Chuan He, Lei Wang, Shi-Peng Liang, Chong-Cheng Wang, Chen Li, Tian-Fei Luo, Chun-Sheng Feng, Zhen-Chuan Wang, Guang-Fan Chi, Peng-Fei Ge
Acta Pharmacol Sin. 2021 Oct;42(10):1690-1702. doi: 10.1038/s41401-021-00700-w. Epub 2021 Jun 10.

[Kanglexin, a novel anthraquinone compound, protects against myocardial ischemic injury in mice by suppressing NLRP3 and pyroptosis](#)

Yu Bian, Xin Li, Ping Pang, Xue-Ling Hu, Shu-Ting Yu, Yi-Ning Liu, Xin Li, Ning Wang, Jin-Hui Wang, Wei Xiao, Wei-Jie Du, Bao-Feng Yang
Acta Pharmacol Sin. 2020 Mar;41(3):319-326. doi: 10.1038/s41401-019-0307-8. Epub 2019 Oct 23.

[Baicalein attenuates cardiac hypertrophy in mice via suppressing oxidative stress and activating autophagy in cardiomyocytes](#)

Bing-Yan Liu, Ling Li, Gao-Li Liu, Wei Ding, Wen-Guang Chang, Tao Xu, Xiao-Yu Ji, Xian-Xin Zheng, Jing Zhang, Jian-Xun Wang
Acta Pharmacol Sin. 2021 May;42(5):701-714. doi: 10.1038/s41401-020-0496-1. Epub 2020 Aug 14.

[Baicalin prevents LPS-induced activation of TLR4/NF- \$\kappa\$ B p65 pathway and inflammation in mice via inhibiting the expression of CD14](#)

Ya-Jun Fu, Bo Xu, Shao-Wei Huang, Xia Luo, Xiang-Liang Deng, Shuang Luo, Chang Liu, Qing Wang, Jin-Yan Chen, Lian Zhou
Acta Pharmacol Sin. 2021 Jan;42(1):88-96. doi: 10.1038/s41401-020-0411-9. Epub 2020 May 26.

[Rg1 improves LPS-induced Parkinsonian symptoms in mice via inhibition of NF- \$\kappa\$ B signaling and modulation of M1/M2 polarization](#)

Jia-Qi Liu, Ming Zhao, Zhao Zhang, Li-Yuan Cui, Xin Zhou, Wei Zhang, Shi-Feng Chu, Da-Yong Zhang, Nai-Hong Chen
Acta Pharmacol Sin. 2020 Apr;41(4):523-534. doi: 10.1038/s41401-020-0358-x. Epub 2020 Mar 18.

[\$\beta\$ -sitosterol ameliorates influenza A virus-induced proinflammatory response and acute lung injury in mice by disrupting the cross-talk between RIG-I and IFN/STAT signaling](#)

Bei-Xian Zhou, Jing Li, Xiao-Li Liang, Xi-Ping Pan, Yan-Bing Hao, Pei-Fang Xie, Hai-Ming Jiang, Zi-Feng Yang, Nan-Shan Zhong

Acta Pharmacol Sin. 2020 Sep;41(9):1178-1196. doi: 10.1038/s41401-020-0403-9. Epub 2020 Jun 5.

[Icariside II attenuates cerebral ischemia/reperfusion-induced blood-brain barrier dysfunction in rats via regulating the balance of MMP9/TIMP1](#)

Mu-Bo Liu, Wei Wang, Jian-Mei Gao, Fei Li, Jing-Shan Shi, Qi-Hai Gong

Acta Pharmacol Sin. 2020 Dec;41(12):1547-1556. doi: 10.1038/s41401-020-0409-3. Epub 2020 Jun 2.

[Sirt1 inhibits renal tubular cell epithelial-mesenchymal transition through YY1 deacetylation in diabetic nephropathy](#)

Lei Du, Xuan Qian, Yuan Li, Xi-Zhi Li, Lin-Lin He, Liu Xu, Yi-Qi Liu, Cheng-Cheng Li, Pu Ma, Fang-Lin Shu, Qian Lu, Xiao-Xing Yin

Acta Pharmacol Sin. 2021 Feb;42(2):242-251. doi: 10.1038/s41401-020-0450-2. Epub 2020 Jun 17.

[A multi-targeting drug design strategy for identifying potent anti-SARS-CoV-2 inhibitors](#)

Peng-Xuan Ren, Wei-Juan Shang, Wan-Chao Yin, Huan Ge, Lin Wang, Xiang-Lei Zhang, Bing-Qian Li, Hong-Lin Li, Ye-Chun Xu, Eric H Xu, Hua-Liang Jiang, Li-Li Zhu, Lei-Ke Zhang, Fang Bai

Acta Pharmacol Sin. 2022 Feb;43(2):483-493. doi: 10.1038/s41401-021-00668-7. Epub 2021 Apr 27.

[Nrf2 activation ameliorates mechanical allodynia in paclitaxel-induced neuropathic pain](#)

Ya-Qun Zhou, Dai-Qiang Liu, Shu-Ping Chen, Nan Chen, Jia Sun, Xiao-Mei Wang, Fei Cao, Yu-Ke Tian, Da-Wei Ye

Acta Pharmacol Sin. 2020 Aug;41(8):1041-1048. doi: 10.1038/s41401-020-0394-6. Epub 2020 Mar 19.

[Salvianolic acid A prevented cerebrovascular endothelial injury caused by acute ischemic stroke through inhibiting the Src signaling pathway](#)

Cheng-di Liu, Nan-Nan Liu, Sen Zhang, Guo-Dong Ma, Hai-Guang Yang, Ling-Lei Kong, Guan-Hua Du

Acta Pharmacol Sin. 2021 Mar;42(3):370-381. doi: 10.1038/s41401-020-00568-2. Epub 2020 Dec 10.

[Tetrandrine alleviates silicosis by inhibiting canonical and non-canonical NLRP3 inflammasome activation in lung macrophages](#)

Mei-Yue Song, Jia-Xin Wang, You-Liang Sun, Zhi-Fa Han, Yi-Tian Zhou, Ying Liu, Tian-Hui Fan, Zhao-Guo Li, Xian-Mei Qi, Ya Luo, Pei-Ran Yang, Bai-Cun Li, Xin-Ri Zhang, Jing Wang, Chen Wang

Acta Pharmacol Sin. 2022 May;43(5):1274-1284. doi: 10.1038/s41401-021-00693-6. Epub 2021 Aug 20.

[Engineering nanomedicines through boosting immunogenic cell death for improved cancer immunotherapy](#)

Jing Gao, Wei-Qi Wang, Qing Pei, Megan S Lord, Hai-Jun Yu

Acta Pharmacol Sin. 2020 Jul;41(7):986-994. doi: 10.1038/s41401-020-0400-z. Epub 2020 Apr 21.

Ex vivo pulsed dendritic cell vaccination against cancer

Yang-Zhuo Gu, Xing Zhao, Xiang-Rong Song

Acta Pharmacol Sin. 2020 Jul;41(7):959-969. doi: 10.1038/s41401-020-0415-5. Epub 2020 May 4.

Metformin and cancer immunity

Ruixia Ma, Bin Yi, Adam I Riker, Yaguang Xi

Acta Pharmacol Sin. 2020 Nov;41(11):1403-1409. doi: 10.1038/s41401-020-00508-0. Epub 2020 Aug 31.

The glycolytic process in endothelial cells and its implications

Susan Wai Sum Leung, Yi Shi

Acta Pharmacol Sin. 2022 Feb;43(2):251-259. doi: 10.1038/s41401-021-00647-y. Epub 2021 Apr 13.

Harnessing nanomedicine to overcome the immunosuppressive tumor microenvironment

Bo Sun, Hyesun Hyun, Lian-Tao Li, Andrew Z Wang

Acta Pharmacol Sin. 2020 Jul;41(7):970-985. doi: 10.1038/s41401-020-0424-4. Epub 2020 May 18.

Research progress on the protective effects of licorice-derived 18 β -glycyrrhetic acid against liver injury

Shou-Yan Wu, Wen-Jie Wang, Jin-Hui Dou, Li-Kun Gong

Acta Pharmacol Sin. 2021 Jan;42(1):18-26. doi: 10.1038/s41401-020-0383-9. Epub 2020 Mar 6.

Atomic force microscopy for revealing micro/nanoscale mechanics in tumor metastasis: from single cells to microenvironmental cues

Mi Li, Ning Xi, Yue-Chao Wang, Lian-Qing Liu

Acta Pharmacol Sin. 2021 Mar;42(3):323-339. doi: 10.1038/s41401-020-0494-3. Epub 2020 Aug 17.

APS Outstanding Reviewer Award

Lu, Jinjian	Chen, Yi	Chen, Shu-zhen	He, Xian-hui
Wu, Jian	Zhao, Ying-Yong	Feng, Dechun	Meng, Ling-hua
Lin, Neng-ming	Jiang, Wei	Chu, Xiangping	Ma, Kun-Ling
Ge, Pengfei	Lu, Limin	Ren, Jun	Yao, Hong-hong
Zhang, Yong	Yi, Fan	Fu, Li-wu	Sun, Wu-Yi
Lu, Ming	Huang, Min	Zhao, Ming-Gao	Lu, Qiulun
Mao, Xin-liang	Shen, Ying	Peng, Jing-Hua	Wang, Pei
Xu, Ming	Zhu, Hua	Chen, Xiao-qian	Shan, Zhixin
Lu, Boxun	Li, Lei	Lin, Chuwen	