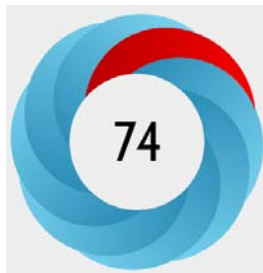


JIPB: TOP 5 Articles in 2021 Based on Altmetric Scores

JIPB is very pleased to announce our Top 5 articles from 2021 based on Altmetric scores. We would like to extend our warmest congratulations to all the authors of the selected papers, and our thanks for choosing JIPB to publish your high-impact, cutting-edge research in plant biology!

Altmetrics are complementary to traditional, citation-based metrics. They can include (but are not limited to) peer reviews on Faculty of 1000, citations on Wikipedia and in public policy documents, discussions on research blogs, mainstream media coverage, bookmarks on reference managers like Mendeley, and mentions on social networks such as Twitter.

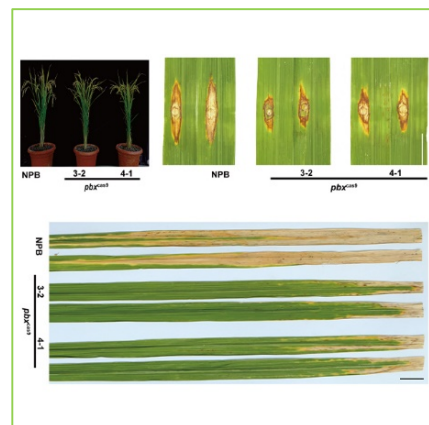


#1 JIPB Article in 2021

Engineering broad-spectrum disease-resistant rice by editing multiple susceptibility genes

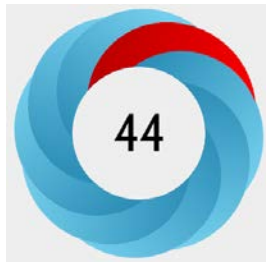
Hui Tao, Xuetao Shi, Feng He, Dan Wang, Ning Xiao, Hong Fang, Ruyi Wang, Fan Zhang, Min Wang, Aihong Li, Xionglun Liu, Guo-Liang Wang and Yuese Ning

In our Special Issue on Genome Editing in Plants in September 2021, Tao et al. generated a CRISPR/Cas9-induced triple mutant of the rice susceptibility genes *Pi21*, *Bsr-d1*, and *Xa5* that had significantly enhanced resistance to the fungus *Magnaporthe oryzae* and the bacterium *Xanthomonas oryzae* pv. *oryzae* without growth penalty. These results demonstrate that the simultaneous editing of multiple susceptibility genes is a powerful strategy for generating new rice varieties with broad-spectrum resistance.



J. Integr. Plant Biol. 2021, 63 (9): 1639-1648.

<https://doi.org/10.1111/jipb.13145>



#2 JIPB Article in 2021

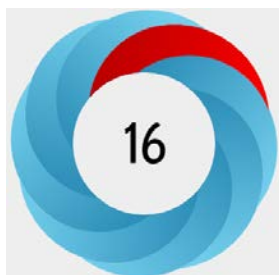
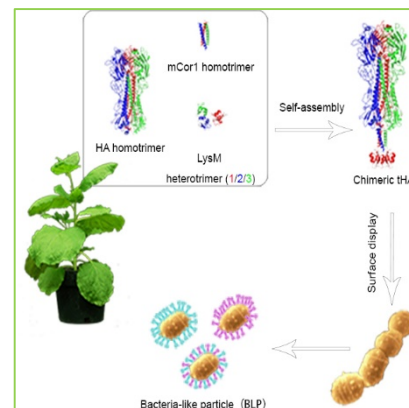
Plant-based, adjuvant-free, potent multivalent vaccines for avian influenza virus via *Lactococcus* surface display

Shi-Jian Song, Gyeong-Im Shin, Jinyong Noh, Jiho Lee, Deok-Hwan Kim, Gyeongryul Ryu, Gyeongik Ahn, Hyungmin Jeon, Hai-Ping Diao, Youngmin Park, Min Gab Kim, Woe-Yeon Kim, Young-Jin Kim, Eun-Ju Sohn, Chang Seon Song and Inhwan Hwang

In our August 2021 issue, Song et al. developed a new subunit vaccine platform for a potent, adjuvant-free, and multivalent vaccination. Production of subunit vaccines with high efficacy in a cost-effective manner remains a major challenge. However, a combination of plant-based antigen production and bacteria-like particle-based delivery may provide a cost-effective platform for producing potent multivalent vaccines against influenza viruses.

J. Integr. Plant Biol. 2021, 63 (8): 1505–1520.

<https://doi.org/10.1111/jipb.13141>

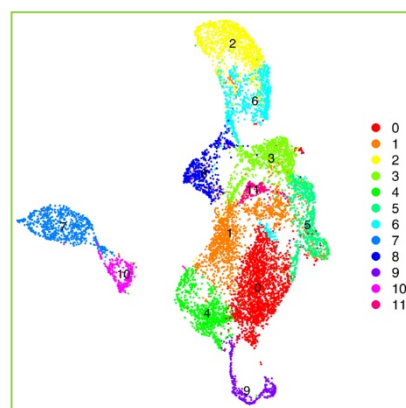


#3 JIPB Article in 2021

Single-cell RNA sequencing reveals a high-resolution cell atlas of xylem in *Populus*

Hui Li, Xinren Dai, Xiong Huang, Mengxuan Xu, Qiao Wang, Xiaojing Yan, Ronald R. Sederoff and Quanzi Li

In our November 2021 issue, Li et al. performed Drop-seq, a method for the dropwise sequestration of single cells for sequencing, on protoplasts from the differentiating xylem of *Populus alba* × *Populus glandulosa*. The single-cell transcriptome analysis for differentiating xylem in poplar identified the major cell types of vessels, fibers and rays, and revealed their trajectory of differentiation, paving the way for further understanding xylem differentiation to improve tree growth and wood properties.



J. Integr. Plant Biol. 2021, 63 (11): 1906–1921.

<https://doi.org/10.1111/jipb.13159>

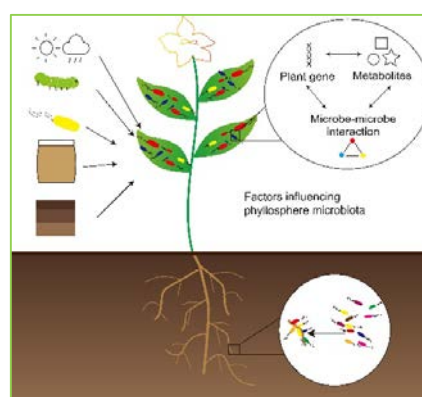


#4 JIPB Article in 2021

Phyllosphere microbiota: Community dynamics and its interaction with plant hosts

Tianyu Gong and Xiu-Fang Xin

In our Special Issue on Plant Biotic Interactions in February 2021, the Mini Review from authors Tianyu Gong and Xiu-Fang Xin highlights recent progress toward understanding phyllosphere microbiota assembly, factors influencing the phyllosphere microbiota, and the effects of the phyllosphere microbiota on plants. This review provides an update on our current understanding of how plant, microbial, and environmental processes regulate phyllosphere community assembly and functions.



J. Integr. Plant Biol. 2021, 63 (2): 297–304.

<https://doi.org/10.1111/jipb.13060>

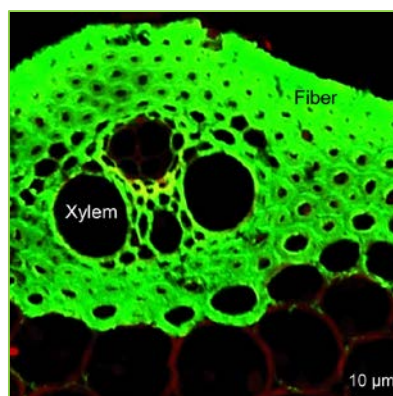


#5 JIPB Article in 2021

The plant cell wall: Biosynthesis, construction, and functions

Baocai Zhang, Yihong Gao, Lanjun Zhang and Yihua Zhou

In our Special Issue on invited expert reviews for plant research progress in January 2021, the review from Zhang et al. summarizes the major progress in plant cell wall studies, reviewing how this complex polysaccharide network is produced and organized, and how it functions, thus providing an updated systematic understanding of this fundamental plant structure.



J. Integr. Plant Biol. 2021, 63 (1): 251–272.

<https://doi.org/10.1111/jipb.13055>