

CURRICULUM VITAE

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Research Interest			
<ol style="list-style-type: none">1. Interactions between atmospheric environmental factors and plants2. Guard cell signal transduction3. Chloroplast development and chloroplastic protein transport			
Professional Memberships			
Other Roles			
Education & Working Experience			
Education: 2002 - 2006, Ph. D. Biochemistry and Molecular Biology, College of Life Science and Technology, Huazhong Agricultural University, Wuhan, China. 1998 - 2002, B. S. Biotechnology, College of Life Science and Technology, Huazhong Agricultural University, Wuhan, China.			



Professional Experiences:

2012 - now Professor, College of Life Science and Technology, Huazhong Agricultural University, China

2007 - 2012 Research associate, University of California, San Diego, USA

Publications

1. You L, Zhang J, Li L, Xiao C, Feng X, Chen S, Guo L, Hu H*. Involvement of abscisic acid, ABI5, and PPC2 in plant acclimation to low CO₂. *J Exp Bot.* 2020, Mar 24, doi: 10.1093/jxb/eraa148.
2. Xu D, Liu Q, Chen G, Yan Z, Hu H*. Aldehyde Dehydrogenase ALDH3F1 involvement in flowering time regulation through histone acetylation modulation on FLC. *J Integr Plant Biol.* 2019 Dec 12. doi: 10.1111/jipb.12893.
3. Li X, Chang Y, Ma S, Shen J, Hu H, Xiong L*. Genome-Wide Identification of SNAC1-Targeted Genes Involved in Drought Response in Rice. *Front Plant Sci.* 2019,10:982.
4. Ceciliato PHO, Zhang J, Liu Q, Shen X, Hu H, Liu C, Schäffner AR, Schroeder JI*. Intact leaf gas exchange provides a robust method for measuring the kinetics of stomatal conductance responses to abscisic acid and other small molecules in Arabidopsis and grasses. *Plant Methods.* 2019, 15:38.
5. Ma S, Tang N, Li X, Xie Y, Xiang D, Fu J, Shen J, Yang J, Tu H, Li X, Hu H, Xiong L*. Reversible Histone H2B Monoubiquitination Fine-Tunes Abscisic Acid Signaling and Drought Response in Rice. *Mol Plant.* 2019, 12(2):263-277.
6. Fu Y, Yang Y, Chen S, Ning N, Hu H*. Arabidopsis IAR4 modulates primary root growth under salt stress through ROS-mediated modulation of auxin distribution. *Frontiers in Plant Sci.* 2019, 10, 522
7. Guo Z, Yang W*, Chang Y, Ma X, Tu H, Xiong F, Jiang N, Feng H, Huang C, Yang P, Zhao H, Chen G, Liu H, Luo L, Hu H, Liu Q, Xiong L*

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 9. He J, Zhang RX, Peng K, Tagliavia C, Li S1, Xue S, Liu A, Hu H, Zhang J, Hubbard KE, Held K, McAinsh MR, Gray JE, Kudla J, Schroeder JI, Liang YK, Hetherington AM. The BIG protein distinguishes the process of CO₂ -induced stomatal closure from the inhibition of stomatal opening by CO₂. *New Phytol*. 2018, 218(1):232-241
 10. Jakobson L[#], Vaahtera L[#], Töldsepp K[#], Nuhkat M[#], Wang C, Wang YS, Hõrak H, Valk E, Pechter P, Sindarovska Y, Tang J, Xiao C, Xu Y, Gerst Talas U, García-Sosa AT, Kangasjärvi S, Maran U, Remm M, Roelfsema MR, Hu H, Kangasjärvi J, Loog M, Schroeder JI, Kollist H*, Brosché M*. Natural variation in Arabidopsis Cvi-0 accession reveals an important role of MPK12 in guard cell CO₂ signaling. *PLoS Biol*. 2016, 14(12): e2000322
 11. Wang C[#], Hu H^{#*}, Qin X, Zeise B, Xu D, Rappel WJ, Boron WF, Schroeder J*. Reconstitution of CO₂ regulation of SLAC1 anion channel and function of CO₂-permeable PIP2;1 aquaporin as carbonic anhydrase 4 interactor. *Plant Cell*. 2016, 28(2): 568-582 (#co-first)
 12. Chen B, Wang J, Zhang G, Liu J, Manan S, Hu H, Zhao J. Two types of soybean diacylglycerol acyltransferases are differentially involved in triacylglycerol biosynthesis and response to environmental stresses and hormones. *Sci Rep*. 2016, 27;6:28541
 13. Hu H*, Rappel WJ, Occhipinti R, Ries A, Böhmer M, You L, Xiao C, Engineer CB, Boron WF, Schroeder JI*. Distinct Cellular Locations of Carbonic Anhydrases Mediate CO₂ Control of Stomatal Movements. *Plant Physiol*. 2015, 169:1168–1178
 14. Li P, Zhang G, Gonzales N, Guo Y, Hu H, Park S, Zhao J. Ca²⁺ -and diurnal rhythm-regulated Na⁺ /Ca²⁺ exchanger AtNCL affects flowering time and auxin signaling in

Arabidopsis. *Plant Cell Environ.* 2016, 39(2):377-392

15. You J, Zong W, Hu H, Li X, Xiao J, Xiong L. A STRESS-RESPONSIVE NAC1-Regulated Protein Phosphatase Gene Rice Protein Phosphatase18 Modulates Drought and Oxidative Stress Tolerance through Abscisic Acid-Independent Reactive Oxygen Species Scavenging in Rice. *Plant Physiol.* 2014, 166(4):2100-14
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23. Xue S[#], Hu H[#], Ries A, Merilo E, Kollist H, and Schroeder JI. Central functions of

- bicarbonate in S-type anion channel activation and OST1 protein kinase in CO₂ signal transduction in guard cells. *EMBO J*, 2011, 30, 1645-1658 (#co-first author)
24. Hu H[#], Boisson-Dernier A[#], Israelsson-Nordstrom M[#], Bohmer M, Xue S, Ries A, Godoski J, Kuhn JM, and Schroeder JI. Carbonic anhydrases are upstream regulators of CO₂-controlled stomatal movements in guard cells. *Nat Cell Biol*. 2010, 12(1), 87-93 (cover paper) (#co-first author)
 25. Kim TH, # Bohmer M, # Hu H, Nishimura N, and Schroeder JI. Guard cell signal transduction network: advances in understanding abscisic acid, CO₂, and Ca²⁺ signaling. *Annu Rev Plant Biol*. 2010, 61, 561-591 (# co-first author)
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