

## 荣誉奖励:

- 2013 年: 当选为“美国科学院院士”(Elected member of US National Academy of Sciences)
- 2013 年: 当选为“美国科学促进协会会员”(Elected fellow of American Association for Advancement of Science)
- 2013 年: 获“北京市有突出贡献的科学、技术、管理人才”
- 2009 年: 获“北京市海外高层次人才”, 同时被聘为“北京市特聘专家”
- 2009 年: 中组部“千人计划”引进高层次人才
- 2003 年: 获国际植物分子生物学学会 (ISPMB) 最重要奖项“The Kumho Science International Award”(2003)
- 1995 年: 获“美国总统青年教师奖”(Presidential Faculty Fellow Award)

## 学术发表:

### (I) Books in Chinese:

3. 邓兴旺(主编) (2020). 《植物的身体》. 商务出版社.
2. 邓兴旺(主编) (2020). 《植物私生活》. 商务出版社.
1. 邓兴旺(主编) (2020). 《植物与食物》. 商务出版社.

### (II) Books in English:

1. Karplus, V. J., and **Deng, X.W.** (2007). *Agricultural Biotechnology in China: Origins and Prospects* (a book with 10 chapters). Forwarded by Norman E. Borlaug. Published December 7, 2007 by Springer.

### (III) Book Chapters in English:

13. He, G., and **Deng X. W.** (2013). Chromatin and gene expression mechanisms in hybrids. Chapter 20 in *Hybrid and Polyploid Genomics*. John Wiley & Sons, Inc.: 323-333.
12. Li, J., Li, G., Wang, H., and **Deng, X.W.** (2011). Phytochrome signaling mechanisms. *Arabidopsis Book* 9: e0148.
11. Yanagawa, Y., Feng, S., and **Deng, X.W.** (2005). Light control of plant development: a role of the ubiquitin/proteasome-mediated proteolysis. Chapter 29 in *Light Sensing in Plants*, pp. 253-260. Eds: Wada, M., Shimazaki, K., and Lino, M. Springer.
10. Li, L., Wang, X., Li, X., Su, N., Stolc, V., Han, B., Li, J., Xue, Y., Wang, J., and **Deng, X.W.** (2004). Toward genome-wide transcriptional analysis in rice using MAS oligonucleotide tiling-path microarrays. In *Rice Is Life: Scientific Perspectives For The 21st Century*. Eds: Toriyama K., Heong, K. L. and Hardy, B. *Proceedings of the World Rice Research Conference*.
9. Wang, H., and **Deng, X.W.** (2002). Phytochrome signaling mechanisms. In *The Arabidopsis Book*, Eds. Somerville, C. R., and Meyerowitz, E. M., American Society of Plant Biologists.
8. Schwechheimer, C., and **Deng, X.W.** (2002). FPLC Gel Filtration. In *Arabidopsis-A Laboratory Manual* pp. 226-228, Eds: Weigel, D., and Glazebrook, J. Cold Spring Harbor Laboratory Press.

7. Schwechheimer, C., and **Deng, X.W.** (2002). Studying protein-protein interactions with the yeast two-hybrid system. Chapter 9 in *Molecular Plant Biology: A practical Approach*, volume II, pp. 173-198. Eds: Philip M. G. and Chris B. *Oxford University Press*.
6. Habashi, J., and **Deng, X.W.** (2002). Nondenaturing Gel Electrophoresis of Proteins. In *Arabidopsis-A Laboratory Manual*. pp. 228-233, Eds: Weigel, D., and Glazebrook, J. *Cold Spring Harbor Laboratory Press*.
5. Chamovitz, D.A., and **Deng, X.W.** (1998). Molecular approaches to biochemical purification: the COP9 complex paradigm. *NATO ASI series*, vol. H104, 83-91.
4. Kwok, S. F., and **Deng, X.W.** (1996). The role of the pleiotropic *Arabidopsis* COP/DET/FUS genes in repression of photomorphogenic development in darkness. In *Current Topics in Plant Physiology: an american Society of Plant Physiologists Series on [regulation of plant growth and development by light]* vol. 17 pg.134-143
3. **Deng, X.W.**, and Gruissem, W. (1994). Chloroplast run-on transcription: determination of the transcription activity of chloroplast genes. A chapter on a published laboratory manual based on a *COLD SPRING HARBOR COURSE*.
2. Melis, A., and **Deng, X.W.** (1987). The physiological significance of thylakoid membrane protein phosphorylation. In *Progress in Photosynthesis Research*, Eds: Biggins, J. Vol. II (2):257 260. *Springer*.
1. Gruissem, W., **Deng, X.W.**, Jones, H., Stern, D, Tonkyn, J., and Zurawski, G. (1987). Transcriptional and post transcriptional regulation of chloroplast gene expression. In *Structure and Function of Plant Genome*, pp.135 148, Eds: Von Wettstein D., Chua, N. H. *Plenum Press*, New York.

#### (IV) Books Translated into Chinese

2. Published in Chinese in June 2006. *Mechanisms in Plant Development*. Eds: Ottoline Leyser, and Stephen Day. *Wiley-Blackwell*, Oxford. 2002 version.  
Ottoline Leyser, Stephen Day (著), 瞿礼嘉, 邓兴旺(译) (2006). 植物发育的机制. 高等教育出版社.
1. Published in Chinese in February 2004. *Biochemistry & Molecular Biology of Plants*. Eds: Bob Buchanan, Wilhelm Gruissem, and Russell Jones. *American Society of Plant Physiologists*, Rockville, MD, USA. 2002 version.  
B.B. 布坎南, W. 格鲁依森姆, R.L. 琼斯(主编), 瞿礼嘉, 顾红雅, 白书农, 赵进东, 陈章良(主译), 陈章良, 邓兴旺(主校) (2004). 植物生物化学与分子生物学. 科学出版社.

#### (V) Articles in Chinese

- 21 邓兴旺 (2022). 道阻且长,行则将至;行而不辍,未来可期——杂交小麦的发展和展望. *科学通报* 67, 3097-3099.
- 20 李健,周宽基,王峥,周君莉, 邓兴旺 (2022). 基于隐性核雄性不育系的杂交小麦制种技术研究进展、问题与展望. *科学通报* 67, 3140-3151.

- 19 邓兴旺, 李磊 (2022). 袁隆平和我国杂交水稻研究简史. 杂交水稻 37, 21-25.
- 18 张兴平, 钱前, 张嘉楠, 邓兴旺, 万建民, 徐云碧 (2021). 分子植物育种助推南繁种业转型升级. 中国农业科学 54, 3789-3804.
- 17 衡燕芳, 李健, 王峥, 陈卓, 何航, 邓兴旺, 马力耕 (2020). 十倍体长穗偃麦草雄性育性基因 ThMs1 的克隆、表达及功能分析. 中国农业科学 53, 4727-4742.
- 16 邓兴旺 (2019). 一座照亮植物科学和人类的灯塔——怀念 Winslow Briggs 教授. 自然杂志 41, 231-234.
- 15 严维, 周涵, 何航, 邓兴旺 (2019). 基于全基因组多态性的安农 S-1 与株 1S 亲缘关系分析. 杂交水稻 34, 57-61.
- 14 邓兴旺 (2018). 植物的“眼睛”在哪里? 自然杂志 40, 391-399.
- 13 何光明, 邓兴旺 (2018). 死亡信号传递:叶绿体与线粒体间信号交流调控植物程序性细胞死亡. 植物学报 53, 441-444.
- 12 何光明, 何航, 邓兴旺 (2016). 水稻杂种优势的转录组基础. 科学通报 61, 3850-3857.
- 11 何光明, 邓兴旺 (2016). 植物杂种优势分子机理研究:机遇和挑战. 中国基础科学 18, 28-34+64.
- 10 王玉秋, 樊德, 邓兴旺, 朱丹萌 (2016). 高等植物中的较长非编码 RNA:从序列、功能到分子机理. 生命科学 28, 630-639.
- 9 邓兴旺 (2014). 怀念我的北大硕士生导师梅镇安先生. 植物学报 49, 751-752.
- 8 陈少霞, 何航, 邓兴旺 (2013). 利用拟南芥杂交组合研究 siRNA 与等位基因 DNA 甲基化调控中的联系. 中国科学:生命科学 43, 897-904.
- 7 邓兴旺, 王海洋, 唐晓艳, 周君莉, 陈浩东, 何光明, 陈良碧, 许智宏 (2013). 杂交水稻育种将迎来新时代. 中国科学:生命科学 43, 864-868.
- 6 肖景华, 吴昌银, 韩斌, 薛勇彪, 邓兴旺, 张启发 (2009). 中国水稻功能基因组研究进展. 中国科学:生命科学 39, 909-924.
- 5 康定明, 瞿礼嘉, 邓兴旺, 陈章良 (2001). 拟南芥 DNA 全序列测定与分析完成. 植物学通报 18, 124-125.
- 4 邓兴旺 (2007). 水稻:从基因组水平研究到产量及品质的改进. 生命世界 6, 46-51.
- 3 邓兴旺, 梅镇安 (1987). 高等植物类囊体膜中色素蛋白复合体的迁移及光能在光系统间的分配. 中国科学:B辑 4, 377-386.
- 2 朱广廉, 邓兴旺, 左卫能, 曹宗巽 (1984). 太谷核不育小麦花药内游离脯氨酸和总氨基酸含量的变化及其与育性的关系. 植物学报 26, 616-622.
- 1 朱广廉, 邓兴旺, 左卫能 (1983). 植物体内游离脯氨酸的测定. 植物生理学通讯 1, 35-37.

#### (VI) Articles in English

- 399 Liu, W., He, G., and Deng, X.W. (2024). Toward understanding and utilizing crop heterosis in the age of biotechnology. iScience 27, 108901.

- 398 Gao, Z., Su, Y., Chang, L., Jiao, G., Ou, Y., Yang, M., Xu, C., Liu, P., Wang, Z., Qi, Z., Liu, W., Sun, L., He, G., **Deng, X.W.**, and He, H. (2024). Increased long-distance and homo-trans interactions related to H3K27me3 in Arabidopsis hybrids. *J Integr Plant Biol* 66, 208-227.
- 397 Wang, X., Yuan, S., Wang, C., Yan, W., Xie, G., Wang, C., Qiu, S., Wu, J., **Deng, X.W.**, Xu, C., and Tang, X. (2024). Construction of a Female Sterility Maintaining System Based on a Novel Mutation of the MEL2 Gene. *Rice (N Y)* 17, 12.
- 396 Sun, L., Zhou, J., Xu, X., Liu, Y., Ma, N., Liu, Y., Nie, W., Zou, L., **Deng, X.W.**, and He, H. (2024). Mapping nucleosome-resolution chromatin organization and enhancer-promoter loops in plants using Micro-C-XL. *Nat Commun* 15, 35.
- 395 Ren, Z., Gou, R., Zhuo, W., Chen, Z., Yin, X., Cao, Y., Wang, Y., Mi, Y., Liu, Y., Wang, Y., Fan, L.M., **Deng, X.W.**, and Qian, W. (2024). The MBD-ACD DNA methylation reader complex recruits MICRORCHIDIA6 to regulate ribosomal RNA gene expression in Arabidopsis. *Plant Cell* 36, 1098-1118.
- 394 Cai, Y., Liu, Y., Fan, Y., Li, X., Yang, M., Xu, D., Wang, H., **Deng, X.W.**, and Li, J. (2023). MYB112 connects light and circadian clock signals to promote hypocotyl elongation in Arabidopsis. *Plant Cell* 35, 3485-3503.
- 393 Chen, J., Yu, R., Li, N., Deng, Z., Zhang, X., Zhao, Y., Qu, C., Yuan, Y., Pan, Z., Zhou, Y., Li, K., Wang, J., Chen, Z., Wang, X., Wang, X., He, S.N., Dong, J., **Deng, X.W.**, and Chen, H. (2023). Amyloplast sedimentation repolarizes LAZYS to achieve gravity sensing in plants. *Cell* 186, 4788-4802.e4715.
- 392 Chen, Z., Wu, J., **Deng, X.W.**, and Tang, X. (2023). Establishment and Advances of Third-Generation Hybrid Rice Technology: A Review. *Rice (N Y)* 16, 56.
- 391 Han, X., Zhang, Y., Lou, Z., Li, J., Wang, Z., Gao, C., Liu, Y., Ren, Z., Liu, W., Li, B., Pan, W., Zhang, H., Sang, Q., Wan, M., He, H., and **Deng, X.W.** (2023). Time series single-cell transcriptional atlases reveal cell fate differentiation driven by light in Arabidopsis seedlings. *Nat Plants* 9, 2095-2109.
- 390 Li, H., Hua, L., Zhao, S., Hao, M., Song, R., Pang, S., Liu, Y., Chen, H., Zhang, W., Shen, T., Gou, J.Y., Mao, H., Wang, G., Hao, X., Li, J., Song, B., Lan, C., Li, Z., **Deng, X.W.**, Dubcovsky, J., Wang, X., and Chen, S. (2023). Cloning of the wheat leaf rust resistance gene Lr47 introgressed from Aegilops speltoides. *Nat Commun* 14, 6072.
- 389 Li, H., Zhou, Y., Qin, X., Peng, J., Han, R., Lv, Y., Li, C., Qi, L., Qu, G.P., Yang, L., Li, Y., Terzaghi, W., Li, Z., Qin, F., Gong, Z., **Deng, X.W.**, and Li, J. (2023). Reconstitution of phytochrome A-mediated light modulation of the ABA signaling pathways in yeast. *Proc Natl Acad Sci U S A* 120, e2302901120.
- 388 Liu, W., Ren, D., Yang, W., Xu, M., Zhang, Y., Wang, X., He, G., and **Deng, X.W.** (2023). Genetic and molecular regulation of increased photosynthetic cell number contributes to leaf size heterosis in Arabidopsis. *iScience* 26, 107366.

- 387 Song, X., Guo, P., Xia, K., Wang, M., Liu, Y., Chen, L., Zhang, J., Xu, M., Liu, N., Yue, Z., Xu, X., Gu, Y., Li, G., Liu, M., Fang, L., **Deng, X.W.**, and Li, B. (2023). Spatial transcriptomics reveals light-induced chlorenchyma cells involved in promoting shoot regeneration in tomato callus. *Proc Natl Acad Sci U S A* 120, e2310163120.
- 386 Wang, J., Zhou, C., Guan, Z., Wang, Q., Zhao, J., Wang, L., Zhang, L., Zhang, D., **Deng, X.W.**, Ma, L., and Yin, P. (2023). Plant phytochrome A in the Pr state assembles as an asymmetric dimer. *Cell Res* 33, 802-805.
- 385 Zhang, Y., Lin, X., Ma, C., Zhao, J., Shang, X., Wang, Z., Xu, B., Gao, N., **Deng, X.W.**, and Wang, J. (2023). Structural insights into plant phytochrome A as a highly sensitized photoreceptor. *Cell Res* 33, 806-809.
- 384 Zhou, H., **Deng, X.W.**, and He, H. (2023). Gene expression variations and allele-specific expression of two rice and their hybrid in caryopses at single-nucleus resolution. *Front Plant Sci* 14, 1171474.
- 383 Sun, L., Cao, Y., Li, Z., Liu, Y., Yin, X., **Deng, X.W.**, He, H., and Qian, W. (2023). Conserved H3K27me3-associated chromatin looping mediates physical interactions of gene clusters in plants. *J Integr Plant Biol* 65, 1966-1982.
- 382 Yan, W., Yuan, S., Zu, Y., Chang, Z., Li, Y., Chen, Z., Xie, G., Chen, L., Lu, C., **Deng, X.W.**, Yang, C., Xu, C., and Tang, X. (2023). Ornithine  $\delta$ -aminotransferase OsOAT is critical for male fertility and cold tolerance during rice plant development. *Plant J* 114, 1301-1318.
- 381 Zhao, Y., Shi, H., Pan, Y., Lyu, M., Yang, Z., Kou, X., **Deng, X.W.**, and Zhong, S. (2023). Sensory circuitry controls cytosolic calcium-mediated phytochrome B phototransduction. *Cell* 186, 1230-1243 e1214.
- 380 Li, J., Wang, C., Liang, W., Zhang, J., Jiang, C.K., Liu, Y., Ren, Z., Ci, D., Chang, J., Han, S., **Deng, X.W.**, Wang, Y., and Qian, W. (2023). Functional importance and divergence of plant apurinic/aprimidinic endonucleases in somatic and meiotic DNA repair. *Plant Cell* 35, 2316-2331.
- 379 Han, X., Zhang, Y., Zhang, Q., Ma, N., Liu, X., Tao, W., Lou, Z., Zhong, C., **Deng, X.W.**, Li, D., and He, H. (2023). Two haplotype-resolved, gap-free genome assemblies for *Actinidia latifolia* and *Actinidia chinensis* shed light on the regulatory mechanisms of vitamin C and sucrose metabolism in kiwifruit. *Mol Plant* 16, 452-470.
- 378 Wang, Y., Fan, Y., Fan, D., Zhou, X., Jiao, Y., **Deng, X.W.**, and Zhu, D. (2023). The noncoding RNA HIDDEN TREASURE 1 promotes phytochrome B-dependent seed germination by repressing abscisic acid biosynthesis. *Plant Cell* 35, 700-716.
- 377 Wang, J., Sun, N., Zheng, L., Zhang, F., Xiang, M., Chen, H., **Deng, X.W.**, and Wei, N. (2023). Brassinosteroids promote etiolated apical structures in darkness by amplifying the ethylene response via the EBF-EIN3/PIF3 circuit. *Plant Cell* 35, 390-408.
- 376 Wang, Y., **Deng, X.W.**, and Zhu, D. (2022). From molecular basics to agronomic benefits: Insights into noncoding RNA-mediated gene regulation in plants. *J Integr Plant Biol* 64, 2290-2308.
- 375 Cao, Y., Wang, J., Wu, S., Yin, X., Shu, J., Dai, X., Liu, Y., Sun, L., Zhu, D., **Deng, X.W.**, Ye, K.,

- and Qian, W. (2022). The small nucleolar RNA SnoR28 regulates plant growth and development by directing rRNA maturation. *Plant Cell* 34, 4173-4190.
- 374 Lan, H., Heng, Y., Li, J., Zhang, M., Bian, Y., Chu, L., Jiang, Y., Wang, X., Xu, D., and **Deng, X.W.** (2022). COP1 SUPPRESSOR 6 represses the PIF4 and PIF5 action to promote light-inhibited hypocotyl growth. *J Integr Plant Biol* 64, 2097-2110.
- 373 Liu, H., Wang, H., Liao, X.L., Gao, B., Lu, X., Sun, D., Gong, W., Zhong, J., Zhu, H., Pan, X., Guo, L., **Deng, X.W.**, and Zhou, Q. (2022). Mycoviral gene integration converts a plant pathogenic fungus into a biocontrol agent. *Proc Natl Acad Sci U S A* 119, e2214096119.
- 372 Xu, M., Wang, X., Liu, J., Jia, A., Xu, C., **Deng, X.W.**, and He, G. (2022). Natural variation in the transcription factor Replumless contributes to both disease resistance and plant growth in Arabidopsis. *Plant Commun*, 100351.
- 371 Wang, Y., Fan, Y., Fan, D., Zhang, Y., Zhou, X., Zhang, R., Wang, Y., Sun, Y., Zhang, W., He, Y., **Deng, X.W.**, and Zhu, D. (2022). The Arabidopsis DREAM complex antagonizes WDR5A to modulate histone H3K4me2/3 deposition for a subset of genome repression. *Proc Natl Acad Sci U S A* 119, e2206075119.
- 670 Zhang, Y., Fu, J., Wang, K., Han, X., Yan, T., Su, Y., Li, Y., Lin, Z., Qin, P., Fu, C., **Deng, X.W.**, Zhou, D., Yang, Y., and He, H. (2022). The telomere-to-telomere gap-free genome of four rice parents reveals SV and PAV patterns in hybrid rice breeding. *Plant Biotechnol J* 20, 1642-1644.
- 369 Deng, Y., Liu, S., Zhang, Y., Tan, J., Li, X., Chu, X., Xu, B., Tian, Y., Sun, Y., Li, B., Xu, Y., **Deng, X.W.**, He, H., and Zhang, X. (2022). A telomere-to-telomere gap-free reference genome of watermelon and its mutation library provide important resources for gene discovery and breeding. *Mol Plant* 15, 1268-1284.
- 368 Cui, D., Zhou, H., Ma, X., Lin, Z., Sun, L., Han, B., Li, M., Sun, J., Liu, J., Jin, G., Wang, X., Cao, G., **Deng, X.W.**, He, H., and Han, L. (2022). Genomic insights on the contribution of introgressions from Xian/Indica to the genetic improvement of Geng/Japonica rice cultivars. *Plant Commun* 3, 100325.
- 367 Wang, Y., Wang, L., Guan, Z., Chang, H., Ma, L., Shen, C., Qiu, L., Yan, J., Zhang, D., Li, J., **Deng, X.W.**, and Yin, P. (2022). Structural insight into UV-B-activated UVR8 bound to COP1. *Sci Adv* 8, eabn3337.
- 366 Cui, Y., Bian, J., Guan, Y., Xu, F., Han, X., **Deng, X.W.**, and Liu, X. (2022). Genome-Wide Analysis and Expression Profiles of Ethylene Signal Genes and Apetala2/Ethylene-Responsive Factors in Peanut (*Arachis hypogaea* L.). *Front Plant Sci* 13, 828482.
- 365 Zhou, H., Zhu, W., Wang, X., Bian, Y., Jiang, Y., Li, J., Wang, L., Yin, P., **Deng, X.W.**, and Xu, D. (2022). A missense mutation in WRKY32 converts its function from a positive regulator to a repressor of photomorphogenesis. *New Phytol* 235, 111-125.
- 364 Liu, W., Zhang, Y., He, H., He, G., and **Deng, X.W.** (2022). From hybrid genomes to heterotic trait output: Challenges and opportunities. *Curr Opin Plant Biol* 66, 102193.

- 363 Hao, C., Yang, Y., Du, J., **Deng, X.W.**, and Li, L. (2022). The PCY-SAG14 phytocyanin module regulated by PIFs and miR408 promotes dark-induced leaf senescence in Arabidopsis. *Proc Natl Acad Sci USA* 119.
- 362 Yan, T., Heng, Y., Wang, W., Li, J., and **Deng, X.W.** (2022). SWELLMAP 2, a phyB-Interacting Splicing Factor, Negatively Regulates Seedling Photomorphogenesis in Arabidopsis. *Front Plant Sci* 13, 836519.
- 361 Cao, J., Liang, Y., Yan, T., Wang, X., Zhou, H., Chen, C., Zhang, Y., Zhang, B., Zhang, S., Liao, J., Cheng, S., Chu, J., Huang, X., Xu, D., Li, J., **Deng, X.W.**, and Lin, F. (2022). The photomorphogenic repressors BBX28 and BBX29 integrate light and brassinosteroid signaling to inhibit seedling development in Arabidopsis. *Plant Cell* 34, 2266-2285.
- 360 Cui, Y., Bian, J., Lv, Y., Li, J., **Deng, X.W.**, and Liu, X. (2022). Analysis of the Transcriptional Dynamics of Regulatory Genes During Peanut Pod Development Caused by Darkness and Mechanical Stress. *Front Plant Sci* 13, 904162.
- 359 Wu, J., Qiu, S., Wang, M., Xu, C., **Deng, X.W.**, and Tang, X. (2021). Construction of a weight-based seed sorting system for the third-generation hybrid rice. *Rice (New York, NY)* 14, 66.
- 358 Yan, W., **Deng, X.W.**, Yang, C., and Tang, X. (2021). The Genome-Wide EMS Mutagenesis Bias Correlates With Sequence Context and Chromatin Structure in Rice. *Front Plant Sci* 12, 579675.
- 357 Zhao, P., Zhang, X., Gong, Y., Wang, D., Xu, D., Wang, N., Sun, Y., Gao, L., Liu, S.S., **Deng, X.W.**, Kliebenstein, D.J., Zhou, X., Fang, R.X., and Ye, J. (2021). Red-light is an environmental effector for mutualism between begomovirus and its vector whitefly. *PLoS Pathog* 17, e1008770.
- 356 Li, G., Wang, L., Yang, J., He, H., Jin, H., Li, X., Ren, T., Ren, Z., Li, F., Han, X., Zhao, X., Dong, L., Li, Y., Song, Z., Yan, Z., Zheng, N., Shi, C., Wang, Z., Yang, S., Xiong, Z., Zhang, M., Sun, G., Zheng, X., Gou, M., Ji, C., Du, J., Zheng, H., Doležal, J., **Deng, X.W.**, Stein, N., Yang, Q., Zhang, K., and Wang, D. (2021). A high-quality genome assembly highlights rye genomic characteristics and agronomically important genes. *Nat Genet* 53, 574-584.
- 355 Song, Z., Heng, Y., Bian, Y., Xiao, Y., Liu, J., Zhao, X., Jiang, Y., **Deng, X.W.**, and Xu, D. (2021). BBX11 promotes red light-mediated photomorphogenic development by modulating phyB-PIF4 signaling. *aBIOTECH* 2, 117-130.
- 354 Liu, W., He, G., and **Deng, X.W.** (2021). Biological pathway expression complementation contributes to biomass heterosis in Arabidopsis. *Proc Natl Acad Sci USA* 118.
- 353 Yang, L., Liu, P., Wang, X., Jia, A., Ren, D., Tang, Y., Tang, Y., **Deng, X.W.**, and He, G. (2021). A central circadian oscillator confers defense heterosis in hybrids without growth vigor costs. *Nature Commun* 12, 2317.
- 352 Han, X., Huang, X., and **Deng, X.W.** (2020). The Photomorphogenic Central Repressor COP1: Conservation and Functional Diversification during Evolution. *Plant Commun* 1, 100044.
- 351 Zhu, W., Zhou, H., Lin, F., Zhao, X., Jiang, Y., Xu, D., and **Deng, X.W.** (2020). COLD-REGULATED GENE27 Integrates Signals from Light and the Circadian Clock to Promote

- Hypocotyl Growth in Arabidopsis. *Plant Cell* 32, 3155-3169.
- 350 Zhang, H., Wang, M., Li, Y., Yan, W., Chang, Z., Ni, H., Chen, Z., Wu, J., Xu, C., **Deng, X.W.**, and Tang, X. (2020). GDSL esterase/lipases OsGELP34 and OsGELP110/OsGELP115 are essential for rice pollen development. *J Integr Plant Biol* 62, 1574-1593.
- 349 Yang, P., Wen, Q., Yu, R., Han, X., **Deng, X.W.** and Chen, H. (2020). Light modulates the gravitropic responses through organ-specific PIFs and HY5 regulation of LAZY4 expression in *Arabidopsis*. *Proc Natl Acad Sci U S A* 117, 18840-18848.
- 348 Xu, D., Wu, D., Li, X. H., Jiang, Y., Tian, T., Chen, Q., Ma, L., Wang, H., **Deng, X.W.** and Li, G. (2020). Light and Abscisic Acid Coordinately Regulate Greening of Seedlings. *Plant Physiol* 183, 1281-1294.
- 347 Zhao, X., Heng, Y., Wang, X., Deng, X.W., and Xu, D. (2020). A Positive Feedback Loop of BBX11-BBX21-HY5 Promotes Photomorphogenic Development in Arabidopsis. *Plant Commun* 1, 100045.
- 346 Xu, D., and **Deng, X.W.** (2020). CBF-phyB-PIF Module Links Light and Low Temperature Signaling. *Trends Plant Sci* 25, 952-954.
- 345 Wang, X., Yu, R., Wang, J., Lin, Z., Han, X., Deng, Z., Fan, L., He, H., **Deng, X.W.** and Chen, H. (2020). The Asymmetric Expression of SAUR Genes Mediated by ARF7/19 Promotes the Gravitropism and Phototropism of Plant Hypocotyls. *Cell Rep* 31, 107529.
- 344 Wang, M., Yan, W., Peng, X., Chen, Z., Xu, C., Wu, J., **Deng, X.W.** and Tang, X. (2020). Identification of late-stage pollen-specific promoters for construction of pollen-inactivation system in rice. *J Integr Plant Biol* 62, 1246-1263.
- 343 Wang, J., Sun, N., Zhang, F., Yu, R., Chen, H., **Deng, X.W.** and Wei, N. (2020). SAUR17 and SAUR50 Differentially Regulate PP2C-D1 during Apical Hook Development and Cotyledon Opening in Arabidopsis. *Plant Cell* 32, 3792-3811.
- 342 Song, Z., Yan, T., Liu, J., Bian, Y., Heng, Y., Lin, F., Jiang, Y., **Deng, X.W.**, and Xu, D. (2020). BBX28/BBX29, HY5 and BBX30/31 form a feedback loop to fine-tune photomorphogenic development. *Plant J* 104, 377-390.
- 341 Qin, N., Xu, D., Li, J. and **Deng, X.W.** (2020). COP9 signalosome: Discovery, conservation, activity, and function. *J Integr Plant Biol* 62, 90-103.
- 340 Li, J., Wang, Z., He, G., Ma, L., and **Deng, X.W.** (2020). CRISPR/Cas9-mediated disruption of TaNP1 genes results in complete male sterility in bread wheat. *J Genet Genomics* 47, 263-272.
- 339 Peng, X., Wang, M., Li, Y., Yan, W., Chang, Z., Chen, Z., Xu, C., Yang, C., **Deng, X.W.**, Wu, J. and Tang, X. (2020). Lectin receptor kinase OsLecRK-S.7 is required for pollen development and male fertility. *J Integr Plant Biol* 62, 1227-1245.
- 338 Liu, H., Lin, R. and **Deng, X.W.** (2020). Photobiology: Light signal transduction and photomorphogenesis. *J Integr Plant Biol* 62, 1267-1269.
- 337 Lin, Z., Qin, P., Zhang, X., Fu, C., Deng, H., Fu, X., Huang, Z., Jiang, S., Li, C., Tang, X., Wang,



- X., He, G., Yang, Y., He, H. and **Deng, X.W.** (2020). Divergent selection and genetic introgression shape the genome landscape of heterosis in hybrid rice. *Proc Natl Acad Sci U S A* 117, 4623-4631.
- 336 Li, J., Terzaghi, W., Gong, Y., Li, C., Ling, J. J., Fan, Y., Qin, N., Gong, X., Zhu, D. and **Deng, X.W.** (2020). Modulation of BIN2 kinase activity by HY5 controls hypocotyl elongation in the light. *Nat Commun* 11, 1592.
- 335 Li, H., Jiang, S., Li, C., Liu, L., Lin, Z., He, H., **Deng, X.W.**, Zhang, Z. and Wang, X. (2020). The hybrid protein interactome contributes to rice heterosis as epistatic effects. *Plant J* 102, 116-128.
- 334 Dong, J., Chen, H., **Deng, X.W.**, Irish, V. F. and Wei, N. (2020). Phytochrome B Induces Intron Retention and Translational Inhibition of PHYTOCHROME-INTERACTING FACTOR3. *Plant Physiol* 182, 159-166.
- 333 Han, X., Chang, X., Zhang, Z., Chen, H., He, H., Zhong, B., and **Deng, X.W.** (2019). Origin and Evolution of Core Components Responsible for Monitoring Light Environment Changes during Plant Terrestrialization. *Mol Plant* 12, 847-862.
- 332 Heng, Y., Jiang, Y., Zhao, X., Zhou, H., Wang, X., **Deng, X.W.**, and Xu, D. (2019). BBX4, a phyB-interacting and modulated regulator, directly interacts with PIF3 to fine tune red light-mediated photomorphogenesis. *Proc Natl Acad Sci U S A* 116, 26049-26056.
- 331 Ren, D., Wang, X., Yang, M., Yang, L., He, G., and **Deng, X.W.** (2019). A new regulator of seed size control in Arabidopsis identified by a genome-wide association study. *New Phytol* 222, 895-906.
- 330 Wang, L., Cheng, M., Yang, Q., Li, J., Wang, X., Zhou, Q., Nagawa, S., Xia, B., Xu, T., Huang, R., He, J., Li, C., Fu, Y., Liu, Y., Bao, J., Wei, H., Li, H., Tan, L., Gu, Z., Xia, A., Huang, X., Yang, Z., and **Deng, X.W.** (2019). Arabinogalactan protein-rare earth element complexes activate plant endocytosis. *Proc Natl Acad Sci U S A* 116, 14349-14357.
- 329 Wang, X., Yang, M., Ren, D., Terzaghi, W., **Deng, X.W.**, and He, G. (2019). Cis-regulated alternative splicing divergence and its potential contribution to environmental responses in Arabidopsis. *Plant J* 97, 555-570.
- 328 Yu, X., Dong, J., Deng, Z., Jiang, Y., Wu, C., Qin, X., Terzaghi, W., Chen, H., Dai, M., and **Deng, X.W.** (2019). Arabidopsis PP6 phosphatases dephosphorylate PIF proteins to repress photomorphogenesis. *Proc Natl Acad Sci U S A* 116, 20218-20225.
- 327 Dong, J., Sun, N., Yang, J., Deng, Z., Lan, J., Qin, G., He, H., **Deng, X.W.**, Irish, V. F., Chen, H., and Wei, N. (2019). The Transcription Factors TCP4 and PIF3 Antagonistically Regulate Organ-Specific Light Induction of SAUR Genes to Modulate Cotyledon Opening during De-Etiolation in Arabidopsis. *Plant Cell* 31, 1155-1170.
- 326 Ren, H., Han, J., Yang, P., Mao, W., Liu, X., Qiu, L., Qian, C., Liu, Y., Chen, Z., Ouyang, X., Chen, X., **Deng, X.W.** and Huang, X. (2019). Two E3 ligases antagonistically regulate the UV-B response in Arabidopsis. *Proc Natl Acad Sci U S A* 116, 4722-4731.
- 325 Heng, Y., Lin, F., Jiang, Y., Ding, M., Yan, T., Lan, H., Zhou, H., Zhao, X., Xu, D. and **Deng, X.W.**

- (2019). B-box containing proteins BBX30 and BBX31, acting downstream of HY5, negatively regulate photomorphogenesis in *Arabidopsis*. *Plant Physiol* 180, 497-508.
- 324 Wang, H. and **Deng, X.W.** (2018). Development of the Third-Generation" Hybrid Rice in China. *Genomics Proteomics Bioinformatics*, 16, 393-396.
- 323 Xia, M., Han, X., He, H., Yu, R., Zhen, G., Jia, X., Cheng, B. and **Deng, X.W.** (2018). Improved de novo genome assembly and analysis of the Chinese cucurbit *Siraitia grosvenorii*, also known as monk fruit or luo-han-guo. *Gigascience* 7, 1-9.
- 322 Zhou, Y., Yang, L., Duan, J., Cheng, J., Shen, Y., Wang, X., Han, R., Li, H., Li, Z., Wang, L., Terzaghi, W., Zhu, D., Chen, H., **Deng, X.W.** and Li, J. (2018). Hinge region of Arabidopsis phyA plays an important role in regulating phyA function. *Proc Natl Acad Sci USA* 115, E11864-E11873.
- 321 Zhao, X., Jiang, Y., Li, J., Huq, E., Chen, Z. J., Xu, D. and **Deng, X.W.** (2018). COP1 SUPPRESSOR 4 promotes seedling photomorphogenesis by repressing CCA1 and PIF4 expression in Arabidopsis. *Proc Natl Acad Sci USA* 115, 11631-11636.
- 320 Lin, F., Jiang, Y., Li, J., Yan, T., Fan, L., Liang, J., Chen, Z. J., Xu, D. and **Deng, X.W.** (2018). B-BOX DOMAIN PROTEIN28 Negatively Regulates Photomorphogenesis by Repressing the Activity of Transcription Factor HY5 and Undergoes COP1-Mediated Degradation. *Plant Cell* 30, 2006-2019.
- 319 Shi, H., Lyu, M., Luo, Y., Liu, S., Li, Y., He, H., Wei, N., **Deng, X.W.** and Zhong, S. (2018). Genome-wide regulation of light-controlled seedling morphogenesis by three families of transcription factors. *Proc Natl Acad Sci USA* 115, 6482-6487.
- 318 Song, Q., Ando, A., Xu, D., Fang, L., Zhang, T., Huq, E., Qiao, H., **Deng, X.W.** and Chen, Z. J. (2018). Diurnal down-regulation of ethylene biosynthesis mediates biomass heterosis. *Proc Natl Acad Sci USA* 115, 5606-5611.
- 317 Zhang, S., Li, C., Zhou, Y., Wang, X., Li, H., Feng, Z., Chen, H., Qin, G., Jin, D., Terzaghi, W., Gu, H., Qu, L. J., Kang, D., **Deng, X.W.** and Li, J. (2018). TANDEM ZINC-FINGER/PLUS3 Is a Key Component of Phytochrome A Signaling. *Plant Cell* 30, 835-852.
- 316 Xu, D., Jiang, Y., Li, J., Holm, M. and **Deng, X.W.** (2018). The B-Box Domain Protein BBX21 Promotes Photomorphogenesis. *Plant Physiol* 176, 2365-2375.
- 315 Jin, D., Wu, M., Li, B., Bucker, B., Keil, P., Zhang, S., Li, J., Kang, D., Liu, J., Dong, J., **Deng, X.W.**, Irish, V. and Wei, N. (2018). The COP9 Signalosome regulates seed germination by facilitating protein degradation of RGL2 and ABI5. *PLoS Genet* 14, e1007237.
- 314 Wang, Y., Li, J., **Deng, X.W.** and Zhu, D. (2018). Arabidopsis noncoding RNA modulates seedling greening during deetiolation. *Sci China Life Sci* 61, 199-203.
- 313 Wang, Z., Li J., Chen S., Heng Y., Chen Z., Yang J., Zhou K., Pei J., He H., **Deng, X.W.** and Ma L. (2017). Poaceae-specific MS1 encodes a phospholipid-binding protein for male fertility in bread wheat. *Proc Natl Acad Sci USA* 114, 12614-12619.
- 312 Yang, M., Wang, X., Ren, D., Huang, H., Xu, M., He, G., and **Deng, X.W.** (2017). Genomic

- architecture of biomass heterosis in Arabidopsis. *Proc Natl Acad Sci U S A* 114, 8101-8106.
- 311 Zhen, G., Qin, P., Liu, K.Y., Nie, D.Y., Yang, Y.Z., **Deng, X.W.**, and He, H. (2017). Genome-wide dissection of heterosis for yield traits in two-line hybrid rice populations. *Sci Rep* 7, 7635.
- 310 Chen, S., Lin Z., Zhou D., Wang C., Li H., Yu R., Deng H., Tang X., Zhou S., Wang **Deng X.W.** and He H. (2017). Genome-wide study of an elite rice pedigree reveals a complex history of genetic architecture for breeding improvement. *Sci Rep* 7, 45685.
- 309 Dong, J., Ni, W., Yu, R., **Deng, X.W.**, Chen, H., and Wei, N. (2017). Light-Dependent Degradation of PIF3 by SCFEBF1/2 Promotes a Photomorphogenic Response in Arabidopsis. *Curr Biol* 27, 2420-2430.e2426.
- 308 Lin, F., Xu, D., Jiang, Y., Chen, H., Fan, L., Holm, M., and **Deng, X.W.** (2017). Phosphorylation and negative regulation of CONSTITUTIVELY PHOTOMORPHOGENIC 1 by PINOID in Arabidopsis. *Proc Natl Acad Sci U S A* 114, 6617-6622.
- 307 Ling, J.J., Li, J., Zhu, D. and **Deng, X.W.** (2017). Noncanonical role of Arabidopsis COP1/SPA complex in repressing BIN2-mediated PIF3 phosphorylation and degradation in darkness. *Proc Natl Acad Sci U S A* 114, 3539-3544.
- 306 Yan, W., Chen Z., Lu J., Xu C., Xie G., Li Y., **Deng, X.W.**, He H. and Tang X. (2017). Simultaneous Identification of Multiple Causal Mutations in Rice. *Front Plant Sci* 7, 2055.
- 305 Zhu, P., Wang, Y., Qin, N., Wang, F., Wang, J., **Deng, X.W.**, and Zhu, D. (2016). Arabidopsis small nucleolar RNA monitors the efficient pre-rRNA processing during ribosome biogenesis. *Proc Natl Acad Sci U S A* 113, 11967-11972.
- 304 Chang, Z., Chen, Z., Wang, N., Xie, G., Lu, J., Yan, W., Zhou, J., Tang, X., and **Deng, X.W.** (2016). Construction of a male sterility system for hybrid rice breeding and seed production using a nuclear male sterility gene. *Proc Natl Acad Sci U S A* 113, 14145-14150.
- 303 Li, K., Yu, R., Fan, L.M., Wei, N., Chen, H., and **Deng, X.W.** (2016). DELLA-mediated PIF degradation contributes to coordination of light and gibberellin signalling in Arabidopsis. *Nat Commun* 7, 11868.
- 302 Shi, H., Shen, X., Liu, R., Xue, C., Wei, N., **Deng, X.W.**, and Zhong, S. (2016). The Red Light Receptor Phytochrome B Directly Enhances Substrate-E3 Ligase Interactions to Attenuate Ethylene Responses. *Dev Cell* 39, 597-610.
- 301 Xu, D., Jiang, Y., Li, J., Lin, F., Holm, M., and **Deng, X.W.** (2016). BBX21, an Arabidopsis B-box protein, directly activates HY5 and is targeted by COP1 for 26S proteasome-mediated degradation. *Proc Natl Acad Sci U S A* 113, 7655-7660.
- 300 Yu, R., Yan, W., Liang, M., Dai, X., Chen, H., Sun, Y., **Deng, X.W.**, Chen, X., He, H., and Chen, L. (2016). Exploring the genetic characteristics of 93-11 and Nipponbare recombination inbred lines based on the GoldenGate SNP assay. *Sci China Life Sci* 59, 700-708.
- 299 Sun, N., Wang, J., Gao, Z., Dong, J., He, H., Terzaghi, W., Wei, N., **Deng, X.W.** and Chen H. (2016). *Arabidopsis* SAURs are critical for differential light regulation of the development of various

- organs. *Proc Natl Acad Sci U S A* 113, 6071-6076.
- 298 Yan, J., Lv, S., Hu, M., Gao, Z., He, H., Ma, Q., **Deng, X.W.**, Zhu Z. and Wang X. (2016). Single-Molecule Sequencing Assists Genome Assembly Improvement and Structural Variation Inference. *Mol Plant* 9, 1085-1087.
- 297 Yang, M., Huang, H., Zhang, C., Wang, Z., Su, Y., Zhu, P., Guo, Y. and **Deng, X.W.** (2016). *Arabidopsis* atypical kinase ABC1K1 is involved in red light-mediated development. *Plant Cell Rep* 35(6), 1213-1220.
- 296 Xu, D., Zhu, D. and **Deng, X.W.** (2016). The role of COP1 in repression of photoperiodic flowering. *F1000Res* 5.
- 295 Yu, Y., Wang, J., Shi, H., Gu, J., Dong, J., **Deng, X.W.** and Huang R. (2016). Salt stress and ethylene antagonistically regulate nucleocytoplasmic partitioning of COP1 to control seed germination. *Plant Physiol* 170, 2340-2350.
- 294 Shi, H., Liu, R., Xue, C., Shen, X., Wei, N., **Deng, X.W.** and Zhong S. (2016). Seedlings Transduce the Depth and Mechanical Pressure of Covering Soil Using COP1 and Ethylene to Regulate EBF1/EBF2 for Soil Emergence. *Curr Biol* 26(2), 139-149.
- 293 Ma, L., Tian, T., Lin, R., **Deng, X.W.**, Wang H. and Li G. (2016). *Arabidopsis* FHY3 and FAR1 Regulate Light-Induced myo-Inositol Biosynthesis and Oxidative Stress Responses by Transcriptional Activation of MIPS1. *Mol Plant* 9(4), 541-557.
- 292 Yang, M., Wang, X., Huang, H., Ren, D., Su, Y., Zhu, P., Zhu, D., Fan, L., Chen, L., He, G. and **Deng, X.W.** (2016). Natural variation of H3K27me3 modification in two *Arabidopsis* accessions and their hybrid. *J Integr Plant Biol* 58(5), 466-474.
- 291 Dutilleul, C., Ribeiro, I., Blanc, N., Nezames, C. D., **Deng, X.W.**, Zglobicki, P., Palacio Barrera, A. M., Atehortua, L., Courtois, M., Labas, V., Giglioli-Guivarc'h, N. and Ducos, E. (2016). ASG2 is a farnesylated DWD protein that acts as ABA negative regulator in *Arabidopsis*. *Plant Cell Environ* 39(1), 185-198.
- 290 Zhou, D., Chen, W., Lin, Z., Chen, H., Wang, C., Li, H., Yu, R., Zhang, F., Zhen, G., Yi, J., Li, K., Liu, Y., Terzaghi, W., Tang, X., He, H., Zhou, S. and **Deng, X.W.** (2016). Pedigree-based analysis of derivation of genome segments of an elite rice reveals key regions during its breeding. *Plant Biotechnol J* 14(2), 638-648.
- 289 Huang, L., Zhang, H., Zhang, H., **Deng, X.W.** and Wei, N. (2015). HY5 regulates nitrite reductase 1 (NIR1) and ammonium transporter1;2 (AMT1;2) in *Arabidopsis* seedlings. *Plant Sci* 238, 330-339.
- 288 Xu, D., Lin, F., Jiang, Y., Ling, J., Hettiarachchi, C., Tellgren-Roth, C., Holm, M., Wei, N. and **Deng, X.W.** (2015). *Arabidopsis* COP1 SUPPRESSOR 2 Represses COP1 E3 Ubiquitin Ligase Activity through Their Coiled-Coil Domains Association. *PLoS Genet* 11, e1005747.
- 287 Zhu, L., Bu, Q., Xu, X., Paik, I., Huang, X., Hoecker, U., **Deng, X.W.** and Huq, E. (2015). CUL4 forms an E3 ligase with COP1 and SPA to promote light-induced degradation of PIF1. *Nat Commun*

- 6, 7245.
- 286 Zhen, G., Zhang, L., Du, Y., Yu, R., Liu, X., Cao, F., Chang, Q., **Deng, X.W.**, Xia, M., and He, H. (2015). De novo assembly and comparative analysis of root transcriptomes from different varieties of *Panax ginseng* C. A. Meyer grown in different environments. *Sci China Life Sci* 58, 1099-1110.
- 285 Dong, J., Terzaghi, W., **Deng, X.W.** and Chen H. (2015). Multiple photomorphogenic repressors work in concert to regulate *Arabidopsis* seedling development. *Plant Signal Behav* 10(3), e1011934.
- 284 Huang, H., Yang, M., Su, Y., Qu, L., and **Deng, X.W.** (2015). *Arabidopsis* Atypical Kinases ABC1K1 and ABC1K3 Act Oppositely to Cope with Photodamage Under Red Light. *Mol Plant* 8, 1122-1124.
- 283 Yang, L., Li, B., Zheng, X.Y., Li, J., Yang, M., Dong, X., He, G., An, C., and **Deng, X.W.**(2015). Salicylic acid biosynthesis is enhanced and contributes to increased biotrophic pathogen resistance in *Arabidopsis* hybrids. *Nat Commun* 6, 7309.
- 282 Li, K., Gao, Z., He, H., Terzaghi, W., Fan, L.M., **Deng, X.W.**, and Chen, H. (2015). *Arabidopsis* DET1 Represses Photomorphogenesis in Part by Negatively Regulating DELLA Protein Abundance in Darkness. *Mol Plant* 8, 622-630.
- 281 Shi, H., Wang, X., Mo, X., Tang, C., Zhong, S., and **Deng, X.W.** (2015). *Arabidopsis* DET1 degrades HFR1 but stabilizes PIF1 to precisely regulate seed germination. *Proc Natl Acad Sci U S A* 112, 3817-3822.
- 280 Zhang, H., Zhao, X., Li, J., Cai, H., **Deng, X.W.**, and Li, L. (2014). MicroRNA408 is critical for the HY5-SPL7 gene network that mediates the coordinated response to light and copper. *Plant Cell* 26, 4933-4953.
- 279 Kim, S. H., Kim, H., Seo, K. I., Kim, S. H., Chung, S., Huang, X., Yang, P., **Deng, X.W.**, and Lee, J. H. (2014). DWD HYPERSENSITIVE TO UV-B 1 is negatively involved in UV-B mediated cellular responses in *Arabidopsis*. *Plant Mol Biol* 86, 571-583.
- 278 Kim, S. H., Lee, J. H., Seo, K. I., Ryu, B., Sung, Y., Chung, T., **Deng, X.W.**, and Lee, J. H (2014). Characterization of a Novel DWD Protein that Participates in Heat Stress Response in *Arabidopsis*. *Mol Cells* 37, 833-840.
- 277 Dong, J., Tang, D., Gao, Z., Yu, R., Li, K., He, H., Terzaghi, W., **Deng, X.W.** and Chen, H. (2014). *Arabidopsis* DE-ETIOLATED1 Represses Photomorphogenesis by Positively Regulating Phytochrome-Interacting Factors in the Dark. *Plant Cell* 26, 3630-3645.
- 276 Wang, L., Li, J., Zhou, Q., Yang, G., Ding, X. L., Li, X., Cai, C. X., Zhang, Z., Wei, H. Y., Lu, T. H., **Deng, X.W.** and Huang, X. H. (2014). Rare earth elements activate endocytosis in plant cells. *Proc Natl Acad Sci U S A* 111,12936-12941.
- 275 Chen, F., Li, B., Demone, J., Charron, J.B., Shi, X., and **Deng, X.W.** (2014). Photoreceptor partner FHY1 has an independent role in gene modulation and plant development under far-red light. *Proc Natl Acad Sci U S A* 111,11888-11893.
- 274 Huang, X., Ouyang, X., and **Deng, X.W.** (2014). Beyond repression of photomorphogenesis: role

- switching of COP/DET/FUS in light signaling. *Curr Opin Plant Biol* 21C, 96-103.
- 273 Ouyang, X., Huang, X., Jin, X., Chen, Z., Yang, P., Ge, H., Li, S., and **Deng, X.W.** (2014). Coordinated photomorphogenic UV-B signaling network captured by mathematical modeling. *Proc Natl Acad Sci U S A* 111, 11539-11544.
- 272 Wang, Y., Fan, X., Lin, F., He, G., Terzaghi, W., Zhu, D., and **Deng, X.W.** (2014). Arabidopsis noncoding RNA mediates control of photomorphogenesis by red light. *Proc Natl Acad Sci U S A* 111, 10359-10364.
- 271 Xu, D., Lin, F., Jiang, Y., Huang, X., Li, J., Ling, J., Hettiarachchi, C., Tellgren-Roth, C., Holm, M., and **Deng, X.W.** (2014). The RING-Finger E3 Ubiquitin Ligase COP1 SUPPRESSOR1 Negatively Regulates COP1 Abundance in Maintaining COP1 Homeostasis in Dark-Grown Arabidopsis Seedlings. *Plant Cell* 26, 1981-1991.
- 270 Chen, F., Li, B., Li, G., Charron, J.B., Dai, M., Shi, X., and **Deng, X.W.** (2014). Arabidopsis Phytochrome A Directly Targets Numerous Promoters for Individualized Modulation of Genes in a Wide Range of Pathways. *Plant Cell* 26, 1949-1966.
- 269 Jin, D., Li, B., **Deng, X.W.**, and Wei, N. (2014). Plant COP9 signalosome subunit 5, CSN5. *Plant Sci* 224, 54-61.
- 268 Huang, X., Yang, P., Ouyang, X., Chen, L., and **Deng, X.W.** (2014). Photoactivated UVR8-COP1 module determines photomorphogenic UV-B signaling output in Arabidopsis. *PLoS Genet* 10, e1004218.
- 267 Zhong, S., Shi, H., Xue, C., Wei, N., Guo, H., and **Deng, X.W.** (2014). Ethylene-orchestrated circuitry coordinates a seedling's response to soil cover and etiolated growth. *Proc Natl Acad Sci U S A* 111, 3913-3920.
- 266 Xu, D., Li, J., Gangappa, S.N., Hettiarachchi, C., Lin, F., Andersson, M.X., Jiang, Y., **Deng, X.W.**, and Holm, M. (2014). Convergence of Light and ABA signaling on the ABI5 promoter. *PLoS Genet* 10, e1004197.
- 265 Xu, X., Paik, I., Zhu, L., Bu, Q., Huang, X., **Deng, X.W.**, and Huq, E. (2014). PHYTOCHROME INTERACTING FACTOR1 Enhances the E3 Ligase Activity of CONSTITUTIVE PHOTOMORPHOGENIC1 to Synergistically Repress Photomorphogenesis in Arabidopsis. *Plant Cell* 26, 1992-2006.
- 264 Wang, Y., Wang, X., Deng, W., Fan, X., Liu, T.T., He, G., Chen, R., Terzaghi, W., Zhu, D., and **Deng, X.W.** (2014). Genomic features and regulatory roles of intermediate-sized non-coding RNAs in Arabidopsis. *Mol Plant* 7, 514-527.
- 263 Seo, K.I., Lee, J.H., Nezames, C.D., Zhong, S., Song, E., Byun, M.O., and **Deng, X.W.** (2014). ABD1 is an Arabidopsis DCAF substrate receptor for CUL4-DDB1-based E3 ligases that acts as a negative regulator of abscisic acid signaling. *Plant Cell* 26, 695-711.
- 262 Irigoyen, M.L., Iniesto, E., Rodriguez, L., Puga, M.I., Yanagawa, Y., Pick, E., Strickland, E., Paz-Ares, J., Wei, N., De Jaeger, G., Rodriguez, P.L., **Deng, X.W.**, and Rubio, V. (2014). Targeted

- degradation of abscisic acid receptors is mediated by the ubiquitin ligase substrate adaptor DDA1 in Arabidopsis. *Plant Cell* **26**, 712-728.
- 261 Chen, W., Chen, H., Zheng, T., Yu, R., Terzaghi, W.B., Li, Z., **Deng, X.W.**, Xu, J., and He, H. (2014). Highly efficient genotyping of rice biparental populations by GoldenGate assays based on parental resequencing. *Theor Appl Genet* **127**, 297-307.
- 260 Chen, S., He, H., and **Deng, X.W.** (2014). Allele-specific DNA methylation analyses associated with siRNAs in Arabidopsis hybrids. *Science China. Life sciences* **57**, 519-525.
- 259 Chen, H., Xie, W., He, H., Yu, H., Chen, W., Li, J., Yu, R., Yao, Y., Zhang, W., He, Y., Tang, X., Zhou, F., **Deng, X.W.**, and Zhang, Q. (2014). A high-density SNP genotyping array for rice biology and molecular breeding. *Mol Plant* **7**, 541-553.
- 258 Zhang, H., **Deng, X.W.**, and Li, L. (2013). Analysis of allele-specific gene expression using a target-oriented tiling microarray assay. *Methods in molecular biology (Clifton, N.J.)* **1067**, 65-76.
- 257 Yu, Y., Wang, J., Zhang, Z., Quan, R., Zhang, H., **Deng, X.W.**, Ma, L., and Huang, R. (2013). Ethylene promotes hypocotyl growth and HY5 degradation by enhancing the movement of COP1 to the nucleus in the light. *PLoS Genet* **9**, e1004025.
- 256 Wang, J., Yu, Y., Zhang, Z., Quan, R., Zhang, H., Ma, L., **Deng, X.W.**, and Huang, R. (2013). Arabidopsis CSN5B interacts with VTC1 and modulates ascorbic acid synthesis. *Plant Cell* **25**, 625-636.
- 255 Shi, H., Zhong, S., Mo, X., Liu, N., Nezames, C.D., and **Deng, X.W.** (2013). HFR1 sequesters PIF1 to govern the transcriptional network underlying light-initiated seed germination in Arabidopsis. *Plant Cell* **25**, 3770-3784.
- 254 Liu, T.T., Zhu, D., Chen, W., Deng, W., He, H., He, G., Bai, B., Qi, Y., Chen, R., and **Deng, X.W.** (2013). A global identification and analysis of small nucleolar RNAs and possible intermediate-sized non-coding RNAs in *Oryza sativa*. *Mol Plant* **6**, 830-846.
- 253 Liu, C., Guo, L.Q., Menon, S., Jin, D., Pick, E., Wang, X., **Deng, X.W.**, and Wei, N. (2013). COP9 signalosome subunit Csn8 is involved in maintaining proper duration of the G1 phase. *J Biol Chem* **288**, 20443-20452.
- 252 Li, J., Yang, L., Jin, D., Nezames, C.D., Terzaghi, W., and **Deng, X.W.** (2013). UV-B-induced photomorphogenesis in Arabidopsis. *Protein & cell* **4**, 485-492.
- 251 Li, B., Duan, H., Li, J., **Deng, X.W.**, Yin, W., and Xia, X. (2013). Global identification of miRNAs and targets in *Populus euphratica* under salt stress. *Plant Mol Biol* **81**, 525-539.
- 250 Huang, X., Ouyang, X., Yang, P., Lau, O.S., Chen, L., Wei, N., and **Deng, X.W.** (2013). Conversion from CUL4-based COP1-SPA E3 apparatus to UVR8-COP1-SPA complexes underlies a distinct biochemical function of COP1 under UV-B. *Proc Natl Acad Sci USA* **110**, 16669-16674.
- 249 Huang, X., and **Deng, X.W.** (2013). Organization of protein complexes under photomorphogenic UV-B in Arabidopsis. *Plant Signal Behav* **8**.
- 248 He, G., He, H., and **Deng, X.W.** (2013). Epigenetic variations in plant hybrids and their potential

- roles in heterosis. *J Genet Genomics* 40, 205-210.
- 247 He, G., Chen, B., Wang, X., Li, X., Li, J., He, H., Yang, M., Lu, L., Qi, Y., and **Deng, X.W.** (2013). Conservation and divergence of transcriptomic and epigenomic variation in maize hybrids. *Genome Biol* 14, R57.
- 246 Guo, L., Nezames, C.D., Sheng, L., **Deng, X.W.**, and Wei, N. (2013). Cullin-RING ubiquitin ligase family in plant abiotic stress pathways(F). *J Integr Plant Biol* 55, 21-30.
- 245 Franciosini, A., Lombardi, B., Iafrate, S., Pecce, V., Mele, G., Lupacchini, L., Rinaldi, G., Kondou, Y., Gusmaroli, G., Aki, S., Tsuge, T., **Deng, X.W.**, Matsui, M., Vittorioso, P., Costantino, P., and Serino, G. (2013). The Arabidopsis COP9 SIGNALOSOME INTERACTING F-BOX KELCH 1 protein forms an SCF ubiquitin ligase and regulates hypocotyl elongation. *Mol Plant* 6, 1616-1629.
- 244 Dai, M., Xue, Q., McCray, T., Margavage, K., Chen, F., Lee, J.H., Nezames, C.D., Guo, L., Terzaghi, W., Wan, J., **Deng, X.W.**, and Wang, H. (2013). The PP6 Phosphatase Regulates ABI5 Phosphorylation and Abscisic Acid Signaling in Arabidopsis. *Plant Cell* 25, 517-534.
- 243 Chen, H., He, H., Zhou, F., Yu, H., and **Deng, X.W.** (2013). Development of genomics-based genotyping platforms and their applications in rice breeding. *Curr Opin Plant Biol* 16, 247-254.
- 242 Bowler, C., Botto, J., and **Deng, X.W.** (2013). Photomorphogenesis, B-Box transcription factors, and the legacy of Magnus Holm. *Plant Cell* 25, 1192-1195.
- 241 Zhu, D., and **Deng, X.W.** (2012). A non-coding RNA locus mediates environment-conditioned male sterility in rice. *Cell Res* 22, 791-792.
- 240 Zhou, H., Zhao, J., Yang, Y., Chen, C., Liu, Y., Jin, X., Chen, L., Li, X., **Deng, X.W.**, Schumaker, K.S., and Guo, Y. (2012). Ubiquitin-specific protease16 modulates salt tolerance in Arabidopsis by regulating Na(+)/H(+) antiport activity and serine hydroxymethyltransferase stability. *Plant Cell* 24, 5106-5122.
- 239 Zhong, S., Shi, H., Xue, C., Wang, L., Xi, Y., Li, J., Quail, P.H., **Deng, X.W.**, and Guo, H. (2012). A molecular framework of light-controlled phytohormone action in Arabidopsis. *Curr Biol* 22, 1530-1535.
- 238 Zhao, J., Huang, X., Ouyang, X., Chen, W., Du, A., Zhu, L., Wang, S., **Deng, X.W.**, and Li, S. (2012). OsELF3-1, an ortholog of Arabidopsis early flowering 3, regulates rice circadian rhythm and photoperiodic flowering. *PLoS One* 7, e43705.
- 237 Yang, D.L., Yao, J., Mei, C.S., Tong, X.H., Zeng, L.J., Li, Q., Xiao, L.T., Sun, T.P., Li, J., **Deng, X.W.**, Lee, C.M., Thomashow, M.F., Yang, Y., He, Z., and He, S.Y. (2012). Plant hormone jasmonate prioritizes defense over growth by interfering with gibberellin signaling cascade. *Proc Natl Acad Sci U S A* 109, E1192-1200.
- 236 Wu, D., Hu, Q., Yan, Z., Chen, W., Yan, C., Huang, X., Zhang, J., Yang, P., Deng, H., Wang, J., **Deng, X.W.**, and Shi, Y. (2012). Structural basis of ultraviolet-B perception by UVR8. *Nature* 484, 214-219.
- 235 Shen, H., He, H., Li, J., Chen, W., Wang, X., Guo, L., Peng, Z., He, G., Zhong, S., Qi, Y., Terzaghi,



- W., and **Deng, X.W.** (2012). Genome-wide analysis of DNA methylation and gene expression changes in two Arabidopsis ecotypes and their reciprocal hybrids. *Plant Cell* **24**, 875-892.
- 234 Nezames, C.D., and **Deng, X.W.** (2012). The COP9 signalosome: its regulation of cullin-based E3 ubiquitin ligases and role in photomorphogenesis. *Plant Physiol* **160**, 38-46.
- 233 Li, J., Terzaghi, W., and **Deng, X.W.** (2012). Genomic basis for light control of plant development. *Protein & cell* **3**, 106-116.
- 232 Lau, O.S., and **Deng, X.W.** (2012). The photomorphogenic repressors COP1 and DET1: 20 years later. *Trends Plant Sci* **17**, 584-593.
- 231 Huang, X., Ouyang, X., Yang, P., Lau, O.S., Li, G., Li, J., Chen, H., and **Deng, X.W.** (2012). Arabidopsis FHY3 and HY5 positively mediate induction of COP1 transcription in response to photomorphogenic UV-B light. *Plant Cell* **24**, 4590-4606.
- 230 Fan, D., Dai, Y., Wang, X., Wang, Z., He, H., Yang, H., Cao, Y., **Deng, X.W.**, and Ma, L. (2012). IBM1, a JmjC domain-containing histone demethylase, is involved in the regulation of RNA-directed DNA methylation through the epigenetic control of RDR2 and DCL3 expression in Arabidopsis. *Nucleic Acids Res* **40**, 8905-8916.
- 229 Dai, M., Zhang, C., Kania, U., Chen, F., Xue, Q., McCray, T., Li, G., Qin, G., Wakeley, M., Terzaghi, W., Wan, J., Zhao, Y., Xu, J., Friml, J., **Deng, X.W.**, and Wang, H. (2012). A PP6-type phosphatase holoenzyme directly regulates PIN phosphorylation and auxin efflux in Arabidopsis. *Plant Cell* **24**, 2497-2514.
- 228 Chen, H., Chen, W., Zhou, J., He, H., Chen, L., and **Deng, X.W.** (2012). Basic leucine zipper transcription factor OsZIP16 positively regulates drought resistance in rice. *Plant Sci* **193-194**, 8-17.
- 227 Chen, F., Shi, X., Chen, L., Dai, M., Zhou, Z., Shen, Y., Li, J., Li, G., Wei, N., and **Deng, X.W.** (2012). Phosphorylation of FAR-RED ELONGATED HYPOCOTYL1 is a key mechanism defining signaling dynamics of phytochrome A under red and far-red light in Arabidopsis. *Plant Cell* **24**, 1907-1920.
- 226 Zhang, H., He, H., Wang, X., Yang, X., Li, L., and **Deng, X.W.** (2011). Genome-wide mapping of the HY5-mediated gene networks in Arabidopsis that involve both transcriptional and post-transcriptional regulation. *Plant J* **65**, 346-358.
- 225 Zang, B., Li, H., Li, W., **Deng, X.W.**, and Wang, X. (2011). Analysis of trehalose-6-phosphate synthase (TPS) gene family suggests the formation of TPS complexes in rice. *Plant Mol Biol* **76**, 507-522.
- 224 Wang, F., and **Deng, X.W.** (2011). Plant ubiquitin-proteasome pathway and its role in gibberellin signaling. *Cell Res* **21**, 1286-1294.
- 223 Ouyang, X., Li, J., Li, G., Li, B., Chen, B., Shen, H., Huang, X., Mo, X., Wan, X., Lin, R., Li, S., Wang, H., and **Deng, X.W.** (2011). Genome-wide binding site analysis of FAR-RED ELONGATED HYPOCOTYL3 reveals its novel function in Arabidopsis development. *Plant Cell* **23**, 2514-2535.

- 222 Lozano-Duran, R., Rosas-Diaz, T., Gusmaroli, G., Luna, A.P., Taconnat, L., **Deng, X.W.**, and Bejarano, E.R. (2011). Geminiviruses subvert ubiquitination by altering CSN-mediated derubylation of SCF E3 ligase complexes and inhibit jasmonate signaling in *Arabidopsis thaliana*. *Plant Cell* **23**, 1014-1032.
- 221 Li, W., Zang, B., Liu, C., Lu, L., Wei, N., Cao, K., **Deng, X.W.**, and Wang, X. (2011). TSA1 interacts with CSN1/CSN and may be functionally involved in *Arabidopsis* seedling development in darkness. *J Genet Genomics* **38**, 539-546.
- 220 Li, H.W., Zang, B.S., **Deng, X.W.**, and Wang, X.P. (2011). Overexpression of the trehalose-6-phosphate synthase gene OsTPS1 enhances abiotic stress tolerance in rice. *Planta* **234**, 1007-1018.
- 219 Li, G., Siddiqui, H., Teng, Y., Lin, R., Wan, X.Y., Li, J., Lau, O.S., Ouyang, X., Dai, M., Wan, J., Devlin, P.F., **Deng, X.W.**, and Wang, H. (2011). Coordinated transcriptional regulation underlying the circadian clock in *Arabidopsis*. *Nat Cell Biol* **13**, 616-622.
- 218 Lee, J.H., Terzaghi, W., and **Deng, X.W.** (2011). DWA3, an *Arabidopsis* DWD protein, acts as a negative regulator in ABA signal transduction. *Plant Sci* **180**, 352-357.
- 217 Lau, O.S., Huang, X., Charron, J.B., Lee, J.H., Li, G., and **Deng, X.W.** (2011). Interaction of *Arabidopsis* DET1 with CCA1 and LHY in mediating transcriptional repression in the plant circadian clock. *Mol Cell* **43**, 703-712.
- 216 He, G., Elling, A.A., and **Deng, X.W.** (2011). The epigenome and plant development. *Annu Rev Plant Biol* **62**, 411-435.
- 215 Cui, H., Hao, Y., Kovtun, M., Stolc, V., **Deng, X.W.**, Sakakibara, H., and Kojima, M. (2011). Genome-wide direct target analysis reveals a role for SHORT-ROOT in root vascular patterning through cytokinin homeostasis. *Plant Physiol* **157**, 1221-1231.
- 214 Chen, H., He, H., Zou, Y., Chen, W., Yu, R., Liu, X., Yang, Y., Gao, Y.M., Xu, J.L., Fan, L.M., Li, Y., Li, Z.K., and **Deng, X.W.** (2011). Development and application of a set of breeder-friendly SNP markers for genetic analyses and molecular breeding of rice (*Oryza sativa* L.). *Theor Appl Genet* **123**, 869-879.
- 213 Zhou, J., Wang, X., He, K., Charron, J.B., Elling, A.A., and **Deng, X.W.** (2010). Genome-wide profiling of histone H3 lysine 9 acetylation and dimethylation in *Arabidopsis* reveals correlation between multiple histone marks and gene expression. *Plant Mol Biol* **72**, 585-595.
- 212 Yang, Y., Qin, Y., Xie, C., Zhao, F., Zhao, J., Liu, D., Chen, S., Fuglsang, A.T., Palmgren, M.G., Schumaker, K.S., **Deng, X.W.**, and Guo, Y. (2010). The *Arabidopsis* chaperone J3 regulates the plasma membrane H<sup>+</sup>-ATPase through interaction with the PKS5 kinase. *Plant Cell* **22**, 1313-1332.
- 211 Xie, C., Zhou, X., **Deng, X.W.**, and Guo, Y. (2010). PKS5, a SNF1-related kinase, interacts with and phosphorylates NPR1, and modulates expression of WRKY38 and WRKY62. *J Genet Genomics* **37**, 359-369.
- 210 Li, J., Li, G., Gao, S., Martinez, C., He, G., Zhou, Z., Huang, X., Lee, J.H., Zhang, H., Shen, Y., Wang, H., and **Deng, X.W.** (2010). *Arabidopsis* transcription factor ELONGATED HYPOCOTYL5

- plays a role in the feedback regulation of phytochrome A signaling. *Plant Cell* 22, 3634-3649.
- 209 Lee, J.H., Yoon, H.J., Terzaghi, W., Martinez, C., Dai, M., Li, J., Byun, M.O., and **Deng, X.W.** (2010). DWA1 and DWA2, two Arabidopsis DWD protein components of CUL4-based E3 ligases, act together as negative regulators in ABA signal transduction. *Plant Cell* 22, 1716-1732.
- 208 Lau, O.S., and **Deng, X.W.** (2010). Plant hormone signaling lightens up: integrators of light and hormones. *Curr Opin Plant Biol* 13, 571-577.
- 207 Kong, Y.M., Elling, A. A., Chen, B., and **Deng, X.W.** (2010). Differential Expression of microRNAs in Maize Inbred and Hybrid Lines During Salt and Drought Stress. *Am J Plant Sci* 1, 69-76.
- 206 He, H., Zhang, H., Wang, X., Wu, N., Yang, X., Chen, R., Li, Y., **Deng, X.W.**, and Li, L. (2010). Development of a versatile, target-oriented tiling microarray assay for measuring allele-specific gene expression. *Genomics* 96, 308-315.
- 205 He, G., Zhu, X., Elling, A.A., Chen, L., Wang, X., Guo, L., Liang, M., He, H., Zhang, H., Chen, F., Qi, Y., Chen, R., and **Deng, X.W.** (2010). Global epigenetic and transcriptional trends among two rice subspecies and their reciprocal hybrids. *Plant Cell* 22, 17-33.
- 204 Chen, H., Huang, X., Gusmaroli, G., Terzaghi, W., Lau, O.S., Yanagawa, Y., Zhang, Y., Li, J., Lee, J.H., Zhu, D., and **Deng, X.W.** (2010). Arabidopsis CULLIN4-damaged DNA binding protein 1 interacts with CONSTITUTIVELY PHOTOMORPHOGENIC1-SUPPRESSOR OF PHYA complexes to regulate photomorphogenesis and flowering time. *Plant Cell* 22, 108-123.
- 203 Chen, F., He, G., He, H., Chen, W., Zhu, X., Liang, M., Chen, L., and **Deng, X.W.** (2010). Expression analysis of miRNAs and highly-expressed small RNAs in two rice subspecies and their reciprocal hybrids. *J Integr Plant Biol* 52, 971-980.
- 202 Bai, S., Zhao, J., Zhang, Y., Huang, W., Xu, S., Chen, H., Fan, L.M., Chen, Y., and **Deng, X.W.** (2010). Rapid and reliable detection of 11 food-borne pathogens using thin-film biosensor chips. *Appl Microbiol Biotechnol* 86, 983-990.
- 201 Xie, C.G., Lin, H., **Deng, X.W.**, and Guo, Y. (2009). Roles of SCaBP8 in salt stress response. *Plant Signal Behav* 4, 956-958.
- 200 Wang, X., Yu, Z., Yang, X., **Deng, X.W.**, and Li, L. (2009). Transcriptionally active gene fragments derived from potentially fast-evolving donor genes in the rice genome. *Bioinformatics* 25, 1215-1218.
- 199 Wang, X., Li, W., Piqueras, R., Cao, K., **Deng, X.W.**, and Wei, N. (2009). Regulation of COP1 nuclear localization by the COP9 signalosome via direct interaction with CSN1. *Plant J* 58, 655-667.
- 198 Wang, X., Elling, A.A., Li, X., Li, N., Peng, Z., He, G., Sun, H., Qi, Y., Liu, X.S., and **Deng, X.W.** (2009). Genome-wide and organ-specific landscapes of epigenetic modifications and their relationships to mRNA and small RNA transcriptomes in maize. *Plant Cell* 21, 1053-1069.
- 197 Wang, F., Zhu, D., Huang, X., Li, S., Gong, Y., Yao, Q., Fu, X., Fan, L.M., and **Deng, X.W.** (2009). Biochemical insights on degradation of Arabidopsis DELLA proteins gained from a cell-free assay

- system. *Plant Cell* 21, 2378-2390.
- 196 Shen, Y., Zhou, Z., Feng, S., Li, J., Tan-Wilson, A., Qu, L.J., Wang, H., and **Deng, X.W.** (2009). Phytochrome A mediates rapid red light-induced phosphorylation of Arabidopsis FAR-RED ELONGATED HYPOCOTYL1 in a low fluence response. *Plant Cell* 21, 494-506.
- 195 Rubio, V., and **Deng, X.W.** (2009). The dark side of clock-controlled flowering. *F1000 Biol Rep* 1, 57.
- 194 Peng, Z.Y., Zhang, H., Liu, T., Dzikiewicz, K.M., Li, S., Wang, X., Hu, G., Zhu, Z., Wei, X., Zhu, Q.H., Sun, Z., Ge, S., Ma, L., Li, L., and **Deng, X.W.** (2009). Characterization of the genome expression trends in the heading-stage panicle of six rice lineages. *Genomics* 93, 169-178.
- 193 Lau, O.S., and **Deng, X.W.** (2009). Effect of Arabidopsis COP10 ubiquitin E2 enhancement activity across E2 families and functional conservation among its canonical homologues. *Biochem J* 418, 683-690.
- 192 Jiao, Y., Tausta, S.L., Gandotra, N., Sun, N., Liu, T., Clay, N.K., Ceserani, T., Chen, M., Ma, L., Holford, M., Zhang, H.Y., Zhao, H., **Deng, X.W.**, and Nelson, T. (2009). A transcriptome atlas of rice cell types uncovers cellular, functional and developmental hierarchies. *Nat Genet* 41, 258-263.
- 191 He, K., Li, X., Zhou, J., **Deng, X.W.**, Zhao, H., and Luo, J. (2009). NTAP: for NimbleGen tiling array CHIP-chip data analysis. *Bioinformatics* 25, 1838-1840.
- 190 Elling, A.A., and **Deng, X.W.** (2009). Next-generation sequencing reveals complex relationships between the epigenome and transcriptome in maize. *Plant Signal Behav* 4, 760-762.
- 189 Charron, J.B., He, H., Elling, A.A., and **Deng, X.W.** (2009). Dynamic landscapes of four histone modifications during deetiolation in Arabidopsis. *Plant Cell* 21, 3732-3748.
- 188 Zhu, D., Maier, A., Lee, J.H., Laubinger, S., Saijo, Y., Wang, H., Qu, L.J., Hoecker, U., and **Deng, X.W.** (2008). Biochemical characterization of Arabidopsis complexes containing CONSTITUTIVELY PHOTOMORPHOGENIC1 and SUPPRESSOR OF PHYA proteins in light control of plant development. *Plant Cell* 20, 2307-2323.
- 187 Zhang, Y., Xu, W., Li, Z., **Deng, X.W.**, Wu, W., and Xue, Y. (2008). F-box protein DOR functions as a novel inhibitory factor for abscisic acid-induced stomatal closure under drought stress in Arabidopsis. *Plant Physiol* 148, 2121-2133.
- 186 Zhang, Y., Feng, S., Chen, F., Chen, H., Wang, J., McCall, C., Xiong, Y., and **Deng, X.W.** (2008). Arabidopsis DDB1-CUL4 ASSOCIATED FACTOR1 forms a nuclear E3 ubiquitin ligase with DDB1 and CUL4 that is involved in multiple plant developmental processes. *Plant Cell* 20, 1437-1455.
- 185 Zhang, Q., Li, J., Xue, Y., Han, B., and **Deng, X.W.** (2008). Rice 2020: a call for an international coordinated effort in rice functional genomics. *Mol Plant* 1, 715-719.
- 184 Zhang, H.Y., He, H., Chen, L.B., Li, L., Liang, M.Z., Wang, X.F., Liu, X.G., He, G.M., Chen, R.S., Ma, L.G., and **Deng, X.W.** (2008). A genome-wide transcription analysis reveals a close correlation of promoter INDEL polymorphism and heterotic gene expression in rice hybrids. *Mol Plant* 1, 720-

731.

- 183 Yu, J.W., Rubio, V., Lee, N.Y., Bai, S., Lee, S.Y., Kim, S.S., Liu, L., Zhang, Y., Irigoyen, M.L., Sullivan, J.A., Lee, I., Xie, Q., Paek, N.C., and **Deng, X.W.** (2008). COP1 and ELF3 control circadian function and photoperiodic flowering by regulating GI stability. *Mol Cell* **32**, 617-630.
- 182 Yin, B.L., Guo, L., Zhang, D.F., Terzaghi, W., Wang, X.F., Liu, T.T., He, H., Cheng, Z.K., and **Deng, X.W.** (2008). Integration of cytological features with molecular and epigenetic properties of rice chromosome 4. *Mol Plant* **1**, 816-829.
- 181 Wei, N., Serino, G., and **Deng, X.W.** (2008). The COP9 signalosome: more than a protease. *Trends Biochem Sci* **33**, 592-600.
- 180 Saijo, Y., Zhu, D., Li, J., Rubio, V., Zhou, Z., Shen, Y., Hoecker, U., Wang, H., and **Deng, X.W.** (2008). Arabidopsis COP1/SPA1 complex and FHY1/FHY3 associate with distinct phosphorylated forms of phytochrome A in balancing light signaling. *Mol Cell* **31**, 607-613.
- 179 Liu, Y., Wang, F., Zhang, H., He, H., Ma, L., and **Deng, X.W.** (2008). Functional characterization of the Arabidopsis ubiquitin-specific protease gene family reveals specific role and redundancy of individual members in development. *Plant J* **55**, 844-856.
- 178 Li, X., Wang, X., He, K., Ma, Y., Su, N., He, H., Stolc, V., Tongprasit, W., Jin, W., Jiang, J., Terzaghi, W., Li, S., and **Deng, X.W.** (2008). High-resolution mapping of epigenetic modifications of the rice genome uncovers interplay between DNA methylation, histone methylation, and gene expression. *Plant Cell* **20**, 259-276.
- 177 Li, L., He, H., Zhang, J., Wang, X., Bai, S., Stolc, V., Tongprasit, W., Young, N.D., Yu, O., and **Deng, X.W.** (2008). Transcriptional analysis of highly syntenic regions between *Medicago truncatula* and *Glycine max* using tiling microarrays. *Genome Biol* **9**, R57.
- 176 Lee, J.H., Terzaghi, W., Gusmaroli, G., Charron, J.B., Yoon, H.J., Chen, H., He, Y.J., Xiong, Y., and **Deng, X.W.** (2008). Characterization of Arabidopsis and rice DWD proteins and their roles as substrate receptors for CUL4-RING E3 ubiquitin ligases. *Plant Cell* **20**, 152-167.
- 175 Jang, S., Marchal, V., Panigrahi, K.C., Wenkel, S., Soppe, W., **Deng, X.W.**, Valverde, F., and Coupland, G. (2008). Arabidopsis COP1 shapes the temporal pattern of CO accumulation conferring a photoperiodic flowering response. *EMBO J* **27**, 1277-1288.
- 174 Guo, L., Zhou, J., Elling, A.A., Charron, J.B., and **Deng, X.W.** (2008). Histone modifications and expression of light-regulated genes in Arabidopsis are cooperatively influenced by changing light conditions. *Plant Physiol* **147**, 2070-2083.
- 173 Gong, W., He, K., Covington, M., Dinesh-Kumar, S.P., Snyder, M., Harmer, S.L., Zhu, Y.X., and **Deng, X.W.** (2008). The development of protein microarrays and their applications in DNA-protein and protein-protein interaction analyses of Arabidopsis transcription factors. *Mol Plant* **1**, 27-41.
- 172 Feng, S., Martinez, C., Gusmaroli, G., Wang, Y., Zhou, J., Wang, F., Chen, L., Yu, L., Iglesias-Pedraz, J.M., Kircher, S., Schafer, E., Fu, X., Fan, L.M., and **Deng, X.W.** (2008). Coordinated regulation of Arabidopsis thaliana development by light and gibberellins. *Nature* **451**, 475-479.

- 171 Chen, H., Zhang, J., Neff, M.M., Hong, S.W., Zhang, H., **Deng, X.W.**, and Xiong, L. (2008). Integration of light and abscisic acid signaling during seed germination and early seedling development. *Proc Natl Acad Sci U S A* *105*, 4495-4500.
- 170 Alabadi, D., Gallego-Bartolome, J., Orlando, L., Garcia-Carcel, L., Rubio, V., Martinez, C., Frigerio, M., Iglesias-Pedraz, J.M., Espinosa, A., **Deng, X.W.**, and Blazquez, M.A. (2008). Gibberellins modulate light signaling pathways to prevent Arabidopsis seedling de-etiolation in darkness. *Plant J* *53*, 324-335.
- 169 Zhou, J., Wang, X., Jiao, Y., Qin, Y., Liu, X., He, K., Chen, C., Ma, L., Wang, J., Xiong, L., Zhang, Q., Fan, L., and **Deng, X.W.** (2007). Global genome expression analysis of rice in response to drought and high-salinity stresses in shoot, flag leaf, and panicle. *Plant Mol Biol* *63*, 591-608.
- 168 Su, N., He, K., Jiao, Y., Chen, C., Zhou, J., Li, L., Bai, S., Li, X., and **Deng, X.W.** (2007). Distinct reorganization of the genome transcription associates with organogenesis of somatic embryo, shoots, and roots in rice. *Plant Mol Biol* *63*, 337-349.
- 167 Serino, G., and **Deng, X.W.** (2007). Protein coimmunoprecipitation in Arabidopsis. *CSH Protoc* *2007*, pdb prot4683.
- 166 Rubio, V., and **Deng, X.W.** (2007). Standing on the shoulders of GIGANTEA. *Science* *318*, 206-207.
- 165 Liu, B., Chen, Z., Song, X., Liu, C., Cui, X., Zhao, X., Fang, J., Xu, W., Zhang, H., Wang, X., Chu, C., **Deng, X.W.**, Xue, Y. and Cao, X. (2007). *Oryza sativa* dicer-like4 reveals a key role for small interfering RNA silencing in plant development. *Plant Cell* *19*, 2705-2718.
- 164 Qin, G., Gu, H., Ma, L., Peng, Y., **Deng, X.W.**, Chen, Z., and Qu, L.J. (2007). Disruption of phytoene desaturase gene results in albino and dwarf phenotypes in Arabidopsis by impairing chlorophyll, carotenoid, and gibberellin biosynthesis. *Cell Res* *17*, 471-482.
- 163 Pick, E., Lau, O.S., Tsuge, T., Menon, S., Tong, Y., Dohmae, N., Plafker, S.M., **Deng, X.W.**, and Wei, N. (2007). Mammalian DET1 regulates Cul4A activity and forms stable complexes with E2 ubiquitin-conjugating enzymes. *Mol Cell Biol* *27*, 4708-4719.
- 162 Menon, S., Chi, H., Zhang, H., **Deng, X.W.**, Flavell, R.A., and Wei, N. (2007). COP9 signalosome subunit 8 is essential for peripheral T cell homeostasis and antigen receptor-induced entry into the cell cycle from quiescence. *Nat Immunol* *8*, 1236-1245.
- 161 Li, L., Wang, X., Sasidharan, R., Stolc, V., Deng, W., He, H., Korbel, J., Chen, X., Tongprasit, W., Ronald, P., Chen, R., Gerstein, M., and **Deng, X.W.** (2007). Global identification and characterization of transcriptionally active regions in the rice genome. *PLoS One* *2*, e294.
- 160 Lee, J., He, K., Stolc, V., Lee, H., Figueroa, P., Gao, Y., Tongprasit, W., Zhao, H., Lee, I., and **Deng, X.W.** (2007). Analysis of transcription factor HY5 genomic binding sites revealed its hierarchical role in light regulation of development. *Plant Cell* *19*, 731-749.
- 159 Jiao, Y., Lau, O.S., and **Deng, X.W.** (2007). Light-regulated transcriptional networks in higher plants. *Nat Rev Genet* *8*, 217-230.

- 158 Jiao, Y., and **Deng, X.W.** (2007). A genome-wide transcriptional activity survey of rice transposable element-related genes. *Genome Biol* **8**, R28.
- 157 Han, B., Xue, Y., Li, J., **Deng, X.W.**, and Zhang, Q. (2007). Rice functional genomics research in China. *Philos Trans R Soc Lond B Biol Sci* **362**, 1009-1021.
- 156 Gusmaroli, G., Figueroa, P., Serino, G., and **Deng, X.W.** (2007). Role of the MPN subunits in COP9 signalosome assembly and activity, and their regulatory interaction with Arabidopsis Cullin3-based E3 ligases. *Plant Cell* **19**, 564-581.
- 155 Bai, S.L., Zhong, X., Ma, L., Zheng, W., Fan, L.M., Wei, N., and **Deng, X.W.** (2007). A simple and reliable assay for detecting specific nucleotide sequences in plants using optical thin-film biosensor chips. *Plant J* **49**, 354-366.
- 154 Yi, C., Li, S., Wang, J., Wei, N., and **Deng, X.W.** (2006). Affinity purification reveals the association of WD40 protein constitutive photomorphogenic 1 with the hetero-oligomeric TCP-1 chaperonin complex in mammalian cells. *Int J Biochem Cell Biol* **38**, 1076-1083.
- 153 Wang, X., He, H., Li, L., Chen, R., **Deng, X.W.**, and Li, S. (2006). NMPP: a user-customized NimbleGen microarray data processing pipeline. *Bioinformatics* **22**, 2955-2957.
- 152 Li, L., Wang, X., Stolc, V., Li, X., Zhang, D., Su, N., Tongprasit, W., Li, S., Cheng, Z., Wang, J., and **Deng, X.W.** (2006). Genome-wide transcription analyses in rice using tiling microarrays. *Nat Genet* **38**, 124-129.
- 151 Li, J., Zhu, S., Song, X., Shen, Y., Chen, H., Yu, J., Yi, K., Liu, Y., Karplus, V.J., Wu, P., and **Deng, X.W.** (2006). A rice glutamate receptor-like gene is critical for the division and survival of individual cells in the root apical meristem. *Plant Cell* **18**, 340-349.
- 150 Lee, J.H., **Deng, X.W.**, and Kim, W.T. (2006). Possible role of light in the maintenance of EIN3/EIL1 stability in Arabidopsis seedlings. *Biochem Biophys Res Co* **350**, 484-491.
- 149 Han, Z., Guo, L., Wang, H., Shen, Y., **Deng, X.W.**, and Chai, J. (2006). Structural basis for the specific recognition of methylated histone H3 lysine 4 by the WD-40 protein WDR5. *Mol Cell* **22**, 137-144.
- 148 Guo, L., Yin, B., Zhou, J., Li, X., and **Deng, X.W.** (2006). Development of rabbit monoclonal and polyclonal antibodies for detection of site-specific histone modifications and their application in analyzing overall modification levels. *Cell Res* **16**, 519-527.
- 147 Dong, L., Wang, L., Zhang, Y., **Deng, X.W.**, and Xue, Y. (2006). An auxin-inducible F-box protein CEGENDUO negatively regulates auxin-mediated lateral root formation in Arabidopsis. *Plant Mol Biol* **60**, 599-615.
- 146 Datta, S., Hettiarachchi, G.H., **Deng, X.W.**, and Holm, M. (2006). Arabidopsis CONSTANS-LIKE3 is a positive regulator of red light signaling and root growth. *Plant Cell* **18**, 70-84.
- 145 Chen, Y., Yang, X., He, K., Liu, M., Li, J., Gao, Z., Lin, Z., Zhang, Y., Wang, X., Qiu, X., Shen, Y., Zhang, L., Deng, X., Luo, J., **Deng, X.W.**, Chen, Z., Gu, H., and Qu, L.J. (2006). The MYB transcription factor superfamily of Arabidopsis: expression analysis and phylogenetic comparison

- with the rice MYB family. *Plant Mol Biol* 60, 107-124.
- 144 Chen, H., Shen, Y., Tang, X., Yu, L., Wang, J., Guo, L., Zhang, Y., Zhang, H., Feng, S., Strickland, E., Zheng, N., and **Deng, X.W.** (2006). Arabidopsis CULLIN4 Forms an E3 Ubiquitin Ligase with RBX1 and the CDD Complex in Mediating Light Control of Development. *Plant Cell* 18, 1991-2004.
- 143 Chen, H., Karplus, V.J., Ma, H., and **Deng, X.W.** (2006). Plant biology research comes of age in China. *Plant Cell* 18, 2855-2864.
- 142 Zhang, S., Chen, C., Li, L., Meng, L., Singh, J., Jiang, N., **Deng, X.W.**, He, Z.H., and Lemaux, P.G. (2005). Evolutionary expansion, gene structure, and expression of the rice wall-associated kinase gene family. *Plant Physiol* 139, 1107-1124.
- 141 Yi, C., Li, S., Chen, X., Wiemer, E.A., Wang, J., Wei, N., and **Deng, X.W.** (2005). Major vault protein, in concert with constitutively photomorphogenic 1, negatively regulates c-Jun-mediated activator protein 1 transcription in mammalian cells. *Cancer Res* 65, 5835-5840.
- 140 Yi, C., and **Deng, X.W.** (2005). COP1 - from plant photomorphogenesis to mammalian tumorigenesis. *Trends Cell Biol* 15, 618-625.
- 139 Yang, J., Lin, R., Sullivan, J., Hoecker, U., Liu, B., Xu, L., **Deng, X.W.**, and Wang, H. (2005). Light regulates COP1-mediated degradation of HFR1, a transcription factor essential for light signaling in Arabidopsis. *Plant Cell* 17, 804-821.
- 138 Su, N., Sullivan, J.A., and **Deng, X.W.** (2005). Modulation of F1 hybrid stature without altering parent plants through trans-activated expression of a mutated rice GAI homologue. *Plant Biotechnol J* 3, 157-164.
- 137 Stolc, V., Li, L., Wang, X., Li, X., Su, N., Tongprasit, W., Han, B., Xue, Y., Li, J., Snyder, M., Gerstein, M., Wang, J., and **Deng, X.W.** (2005). A pilot study of transcription unit analysis in rice using oligonucleotide tiling-path microarray. *Plant Mol Biol* 59, 137-149.
- 136 Shen, Y., Feng, S., Ma, L., Lin, R., Qu, L.J., Chen, Z., Wang, H., and **Deng, X.W.** (2005). Arabidopsis FHY1 protein stability is regulated by light via phytochrome A and 26S proteasome. *Plant Physiol* 139, 1234-1243.
- 135 Sang, Y., Li, Q.H., Rubio, V., Zhang, Y.C., Mao, J., **Deng, X.W.**, and Yang, H.Q. (2005). N-terminal domain-mediated homodimerization is required for photoreceptor activity of Arabidopsis CRYPTOCHROME 1. *Plant Cell* 17, 1569-1584.
- 134 Rubio, V., Shen, Y., Saijo, Y., Liu, Y., Gusmaroli, G., Dinesh-Kumar, S.P., and **Deng, X.W.** (2005). An alternative tandem affinity purification strategy applied to Arabidopsis protein complex isolation. *Plant J* 41, 767-778.
- 133 Rubio, V., and **Deng, X.W.** (2005). Phy tunes: phosphorylation status and phytochrome-mediated signaling. *Cell* 120, 290-292.
- 132 Menon, S., Rubio, V., Wang, X., **Deng, X.W.**, and Wei, N. (2005). Purification of the COP9 signalosome from porcine spleen, human cell lines, and Arabidopsis thaliana plants. *Methods*



*Enzymol* 398, 468-481.

- 131 Ma, L., Sun, N., Liu, X., Jiao, Y., Zhao, H., and **Deng, X.W.** (2005). Organ-specific expression of Arabidopsis genome during development. *Plant Physiol* 138, 80-91.
- 130 Ma, L., Chen, C., Liu, X., Jiao, Y., Su, N., Li, L., Wang, X., Cao, M., Sun, N., Zhang, X., Bao, J., Li, J., Pedersen, S., Bolund, L., Zhao, H., Yuan, L., Wong, G.K., Wang, J., and **Deng, X.W.** (2005). A microarray analysis of the rice transcriptome and its comparison to Arabidopsis. *Genome Res* 15, 1274-1283.
- 129 Li, L., Wang, X., Xia, M., Stolc, V., Su, N., Peng, Z., Li, S., Wang, J., and **Deng, X.W.** (2005). Tiling microarray analysis of rice chromosome 10 to identify the transcriptome and relate its expression to chromosomal architecture. *Genome Biol* 6, R52.
- 128 Li, L., and **Deng, X.W.** (2005). It runs in the family: regulation of brassinosteroid signaling by the BZR1-BES1 class of transcription factors. *Trends Plant Sci* 10, 266-268.
- 127 Kraft, E., Stone, S.L., Ma, L., Su, N., Gao, Y., Lau, O.S., **Deng, X.W.**, and Callis, J. (2005). Genome analysis and functional characterization of the E2 and RING-type E3 ligase ubiquitination enzymes of Arabidopsis. *Plant Physiol* 139, 1597-1611.
- 126 Jiao, Y., Ma, L., Strickland, E., and **Deng, X.W.** (2005). Conservation and divergence of light-regulated genome expression patterns during seedling development in rice and Arabidopsis. *Plant Cell* 17, 3239-3256.
- 125 Jiao, Y., Jia, P., Wang, X., Su, N., Yu, S., Zhang, D., Ma, L., Feng, Q., Jin, Z., Li, L., Xue, Y., Cheng, Z., Zhao, H., Han, B., and **Deng, X.W.** (2005). A tiling microarray expression analysis of rice chromosome 4 suggests a chromosome-level regulation of transcription. *Plant Cell* 17, 1641-1657.
- 124 Figueroa, P., Gusmaroli, G., Serino, G., Habashi, J., Ma, L., Shen, Y., Feng, S., Bostick, M., Callis, J., Hellmann, H., and **Deng, X.W.** (2005). Arabidopsis has two redundant Cullin3 proteins that are essential for embryo development and that interact with RBX1 and BTB proteins to form multisubunit E3 ubiquitin ligase complexes in vivo. *Plant Cell* 17, 1180-1195.
- 123 Feng, J.X., Liu, D., Pan, Y., Gong, W., Ma, L.G., Luo, J.C., **Deng, X.W.**, and Zhu, Y.X. (2005). An annotation update via cDNA sequence analysis and comprehensive profiling of developmental, hormonal or environmental responsiveness of the Arabidopsis AP2/EREBP transcription factor gene family. *Plant Mol Biol* 59, 853-868.
- 122 Yanagawa, Y., Sullivan, J.A., Komatsu, S., Gusmaroli, G., Suzuki, G., Yin, J., Ishibashi, T., Saijo, Y., Rubio, V., Kimura, S., Wang, J., and **Deng, X.W.** (2004). Arabidopsis COP10 forms a complex with DDB1 and DET1 in vivo and enhances the activity of ubiquitin conjugating enzymes. *Genes Dev* 18, 2172-2181.
- 121 Wang, L., Dong, L., Zhang, Y., Wu, W., **Deng, X.W.**, and Xue, Y. (2004). Genome-wide analysis of S-Locus F-box-like genes in Arabidopsis thaliana. *Plant Mol Bio* 156, 929-945.
- 120 Gusmaroli, G., Feng, S., and **Deng, X.W.** (2004). The Arabidopsis CSN5A and CSN5B subunits are present in distinct COP9 signalosome complexes, and mutations in their JAMM domains exhibit

- differential dominant negative effects on development. *Plant Cell* 16, 2984-3001.
- 119 Gong, W., Shen, Y.P., Ma, L.G., Pan, Y., Du, Y.L., Wang, D.H., Yang, J.Y., Hu, L.D., Liu, X.F., Dong, C.X., Ma, L., Chen, Y.H., Yang, X.Y., Gao, Y., Zhu, D., Tan, X., Mu, J.Y., Zhang, D.B., Liu, Y.L., Dinesh-Kumar, S.P., Li, Y., Wang, X.P., Gu, H.Y., Qu, L.J., Bai, S.N., Lu, Y.T., Li, J.Y., Zhao, J.D., Zuo, J., Huang, H., **Deng, X.W.**, and Zhu, Y.X. (2004). Genome-wide ORFeome cloning and analysis of Arabidopsis transcription factor genes. *Plant Physiol* 135, 773-782.
- 118 Gao, Y., Li, J., Strickland, E., Hua, S., Zhao, H., Chen, Z., Qu, L., and **Deng, X.W.** (2004). An Arabidopsis promoter microarray and its initial usage in the identification of HY5 binding targets in vitro. *Plant Mol Biol* 54, 683-699.
- 117 Feng, S., Shen, Y., Sullivan, J.A., Rubio, V., Xiong, Y., Sun, T.P., and **Deng, X.W.** (2004). Arabidopsis CAND1, an unmodified CUL1-interacting protein, is involved in multiple developmental pathways controlled by ubiquitin/proteasome-mediated protein degradation. *Plant Cell* 16, 1870-1882.
- 116 Boccalandro, H.E., Rossi, M.C., Saijo, Y., **Deng, X.W.**, and Casal, J.J. (2004). Promotion of photomorphogenesis by COP1. *Plant Mol Biol* 56, 905-915.
- 115 Wu, P., Ma, L., Hou, X., Wang, M., Wu, Y., Liu, F., and **Deng, X.W.** (2003). Phosphate starvation triggers distinct alterations of genome expression in Arabidopsis roots and leaves. *Plant Physiol* 132, 1260-1271.
- 114 Wei, N., and **Deng, X.W.** (2003). The COP9 signalosome. *Annu Rev Cell Dev Biol* 19, 261-286.
- 113 Wang, X., Feng, S., Nakayama, N., Crosby, W.L., Irish, V., **Deng, X.W.**, and Wei, N. (2003). The COP9 signalosome interacts with SCF UFO and participates in Arabidopsis flower development. *Plant Cell* 15, 1071-1082.
- 112 Wang, H., and **Deng, X.W.** (2003). Dissecting the phytochrome A-dependent signaling network in higher plants. *Trends Plant Sci* 8, 172-178.
- 111 Sun, N., Ma, L., Pan, D., Zhao, H., and **Deng, X.W.** (2003). Evaluation of light regulatory potential of Calvin cycle steps based on large-scale gene expression profiling data. *Plant Mol Biol* 53, 467-478.
- 110 Sullivan, J.A., Shirasu, K., and **Deng, X.W.** (2003). The diverse roles of ubiquitin and the 26S proteasome in the life of plants. *Nat Rev Genet* 4, 948-958.
- 109 Sullivan, J.A., and **Deng, X.W.** (2003). From seed to seed: the role of photoreceptors in Arabidopsis development. *Dev Biol* 260, 289-297.
- 108 Serino, G., Su, H., Peng, Z., Tsuge, T., Wei, N., Gu, H., and **Deng, X.W.** (2003). Characterization of the last subunit of the Arabidopsis COP9 signalosome: implications for the overall structure and origin of the complex. *Plant Cell* 15, 719-731.
- 107 Serino, G., and **Deng, X.W.** (2003). The COP9 signalosome: regulating plant development through the control of proteolysis. *Annu Rev Plant Biol* 54, 165-182.
- 106 Saijo, Y., Sullivan, J.A., Wang, H., Yang, J., Shen, Y., Rubio, V., Ma, L., Hoecker, U., and **Deng, X.W.**

- X.W.** (2003). The COP1-SPA1 interaction defines a critical step in phytochrome A-mediated regulation of HY5 activity. *Genes Dev* *17*, 2642-2647.
- 105 Peng, Z., Shen, Y., Feng, S., Wang, X., Chitteti, B.N., Vierstra, R.D., and **Deng, X.W.** (2003). Evidence for a physical association of the COP9 signalosome, the proteasome, and specific SCF E3 ligases in vivo. *Curr Biol* *13*, R504-505.
- 104 Pan, D., Sun, N., Cheung, K.H., Guan, Z., Ma, L., Holford, M., **Deng, X.W.**, and Zhao, H. (2003). PathMAPA: a tool for displaying gene expression and performing statistical tests on metabolic pathways at multiple levels for Arabidopsis. *BMC bioinformatics* *4*, 56.
- 103 Ma, L., Zhao, H., and **Deng, X.W.** (2003). Analysis of the mutational effects of the COP/DET/FUS loci on genome expression profiles reveals their overlapping yet not identical roles in regulating Arabidopsis seedling development. *Development* *130*, 969-981.
- 102 Lykke-Andersen, K., Schaefer, L., Menon, S., **Deng, X.W.**, Miller, J.B., and Wei, N. (2003). Disruption of the COP9 signalosome Csn2 subunit in mice causes deficient cell proliferation, accumulation of p53 and cyclin E, and early embryonic death. *Mol Cell Biol* *23*, 6790-6797.
- 101 Li, L., and **Deng, X.W.** (2003). The COP9 signalosome: an alternative lid for the 26S proteasome? *Trends Cell Biol* *13*, 507-509.
- 100 Jiao, Y., Yang, H., Ma, L., Sun, N., Yu, H., Liu, T., Gao, Y., Gu, H., Chen, Z., Wada, M., Gerstein, M., Zhao, H., Qu, L.J., and **Deng, X.W.** (2003). A genome-wide analysis of blue-light regulation of Arabidopsis transcription factor gene expression during seedling development. *Plant Physiol* *133*, 1480-1493.
- 99 Feng, S., Ma, L., Wang, X., Xie, D., Dinesh-Kumar, S.P., Wei, N., and **Deng, X.W.** (2003). The COP9 signalosome interacts physically with SCF COI1 and modulates jasmonate responses. *Plant Cell* *15*, 1083-1094.
- 98 Yi, C., Wang, H., Wei, N., and **Deng, X.W.** (2002). An initial biochemical and cell biological characterization of the mammalian homologue of a central plant developmental switch, COP1. *BMC Cell Biol* *3*, 30.
- 97 Yadav, V., Kundu, S., Chattopadhyay, D., Negi, P., Wei, N., **Deng, X.W.**, and Chattopadhyay, S. (2002). Light regulated modulation of Z-box containing promoters by photoreceptors and downstream regulatory components, COP1 and HY5, in Arabidopsis. *Plant J* *31*, 741-753.
- 96 Wang, H., Ma, L., Habashi, J., Li, J., Zhao, H., and **Deng, X.W.** (2002). Analysis of far-red light-regulated genome expression profiles of phytochrome A pathway mutants in Arabidopsis. *Plant J* *32*, 723-733.
- 95 Wang, H., and **Deng, X.W.** (2002). Arabidopsis FHY3 defines a key phytochrome A signaling component directly interacting with its homologous partner FAR1. *EMBO J* *21*, 1339-1349.
- 94 Suzuki, G., Yanagawa, Y., Kwok, S.F., Matsui, M., and **Deng, X.W.** (2002). Arabidopsis COP10 is a ubiquitin-conjugating enzyme variant that acts together with COP1 and the COP9 signalosome in repressing photomorphogenesis. *Genes Dev* *16*, 554-559.

- 93 Schwechheimer, C., Serino, G., and **Deng, X.W.** (2002). Multiple ubiquitin ligase-mediated processes require COP9 signalosome and AXR1 function. *Plant Cell* **14**, 2553-2563.
- 92 Ma, L., Gao, Y., Qu, L., Chen, Z., Li, J., Zhao, H., and **Deng, X.W.** (2002). Genomic evidence for COP1 as a repressor of light-regulated gene expression and development in Arabidopsis. *Plant Cell* **14**, 2383-2398.
- 91 Liu, Y., Schiff, M., Serino, G., **Deng, X.W.**, and Dinesh-Kumar, S.P. (2002). Role of SCF ubiquitin-ligase and the COP9 signalosome in the N gene-mediated resistance response to Tobacco mosaic virus. *Plant Cell* **14**, 1483-1496.
- 90 Holm, M., Ma, L.G., Qu, L.J., and **Deng, X.W.** (2002). Two interacting bZIP proteins are direct targets of COP1-mediated control of light-dependent gene expression in Arabidopsis. *Genes Dev* **16**, 1247-1259.
- 89 Hardtke, C.S., Okamoto, H., Stoop-Myer, C., and **Deng, X.W.** (2002). Biochemical evidence for ubiquitin ligase activity of the Arabidopsis COP1 interacting protein 8 (CIP8). *Plant J* **30**, 385-394.
- 88 Fry, R.C., Habashi, J., Okamoto, H., and **Deng, X.W.** (2002). Characterization of a strong dominant phytochrome A mutation unique to phytochrome A signal propagation. *Plant Physiol* **130**, 457-465.
- 87 Yamamoto, Y.Y., **Deng, X.W.**, and Matsui, M. (2001). Cip4, a new COP1 target, is a nucleus-localized positive regulator of Arabidopsis photomorphogenesis. *Plant Cell* **13**, 399-411.
- 86 Wang, H., Ma, L.G., Li, J.M., Zhao, H.Y., and **Deng, X.W.** (2001). Direct interaction of Arabidopsis cryptochromes with COP1 in light control development. *Science* **294**, 154-158.
- 85 Schwechheimer, C., Serino, G., Callis, J., Crosby, W.L., Lyapina, S., Deshaies, R.J., Gray, W.M., Estelle, M., and **Deng, X.W.** (2001). Interactions of the COP9 signalosome with the E3 ubiquitin ligase SCFTIR1 in mediating auxin response. *Science* **292**, 1379-1382.
- 84 Schwechheimer, C., and **Deng, X.W.** (2001). COP9 signalosome revisited: a novel mediator of protein degradation. *Trends Cell Biol* **11**, 420-426.
- 83 Peng, Z., Staub, J.M., Serino, G., Kwok, S.F., Kurepa, J., Bruce, B.D., Vierstra, R.D., Wei, N., and **Deng, X.W.** (2001). The cellular level of PR500, a protein complex related to the 19S regulatory particle of the proteasome, is regulated in response to stresses in plants. *Mol Biol Cell* **12**, 383-392.
- 82 Peng, Z., Serino, G., and **Deng, X.W.** (2001). Molecular characterization of subunit 6 of the COP9 signalosome and its role in multifaceted developmental processes in Arabidopsis. *Plant Cell* **13**, 2393-2407.
- 81 Peng, Z., Serino, G., and **Deng, X.W.** (2001). A role of Arabidopsis COP9 signalosome in multifaceted developmental processes revealed by the characterization of its subunit 3. *Development* **128**, 4277-4288.
- 80 Okamoto, H., Qu, L., and **Deng, X.W.** (2001). Does EID1 aid the fine-tuning of phytochrome A signal transduction in Arabidopsis? *Plant Cell* **13**, 1983-1986.
- 79 Okamoto, H., Matsui, M., and **Deng, X.W.** (2001). Overexpression of the heterotrimeric G-protein alpha-subunit enhances phytochrome-mediated inhibition of hypocotyl elongation in Arabidopsis.

*Plant Cell* 13, 1639-1652.

- 78 Ma, L., Li, J., Qu, L., Hager, J., Chen, Z., Zhao, H., and **Deng, X.W.** (2001). Light control of Arabidopsis development entails coordinated regulation of genome expression and cellular pathways. *Plant Cell* 13, 2589-2607.
- 77 Jiang, C.J., Shoji, K., Matsuki, R., Baba, A., Inagaki, N., Ban, H., Iwasaki, T., Imamoto, N., Yoneda, Y., **Deng, X.W.**, and Yamamoto, N. (2001). Molecular cloning of a novel importin alpha homologue from rice, by which constitutive photomorphogenic 1 (COP1) nuclear localization signal (NLS)-protein is preferentially nuclear imported. *J Biol Chem* 276, 9322-9329.
- 76 Holm, M., Hardtke, C.S., Gaudet, R., and **Deng, X.W.** (2001). Identification of a structural motif that confers specific interaction with the WD40 repeat domain of Arabidopsis COP1. *EMBO J* 20, 118-127.
- 75 Yamamoto, Y.Y., Puente, P., and **Deng, X.W.** (2000). An Arabidopsis cotyledon-specific albino locus: a possible role in 16S rRNA maturation. *Plant Cell Physiol* 41, 68-76.
- 74 Schwechheimer, C., and **Deng, X.W.** (2000). The COP/DET/FUS proteins-regulators of eukaryotic growth and development. *Semin Cell Dev Biol* 11, 495-503.
- 73 Osterlund, M.T., Wei, N., and **Deng, X.W.** (2000). The roles of photoreceptor systems and the COP1-targeted destabilization of HY5 in light control of Arabidopsis seedling development. *Plant Physiol* 124, 1520-1524.
- 72 Osterlund, M.T., Hardtke, C.S., Wei, N., and **Deng, X.W.** (2000). Targeted destabilization of HY5 during light-regulated development of Arabidopsis. *Nature* 405, 462-466.
- 71 Leyser, O., and **Deng, X.W.** (2000). Cell signalling and gene regulation: New directions in plant signalling: Editorial Overview. *Curr Opin Plant Biol* 3, 351-352.
- 70 Kang, D., Wang, X., Cao, K., Sun, C., **Deng, X.W.**, and Wei, N. (2000). A gain-of-function phenotype conferred by over-expression of functional subunits of the COP9 signalosome in Arabidopsis. *Plant J* 23, 597-608.
- 69 Hsieh, H.L., Okamoto, H., Wang, M., Ang, L.H., Matsui, M., Goodman, H., and **Deng, X.W.** (2000). FIN219, an auxin-regulated gene, defines a link between phytochrome A and the downstream regulator COP1 in light control of Arabidopsis development. *Genes Dev* 14, 1958-1970.
- 68 Hardtke, C.S., Gohda, K., Osterlund, M.T., Oyama, T., Okada, K., and **Deng, X.W.** (2000). HY5 stability and activity in Arabidopsis is regulated by phosphorylation in its COP1 binding domain. *EMBO J* 19, 4997-5006.
- 67 Hardtke, C.S., and **Deng, X.W.** (2000). The cell biology of the COP/DET/FUS proteins. Regulating proteolysis in photomorphogenesis and beyond? *Plant Physiol* 124, 1548-1557.
- 66 **Deng, X.W.**, Dubiel, W., Wei, N., Hofmann, K., Mundt, K., Colicelli, J., Kato, J., Naumann, M., Segal, D., Seeger, M., Carr, A., Glickman, M., and Chamovitz, D.A. (2000). Unified nomenclature for the COP9 signalosome and its subunits: an essential regulator of development. *Trends Genet* 16, 202-203.

- 65 Abel, S., Blazquez, M., Dangel, J., **Deng, X.W.**, Graham, I., Harada, J., Jones, J., and Nilsson, O. (2000). Arabidopsis Research 2000. *Plant Cell* **12**, 2302-2308.
- 64 Yamamoto, N., and **Deng, X.W.** (1999). Protein nucleocytoplasmic transport and its light regulation in plants. *Genes Cells* **4**, 489-500.
- 63 Wei, N., and **Deng, X.W.** (1999). Making sense of the COP9 signalosome. A regulatory protein complex conserved from Arabidopsis to human. *Trends Genet* **15**, 98-103.
- 62 Wang, H., Kang, D., **Deng, X.W.**, and Wei, N. (1999). Evidence for functional conservation of a mammalian homologue of the light-responsive plant protein COP1. *Curr Biol* **9**, 711-714.
- 61 Torii, K.U., Stoop-Myer, C.D., Okamoto, H., Coleman, J.E., Matsui, M., and **Deng, X.W.** (1999). The RING finger motif of photomorphogenic repressor COP1 specifically interacts with the RING-H2 motif of a novel Arabidopsis protein. *J Biol Chem* **274**, 27674-27681.
- 60 Stoop-Myer, C., Torii, K.U., McNellis, T.W., Coleman, J.E., and **Deng, X.W.** (1999). Short communication: the N-terminal fragment of Arabidopsis photomorphogenic repressor COP1 maintains partial function and acts in a concentration-dependent manner. *Plant J* **20**, 713-717.
- 59 Serino, G., Tsuge, T., Kwok, S., Matsui, M., Wei, N., and **Deng, X.W.** (1999). Arabidopsis cop8 and fus4 mutations define the same gene that encodes subunit 4 of the COP9 signalosome. *Plant Cell* **11**, 1967-1980.
- 58 Osterlund, M.T., Ang, L.H., and **Deng, X.W.** (1999). The role of COP1 in repression of Arabidopsis photomorphogenic development. *Trends Cell Biol* **9**, 113-118.
- 57 Kwok, S.F., Staub, J.M., and **Deng, X.W.** (1999). Characterization of two subunits of Arabidopsis 19S proteasome regulatory complex and its possible interaction with the COP9 complex. *J Mol Biol* **285**, 85-95.
- 56 Holm, M., and **Deng, X.W.** (1999). Structural organization and interactions of COP1, a light-regulated developmental switch. *Plant Mol Biol* **41**, 151-158.
- 55 **Deng, X.W.**, and Quail, P.H. (1999). Signalling in light-controlled development. *Semin Cell Dev Biol* **10**, 121-129.
- 54 Yamamoto, Y.Y., Matsui, M., and **Deng, X.W.** (1998). Positive feedback in plant signaling pathways. *Trends Plant Sci* **3**, 374-375.
- 53 Yamamoto, Y.Y., Matsui, M., Ang, L.H., and **Deng, X.W.** (1998). Role of a COP1 interactive protein in mediating light-regulated gene expression in arabidopsis. *Plant Cell* **10**, 1083-1094.
- 52 Yamamoto, Y.Y., and **Deng, X.W.** (1998). A New Vector Set for GAL4-Dependent Transactivation Assay in Plants. *Plant Biotechnol* **15**, 217-220.
- 51 Wei, N., Tsuge, T., Serino, G., Dohmae, N., Takio, K., Matsui, M., and **Deng, X.W.** (1998). The COP9 complex is conserved between plants and mammals and is related to the 26S proteasome regulatory complex. *Curr Biol* **8**, 919-922.
- 50 Wei, N., and **Deng, X.W.** (1998). Characterization and purification of the mammalian COP9 complex, a conserved nuclear regulator initially identified as a repressor of photomorphogenesis in

- higher plants. *Photochem Photobiol* 68, 237-241.
- 49 von Arnim, A.G., **Deng, X.W.**, and Stacey, M.G. (1998). Cloning vectors for the expression of green fluorescent protein fusion proteins in transgenic plants. *Gene* 221, 35-43.
- 48 Torii, K.U., McNellis, T.W., and **Deng, X.W.** (1998). Functional dissection of Arabidopsis COP1 reveals specific roles of its three structural modules in light control of seedling development. *EMBO J* 17, 5577-5587.
- 47 Osterlund, M.T., and **Deng, X.W.** (1998). Multiple photoreceptors mediate the light-induced reduction of GUS-COP1 from Arabidopsis hypocotyl nuclei. *Plant J* 16, 201-208.
- 46 Kwok, S.F., Solano, R., Tsuge, T., Chamovitz, D.A., Ecker, J.R., Matsui, M., and **Deng, X.W.** (1998). Arabidopsis homologs of a c-Jun coactivator are present both in monomeric form and in the COP9 complex, and their abundance is differentially affected by the pleiotropic cop/det/fus mutations. *Plant Cell* 10, 1779-1790.
- 45 Karniol, B., Yahalom, A., Kwok, S., Tsuge, T., Matsui, M., **Deng, X.W.**, and Chamovitz, D.A. (1998). The Arabidopsis homologue of an eIF3 complex subunit associates with the COP9 complex. *FEBS Lett* 439, 173-179.
- 44 **Deng, X.W.** (1998). Light control of Arabidopsis developmental pattern. *Symp Soc Exp Biol* 51, 93-96.
- 43 Chattopadhyay, S., Puente, P., **Deng, X.W.**, and Wei, N. (1998). Combinatorial interaction of light-responsive elements plays a critical role in determining the response characteristics of light-regulated promoters in Arabidopsis. *Plant J* 15, 69-77.
- 42 Chattopadhyay, S., Ang, L.H., Puente, P., **Deng, X.W.**, and Wei, N. (1998). Arabidopsis bZIP protein HY5 directly interacts with light-responsive promoters in mediating light control of gene expression. *Plant Cell* 10, 673-683.
- 41 Ang, L.H., Chattopadhyay, S., Wei, N., Oyama, T., Okada, K., Batschauer, A., and **Deng, X.W.** (1998). Molecular interaction between COP1 and HY5 defines a regulatory switch for light control of Arabidopsis development. *Mol Cell* 1, 213-222.
- 40 von Arnim, A.G., Osterlund, M.T., Kwok, S.F., and **Deng, X.W.** (1997). Genetic and developmental control of nuclear accumulation of COP1, a repressor of photomorphogenesis in Arabidopsis. *Plant Physiol* 114, 779-788.
- 39 Torii, K.U., and **Deng, X.W.** (1997). The role of COP1 in light control of Arabidopsis seedling development. *Plant Cell Environ* 20, 728-733.
- 38 **Deng, X.W.**, and Mei, Z. (1997). The higher plant thylakoid pigment-protein complexes migration and the reduction of light energy distribution between two photosystems. *Scientia Sinica (series B)* 4, 377-386.
- 37 Chamovitz, D.A., and **Deng, X.W.** (1997). The COP9 complex: a link between photomorphogenesis and general developmental regulation? *Plant Cell Environ* 20, 734-739.
- 36 Wei, N., and **Deng, X.W.** (1996). The role of the COP/DET/FUS genes in light control of

- arabidopsis seedling development. *Plant Physiol* 112, 871-878.
- 35 von Arnim, A., and **Deng, X.W.** (1996). A role for transcriptional repression during light control of plant development. *Bioessays* 18, 905-910.
- 34 Von Arnim, A., and **Deng, X.W.** (1996). Light control of seedling development. *Annu Rev Plant Physiol Plant Mol Biol* 47, 215-243.
- 33 Staub, J.M., Wei, N., and **Deng, X.W.** (1996). Evidence for FUS6 as a component of the nuclear-localized COP9 complex in Arabidopsis. *Plant Cell* 8, 2047-2056.
- 32 Staub, J.M., and **Deng, X.W.** (1996). Light signal transduction in plants. *Photochem Photobiol* 64, 897-905.
- 31 Puente, P., Wei, N., and **Deng, X.W.** (1996). Combinatorial interplay of promoter elements constitutes the minimal determinants for light and developmental control of gene expression in Arabidopsis. *EMBO J* 15, 3732-3743.
- 30 McNellis, T.W., Torii, K.U., and **Deng, X.W.** (1996). Expression of an N-terminal fragment of COP1 confers a dominant-negative effect on light-regulated seedling development in Arabidopsis. *Plant Cell* 8, 1491-1503.
- 29 Kwok, S.F., Piekos, B., Misera, S., and **Deng, X.W.** (1996). A complement of ten essential and pleiotropic arabidopsis COP/DET/FUS genes is necessary for repression of photomorphogenesis in darkness. *Plant Physiol* 110, 731-742.
- 28 **Deng, X.W.**, and Melis, A. (1996). Phosphorylation of the light-harvesting complex II in higher plant chloroplasts: effect on photosystem II and photosystem I absorption cross section. *Photochem Photobiol* 13, 41-52.
- 27 Chamovitz, D.A., Wei, N., Osterlund, M.T., von Arnim, A.G., Staub, J.M., Matsui, M., and **Deng, X.W.** (1996). The COP9 complex, a novel multisubunit nuclear regulator involved in light control of a plant developmental switch. *Cell* 86, 115-121.
- 26 Chamovitz, D.A., **Deng, X.W.**, and Lam, E. (1996). Light signaling in plants. *Crit Rev Plant Sci* 15, 455-478.
- 25 Torii, K.U., and **Deng, X.W.** (1995). Regulation of plant form: Identification of a molecule controlling cell expansion. *Bioessays* 17, 383-386.
- 24 McNellis, T.W., and **Deng, X.W.** (1995). Light control of seedling morphogenetic pattern. *Plant Cell* 7, 1749-1761.
- 23 Matsui, M., Stoop, C.D., von Arnim, A.G., Wei, N., and **Deng, X.W.** (1995). Arabidopsis COP1 protein specifically interacts in vitro with a cytoskeleton-associated protein, CIP1. *Proc Natl Acad Sci U S A* 92, 4239-4243.
- 22 Chamovitz, D.A., and **Deng, X.W.** (1995). The novel components of the Arabidopsis light signaling pathway may define a group of general developmental regulators shared by both animal and plant kingdoms. *Cell* 82, 353-354.
- 21 Wei, N., Kwok, S.F., von Arnim, A.G., Lee, A., McNellis, T.W., Piekos, B., and **Deng, X.W.** (1994).



- Arabidopsis COP8, COP10, and COP11 genes are involved in repression of photomorphogenic development in darkness. *Plant Cell* 6, 629-643.
- 20 Wei, N., Chamovitz, D.A., and **Deng, X.W.** (1994). Arabidopsis COP9 is a component of a novel signaling complex mediating light control of development. *Cell* 78, 117-124.
- 19 von Arnim, A.G., and **Deng, X.W.** (1994). Light inactivation of Arabidopsis photomorphogenic repressor COP1 involves a cell-specific regulation of its nucleocytoplasmic partitioning. *Cell* 79, 1035-1045.
- 18 McNellis, T.W., von Arnim, A.G., and **Deng, X.W.** (1994). Overexpression of Arabidopsis COP1 results in partial suppression of light-mediated development: evidence for a light-inactivable repressor of photomorphogenesis. *Plant Cell* 6, 1391-1400.
- 17 McNellis, T.W., von Arnim, A.G., Araki, T., Komeda, Y., Misera, S., and **Deng, X.W.** (1994). Genetic and molecular analysis of an allelic series of cop1 mutants suggests functional roles for the multiple protein domains. *Plant Cell* 6, 487-500.
- 16 **Deng, X.W.** (1994). Fresh view of light signal transduction in plants. *Cell* 76, 423-426.
- 15 Ang, L.H., and **Deng, X.W.** (1994). Regulatory hierarchy of photomorphogenic loci: allele-specific and light-dependent interaction between the HY5 and COP1 loci. *Plant Cell* 6, 613-628.
- 14 von Arnim, A.G., and **Deng, X.W.** (1993). Ring finger motif of Arabidopsis thaliana COP1 defines a new class of zinc-binding domain. *J Biol Chem* 268, 19626-19631.
- 13 Hou, Y., Von Arnim, A.G., and **Deng, X.W.** (1993). A New Class of Arabidopsis Constitutive Photomorphogenic Genes Involved in Regulating Cotyledon Development. *Plant Cell* 5, 329-339.
- 12 Wei, N., and **Deng, X.W.** (1992). COP9: a new genetic locus involved in light-regulated development and gene expression in arabidopsis. *Plant Cell* 4, 1507-1518.
- 11 Tonkyn, J.C., **Deng, X.W.**, and Gruissem, W. (1992). Regulation of Plastid Gene Expression during Photooxidative Stress. *Plant Physiol* 99, 1406-1415.
- 10 **Deng, X.W.**, and Quail, P.H. (1992). Genetic and phenotypic characterization of cop1 mutants of Arabidopsis thaliana. *Plant J* 2, 83-95.
- 9 **Deng, X.W.**, Matsui, M., Wei, N., Wagner, D., Chu, A.M., Feldmann, K.A., and Quail, P.H. (1992). COP1, an Arabidopsis regulatory gene, encodes a protein with both a zinc-binding motif and a G beta homologous domain. *Cell* 71, 791-801.
- 8 **Deng, X.W.**, Caspar, T., and Quail, P.H. (1991). cop1: a regulatory locus involved in light-controlled development and gene expression in Arabidopsis. *Genes Dev* 5, 1172-1182.
- 7 Bruce, W.B., **Deng, X.W.**, and Quail, P.H. (1991). A negatively acting DNA sequence element mediates phytochrome-directed repression of phyA gene transcription. *EMBO J* 10, 3015-3024.
- 6 **Deng, X.W.**, Wing, R.A., and Gruissem, W. (1989). The chloroplast genome exists in multimeric forms. *Proc Natl Acad Sci U S A* 86, 4156-4160.
- 5 **Deng, X.W.**, Tonkyn, J.C., Peter, G.F., Thornber, J.P., and Gruissem, W. (1989). Post-transcriptional control of plastid mRNA accumulation during adaptation of chloroplasts to different light quality

environments. *Plant Cell* 1, 645-654.

- 4 Gruissem, W., Barkan, A., **Deng, X.W.**, and Stern, D. (1988). Transcriptional and post-transcriptional control of plastid mRNA levels in higher plants. *Trends Genet* 4, 258-263.
- 3 **Deng, X.W.**, and Gruissem, W. (1988). Constitutive transcription and regulation of gene expression in non-photosynthetic plastids of higher plants. *EMBOJ* 7, 3301-3308.
- 2 **Deng, X.W.**, Stern, D.B., Tonkyn, J.C., and Gruissem, W. (1987). Plastid run-on transcription. Application to determine the transcriptional regulation of spinach plastid genes. *J Biol Chem* 262, 9641-9648.
- 1 **Deng, X.W.**, and Gruissem, W. (1987). Control of plastid gene expression during development: the limited role of transcriptional regulation. *Cell* 49, 379-387.