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研究助理

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广东工业大学环境生态工程研究院A+类特聘教授，硕导。

一 基本信息

马传鑫，1985年生，美国马萨诸塞大学阿默斯特分校植物与土壤科学博士，广东工业大学环境生态工程研究院A+类特聘教授。主要从事工程纳米颗粒在土壤中的环境行为及生态毒理、植物抗逆生理、新型纳米材料在农业生产中的应用等方面的研究。

二 研究方向

环境土壤化学、环境生物学、环境分析化学。

三 教育经历

2004.9-2008.6，天津理工大学，环境科学，获学士学位；

2008.9-2011.6，天津理工大学，环境科学，获硕士学位；

2011.9-2016.6，美国马萨诸塞大学阿默斯特分校，植物与土壤科学，获博士学位。

四 工作经历

2016.09-2017.08 美国康涅狄格州农业试验站 博士后(Postdoc Agricultural Scientist)

2017.09-2019.04 美国威斯康星大学麦迪逊分校 研究助理(Research Associate)

2019.04-2020.07 美国康涅狄格州农业试验站研究助理(Postdoc Associate)

2020.09-至今，广东工业大学环境生态工程研究院，教授、硕导。

五 学术兼职

1.Plant Physiology and Biochemistry期刊编委

2.Sustainable Nanotechnology Organization (SNO)会员

六 科研成果

1.**Ma, C.**; Liu, H.; Guo, H.; Chen, G.; Zhao, Q.; Rakesh M.; Long, S.; Tang, Y.; Saad, E.; DeLa TorreRoche, R.; White, J.; Dhankher, P.*; Xing, B.*,Dual roles of glutathione in silver nanoparticle detoxification and enhancement of nitrogen assimilation in soybean (*Glycine max*L. [Merrill]).*Environmental Science: Nano***2020**, 7, 1954-1966(**IF: 7.704; Recent HOT Articles**)

2. Hao, Y.*;**Ma, C.**†; White, J.; Adeel, M.; Jiang, R.; Zhao, Z.; Rao, Y.; Rui, Y.†; Xing, B., Physiological response and endophytic fungal composition in rice (*Oryza sativa*L.) as affected by different carbon-base nanomaterials.*Environmental Science: Nano***2020**, 7, 2047-2060(**IF: 7.704**)

3.**Ma, C.**; Borgatta, J.; Torre-Roche, R.; Zuverza-Mena, N.; White, J.†; Hamers, R.; Elmer, W.,Time-dependent transcriptional response of tomato (*Solanum lycopersicum*L.) to Cu nanoparticle exposure upon infection with*Fusarium oxysporum f. sp. lycopersici*.*ACS Sustainable Chemistry & Engineering***2019**, 7 (11): 10064-10074**(IF: 6.970)**

4. Rui, M.*;**Ma, C.**†, *; Jason C. White; Hao, Y.; Wang, Y.; Tang, X.; Yang, J.; Jiang, F.; Rui, Y.†; Cao, W.; Chen, G.; Xing, B., Metal oxide nanoparticles alter peanut (*Arachis hypogaea*L.) physiological response and reduce nutritional quality: A life cycle study.*Environmental Science: Nano***2018**, 5: 2088-2102 (**IF: 7.704**)

5. Hao, Y.*; Yuan, W.*;**Ma, C.**†, *; White, J.C.; Zhang, Z.; Adeel, M.; Zhou, T.†; Rui, Y.†; Xing, B.,Engineered nanomaterials suppress Turnip mosaic virus infection in tobacco (*Nicotiana benthamiana*).*Environmental Science: Nano***2018**, 5: 1685-1693 (**IF: 7.704**)

6.**Ma, C.**; White, J.; Zhao, J.; Zhao, Q.; Xing, B.†, Uptake of nanoparticles by food crops: characterization, mechanisms, and implications.*Annual Review of Food Science and Technology***2018**, 9: 129-153 (**Invited Review Article;IF: 8.511**)

7.**Ma, C.**; White, J. C.; Dhankher, O. P.†; Xing, B.†, Metal-based nanotoxicity and detoxification pathways in higher plants.*Environmental science & technology***2015**, 49 (12): 7109-7122(**Critical Review; IF: 7.149;高被引**)

8.**Ma, C.**; Chhikara, S.; Minocha, R.; Long, S.; Musante, C.; White, J. C.; Xing, B.†; Dhankher, O. P.†, Reduced silver nanoparticle phytotoxicity in*Crambe abyssinica*with enhanced glutathione production by overexpressing bacterial γ-glutamylcysteine synthase.*Environmental Science & Technology***2015,**49 (16): 10117-10126 (**IF: 7.149**)

9.**Ma, C.**; Liu, H.; Guo, H.; Musante, C.; Coskun, S.H.; Nelson, B.C.; White, J.C.; Xing, B.†; Dhankher, O.P.†, Defense mechanism and nutrient displacement of*Arabidopsis thaliana*in response to exposures of $CeO_2$and In_2O_3nanoparticles.*Environmental Science: Nano***2016**, 3: 1369-1379 (**IF:**

7.704)

10.**Ma, C.**[*]; Liu, H.[*,†]; Chen, G.; Zhao, Q.; Eitzer, B.; Wang, Z.; Cai, W.; Newman, L.; White, J. C.; Dhankher, P.; Xing, B.[†], Effects of titanium oxide nanoparticles on tetracycline accumulation and toxicity in*Oryza sativa*L.*Environmental Science: Nano***2017**, 4: 1827-1839 (**IF: 7.704**)

11. Liu, H.[*];**Ma, C.**[*]; Chen, G.; White, J.C.; Wang, Z.; Xing, B.[†]; Dhankher, P.[†], Titanium dioxide nanoparticles alleviate tetracycline toxicity to*Arabidopsis thaliana.ACS Sustainable Chemistry & Engineering***2017**, 5: 3204-3213 (**IF: 6.970**)

12.Zhao, Q.[*,†];**Ma, C.**[*]; White, J.C.; Dhankher, O. P.; Zhang, X.; Zhang, S.; Xing, B.[†], Quantitative evaluation of multi-walled carbon nanotube uptake by terrestrial plants.*Carbon***2017**, 114: 661-670 (**IF: 7.466**)

13. Chen, G.[*,†];**Ma, C.**[*];Mukherjee A.; Musante C.; Zhang, J.; White, J.C.; Dhankher, O.P.; Xing, B.[†], Tannic acid alleviates bulk and nanoparticle Nd_2O_3toxicity to pumpkin: A physiological and molecular response.*Nanotoxicology***2016**, 10 (9): 1243-1253 (**IF: 5.955**)

14. Rui, M.[*];**Ma, C.**[*]; Tang, X.; Yang, J.; Jiang, F.; Pan, Y.; Xiang, Z.; Hao, Y.; Rui, Y.[†]; Cao, W.; Xing, B.,Phytotoxicity of silver nanoparticles to peanut (*Arachis hypogaea*): physiological responses and food safety.*ACS Sustainable Chemistry & Engineering***2017**, 5:6557-6567 (**IF: 6.970**)

15. Hao, Y.[*];**Ma, C.**[*]; Zhang, Z.; Song, Y.; Cao, W.; Guo, J.; Zhou, G.; Rui, Y.[†]; Liu, L.; Xing, B., Carbon nanomaterials alterplant physiology and soil microbial community composition in a rice-soil-microbial ecosystem.*Environmental Pollution***2018**, 232: 123-136 (**IF: 5.714**)

16.**Ma, C.**; Chhikara, S.; Xing, B.; Musante, C.; White, J. C.; Dhankher, O. P.[†], Physiological and molecular response of*Arabidopsis thaliana*(L.) to nanoparticle cerium and indium oxide exposure.*ACS Sustainable Chemistry & Engineering***2013,***1*(7), 768-778 (**IF: 6.970**)

17.Xu, Tao[*];**Ma, C.**[*]; Aytac, Z.; Hu, X.; Ng, K.; White, J.[†]; Demokritou, P.[†], Enhancing agrichemical delivery and seedling development with biodegradable, tunable, biopolymer-based nanofiber seed coatings.*ACS Sustainable Chemistry & Engineering***2020**, 8 (25), 9537-9548(**IF: 6.970**)

18.Cao, Y.;**Ma, C.**[†]; Zhang, J.; Wang, S.; White, J.; Chen, G.[†]; Xing, B., Accumulation and spatial distribution of copper and nutrients in willow as affected by soil flooding: A synchrotron-based X-ray fluorescence study.*Environmental Pollution***2019**, 246, 980-989(**IF: 5.714**)

19.Cao, Y.;**Ma, C.**; Chen, H.; Zhang, J.; Chen, G.[†]; White, J.; Xing, B.,Xylem based long-distance transport and phloem remobilization of copper inshrub willow Salix integra.*Journal of Hazardous Materials***2020**, 392,122428(I**F: 7.650**)

20.Zhang, Z.; Xia, M.;**Ma, C.**; Guo, H.; We, W.; White, J.; Xing, B.; He, L.[†], Rapid Organic Solvent Extraction Coupled with Surface Enhanced Raman Spectroscopic Mapping for Ultrasensitive Quantification of Silver Nanoparticles in Plant Leaves.*Environmental Science: Nano***2020**,7, 1061-1067(**IF: 7.704**)

21.Cao, X.;**Ma, C.**; Zhao, J.; Musante, C.; White, J.; Wang, Z.[†]; Xing, B.[†],Interaction of graphene oxide with co-existing arsenite and arsenate: adsorption, transformation and joint toxicity.*Environment International***2019**, 131, 104992(**IF: 7.943**)

22. Guo, H.;**Ma, C.**; Thistle, L.; Huynh M.; Yu, C.; Clasby, D.; Chefetz, B.; Polubesova, T.; White, J.; He, L.[†]; Xing, B.[†], Transformation of Ag ions to Ag nanoparticle-loaded AgCl microcubes in the plant root zone.*Environmental Science: Nano***2019**, 6, 1099-1110 (**IF: 7.704; Recent HOT Articles**)

23.Borgatta, Y.;**Ma, C.**; Hudson-Smith, N.; Elmer, W.; Plaza-Pere, C.;Roche, R.; Zuverza-Mena, N.; Haynes, C.; White, J.[†]; Hamers, R.[†],Copper nanomaterials suppress root fungal disease in watermelon (Citrullus lanatus): Role of particle morphology, composition and dissolution behavior.ACS Sustainable Chemistry & Engineering**2018**, 6, 14847-14856(**IF: 6.970**)

24. Yue, L.;**Ma, C.**; Zhan, X.†; White, J. C.; Xing, B.†,Molecular mechanisms of maize seedling response to La_2O_3NPs exposure: water uptake, aquaporin gene expression and signaltransduction.*Environmental Science: Nano***2017**, 4: 843-855 (**IF: 7.704**)

25.Shang, H.;**Ma, C.**; Li, C.; White, J.; Chefetz, B.; Polubesova, T.; Xing, B.†,Copper sulfide nanoparticles suppress Gibberella fujikuroi infection in rice (Oryza sativa L.) by multiple mechanisms: contact-mortality, nutritional modulation and phytohormone regulation.*Environmental Science: Nano***2020**(**Accept; IF:7.704**)

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