Weihong Guo

Department: School of Materials Science and Engineering

Professional field: Materials Science

E-mail: guoweihong@ecust.edu.cn

Profile

Weihong Guo, professor and doctoral supervisor. Director of polymer processing research office, school of materials. East China University of Science and Technology. Engaged in polymer synthesis and processing work, focused on the biological material, wood and plastic composite material, low temperature solid phase forming, reactive extrusion and the preparation of functional materials, recycling of polymeric materials and special rubber processing, etc.

Research Field

Work in the polymer synthesis and processing, dedicated to polymer alloy,low temperature solid phase forming, reactive extrusion, and the preparation of functional materials, recycling of polymeric materials, biomass materials, polyolefin modification, engineering plastics, etc.

Research results and selected published papers

1. Lihong Cheng , Yang Luo , Shuhua Ma , Weihong Guo*, Xiaohui Wang. Corrosion resistance of inorganic zinc-rich coating reinforced by Ni-coated coal fly ash. Journal of Alloys and Compounds. 786 (2019) 791-797

2. Lihong Cheng, Chunli Liu, Dajie Han, Shuhua Ma, Weihong Guo*,Haifeng Cai, Xiaohui Wang. Effect of graphene on corrosion resistance of waterborne inorganic zinc-rich coatings. Journal of Alloys and Compounds. 774 (2019) 255-264

3. Feipeng Lou, Kai Wu, Quan Wang, Zhongyu Qian, Shijuan Li and Weihong Guo. Improved flame-retardant and ceramifiable properties of EVA composites by combination of ammonium polyphosphate and aluminum hydroxide. Polymers, 2019, 11(1): 125-143. (SCI/EI source)

4. Lihong Cheng , Yang Luo , Shuhua Ma , Weihong Guo*, Xiaohui Wang. Corrosion resistance of inorganic zinc-rich coating reinforced by Ni-coated coal fly ash. Journal of Alloys and Compounds. 786 (2019) 791-797

5. Lihong Cheng, Chunli Liu, Dajie Han, Shuhua Ma, Weihong Guo*,Haifeng Cai, Xiaohui Wang. Effect of graphene on corrosion resistance of waterborne inorganic zinc-rich coatings. Journal of Alloys and Compounds. 774 (2019) 255-264

6. Feipeng Lou, Kai Wu, Quan Wang, Zhongyu Qian, Shijuan Li and Weihong Guo. Improved flame-retardant and ceramifiable properties of EVA composites by combination of ammonium polyphosphate and aluminum hydroxide. Polymers, 2019, 11(1): 125-143. (SCI/EI source)

7. Yan Wang, Radoslaw Pawel Górecki, Eugen Stamate, Kion Norrman, David Aili, Min Zuo, Weihong Guo, Claus Hélix-Nielsen, Wenjing Zhang. Preparation of super-hydrophilic polyphenylsulfone nanofiber membranes for water treatment. RSC Adv., 2019, 9: 278-286.

8. Kai Wang, Zhongyu Qian, Weihong Guo*. Multi-heterojunction of SnO2/Bi2O3/BiOI nanofibers: facile fabrication with enhanced visible-light photocatalytic performance [J]. Materials Research Bulletin. 2019, 111:202-211. (SCI/EI source)

9. Kai Wang, Weizhou Zhang, Feipeng Lou, Ting Wei, Ziming Qian, Weihong Guo*. Preparation of electrospun heterostructured hollow SnO2/CuO nanofibers and their enhanced visible light photocatalytic performance [J]. Journal of Solid State Electrochemistry. 2018, 22(8): 2413-2423. (SCI/EI source)

10. Kai Wang, Weizhou Zhang, Xinyuan Guan, Yaxin Liu, Ting Wei, Weihong Guo*. Fabrication of PET/BiOI/SnO2 heterostructure nanocomposites for enhanced visible-light photocatalytic activity [J]. Solid State Sciences. 2018, 82: 34-43. (SCI/EI source)

11. Jiawei Ren, Lei Han, Haifeng Cai, Kai Wu, and Weihong Guo*. Functional Biocomposites Based on Plasticized Starch/halloysite Nanotubes for Drug-Release Applications. Starch - Stärke 2018, 1700358 .DOI: 10.1002/star.201700358

12. Guixin Zhang, Yanyan Zhang, Cong Chen, and Weihong Guo. Improved Interfacial Bonding of Melamine Formaldehyde/Rice Husk Composites Using Poly(vinyl alcohol) Modification. anoscience and Nanotechnology Letters. Vol. 9, 2088–2094, 2017

13. Quan Wang，Tinglan Wang，Jikui Wang，Weihong Guo*，Ziming Qian，Ting Wei. Preparation of antistatic high‐density polyethylene composites based on synergistic effect of graphene nanoplatelets and multi-walled carbon nanotubes. Polymer Advanced Technology. 2017, 10, 4129-4139. DOI: 10.1002/pat.4129

14. Weizhou Zhang, Weihong Guo, et al Synergistic effect between ammonium polyphosphate and expandablegraphite on flame-retarded poly(butylene terephthalate) 2018 Mater. Res. Express in press https://doi.org/10.1088/2053-1591/aaae11

15. Feipeng Lou, Lihong Cheng, Qiuying Li, Ting Wei, Xinyuan Guan, Weihong Guo*. The combination of glass dust and glass fiber as fluxing agents for ceramifiable silicone rubber composites. RSC Advances. 2017, 7, 38805–38811

16. Weizhou Zhang, Kai Wang, Wei Yan and Weihong Guo*. Toughening modification of poly (butylene terephthalate)/poly(ethylene terephthalate) blends by an epoxy-functionalized elastomer [J]. Mater. Res. Express 4 (2017) 105303

17. Juan Gong, Weihong Guo, Kai Wang, Jiaoyang Xiong. Surface Modification of Magnesium Hydroxide Sulfate Hydrate Whiskers and Its Toughness and Reinforcement for Polyvinyl Chloride[J]. Polymer Composites. DOI 10.1002/pc.24396

18. Quan Wang, Qingguo Meng, Tinglan Wang, Weihong Guo. High performance antistatic EVA/HDPE composites with graphene nanoplatelets coated by polyaniline[J]. Journal of Applied Polymer Science . J. Appl. Polym. Sci. 2017, 134, 45303. DOI: 10.1002/app.45303