世界大学联盟(WUN)报道王立和俞豪杰课题组在糖敏水凝胶用于葡萄糖检测 方面的研究工作

2017年1月,WUN 在其 Newsletter 作为 Research Highlight 报道了王立教授和俞豪杰副教授课题组在糖敏水凝胶方面的研究工作。据国际糖尿病联盟 (IDF)统计,2015年全球成年糖尿病患者数量达 4.15 亿。糖尿病是继癌症和心血管疾病之后第三大致死疾病。在 WUN 基金和国家自然科学基金等资助下,王立教授和俞豪杰副教授课题组合成了系列对葡萄糖具有灵敏响应性的糖敏水凝胶,所得材料在糖尿病治疗药物控释、糖敏传感器等方面具有很好的应用前景。已在Chemical Reviews (2015年影响因子 37.369)和 J InorgOrganometPolym等发表论文多篇,受到了同行们的高度关注。



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WUN Global China Group Research Highlight

 Novel Glucose-Responsive Hydrogels for Glucose Detection Prof Li Wang and Assoc-Prof Haojie Yu, Zhejiang University





Diabetes is the third largest cause of death following cancer and angiocardiopathy. Reliable sensing of glucose concentration is crucial for diagnosis and treatment of diabetes. Up till now, the measurements of glucose concentration is usually through electrochemical (EC) methods which need glucose oxidase (GOX) to interact with glucose via a redox reaction. A number of inherent problems are associated with the GOX-based sensors, such as inefficiency of the electron transfer between GOX active site and electrode surface. Particularly, the activity of GOX varies depending on