



Showcasing a study on biocompatible redox-active ferritin and enzyme assembly-based biofuel cell anodes and their applications for biosensors and wearable devices, led by Prof. Cheong Hoon Kwon, Kangwon National University, South Korea.

Enhancement of electron transfer efficiency in biofuel cell anodes using biocompatible redox-active ferritin and enzyme assemblies

We introduce an innovative approach to biofuel cell anodes by utilizing redox-active ferritin and enzyme assemblies. This strategy allows for the precise assembly of layered structures comprising ferritin and glucose oxidase, thereby enabling the optimization of efficient physiological signal sensing. The design facilitates efficient electron transfer, ensures stable long-term operation, and holds significant promise for applications in bioelectrochemical systems, including biosensors and wearable devices.

As featured in:



See Yongmin Ko,
Cheong Hoon Kwon *et al.*,
J. Mater. Chem. A, 2025, **13**, 1808.