



Showcasing research from Prof. Hirotomo Nishihara's group, Tohoku University, Japan, collaborated with Prof. Fumito Tani's group, Kyushu University, Japan; Prof. Tomoki Ogoshi's group, Kyoto University, Japan; Prof. Kazuhide Kamiya's group, Osaka University, Japan.

Rational bottom-up synthesis of sulphur-rich porous carbons for single-atomic platinum catalyst supports

The bottom-up fabrication approach for sulphur(S)-rich porous carbons from molecular precursors *via* thermal polymerization process has been demonstrated. The abundant S species in the resulting carbonaceous materials function as an effective anchoring site for single-atomic platinum (Pt) species. The single-atomic Pt catalysts show the high catalytic activity for electrochemical hydrogen oxidation reaction, equivalent to commercial Pt/C catalysts, despite the significantly low Pt loading amount.

As featured in:



See Takeharu Yoshii, Tomoki Ogoshi, Kazuhide Kamiya *et al.*, *Green Chem.*, 2024, **26**, 8758.