

High-Performance $\text{Ag}_{0.333}\text{V}_2\text{O}_5$ Nanowires as Cathode Materials for Aqueous Zinc-Ion Batteries

Yimeng Xu,^{*ac} Junyu Qu^{ab} Xunna Ke^{ab} Hongrui Jiang^{ab} and Ali

Bahadur^{*ab}

^{a.} *College of Science, Mathematics, and Technology, Wenzhou-Kean University, Wenzhou 325060, Zhejiang Province, China.*

E-mail: xuyimeng@wku.edu.cn, Abahadur@wku.edu.cn

^{b.} *Dorothy and George Hennings College of Science, Mathematics and Technology, Kean University, 1000 Morris Ave, Union NJ 07083, USA.*

^{c.} *Wenzhou-Kean University Chemical Materials Research Center.*

**Co-corresponding*

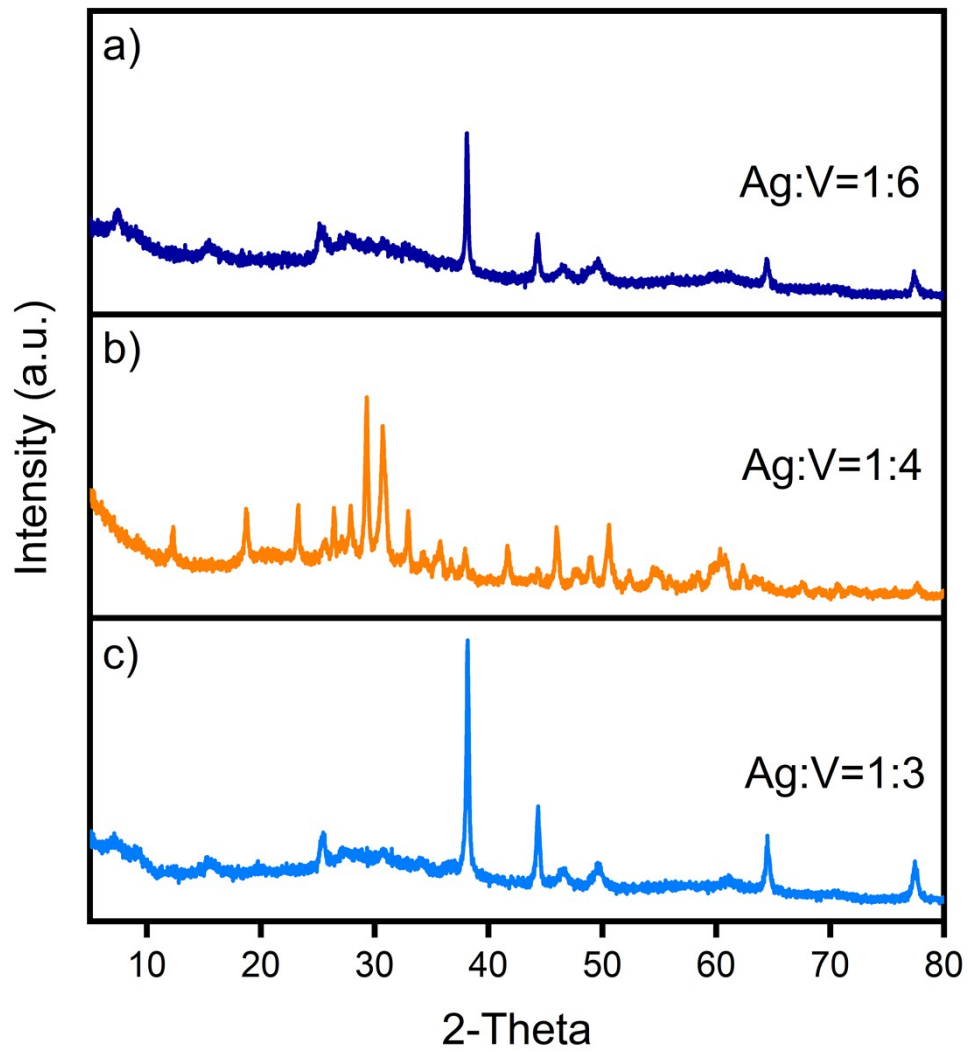


Fig.S1. XRD patterns of samples obtained at different precursor ratios
(Ag:V=1:6, 1:4, 1:3)

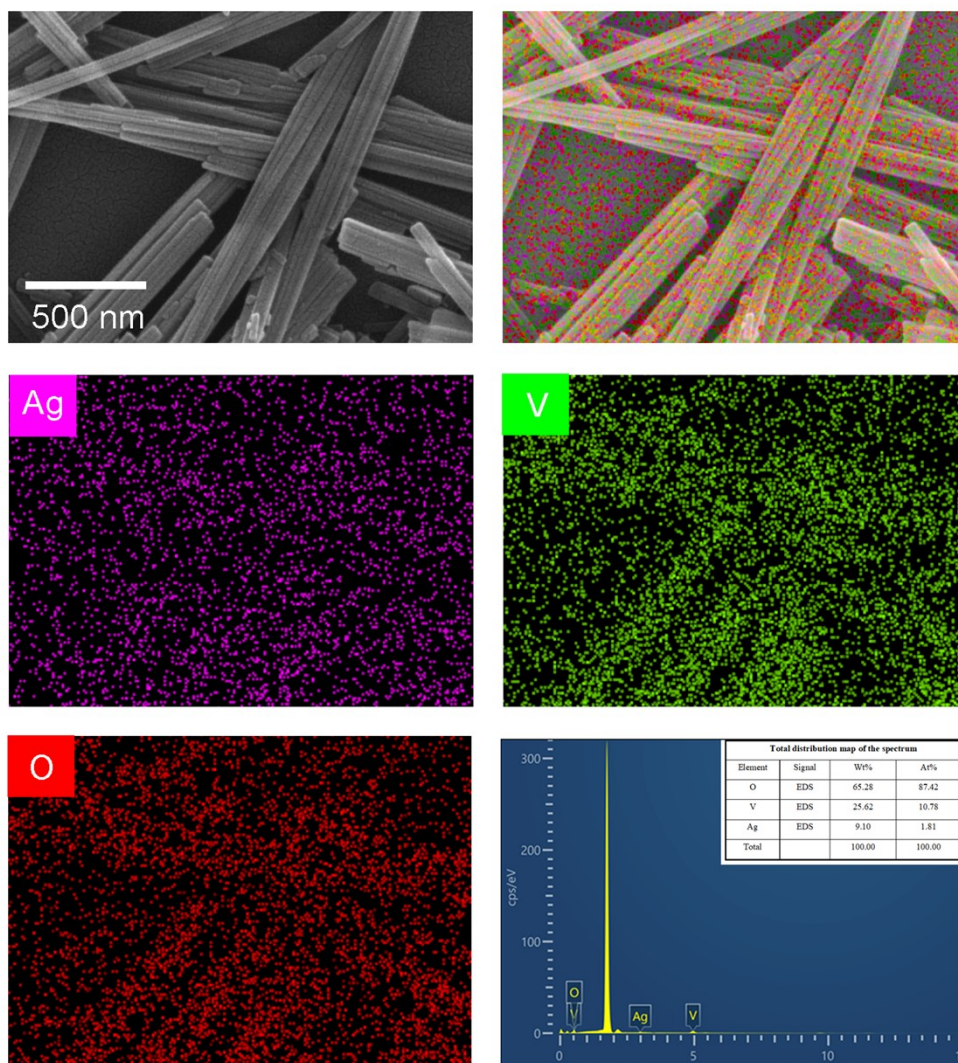


Fig. S2 SEM and elemental mappings of Ag, V, O

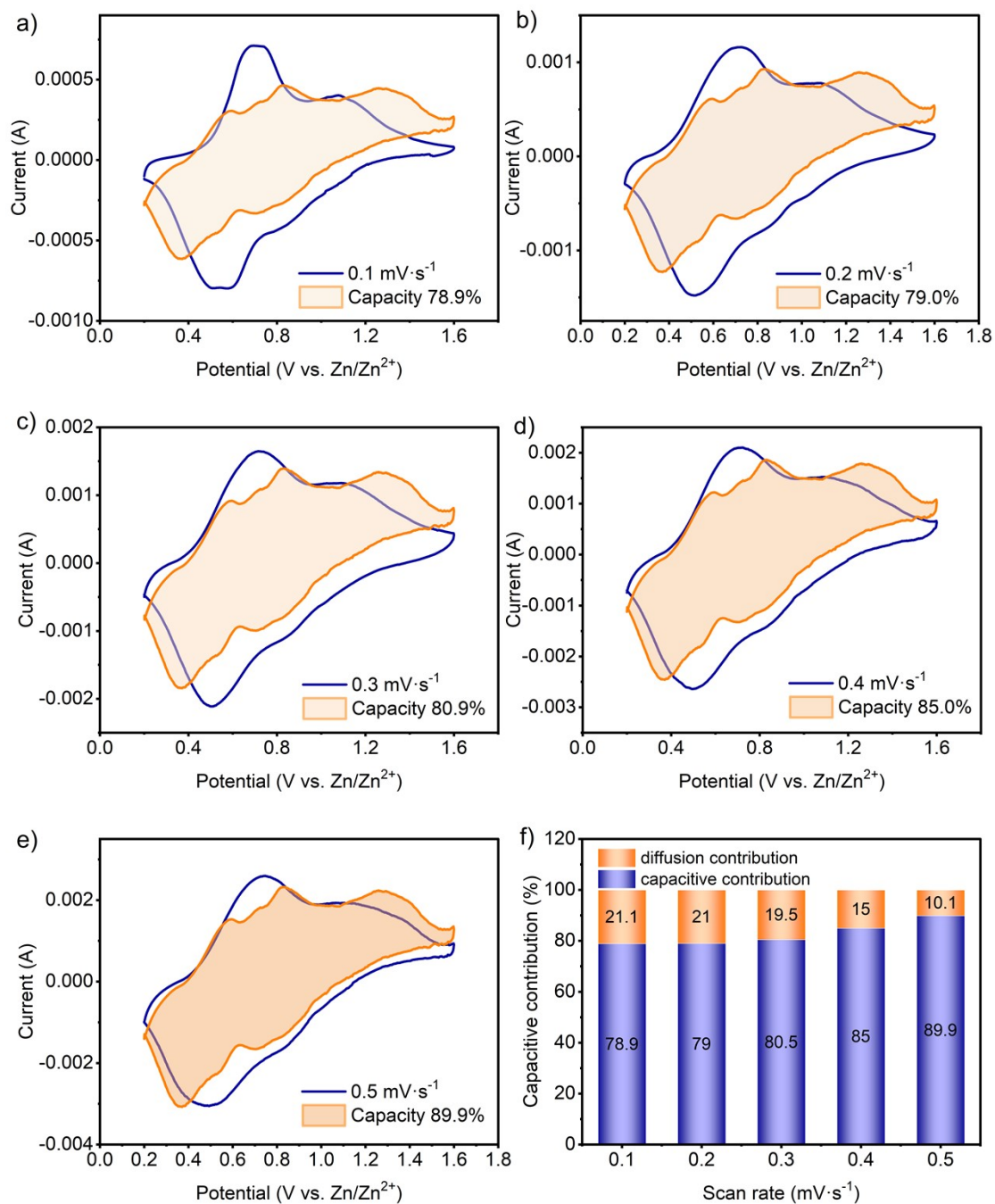


Fig. S3 (a-e) Capacitive contribution of $\text{Ag}_{0.333}\text{V}_2\text{O}_5$ electrode at 0.1, 0.2, 0.3, 0.4, 0.5 $\text{mV}\cdot\text{s}^{-1}$. (f) Pseudocapacitance contribution of $\text{Ag}_{0.333}\text{V}_2\text{O}_5$ at various scan rates

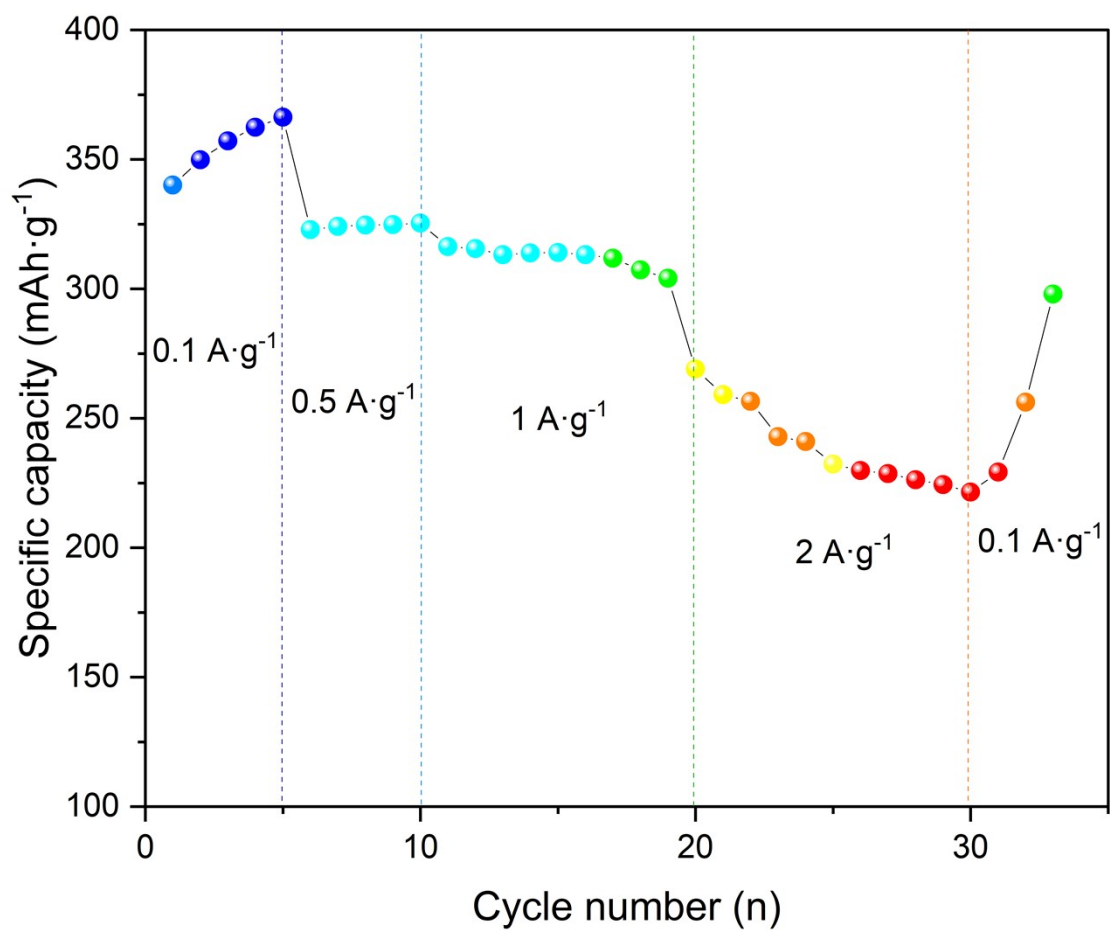


Fig. S4 Rate performance of $\text{Ag}_{0.333}\text{V}_2\text{O}_5$