

1. Biographical Sketch

Kang Xu has been doing researches on electrolyte materials and interphasial chemistry in electrochemical devices, especially Li ion batteries, for over 20 years. His research interests cover materials development and interphasial mechanisms for electrochemical energy storage devices, including batteries and capacitors.

He has been recognized >15 times by numerous awards from ARL, the Department of the Army, Department of the Defense, and University of Maryland. He also received Citation for Leadership Excellence from DDR&E 2008 Wearable Power Prize Competition (2008), and won “Top 10 Hottest Technologies Contest of DoD” (2011). His work on “5 V Li Ion battery” was featured as cover story in “Army AL&T” magazine. In January 2016 he was elected as ARL Fellow, an honorary title given to top 1% of S&E in the Army.

He has published 160+ papers in peer-reviewed journals, written/edited 3 chapters/books, and currently holds 20+ issued U. S. patents. His publications have received 11,000+ citations in the open literature, with an *h*-index of 57. Among those he is best known to the field for the two comprehensive reviews written for *Chem. Rev.* in 2004 and 2014, respectively, which have been regarded as desk-reference by the research community and the papers on the ground-breaking work on high voltage aqueous electrolytes (*Science* 2015, *Nature Energy* 2016 and *Angew. Chem.*, 2016).

