

PATENTED INVENTIONS

1. J. P. Zheng, "High Energy Density Electrochemical Capacitors", PCT patent application No. PCTIUS20111038901, filed June 2, 2011, U.S. Provisional Patent Application Serial No. 611350,776, filed June 2, 2012.
2. J.P. Zheng, "Alkali Metal-air Flow Batteries", PCT International Patent Publication No. WO 2012/061817 A1, filed May 10, 2012.
3. J.P. Zheng, Z.Y. Liang, B. Wang, C. Zhang, and W. Zhu, "Catalytic electrode with gradient porosity and catalyst density for fuel cells", US Patent Pub. No. US2011/0008705.
4. J.P. Zheng, Z.Y. Liang, B. Wang, C. Zhang, and W. Zhu, "Carbon nanotube and nanofiber film materials based membrane electrode assemblies for fuel cells", US Patent Pub. No. US2010/0143822.
5. Y. Wang and J.P. Zheng, "System and Methods for Implementing a Non-Linear Electrical Circuit Dynamic Fuel Cell Model", US Patent Number 7,844,434, November 30, 2010.
6. A.F. Pun and J.P. Zheng, "Thermal Desorption of Oxide from Surface", US Patent Number 20060276038, December 7, 2006.
7. T.R. Jow and J.P. Zheng, "Proton Insertion Ruthenium Oxide Electrode Material for Electrochemical Capacitors", US Patent Number 6,383,363 B2, May 7, 2002.
8. J.P. Zheng and T.R. Jow, "Electrode Materials from Hydrous Metal and/or Hydrous Mixed Metal Oxides", US Patent Number 6,097,588, August 1, 2000.
9. J.P. Zheng and T.R. Jow, "Composite Electrode Materials for High Energy and High Power Density Storage Devices", US Patent Number 5,961,887, October 5, 1999.
10. T.R. Jow and J.P. Zheng, "Proton Inserted Ruthenium Oxide Electrode Material for Electrochemical Capacitors", US Patent Number 5,875,092, February 23, 1999.
11. J.P. Zheng and T.R. Jow, "Electrode materials for electrochemical capacitors from hydrous metal oxides and hydrous mixed metal oxides and method of preparation of same", US Patent Number 5,851,506, December 22, 1998.
12. J.P. Zheng and T.R. Jow, "Method of making composite electrode material for High Energy and High Power Density Storage Devices", US Patent Number 5,797,971, August 25, 1998.
13. J.P. Zheng, P.J. Cygan, and T.R. Jow, "Capacitor having an enhanced dielectric breakdown strength", US Patent Number 5,636,100, June 3, 1997.

14. J.P. Zheng and T.R. Jow, "Composite Electrode Materials for High Energy and High Power Density Storage Devices", US Patent Number 5,621,609, April 15, 1997.
15. T.R. Jow and J.P. Zheng, "Amorphous Thin Film Electrode Materials from Hydrous Metal Oxides" US Patent Number 5,600,535, Feb. 4, 1997.
16. J. Smithyman, Z.Y. Liang, J.P. Zheng, B. Wang, C. Zhang, "Binder-free Nanocomposite Material and Method of Manufacture", U.S. Provisional Application No. 61/259,599, filed November 9, 2009.
17. J.P. Zheng, W. Zhu, C. Zeng, Z.Y. Liang, B. Wang, and C. Zhang, "A Method of Making Catalytic Electrodes for Fuel Cells", U.S. Provisional Patent Application No. 61/467,264, filed March 24, 2011.
18. J.P. Zheng and G.Q. Zhang, "Bifunction Hollandite $\text{Ag}_2\text{Mn}_8\text{O}_{16}$ Catalyst for Lithium-air Batteries", U.S. Provisional Patent Application No. 61/589,524, filed January 23, 2012.