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简历:

李驰麟, 男, 研究员。2003年毕业于华东理工大学化学工程与工艺专业, 获工学学士, 2008年毕业于复旦大学物理化学专业, 获理学博士。同年进入德国马普协会固体研究所从事博士后研究, 在锂离子导体异质界面缺陷化学和空间电荷效应、电池开框架正极材料等方面作出系列开创成果。2013年作为中科院“百人计划”入选者加入上海硅酸盐研究所工作。研究集中于固态离子学、能量存储/转换器件和材料, 特别是离子导体的纳米离子学效应、锂(钠)电池材料的新结构和新合成、固态电解质、全固态电池体系的设计和薄膜技术的应用。迄今, 已在*Adv. Mater.*, *Adv. Funct. Mater.*, *Adv. Energy Mater.*, *Nano. Lett.*, *ACS Nano*, *JACS*, *Chem. Mater.*等国际学术期刊发表论文20余篇, 担任*Adv. Funct. Mater.*, *Energy Environ. Sci.*, *Small*, *Chem. Mater.*等期刊特约审稿人。申请国际专利1项, 授权中国专利3项。

研究方向:

- 1) 新型储能材料的结构合成设计
- 2) 能量储存和转换中的纳米离子学
- 3) 全固态电池, 薄膜电池

职称:

研究员

职务:

社会任职:

获奖及荣誉:

代表论著:

[1] C. L. Li\*, C. L. Yin, X. K. Mu, and J. Maier. *Top-Down Synthesis of Open Framework Fluoride for Lithium and Sodium Batteries*. **Chem. Mater.**, 25, 962-969, 2013.

[2] C. L. Li\*, X. K. Mu, P. A. van Aken, and J. Maier. *A Large-Capacity Cathode for Lithium Batteries Consisting of Porous Microspheres of Highly Amorphized Iron Fluoride Densified from Its Open Parent Phase*. **Adv. Energy Mater.**, 3, 113-119, 2013.

[3] C. L. Li\*, L. Gu, X. X. Guo, D. Samuelis, K. Tang, and J. Maier. *Charge Carrier Accumulation in Lithium Fluoride Thin Films Due to Li-Ion Absorption by Titania (100) Subsurface*. **Nano Lett.**, 12, 1241-1246, 2012.

[4] C. L. Li\*, L. Gu, and J. Maier. *Enhancement of Li Conductivity in LiF by Introducing Glass-Crystal Interfaces*. **Adv. Funct. Mater.**, 22, 1145-1149, 2012.

[5] C. L. Li\*, and J. Maier. *Ionic space charge effects in lithium fluoride thin films*. **Solid State Ionics**, 225, 408-411, 2012.

[6] C. L. Li\*, L. Gu, J. W. Tong, and J. Maier. *Carbon Nanotube Wiring of Electrodes for High-Rate Lithium Batteries Using an Imidazolium-Based Ionic Liquid Precursor as Dispersant and Binder: A Case Study on Iron Fluoride Nanoparticles*. **ACS Nano**, 5, 2930-2938, 2011.

[7] C. L. Li\*, L. Gu, J. W. Tong, S. Tsukimoto, and J. Maier. *A Mesoporous Iron-Based Fluoride Cathode of Tunnel Structure for Rechargeable Lithium Batteries*. **Adv. Funct. Mater.**, 21, 1391-1397, 2011.

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- [10] C. L. Li\*, L. Gu, S. Tsukimoto, P. A. van Aken, and J. Maier. *Low Temperature Synthesis of Nanostructured Iron-Based Fluoride Cathode by Ionic Liquid for Lithium Batteries*. **Adv. Mater.**, 22, 3650-3654, **2010**.
- [11] C. L. Li, K. Sun, L. Yu, and Z. W. Fu. *Electrochemical Reaction of Lithium with Orthorhombic Bismuth Tungstate Thin Films Fabricated by Radio-Frequency Sputtering*. **Electrochimica Acta**, 55, 6-12, **2009**.
- [12] C. L. Li, Q. Sun, G. Y. Jiang, and Z. W. Fu. *Electrochemistry and Morphology Evolution of Carbon Micro-Net Films for Rechargeable Lithium Ion Batteries*. **Journal of Physical Chemistry C**, 112, 13782-13788, **2008**.
- [13] C. L. Li and Z. W. Fu. *Nano-sized Copper Tungstate Thin Films as Positive Electrodes for Rechargeable Li Batteries*. **Electrochimica Acta**, 53, 4293-4301, **2008**.
- [14] C. L. Li and Z. W. Fu. *Electrochemical Characterization of Amorphous LiFe(WO<sub>4</sub>)<sub>2</sub> Thin Films as Positive Electrodes for Rechargeable Lithium Batteries*. **Electrochimica Acta**, 53, 6434-6443, **2008**.
- [15] C. L. Li and Z. W. Fu. *All-Solid-State Rechargeable Thin Film Lithium Batteries with Li<sub>x</sub>Mn<sub>2</sub>O<sub>4</sub> and Li<sub>x</sub>Mn<sub>2</sub>O<sub>4</sub>-0.5ZrO<sub>2</sub> Cathodes*. **Electrochimica Acta**, 52, 6155-6164, **2007**.
- [16] C. L. Li and Z. W. Fu. *Kinetics of Li<sup>+</sup> Ion Diffusion into FePO<sub>4</sub> and FePON Thin Films Characterized by AC Impedance Spectroscopy*. **Journal of The Electrochemical Society**, 154 (8), A784-A791, **2007**.
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- [19] Z. W. Fu, C. L. Li, W. Y. Liu, J. Ma, Y. Wang, and Q. Z. Qin. *Electrochemical Reaction of Lithium with Cobalt Fluoride Thin Film Electrode*. **Journal of The Electrochemical Society**, 152 (2), E50-E55, **2005**.
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- [I] C. L. Li, and J. Maier. *Cathode for lithium battery based on FeF<sub>3</sub>*. **2012** (Pending), PCT/EP2012/061444.

[II] 李驰麟, 傅正文, 钨酸铁锂正极薄膜材料及其制备方法. 中国专利: 200710039147.1. 授权日: 2009年6月24日.

[III] 李驰麟, 傅正文, 掺钴锰酸锂正极薄膜材料及其制备方法. 中国专利: 200710039149.0. 授权日: 2010年5月19日.

[IV] 李驰麟, 傅正文, 电子束热蒸发制备锂镧钛氧薄膜的方法. 中国专利: 200510112198.3. 授权日: 2008年10月1日.

承担科研项目情况:

个人主页:



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