Selected Refereed Publications

1. S. Aminorroaya-Yamini, D. R. G. Mitchell, Z. M. Gibbs, R. Santos, V. Patterson, S. Li, Y. Z. Pei, S. X. Dou, and G. J. Snyder, "Heterogeneous distribution of sodium for high thermoelectric performance of p-type multiphase lead-chalcogenides", ***Advanced Energy Materials*** 5, 1501047 (2015); (IF: 16.146)
2. Y. S. Ang, Z. S. Ma, and C. Zhang, "Quantum ratchet in two-dimensional semiconductors with Rashba spin-orbit interaction", ***Scientific Reports*** 5, 7872 (2015); (IF: 5.578)
3. Y. Bai, C. Han, X. O. Chen, H. Yu, X. Zong, Z. Li, and L. Z. Wang, "Boosting the efficiency of quantum dot sensitized solar cells up to 7.11% through simultaneous engineering of photocathode and photoanode", ***Nano Energy*** 13, 609 (2015); (IF: 10.325)
4. S. Barua, M. S. Al Hossain, Z. Q. Ma, D. Patel, M. Mustapic, M. Somer, S. Acar, I. Kokal, T. Cetner, D. Gajda, and S. X. Dou, "Superior critical current density obtained in MgB_2 bulks through low-cost carbon-encapsulated boron powder", ***Scripta Materialia*** 104, 37 (2015); (IF: 3.224)
5. Y. J. Cai, Y. D. Huang, X. C. Wang, D. Z. Jia, W. K. Pang, Z. P. Guo, Y. P. Du, and X. C. Tang, "Facile synthesis of $LiMn_2O_4$ octahedral nanoparticles as cathode materials for high capacity lithium ion batteries with long cycle life", ***Journal of Power Sources*** 278, 574 (2015); (IF: 6.217)
6. J. Chen, Y. Du, Z. Li, W. B. Li, B. J. Feng, J. L. Qiu, P. Cheng, S. X. Dou, L. Chen, and K. H. Wu, "Delocalized surface state in epitaxial Si (111) film with spontaneous root 3 x root 3 superstructure", ***Scientific Reports*** 5, 13590 (2015); (IF: 5.578)
7. M. J. Chen, J. P. Yang, Y. Liu, W. Li, J. W. Fan, X. Q. Ran, W. Teng, Y. Sun, W. X. Zhang and G. M. Li, "TiO_2 interpenetrating networks decorated with SnO_2 nanocrystals: enhanced activity of selective catalytic reduction of NO with NH_3", ***Journal of Materials Chemistry A*** 3, 1405 (2015); (IF: 7.443)
8. Q. J. Chen, M. Sanderson, and C. Zhang, "Nonlinear terahertz response of HgTe/CdTe quantum wells", ***Applied Physics Letters*** 107, 081111 (2015); (IF: 3.302)
9. W. D. Chen, Z. G. Huang, G. T. Wu, T. He, Z. Li, J. E. Chen, Z. P. Guo, H. K. Liu, and P. Chen, "Guanidinium octahydrotriborate: an ionic liquid with high hydrogen storage capacity", ***Journal of Materials Chemistry A*** 3, 11411 (2015); (IF: 7.443)
10. X. Q. Chen, Z. Li, and S. X. Dou, "Ambient facile synthesis of gram-scale copper selenide nanostructures from commercial copper and selenium powder", ***ACS Applied Materials & Interfaces*** 7, 13295 (2015); (IF: 6.723)
11. M. F. M. Din, J. L. Wang, Z. X. Cheng, S. X. Dou, S. J. Kennedy, M. Avdeev, and S. J. Campbell, "Tuneable magnetic phase transitions in layered $CeMn_2Ge_{2-x}Si_x$ compounds", ***Scientific Reports*** 5, 11288 (2015); (IF: 5.578)
12. V. H. Duong, H. A. Bastawrous, K. C. Lim, K. W. See, P. Zhang, and S. X. Dou, "Online state of charge and model parameters estimation of the $LiFePO_4$ battery in electric vehicles using multiple adaptive forgetting factors recursive least-squares", ***Journal of Power Sources*** 296, 215 (2015); (IF: 6.217)
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14. X. W. Gao, Y. F. Deng, D. Wexler, G. H. Chen, S. L. Chou, H. K. Liu, Z. C. Shi, and J. Z. Wang, "Improving the electrochemical performance of the $LiNi_{0.5}Mn_{1.5}O_4$ spinel by polypyrrole coating as a cathode material for the lithium-ion battery", ***Journal of Materials Chemistry A*** 3, 404 (2015); (IF: 7.443)
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16. C. Han, Z. Li, G. Q. Lu, and S. X. Dou, "Robust scalable synthesis of surfactant-free thermoelectric metal chalcogenide nanostructures", ***Nano Energy*** 15, 193 (2015); (IF: 10.325)
17. W. B. Hua, X. D. Guo, Z. Zheng, Y. J. Wang, B. H. Zhong, B. Fang, J. Z. Wang, S. L. Chou, and H. Liu, "Uncovering a facile large-scale synthesis of $LiNi_{1/3}Co_{1/3}Mn_{1/3}O_2$ nanoflowers for high power lithium-ion batteries", ***Journal of Power Sources*** 275, 200 (2015); (IF: 6.217)
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27. Q. W. Lai, M. Paskevicius, D. A. Sheppard, C. E. Buckley, A. W. Thornton, M. R. Hill, Q. F. Gu, J. F. Mao, Z. G. Huang, H. K. Liu, Z. P. Guo, A. Banerjee, S. Chakraborty, R. Ahuja, and K. F. Aguey-Zinsou, "Hydrogen storage materials for mobile and stationary applications: current state of the art", ***ChemSusChem*** 8, 2789 (2015); (IF: 7.657)

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