

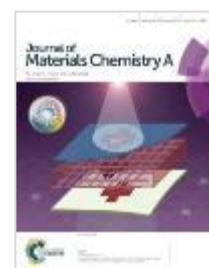
ISEM publication list for 2014

1. S. H. Aboutalebi, R. Jalili, D. Esrafilzadeh, M. Salari, Z. Gholamvand, S. A. Yamini, K. Konstantinov, R. L. Shepherd, J. Chen, S. E. Moulton, P. C. Innis, A. I. Minett, J. M. Razal, and G. G. Wallace, "High performance multifunctional graphene yarns: toward wearable all-carbon energy storage textiles", **ACS Nano** 8, 2456 (2014); (IF= 12.033)
2. M. Ahmed, M. M. A. Yajadda, Z. J. Han, D. W. Su, G. X. Wang, K. Ostrikov, and A. Ghanem, "Single-walled carbon nanotube-based polymer monoliths for the enantioselective nano-liquid chromatographic separation of racemic pharmaceuticals", **Journal of Chromatography A** 1360, 100 (2014); (IF= 4.258)
3. S. Aminoroaya-Yamini, H. Wang, Z. M. Gibbs, Y. Z. Pei, S. X. Dou, and G. J. Snyder, "Chemical composition tuning in quaternary p-type Pb-chalcogenides - a promising strategy for enhanced thermoelectric performance", **Physical Chemistry Chemical Physics** 16, 1835 (2014); (IF= 4.198)
4. Y. S. Ang, J. C. Cao, and C. Zhang, "Nonlinear optical conductivity of two-dimensional semiconductors with Rashba spin-orbit coupling in terahertz regime", **European Physical Journal B** 87, 28 (2014); (IF= 1.463)
5. Y. S. Ang, Z. S. Ma, and C. Zhang, "Chiral-like tunneling of electrons in two-dimensional semiconductors with Rashba spin-orbit coupling", **Scientific Reports** 4, 3780 (2014); (IF= 5.078)
6. Z. M. Ao, S. X. Dou, Z. M. Xu, Q. G. Jiang, and G. X. Wang, "Hydrogen storage in porous graphene with Al decoration", **International Journal of Hydrogen Energy** 39, 16244 (2014); (IF= 2.930)
7. M. Baziljevich, E. Baruch-El, T. H. Johansen, and Y. Yeshurun, "Dendritic instability in $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ films triggered by transient magnetic fields", **Applied Physics Letters** 105, 012602 (2014); (IF= 3.515)
8. J. Bertinshaw, D. L. Cortie, Z. X. Cheng, M. Avdeev, A. J. Studer, F. Klose, C. Ulrich, and X. L. Wang, "Spin-cycloid instability as the origin of weak ferromagnetism in the disordered perovskite $\text{Bi}_{0.8}\text{La}_{0.2}\text{Fe}_{0.5}\text{Mn}_{0.5}\text{O}_3$ ", **Physical Review B** 89, 144422 (2014); (IF= 3.664)
9. K. Bogusz, M. Tehei, C. Stewart, M. McDonald, D. Cardillo, M. Lerch, S. Corde, A. Rosenfeld, H. K. Liu, and K. Konstantinov, "Synthesis of potential theranostic system consisting of methotrexate-immobilized (3-aminopropyl)trimethoxysilane coated alpha- Bi_2O_3 nanoparticles for cancer treatment", **RSC Advances** 4, 24412 (2014); (IF= 3.708)
10. A. Borroto, L. Del Rio, M. Arronte, T. H. Johansen, E. Altshuler, "Modeling transport properties of inhomogeneous superconductor-metal composites", **Applied Physics Letters** 105, 202604 (2014); (IF= 3.515)
11. R. Brown, M. Tehei, S. Oktaria, A. Briggs, C. Stewart, K. Konstantinov, A. Rosenfeld, S. Corde, and M. Lerch, "High-z nanostructured ceramics in radiotherapy: first evidence of Ta_2O_5 -induced dose enhancement on radioresistant cancer cells in an MV photon field", **Particle & Particle Systems Characterization** 31, 500 (2014); (IF= 0.537)
12. A. Bruno-Alfonso, C. Bleasdale, G. V. B. de Souza, and R. A. Lewis, "Closed-orbit dependence on the field direction in the anisotropic diamagnetic Kepler problem", **Physical Review A** 89, 43425 (2014); (IF= 2.991)
13. M. Cao, J. Ju, K. Li, **S. X. Dou**, K. Liu, L. Jiang, "Facile and large-scale fabrication of a cactus-inspired continuous fog collector", **Advanced Functional Materials** 24, 3235 (2014); Cover (IF= 10.439)
14. D. Cardillo, M. Tehei, M. Lerch, S. Corde, A. Rosenfeld, and K. Konstantinov, "Highly porous hematite nanorods prepared via direct spray precipitation method", **Materials Letters** 117, 279 (2014); (IF= 2.269)
15. Q. H. Chen, D. Q. Shi, W. X. Li, B. Y. Zhu, V. V. Moshchalkov, and S. X. Dou, "Configuration-induced vortex motion in type-II superconducting films with periodic magnetic dot arrays", **Superconductor Science & Technology** 27, 65004 (2014); (IF= 2.796)
16. Q. J. Chen, M. Sanderson, J. C. Cao, and C. Zhang, "Dynamic conductivity of the bulk states of n-type HgTe/CdTe quantum well topological insulator", **Applied Physics Letters** 105, 202110 (2014); (IF= 3.515)



17. S. W. Chen, P. A. Lin, H. T. Jeng, S. W. Fu, J. M. Lee, J. F. Lee, C. W. Pao, H. Ishii, K. D. Tsuei, N. Hiraoka, D. P. Chen, S. X. Dou, X. L. Wang, K. T. Lu, and J. M. Chen, "Exchange interaction mediated ferroelectricity in multiferroic MnTiO_3 with anisotropic orbital hybridization and hole delocalization", *Applied Physics Letters* 104, 082104 (2014); (IF= 3.515)
18. X. W. Chen, L. Wang, J. M. Huang, L. Z. Ouyang, M. Zhu, Z. P. Guo, and X. B. Yu, "Nitrogen-containing carbon nanostructures: A promising carrier for catalysis of ammonia borane dehydrogenation", *Carbon* 68, 462 (2014); (IF= 6.160)
19. Z. X. Cheng, F. Hong, Y. X. Wang, K. Ozawa, H. Fujii, H. Kimura, Y. Du, X. L. Wang, and S. X. Dou, "Interface strain-induced multiferroicity in a SmFeO_3 film", *ACS Applied Materials & Interfaces* 6, 7356 (2014) (IF= 5.900)
20. A. T. Chidembo, S. H. Aboutaleb, K. Konstantinov, C. J. Jafta, H. K. Liu, and K. I. Ozoemena, "In situ engineering of urchin-like reduced graphene oxide- Mn_2O_3 - Mn_3O_4 nanostructures for supercapacitors", *RSC Advances* 4, 886 (2014); (IF= 3.708)
21. A. T. Chidembo, S. H. Aboutaleb, K. Konstantinov, D. Wexler, H. K. Liu, and S. X. Dou, "Liquid crystalline dispersions of graphene-oxide-based hybrids: A practical approach towards the next generation of 3D isotropic architectures for energy storage applications", *Particle & Particle Systems Characterization* 31, 465 (2014); (IF= 0.537)
22. S. L. Chou, Y. D. Pan, J. Z. Wang, H. K. Liu, and S. X. Dou, "Small things make a big difference: binder effects on the performance of Li and Na batteries", *Physical Chemistry Chemical Physics* 16, 20347 (2014); (IF= 4.198)
23. A. A. Chowdhury, A. Calka, D. Wexler, and K. Konstantinov, "High dielectric constant nano-structure ceramics synthesis using novel electric discharge assisted mechanical milling and magneto ball milling and its properties", *International Journal of Nanotechnology* 11, 9 (2014); (IF= 1.144)
24. E. Constable, D. L. Cortie, J. Horvat, R. A. Lewis, Z. X. Cheng, G. C. Deng, S. X. Cao, S. J. Yuan, and G. H. Ma, "Complementary terahertz absorption and inelastic neutron study of the dynamic anisotropy contribution to zone-center spin waves in a canted antiferromagnet NdFeO_3 ", *Physical Review B* 90, 054413 (2014); (IF= 3.664)
25. D. L. Cortie, A. G. Biternas, R. W. Chantrell, X. L. Wang, and F. Klose, "Microscopic model for exchange bias from grain-boundary disorder in a ferromagnet/antiferromagnet thin film with a nanocrystalline microstructure", *Applied Physics Letters* 105, 032402 (2014); (IF= 3.515)
26. D. L. Cortie, J. D. Brown, S. Bruck, T. Saerbeck, J. P. Evans, H. Fritzsche, X. L. Wang, J. E. Downes, and F. Klose, "Intrinsic reduction of the ordered 4 f magnetic moments in semiconducting rare-earth nitride thin films: DyN , ErN , and HoN ", *Physical Review B* 89, 064424 (2014); (IF= 3.664)
27. M. F. M. Din, J. L. Wang, A. J. Studer, Q. F. Gu, R. Zeng, J. C. Debnath, P. Shamba, S. J. Kennedy, and S. X. Dou, "Effects of Cr substitution on structural and magnetic properties in $\text{La}_{0.7}\text{Pr}_{0.3}\text{Fe}_{11.4}\text{Si}_{1.6}$ compound", *Journal of Applied Physics* 115, 17A942 (2014); (IF= 2.185)
28. M. F. M. Din, J. L. Wang, M. Avdeev, Q. F. Gu, R. Zeng, S. J. Campbell, S. J. Kennedy, and S. X. Dou, "Magnetic properties and magnetocaloric effect of $\text{NdMn}_{2-x}\text{Cu}_x\text{Si}_2$ compounds", *Journal of Applied Physics* 115, 17A921 (2014); (IF= 2.185)
29. M. F. M. Din, J. L. Wang, S. J. Campbell, A. J. Studer, M. Avdeev, S. J. Kennedy, Q. F. Gu, R. Zeng, and S. X. Dou, "Magnetic phase transitions and entropy change in layered $\text{NdMn}_{1.7}\text{Cr}_{0.3}\text{Si}_2$ ", *Applied Physics Letters* 104, 042401 (2014); (IF= 3.515)
30. M. F. M. Din, J. L. Wang, R. Zeng, S. J. Kennedy, S. J. Campbell, and S. X. Dou, "Magnetic properties and magnetocaloric effect in layered $\text{NdMn}_{1.9}\text{V}_{0.1}\text{Si}_2$ ", *EPJ Web of Conferences* 75, 04001 (2014); (IF=N/A)
31. X. M. Dong, L. Li, C. J. Zhao, H. K. Liu, and Z. P. Guo, "Controllable synthesis of RGO/ Fe_xO_y nanocomposites as high-performance anode materials for lithium ion batteries", *Journal of Materials Chemistry A* 2, 9844 (2014); (IF= N/A)
32. X. M. Dong, K. Wang, C. J. Zhao, X. Z. Qian, S. Chen, Z. Li, H. K. Liu, and S. X. Dou, "Direct synthesis of RGO/ Cu_2O composite films on Cu foil for supercapacitors", *Journal of Alloys and Compounds* 586, 745 (2014); (IF= 2.726)

33. G. D. Du, B. R. Winton, I. M. Hashim, N. Sharma, K. Konstantinov, M. V. Reddy, and Z. P. Guo, "Mass production of $\text{Li}_4\text{Ti}_5\text{O}_{12}$ with a conductive network via in situ spray pyrolysis as a long cycle life, high rate anode material for lithium ion batteries", *RSC Advances* 4, 38568 (2014); (IF= 3.708)
34. Y. Du, J. C. Zhuang, H. S. Liu, X. Xu, S. Eilers, K. H. Wu, P. Cheng, J. J. Zhao, X. D. Pi, K. W. See, G. Peleckis, X. L. Wang, S. X. Dou, "Tuning the band gap in silicene by oxidation", *ACS Nano* 8, 10019 (2014); (IF= 12.033)
35. I. Duz, S. B. Guner, O. Erdem, I. Demir, V. Kapucu, S. Celik, K. Ozturk, M. S. A. Hossain, A. Gencer, and E. Yanmaz, "Comparison of levitation forces of bulk MgB_2 superconductors produced by nano boron and carbon-doped nano boron", *Journal of Superconductivity and Novel Magnetism* 27, 2241 (2014); (IF= 0.930)
36. W. Q. Fang, X. L. Wang, H. M. Zhang, Y. Jia, Z. Y. Huo, Z. Li, H. J. Zhao, H. G. Yang, and X. D. Yao, "Manipulating solar absorption and electron transport properties of rutile TiO_2 photocatalysts via highly n-type F-doping", *Journal of Materials Chemistry A* 2, 3513 (2014); (IF= N/A)
37. C. Q. Feng, L. Li, Z. P. Guo, C. F. Zhang, J. Z. Wang, and S. Q. Wang, "Synthesis and electrochemical properties of VO_x/C nanofiber composite for lithium ion battery application", *Materials Letters* 117, 134 (2014); (IF= 2.269)
38. J. Foroughi, G. M. Spinks, D. Antiohos, A. Mirabedini, S. Gambhir, G. G. Wallace, S. R. Ghorbani, G. Peleckis, M. E. Kozlov, M. D. Lima, and R. H. Baughman, "Highly conductive carbon nanotube-graphene hybrid yarn", *Advanced Functional Materials* 24, 5859 (2014); (IF= 10.439)
39. Z. G. Gai, Z. X. Cheng, X. L. Wang, L. L. Zhao, N. Yin, R. Abah, M. Zhao, F. Hong, Z. Y. Yu, and S. X. Dou, "A colossal dielectric constant of an amorphous $\text{TiO}_2:(\text{Nb}, \text{In})$ film with low loss fabrication at room temperature", *Journal of Materials Chemistry C* 2, 33, (2014); (IF= N/A)
40. X. W. Gao, W. B. Luo, C. Zhong, D. Wexler, S. L. Chou, H. K. Liu, Z. C. Shi, G. H. Chen, K. Ozawa, and J. Z. Wang, "Novel germanium/polypyrrole composite for high power lithium-ion batteries", *Scientific Reports* 4, 6095 (2014); (IF= 5.078)
41. S. R. Ghorbani, G. Farshidnia, X. L. Wang, and S. X. Dou, "Flux pinning mechanism in SiC and nano-C doped MgB_2 : evidence for transformation from ΔT_c to ΔI pinning", *Superconductor Science & Technology* 27, 125003 (2014); (IF= 2.796)
42. I. A. Golovchanskiy, A. V. Pan, S. A. Fedoseev, and M. Higgins, "Significant tunability of thin film functionalities enabled by manipulating magnetic and structural nano-domains", *Applied Surface Science* 311, 549 (2014); (IF= 2.538)
43. C. Guan, Y. H. Xing, C. Zhang, and Z. S. Ma, "Resonant electronic transport through a triple quantum-dot with Lambda-type level structure under dual radiation fields", *Journal of Applied Physics* 116, 063702 (2014); (IF= 2.185)
44. Y. Guo, Y. D. Huang, D. Z. Jia, X. C. Wang, N. Sharma, Z. P. Guo, and X. C. Tang, "Preparation and electrochemical properties of high-capacity $\text{LiFePO}_4\text{-Li}_3\text{V}_2(\text{PO}_4)_3/\text{C}$ composite for lithium-ion batteries", *Journal of Power Sources* 246, 912 (2014); (IF= 5.211)
45. Z. Y. Guo, X. F. Zhang, X. Zheng, Z. Y. Liu, J. H. Cai, D. L. Tian, W. X. Li, J. Zhai, Y. L. Song, and L. Jiang, "Patterned liquid permeation through the TiO_2 nanotube array coated Ti mesh by photoelectric cooperation for liquid printing", *Journal of Materials Chemistry A* 2, 2498 (2014); (IF= N/A)
46. Z. Y. Guo, X. Zheng, D. L. Tian, Y. L. Song, J. Zhai, X. F. Zhang, W. X. Li, X. L. Wang, S. X. Dou, and L. Jiang, "Photoelectric cooperative patterning of liquid permeation on the micro/nano hierarchically structured mesh film with low adhesion", *Nanoscale* 6, 12822 (2014); (IF= 6.739)
47. C. Han, Z. Li, and S. X. Dou, "Recent progress in thermoelectric materials", *Chinese Science Bulletin* 59, 2073 (2014); (IF= 1.365)
48. C. Han, Z. Li, W. J. Li, S. L. Chou, and S. X. Dou, "Controlled synthesis of copper telluride nanostructures for long-cycling anodes in lithium ion batteries", *Journal of Materials Chemistry A* 2, 11683 (2014); (IF= N/A)



49. C. Han, Q. Sun, Z. X. Cheng, J. L. Wang, Z. Li, G. Q. Lu, and S. X. Dou, "Ambient scalable synthesis of surfactant-free thermoelectric CuAgSe nanoparticles with reversible metallic-n-p conductivity transition", *Journal of the American Chemical Society* 136, 17626 (2014); (IF= 11.444)
50. S. B. Hartono, M. H. Yu, W. Y. Gu, J. Yang, E. Strounina, X. L. Wang, S. Z. Qiao, and C. Z. Yu, "Synthesis of multi-functional large pore mesoporous silica nanoparticles as gene carriers", *Nanotechnology* 25, 055701 (2014); (IF= 3.672)
51. M. S. A. Hossain, A. A. Gazder, S. Barua, A. Motaman, D. Patel, J. H. Kim, A. Kario, B. Ringsdorf, B. Runtsch, A. Jung, M. Rindfleisch, S. X. Dou, and W. Goldacker, "Development of high current capacity mono- and 18-filament in situ MgB₂ cables by varying the twist pitch", *IEEE Transactions on Applied Superconductivity* 24, 6200304 (2014); (IF= 1.324)
52. M. S. A. Hossain, A. Motaman, S. Barua, D. Patel, M. Mustapic, J. H. Kim, M. Maeda, M. Rindfleisch, M. Tomsic, O. Cicek, T. Melisek, L. Kopera, A. Kario, B. Ringsdorf, B. Runtsch, A. Jung, S. X. Dou, W. Goldacker, and P. Kovac, "The roles of CHPD: superior critical current density and n-value obtained in binary in situ MgB₂ cables", *Superconductor Science & Technology* 27, 095016 (2014); (IF= 2.796)
53. W. Y. Huang, F. Yoshimura, K. Ueda, W. K. Pang, B. J. Su, L. Y. Jang, C. Y. Chiang, W. Z. Zhou, N. H. Duy, and R. S. Liu, "Domination of second-sphere shrinkage effect to improve photoluminescence of red nitride phosphors", *Inorganic Chemistry* 53, 12822 (2014); (IF= 4.794)
54. S. M. Hwang, Y. G. Lim, J. G. Kim, Y. U. Heo, J. H. Lim, Y. Yamauchi, M. S. Park, Y. J. Kim, S. X. Dou, and J. H. Kim, "A case study on fibrous porous SnO₂ anode for robust, high-capacity lithium-ion batteries", *Nano Energy* 10, 53 (2014); (IF= 10.211)
55. A. Jalalian, A. M. Grishin, X. L. Wang, Z. X. Cheng, and S. X. Dou, "Large piezoelectric coefficient and ferroelectric nanodomain switching in Ba(Ti_{0.8}OZr_{0.20})O₃-0.5(Ba_{0.70}Ca_{0.30})TiO₃ nanofibers and thin", *Applied Physics Letters* 104, 103112 (2014); (IF= 3.515)
56. R. Jalili, S. H. Aboutalebi, D. Esrafilzadeh, K. Konstantinov, J. M. Razal, S. E. Moultona, and G. G. Wallace, "Formation and processability of liquid crystalline dispersions of graphene oxide", *Materials Horizons* 1, 87 (2014); (IF= N/A)
57. G. Jeong, J. G. Kim, M. S. Park, M. Seo, S. M. Hwang, Y. U. Kim, Y. J. Kim, J. H. Kim, and S. X. Dou, "Core-shell structured silicon nanoparticles@TiO_{2-x}/carbon mesoporous microfiber composite as a safe and high-performance lithium-ion battery anode", *ACS Nano* 8, 2977 (2014); (IF= 12.033)
58. T. Jia, H. Kimura, H. Zhao, Q. Yao, Z. X. Cheng, X. Cheng, and Y. Yu, "Impacts of crystal orientation of GaAs on the interfacial structures and electrical properties of Hf_{0.6}La_{0.4}O_x films", *Journal of Applied Physics* 115, 134101 (2014); (IF= 2.185)
59. X. Jin, B. Shi, L. Zheng, X. Pei, X. Zhang, Z. Sun, Y. Du, J. H. Kim, X. L. Wang, S. X. Dou, K. Liu, and L. Jiang, "Bio-inspired multifunctional metallic foams through the fusion of different biological solutions. *Advanced Functional Materials* 24, 2721 (2014). (Cover); (IF= 10.439)
60. P. Jood, R. J. Mehta, Y. L. Zhang, T. Borca-Tasciuc, S. X. Dou, D. J. Singh, and G. Ramanath, "Heavy element doping for enhancing thermoelectric properties of nanostructured zinc oxide", *RSC Advances* 4, 6363 (2014); (IF= 3.708)
61. S. Kalluri, K. H. Seng, W.K. Pang, Z. P. Guo, Z. X. Chen, H. K. Liu, and S. X. Dou, "Electrospun P2-type Na_{2/3}(Fe_{1/2}Mn_{1/2})O₂ hierarchical nanofibers as cathode material for sodium-ion batteries", *ACS Applied Materials & Interfaces* 6, 8953 (2014); (IF= 5.900)
62. S. Kennedy, J. L. Wang, S. Campbell, M. Hofmann, and S. X. Dou, "Pressure induced magnetostructural phase transitions in layered RMn₂X₂ compounds", *Journal of Applied Physics* 115, 172617 (2014); (IF= 2.185)
63. H. S. Kim, S. S. Oh, H. S. Ha, D. Youm, S. H. Moon, J. H. Kim, S. X. Dou, Y. U. Heo, S. H. Wee, and A. Goyal, "Ultra-high performance, high-temperature superconducting wires via cost-effective, scalable, co-evaporation process", *Scientific Reports* 4, 4744 (2014); (IF= 5.078)
64. D. M. Kim, M. S. Won, J. H. Yoon, J. H. Kim, R. N. Goyal, and Y. B. Shim, "Chiral recognition of proline enantiomers by the catalytic oxygen reduction and formation of Cu(II)-polymer complex crystals", *Electroanalysis* 26, 2110 (2014); (IF= 2.502)



65. J. G. Kim, M. S. Park, S. M. Hwang, Y. U. Heo, T. Liao, Z. Q. Sun, J. H. Park, K. J. Kim, G. Jeong, Y. J. Kim, J. H. Kim, and S. X. Dou, "Zr⁴⁺ doping in Li₄Ti₅O₁₂ anode for lithium-ion batteries: open Li⁺ diffusion paths through structural imperfection", *ChemSusChem* 7, 1451 (2014); (IF= 7.117)
66. K. J. Kim, S. W. Lee, T. Yim, J. G. Kim, J. W. Choi, J. H. Kim, M. S. Park, and Y. J. Kim, "A new strategy for integrating abundant oxygen functional groups into carbon felt electrode for vanadium redox flow batteries", *Scientific Reports* 4, 6906 (2014); (IF= 5.078)
67. J. C. Knott, P. A. Commins, J. W. Moscrop, and S. X. Dou, "Design considerations in MgB₂-based superconducting coils for use in saturated-core fault current limiters", *IEEE Transactions on Applied Superconductivity* 24, 7000404 (2014); (IF= 1.324)
68. S. Kolling, B. M. Oborn, P. J. Keall, and J. Horvat, "Magnetization curves of sintered heavy tungsten alloys for applications in MRI-guided radiotherapy", *Medical Physics* 41, 061707 (2014); (IF= 3.012)
69. F. Lan, Z. Q. Ma, Y. C. Liu, N. Chen, Q. Cai, H. J. Li, S. Barua, D. Patel, M. S. A. Hossain, J. H. Kim, and S. X. Dou, "The formation of nano-layered grains and their enhanced superconducting transition temperature in Mg-doped FeSe_{0.9} bulks", *Scientific Reports* 4, 6481 (2014); (IF= 5.078)
70. R. A. Lewis, "A review of terahertz sources", *Journal of Physics D-Applied Physics* 47, 374001 (2014); (IF= 2.521)
71. E. B. Li, B. J. Eggleton, K. J. Fang, and S. H. Fan, "Photonic Aharonov-Bohm effect in photon-phonon interactions", *Nature Communications* 5, 3225 (2014); (IF= 10.742)
72. H. Q. Li, B. B. Cui, M. L. Zhang, W. Q. Zhou, H. D. Chen, C. Zhang, Y. Liu, C. X. Tang, and E. B. Li, "Integration of 1550 nm vertical-cavity surface-emitting laser with gratings on SOI", *Optics and Laser Technology* 64, 333 (2014); (IF= 1.649)
73. H. Q. Li, Y. Liu, C. J. Miao, M. L. Zhang, W. Q. Zhou, C. X. Tang, and E. B. Li, "High-performance binary blazed grating coupler used in silicon-based hybrid photodetector integration", *Optical Engineering* 53, 097106 (2014); (IF= 0.958)
74. H. Q. Li, Y. Liu, M. L. Zhang, W. Q. Zhou, C. Zhang, E. B. Li, C. Y. Miao, and C. X. Tang, "Highly efficient polarization-independent grating coupler used in silica-based hybrid photodetector integration", *Optical Engineering* 53, 057105 (2014); (IF= 0.958)
75. H. Q. Li, X. F. Wang, L. Chen, and E. B. Li, "Denoising and R-peak detection of electrocardiogram signal based on EMD and improved approximate envelope", *Circuits Systems and Signal Processing* 33, 1261 (2014); (IF= 2.185)
76. H. Q. Li, W. Q. Zhou, Y. Liu, X. Y. Dong, C. Zhang, C. Y. Miao, M. L. Zhang, E. B. Li, and C. X. Tang, "Preliminary Investigation of an SOI-based arrayed waveguide grating demodulation integration microsystem", *Scientific Reports* 4, 4848 (2014); (IF= 5.078)
77. H. Q. Li, W. Q. Zhou, M. L. Zhang, Y. Liu, C. Zhang, E. B. Li, C. Y. Miao, and C. X. Tang, "Large-area binary blazed grating coupler between nanophotonic waveguide and LED", *Scientific World Journal*, 586517 (2014); (IF= 1.219)
78. J. F. Li, J. Z. Wang, X. Liang, Z. J. Zhang, H. K. Liu, Y. T. Qian, and S. L. Xiong, "Hollow MnCo₂O₄ submicrospheres with multilevel interiors: From mesoporous spheres to yolk-in-double-shell structures", *ACS Applied Materials & Interfaces* 6, 24 (2014); (IF= 5.900)
79. L. Li, K. H. Seng, D. Li, Y. Y. Xia, H. K. Liu, and Z. P. Guo, "SnSb@carbon nanocable anchored on graphene sheets for sodium ion batteries", *Nano Research* 7, 1466 (2014); (IF= 6.963)
80. L. Li, C. Q. Feng, H. Zheng, P. X. He, and J. Z. Wang, "Synthesis and electrochemical properties of LiNi_{1/3}Co_{1/3}Mn_{1/3}O₂ cathode material", *Journal of Electronic Materials* 43, 3508 (2014); (IF= 1.675)
81. Q. Li, S. L. Chou, J. Z. Wang, D. Shi, and H. K. Liu, "Highly oriented LiFePO₄ thin film electrodes via chemical solution deposition", *Solid State Ionics* 268, 117 (2014); (IF= 2.112)
82. Q. Li, T. T. Shen, Y. L. Cao, K. Zhang, S. S. Yan, Y. F. Tian, S. S. Kang, M. W. Zhao, Y. Y. Dai, Y. X. Chen, G. L. Liu, L. M. Mei, X. L. Wang, and P. Grunberg, "Spin memristive magnetic tunnel junctions with CoO-ZnO nano composite barrier", *Scientific Reports* 4, 3835 (2014); (IF= 5.078)

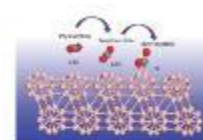


83. S. Li, K. W. Shu, C. Zhao, C. Y. Wang, Z. P. Guo, G. Wallace, and H. K. Liu, "One-step synthesis of graphene/polypyrrole nanofiber composites as cathode material for a biocompatible zinc/polymer battery", **ACS Applied Materials & Interfaces** 6, 16679 (2014); (IF= 5.900)
84. S. Li, S. C. Zhao, K. W. Shu, C. Y. Wang, Z. P. Guo, G. G. Wallace, and H. K. Liu, "Mechanically strong high performance layered polypyrrole nano fibre/graphene film for flexible solid state supercapacitor", **Carbon** 79, 554 (2014); (IF= 6.160)
85. W. J. Li, S. L. Chou, J. Z. Wang, J. H. Kim, H. K. Liu, and S. X. Dou, "Sn⁴⁺_xP₃ @ amorphous Sn-P composites as anodes for sodium-ion batteries with low cost, high capacity, long life, and superior rate capability", **Advanced Materials** 26, 4037 (2014); (IF= 15.409)
86. W. X. Li, Z. Q. Sun, D. L. Tian, I. P. Nevirkovets, and S. X. Dou, "Platinum dendritic nanoparticles with magnetic behavior", **Journal of Applied Physics** 116, 033911 (2014); (IF= 2.185)
87. W. X. Li, R. Zeng, Z. Q. Sun, D. L. Tian, and S. X. Dou, "Uncoupled surface spin induced exchange bias in alpha-MnO₂ nanowires", **Scientific Reports** 4, 6641 (2014); (IF= 5.078)
88. Y. Q. Li, B. P. Bastakoti, M. Imura, S. M. Hwang, Z. Q. Sun, J. H. Kim, S. X. Dou, and Y. Yamauchi, "Synthesis of mesoporous TiO₂/SiO₂ hybrid films as an efficient photocatalyst by polymeric micelle assembly", **Chemistry – A European Journal** 20, 6027 (2014) (IF= 5.696)
89. Z. Li, Q. Sun, Y. Zhu, B. Tan, Z. P. Xu, and S. X. Dou, "Ultra-small fluorescent inorganic nanoparticles for bioimaging", **Journal of Materials Chemistry B** 2, 2793 (2014); (IF= N/A)
90. Q. Li, Z. A. Zhang, Z. P. Guo, Y. Q. Lai, K. Zhang, and J. Li, "Improved cyclability of lithium-sulfur battery cathode using encapsulated sulfur in hollow carbon nanofiber@nitrogen-doped porous carbon core-shell composite", **Carbon** 78, 1 (2014); (IF= 6.160)
91. Y. Li, S. M. Zhu, Z. Y. Yu, Q. Meng, T. Zhang, Q. L. Liu, J. J. Gu, W. Zhang, T. Lu, C. L. Zhu, Z. P. Guo, J. Ma, and D. Zhang, "A facile fabrication of Fe₃O₄/graphene nanosheets for lithium-ion battery", **Science of Advanced Materials** 6, 283 (2014); (IF= 2.908)
92. T. Liao, Z. Q. Sun, C. H. Sun, S. X. Dou, and D. J. Searles, "Electronic coupling and catalytic effect on H₂ evolution of MoS₂/graphene nanocatalyst", **Scientific Reports** 4, 6256 (2014); (IF= 5.078)
93. X. Liang, M. Kaiser, K. Konstantinov, R. Tandiono, Z. X. Wang, H. K. Liu, S. X. Dou, and J. Z. Wang, "High performance pure sulfur honeycomb-like architectures synthesized by a cooperative self-assembly strategy for lithium-sulfur batteries", **RSC Advances** 4, 36513 (2014); (IF= 3.708)
94. J. J. Lin, Y. U. Heo, A. Nattestad, Z. Q. Sun, L. Z. Wang, J. H. Kim, and S. X. Dou, "3D Hierarchical rutile TiO₂ and metal-free organic sensitizer producing dye-sensitized solar cells 8.6% conversion efficiency", **Scientific Reports** 4, 5769 (2014); (IF= 5.078)
95. J. J. Lin, A. Nattestad, H. Yu, Y. Bai, L. Z. Wang, S. X. Dou, and J. H. Kim, "Highly connected hierarchical textured TiO₂ spheres as photoanodes for dye-sensitized solar cells", **Journal of Materials Chemistry A** 2, 8902 (2014); (IF= N/A)
96. K. S. Liu, M. Y. Cao, A. Fujishima, and L. Jiang, "Bio-Inspired titanium dioxide materials with special wettability and their applications", **Chemical Reviews** 114, 10044 (2014); (IF= 45.661)
97. S. G. Liu, C. Zhang, M. Hu, X. X. Chen, P. Zhang, S. Gong, T. Zhao, and R. B. Zhong, "Coherent and tunable terahertz radiation from graphene surface plasmon polaritons excited by an electron beam", **Applied Physics Letters** 104, 201104 (2014); (IF= 3.515)
98. W. B. Luo, S. L. Chou, Y. C. Zhai, and H. K. Liu, "Self-assembled graphene and LiFePO₄ composites with superior high rate capability for lithium ion batteries", **Journal of Materials Chemistry A** 2, 4927 (2014); (IF= N/A)
99. J. J. Ma, J. L. Wang, Y. S. He, X. Z. Liao, J. Chen, J. Z. Wang, T. Yuan, and Z. F. Ma, "A solvothermal strategy: one-step in situ synthesis of self-assembled 3D graphene-based composites with enhanced lithium storage capacity", **Journal of Materials Chemistry A** 2, 9200 (2014); (IF= N/A)
100. M. V. Madsen, S. A. Gevorgyan, R. Pacios, J. Ajuria, I. Etxebarria, and Z. Q. Sun, "Worldwide outdoor round robin study of organic photovoltaic devices and modules", **Solar Energy Materials and Solar Cells** 130, 281 (2014); (IF= 5.030)

101. V. Malgras, P. Jood, Z. Q. Sun, S. X. Dou, Y. Yamauchi, and J. H. Kim, "Channeled porous TiO₂ synthesized with a water-in-oil microemulsion", **Chemistry - A European Journal** 20, 10451 (2014); (IF = 5.696)
102. C. G. Molenaar, D. P. Leusink, X. L. Wang, and A. Brinkman, "Geometric dependence of Nb-Bi₂Te₃-Nb topological Josephson junction transport parameters", **Superconductor Science & Technology** 27, 104003 (2014); (IF= 2.796)
103. A. K. Mondal, D. W. Su, S. Chen, B. Sun, K. Li, and G. X. Wang, "A simple approach to prepare nickel hydroxide nanosheets for enhanced pseudocapacitive performance", **RSC Advances** 4, 19476 (2014); (IF= 3.708)
104. A. K. Mondal, D. W. Su, S. Q. Chen, J. Q. Zhang, A. S. Ung, and G. X. Wang, "Microwave-assisted synthesis of spherical beta-Ni(OH)₂ superstructures for electrochemical capacitors with excellent cycling stability", **Chemical Physics Letters** 610, 115 (2014); (IF= 1.991)
105. A. Motaman, S. Barua, D. Patel, M. Maeda, K. Cheong, J. H. Kim, S. X. Dou, and M. S. A. Hossain, "Power-law relationship between critical current density, microstructure, and the n-value in MgB₂ superconductor wires", **Journal of Superconductivity and Novel Magnetism** 27, 1643 (2014); (IF= 0.930)
106. M. Motta, F. Colauto, J. I. Vestgarden, J. Fritzsche, M. Timmermans, J. Cuppens, C. Attanasio, C. Cirillo, V. V. Moshchalkov, J. Van de Vondel, T. H. Johansen, W. A. Ortiz, and A. V. Silhanek, "Controllable morphology of flux avalanches in microstructured superconductors", **Physical Review B** 89, 134508 (2014); (IF= 3.664)
107. M. Mustapic, J. Horvat, M. S. Hossain, Z. Q. Sun, Z. Skoko, D. R. G. Mitchell, and S. X. Dou, "Novel synthesis of superparamagnetic Ni-Co-B nanoparticles and their effect on superconductor properties of MgB₂", **Acta Materialia** 70, 298 (2014); (IF= 3.940)
108. M. Mustapic, J. Horvat, Z. Skoko, M. S. A. Hossain, and S. X. Dou, "Interplay between boron precursors and Ni-Co-B nanoparticle doping in the fabrication of MgB₂ superconductor with improved electromagnetic properties", **Acta Materialia** 80, 457 (2014); (IF= 3.940)
109. S. Naficy, R. Jalili, S. H. Aboutalebi, R. A. Gorkin, K. Konstantinov, P. C. Innis, G. M. Spinks, P. Poulin, and G. G. Wallace, "Graphene oxide dispersions: tuning rheology to enable fabrication", **Materials Horizons** 1, 326 (2014); (IF= N/A)
110. I. P. Nevirkovets, S. E. Shafranjuk, O. Chernyashkevskyy, N. Masilamani, and J. B. Ketterson, "Current-voltage characteristics of Nb-carbon-Nb junctions", **Low Temperature Physics** 40, 191 (2014); (IF= 0.881)
111. A. V. Pan, O. V. Schcherbakova, S. A. Fedoseev, I. A. Golovchanskiy, D. Attard, S. K. H. Lam, J. Du, C. P. Foley, S. Rubanov, and A. Suvorova, "Enhancing properties of high-temperature superconducting step-edge Josephson junctions by nano-multilayers with a small mismatch", **Advanced Materials Interfaces** 1, 1300112 (2014); (IF= N/A)
112. W. K. Pang, S. Kalluri, V. K. Peterson, S. X. Dou, and Z. P. Guo, "Electrochemistry and structure of the cobalt-free Li_{1+x}MO₂ (M = Li, Ni, Mn, Fe) composite cathode", **Physical Chemistry Chemical Physics** 16, 25377 (2014); (IF= 4.198)
113. W. K. Pang, V. K. Peterson, N. Sharma, J. J. Shiu, and S. H. Wu, "Lithium migration in Li₄Ti₅O₁₂ studied using in situ neutron powder diffraction", **Chemistry of Materials** 26, 2318 (2014); (IF= 8.535)
114. W. K. Pang, V. K. Peterson, N. Sharma, C. F. Zhang, and Z. P. Guo, "Evidence of solid-solution reaction upon lithium insertion into cryptomelane K_{0.25}Mn₂O₄ material", **Journal of Physical Chemistry C** 118, 3976 (2014); (IF= 4.835)
115. M. S. Park, Y. G. Lim, S. M. Hwang, J. H. Kim, J. S. Kim, S. X. Dou, J. Cho, and Y. J. Kim, "Scalable integration of Li₅FeO₄ towards robust, high-performance lithium-ion hybrid capacitors", **ChemSusChem** 7, 3138 (2104); (IF= 7.117)
116. M. S. Park, E. Park, J. Lee, G. Jeong, K. J. Kim, J. H. Kim, Y. J. Kim, and H. Kim, "Hydrogen silsequioxane-derived Si/SiO_x nanospheres for high-capacity lithium storage materials", **ACS Applied Materials & Interfaces** 6, 9608 (2014); (IF= 5.900)
117. D. Patel, M. S. A. Hossain, A. Motaman, S. Barua, M. Shahabuddin, and J. H. Kim, "Rational design of MgB₂ conductors toward practical applications", **Cryogenics** 63, 160 (2014); (IF= 0.935)

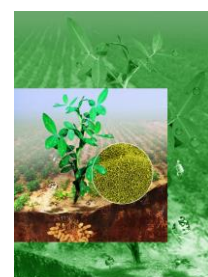
118. D. Patel, M. Maeda, S. Choi, S. J. Kim, M. Shahabuddin, J. M. Parakandy, M. S. A. Hossain, and J. H. Kim, "Multiwalled carbon nanotube-derived superior electrical, mechanical and thermal properties in MgB₂ wires", *Scripta Materialia* 88, 13 (2014); (IF= 2.968)
119. K. Radhanpura, R. A. Lewis, L. Sirbu, M. Enachi, I. M. Tiginyanu, and V. A. Skuratov, "Effect of heavy noble gas ion irradiation on terahertz emission efficiency of InP (100) and (111) crystal planes", *Semiconductor Science and Technology* 29, 095015 (2014); (IF= 2.206)
120. Q. Y. Ren, W. D. Hutchison, J. L. Wang, S. M. Perez, J. M. Cadogan, and S. J. Campbell, "Magnetism and magnetocaloric effect of Mn_{0.98}Fe_{0.02}CoGe", *Physica Status Solidi A* 211, 1101 (2014); (IF= 1.525)
121. M. Salari, S. H. Aboutalebi, A. T. Chidembo, P. C. Innis, K. Konstantinov, H. K. Liu, and P. Schmuki, "Design of self-assembled TiO₂ architectures: Towards hybrid nanotubular interfaces", *Physica Status Solidi A* 211, 938 (2014); (IF= 1.525)
122. M. Salari, S. H. Aboutalebi, A. T. Chidembo, K. Konstantinov, and H. K. Liu, "Surface engineering of self-assembled TiO₂ nanotube arrays: A practical route towards energy storage applications", *Journal of Alloys and Compounds* 586, 197 (2014); (IF= 2.726)
123. R. R. Salunkhe, B. P. Bastakoti, C. T. Hsu, N. Suzuki, J. H. Kim, S. X. Dou, C. C. Hu, and Y. Yamauchi, "Direct growth of cobalt hydroxide rods on nickel foam and its application for energy storage", *Chemistry – A European Journal* 20, 3084 (2014); (IF= 5.696)
124. R. R. Salunkhe, Y. Kamachi, N. L. Torad, S. M. Hwang, Z. Q. Sun, S. X. Dou, J. H. Kim, and Y. Yamauchi, "Fabrication of symmetric supercapacitors based on MOF-derived nanoporous carbons", *Journal of Materials Chemistry A* 2, 19848 (2014); (IF= N/A)
125. G. Seniutinas, G. Gervinskas, E. Constable, A. Krotkus, G. Molis, G. Valusis, R. A. Lewis, and S. Juodkazis, "THz photomixer with milled nanoelectrodes on LT-GaAs", *Applied Physics A - Materials Science & Processing* 117, 439 (2014); (IF= 1.694)
126. M. Shahabuddin, N. S. Alzayed, S. Oh, S. Choi, M. Maeda, S. Hata, Y. Shimada, M. S. A. Hossain, and J. H. Kim, "Microstructural and crystallographic imperfections of MgB₂ superconducting wire and their correlation with the critical current density", *AIP Advances* 4, 017113 (2014); (IF= 1.590)
127. M. Shahabuddin, N. S. Alzayed, S. Oh, S. Choi, M. Maeda, M. S. Shah, A. Motaman, M. S. A. Hossain, and J. H. Kim, "Percolative nature of current transport in polycrystalline MgB₂ wires", *Solid State Communications* 181, 20 (2014); (IF= 1.698)
128. M. Shahbazi, X. L. Wang, M. Ionescu, S. R. Ghorbani, S. X. Dou, and K. Y. Choi, "Simulation of light C⁴⁺ ion irradiation and its enhancement to the critical current density in BaFe_{1.9}Ni_{0.1}As₂ single crystals", *Science of Advanced Materials* 6, 1650 (2014); (IF= 2.908)
129. Y. K. Shan, Z. Xiao, Y. M. Chuan, H. L. Li, M. L. Yuan, Z. Li, and S. X. Dou, "One-pot aqueous synthesis of cysteine-capped CdTe/CdS core-shell nanowires", *Journal of Nanoparticle Research* 16, 2420 (2014); (IF= 2.278)
130. J. Shang, W. C. Hao, X. J. Lv, T. M. Wang, X. L. Wang, Y. Du, S. X. Dou, T. F. Xie, D. J. Wang, and J. O. Wang, "Bismuth oxybromide with reasonable photocatalytic reduction activity under visible light", *ACS Catalysis* 4, 954 (2014); (IF= 7.572)
131. Q. Sheng, H. M. Wu, D. Wexler, and H. K. Liu, "Effects of reducing temperatures on the hydrogen storage capacity of double-walled carbon nanotubes with Pd loading", *Journal of Nanoscience and Nanotechnology* 14, 4706 (2014); (IF= 1.339)
132. Y. Shi, J. Gao, H. D. Abruna, H. J. Li, H. K. Liu, D. Wexler, J. Z. Wang, and Y. P. Wu, "The Mechanism of the one-step synthesis of hollow-structured Li₃VO₄ as an anode for lithium-ion batteries", *Chemistry – A European Journal* 20, 5608 (2014); (IF= 5.696)
133. Y. Shi, J. Gao, H. D. Abruna, H. K. Liu, H. J. Li, J. Z. Wang, and Y. P. Wu, "Rapid synthesis of Li₄Ti₅O₁₂/graphene composite with superior rate capability by a microwave-assisted hydrothermal method", *Nano Energy* 8, 297 (2014); (IF= 10.211)
134. Y. F. Song, L. Li, Y. G. Wang, C. X. Wang, Z. P. Guo, and Y. Y. Xia, "Nitrogen-doped ordered mesoporous carbon with a high surface area, synthesized through organic-inorganic coassembly, and its application in supercapacitors", *ChemPhysChem* 15, 2084 (2014); (IF= 3.360)

135. J. A. Steele and R. A. Lewis, "In situ micro-Raman studies of laser-induced bismuth oxidation reveals metastability of beta-Bi₂O₃ microislands", **Optical Materials Express** 4, 2133 (2014); (IF= 2.923)
136. J. A. Steele and R. A. Lewis, "Laser-induced oxidation kinetics of bismuth surface microdroplets on GaAsBi studied in situ by Raman microprobe analysis", **Optics Express**, 22, 32261 (2014); (IF= 3.525)
137. J. A. Steele, R. A. Lewis, M. Henini, O. M. Lemine, D. Fan, Y. I. Mazur, V. G. Dorogan, P. C. Grant, S. Q. Yu, and G. J. Salamo, "Raman scattering reveals strong LO-phonon-hole-plasmon coupling in nominally undoped GaAsBi: optical determination of carrier concentration", **Optics Express** 22, 11680 (2014); (IF= 3.525)
138. C. Stewart, K. Konstantinov, M. McDonald, K. Bogusz, D. Cardillo, S. Oktaria, D. Q. Shi, M. Lerch, T. Devers, S. Corde, A. Rosenfeld, and M. Tehei, "Engineering of bismuth oxide nanoparticles to induce differential biochemical activity in malignant and nonmalignant cells", **Particle & Particle Systems Characterization** 31, 960 (2014); (IF= 0.537)
139. D. W. Su, S. X. Dou and G. X. Wang, "Hierarchical orthorhombic V₂O₅ hollow nanospheres as high performance cathode materials for sodium-ion batteries", **Journal of Materials Chemistry A** 2, 11185 (2014); (IF= N/A)
140. D. W. Su, S. X. Dou, and G. X. Wang, "Mesocrystal Co₃O₄ nanoplatelets as high capacity anode materials for Li-ion batteries", **Nano Research** 7, 794 (2014); (IF= 6.963)
141. D. W. Su, S. X. Dou, and G. X. Wang, "Single crystalline Co₃O₄ nanocrystals exposed with different crystal planes for Li-O₂ batteries", **Scientific Reports** 4, 5767 (2014); (IF= 5.078)
142. D. W. Su, S. X. Dou, and G. X. Wang, "WS₂@graphene nanocomposites as anode materials for Na-ion batteries with enhanced electrochemical performances", **Chemical Communications** 50, 4192 (2014); (IF= 6.718)
143. D. W. Su, X. Q. Xie, S. X. Dou, and G. X. Wang, "CuO single crystal with exposed {001} facets - A highly efficient material for gas sensing and Li-ion battery applications", **Scientific Reports** 4, 5753 (2014); (IF= 5.078)
144. D. W. Su, X. Q. Xie, P. Munroe, S. X. Dou, and G. X. Wang, "Mesoporous hexagonal Co₃O₄ for high performance lithium ion batteries", **Scientific Reports** 4, 6519 (2014); (IF= 5.078)
145. Q. Sun, C. X. Sun, A. J. Du, Z. Li, "Charged-controlled separation of nitrogen from natural gas using boron nitride fullerene", **Journal of Physical Chemistry C** 118, 30006 (2014); (IF= 4.835)
146. Q. Sun, M. Wang, Z. Li, A. J. Du, and D. J. Searles, "Carbon dioxide capture and gas separation on B-80 fullerene", **Journal of Physical Chemistry C** 118, 2170 (2014); (IF= 4.835)
147. Q. Sun, M. Wang, Z. Li, A. J. Du and D. J. Searles, "A computational study of carbon dioxide adsorption on solid boron", **Physical Chemistry Chemical Physics** 16, 12695 (2014); (IF= 4.198)
148. Z. Q. Sun, M. S. Li, and Y. C. Zhou, "Recent progress on synthesis, multi-scale structure, and properties of Y-Si-O oxides", **International Materials Reviews** 59, 357 (2014); (IF= 6.552)
149. Z. Q. Sun, T. Liao, Y. H. Dou, S. M. Hwang, M. S. Park, L. Jiang, J. H. Kim, and S. X. Dou, "Generalized self-assembly of scalable two-dimensional transition metal oxide nanosheets", **Nature Communications** 5, 3813 (2014); (IF= 10.742)
150. Z. Q. Sun, T. Liao, K. S. Liu, L. Jiang, J. H. Kim, and S. X. Dou, "Fly-eye inspired superhydrophobic anti-fogging inorganic nanostructures", **Small** 10, 3001 (2014) (IF= 7.514)
151. J. Tang, N. L. Torad, R. R. Salunkhe, J. H. Yoon, M. S. A. Hossain, S. X. Dou, J. H. Kim, T. Kimura, and Y. Yamauchi, "Towards vaporized molecular discrimination: A quartz crystal microbalance (QCM) sensor system using cobalt-containing mesoporous graphitic carbon", **Chemistry - An Asian Journal** 9, 3238 (2014); (IF= 3.935)
152. D. L. Tian, Z. Y. Guo, Y. L. Wang, W. X. Li, X. F. Zhang, J. Zhai, and L. Jiang, "Phototunable underwater oil adhesion of micro/nanoscale hierarchical-structured ZnO mesh films with switchable contact mode", **Advanced Functional Materials** 24, 536 (2014); (IF= 6.739)



153. P. Tierno, T. H. Johansen, and T. M. Fischer, "Fast and rewritable colloidal assembly via field synchronized particle swapping", **Applied Physics Letters** 104, 174102 (2014); (IF= 3.515)
154. J. I. Vestgarden, P. Mikheenko, Y. M. Galperin, and T. H. Johansen, "Inductive braking of thermomagnetic avalanches in superconducting film", **Superconductor Science & Technology** 27, 055014 (2014); (IF= 2.796)
155. H. Q. Wang, Z. X. Chen, H. K. Liu, and Z. P. Guo, "A facile synthesis approach to micro-macroporous carbon from cotton and its application in the lithium-sulfur battery", **RSC Advances** 4, 65074 (2014); (IF= 3.708)
156. H. Q. Wang, S. Li, Z. X. Chen, H. K. Liu, and Z. P. Guo, "A novel type of one-dimensional organic selenium-containing fiber with superior performance for lithium-selenium and sodium-selenium batteries", **RSC Advances** 4, 61673 (2014); (IF= 3.708)
157. H. Q. Wang, S. Li, D. Li, Z. X. Chen, H. K. Liu, and Z. P. Guo, "TiO₂ coated three-dimensional hierarchically ordered porous sulfur electrode for the lithium/sulfur rechargeable batteries", **Energy** 75, 597 (2014); (IF= 4.159)
158. J. Wang, C. Q. Feng, Z. Q. Sun, S. L. Chou, H. K. Liu, and J. Z. Wang, "In-situ one-step hydrothermal synthesis of a lead germanate-graphene composite as a novel anode material for lithium-ion batteries", **Scientific Reports** 4, 7030 (2014); (IF= 5.078)
159. J. L. Wang, S. J. Campbell, M. F. M. Din, S. J. Kennedy, and M. Hofmann, "Magnetic transitions and the magnetocaloric effect in the Pr_{1-x}Y_xMn₂Ge₂ system", **Physica Status Solidi A** 211, 1092 (2014); (IF= 1.525)
160. J. L. Wang, M. F. M. Din, S. J. Kennedy, F. Hong, S. J. Campbell, A. J. Studer, G. H. Wu, Z. X. Cheng, and S. X. Dou, "A comparative study of magnetic behaviors in TbNi₂, TbMn₂ and TbNi₂Mn", **Journal of Applied Physics** 115, 17E135 (2014); (IF= 2.185)
161. J. L. Wang, L. Ma, M. Hofmann, M. Avdeev, S. J. Kennedy, S. J. Campbell, M. F. M. Din, M. Hoelzel, G. H. Wu, and S. X. Dou "Neutron diffraction study of MnNiGa₂-structural and magnetic behavior", **Journal of Applied Physics** 115, 17A904 (2014); (IF= 2.185)
162. L. Wang, J. Shang, W. C. Hao, S. Q. Jiang, S. H. Huang, T. M. Wang, Z. Q. Sun, Y. Du, S. X. Dou, T. F. Xie, D. J. Wang, and J. Wang, "A dye-sensitized visible light photocatalyst-Bi₂₄O₃₁Cl₁₀", **Scientific Reports** 4, 7384 (2014); (IF= 5.078)
163. J. Wang, J. Z. Wang, Z. Q. Sun, X. W. Gao, C. Zhong, S. L. Chou, and H. K. Liu, "A germanium/single-walled carbon nanotube composite paper as a free-standing anode for lithium-ion batteries", **Journal of Materials Chemistry A** 2, 4613 (2014); (IF= N/A)
164. X. W. Liang, J. E. Grice, Y. Zhu, D. Liu, W. Y. Sanchez, Z. Li, D. H. G. Crawford, D. G. Le Couteur, V. C. Cogger, X. Liu, Z. P. Xu, and M. S. Roberts, "Intravital multiphoton imaging of the selective uptake of water-dispersible quantum dots into sinusoidal liver cells", **Small**, 2015, DOI: 10.1002/smll.201402698. (IF = 7.510)
165. Y. X. Wang, S. L. Chou, D. Wexler, H. K. Liu, and S. X. Dou, "High-performance sodium-ion batteries and sodium-ion pseudocapacitors based on MoS₂/graphene composites", **Chemistry - A European Journal** 20, 9607 (2014); (IF= 5.696)
166. Y. X. Wang, Y. G. Lim, M. S. Park, S. L. Chou, J. H. Kim, H. K. Liu, S. X. Dou, and Y. J. Kim, "Ultrafine SnO₂ nanoparticle loading onto reduced graphene oxide as anodes for sodium-ion batteries with superior rate and cycling performances", **Journal of Materials Chemistry A** 2, 529 (2014); (IF= N/A)
167. Y. X. Wang, K. H. Seng, S. L. Chou, J. Z. Wang, Z. P. Guo, D. Wexler, H. K. Liu, and S. X. Dou, "Reversible sodium storage via conversion reaction of a MoS₂-C composite", **Chemical Communications** 50, 10730 (2014); (IF= 6.718)
168. Z. F. Wang, Z. Wang, Y. Yin, Z. X. Cheng, H. Kimura, X. Guo, J. Chen, J. Chen, and Y. P. Wang, "Temperature and frequency dependences of the electric properties of CLBO crystal", **Journal of Alloys and Compounds** 591, 377 (2014); (IF= 2.727)
169. N. P. Wickramaratne, J. T. Xu, M. Wang, L. Zhu, L. M. Dai, and M. Jaroniec, "Nitrogen enriched porous carbon spheres: attractive materials for supercapacitor electrodes and CO₂ adsorption", **Chemistry of Materials** 29, 2820 (2014); (IF= 8.535)

170. G. L. Xia, J. Chen, W. W. Sun, Y. B. Tan, Z. P. Guo, H. K. Liu, and X. B. Yu, "Well-dispersed lithium amidoborane nanoparticles through nanoreactor engineering for improved hydrogen release", **Nanoscale** 6, 12333 (2014); (IF= 6.739)
171. G. L. Xia, Y. B. Tan, D. Li, Z. P. Guo, H. K. Liu, Z. W. Liu, and X. B. Yu, "Hierarchical porous $\text{Li}_2\text{Mg}(\text{NH})_2@\text{C}$ nanowires with long cycle life towards stable hydrogen storage", **Scientific Reports** 4, 6599 (2014); (IF= 5.078)
172. X. Q. Xie, D. W. Su, S. Q. Chen, J. Q. Zhang, S. X. Dou, and G. X. Wang, "SnS₂ nanoplatelet@graphene nanocomposites as high-capacity anode materials for sodium-ion batteries", **Chemistry – An Asian Journal** 9, 1611 (2014); (IF= 3.935)
173. Y. Y. Xiong, Z. Li, J. Chen, S. Q. Zhang, L. Z. Wang, and S. X. Dou, "Facile synthesis of highly efficient one-dimensional plasmonic photocatalysts through Ag@Cu₂O core-shell heteronanowires", **ACS Applied Materials & Interfaces** 6, 15716 (2014); (IF= 5.900)
174. B. Xu, B. Tian, M. Z. Lv, X. H. Fan, X. F. Guo, and X. L. Wang, "Theoretical study on the mechanism of direct transformation from graphite to diamond at ultra high-pressure and high-temperature", **Integrated Ferroelectrics** 151, 99 (2014); (IF= 0.371)
175. J. T. Xu, S. L. Chou, Q. F. Gu, M. F. M. Din, H. K. Liu, and S. X. Dou, "Study on vanadium substitution to iron in $\text{Li}_2\text{FeP}_2\text{O}_7$ as cathode material for lithium-ion batteries", **Electrochimica Acta** 141, 195 (2014); (IF= 4.086)
176. J. T. Xu, S. L. Chou, J. L. Wang, H. K. Liu, and S. X. Dou, "Layered P2- $\text{Na}_{0.66}\text{Fe}_{0.5}\text{Mn}_{0.5}\text{O}_2$ cathode material for rechargeable sodium-ion batteries", **Chemelectrochem** 1, 371 (2014) (IF: N/A)
177. J. T. Xu, S. L. Chou, C. F. Zhou, Q. F. Gu, H. K. Liu, and S. X. Dou, "Three-dimensional-network $\text{Li}_3\text{V}_2(\text{PO}_4)_3/\text{C}$ composite as high rate lithium ion battery cathode material and its compatibility with ionic liquid electrolytes", **Journal of Power Sources** 246, 124 (2014); (IF= 5.211)
178. J. T. Xu, I. Y. Jeon, J. M. Seo, S. X. Dou, L. M. Dai, and J. B. Baek, "Edge-selectively halogenated graphene nanoplatelets (XGnPs, X = Cl, Br, or I) prepared by ball-milling and used as anode materials for lithium-ion batteries" **Advanced Materials** 26, 7317 (2014); (IF= 15.409)
179. J. T. Xu, J. L. Shui, J. L. Wang, M. Wang, H. K. Liu, S. X. Dou, I. Y. Jeon, J. M. Seo, J. B. Baek, and L. M. Dai, "Sulfur-graphene nanostructured cathodes via ball-milling for high-performance lithium sulfur batteries", **ACS Nano** 8, 10920 (2014); (IF= 12.033)
180. X. Xu, J. C. Zhuang, Y. Du, H. F. Feng, N. Zhang, C. Liu, T. Lei, J. O. Wang, M. Spencer, T. Morishita, X. L. Wang, and S. X. Dou, "Effects of oxygen adsorption on the surface state of epitaxial silicene on Ag(111)", **Scientific Reports** 4, 7543; (2014); (IF= 5.078)
181. X. B. Xu, H. Fangohr, M. Gu, W. Chen, Z. H. Wang, F. Zhou, D. Q. Shi, and S. X. Dou, "Simulation of the phase diagram of magnetic vortices in two-dimensional superconductors: evidence for vortex chain formation", **Journal of Physics – Condensed Matter** 26, 115702 (2014); (IF= 2.223)
182. Y. Xu, Z. M. Jin, Z. B. Zhang, Z. Y. Zhang, X. Lin, G. H. Ma, and Z. X. Cheng, "Gigahertz longitudinal acoustic phonons originating from ultrafast ligand field transitions in hematite thin films", **Chinese Physics B** 23, 044206 (2014); (IF= 1.392)
183. Y. Xu, Z. Y. Zhang, Z. M. Jin, Q. F. Pan, X. Lin, G. H. Ma, and Z. X. Cheng, "Transient photostriction and strain modulation in La, Nb-codoped BiFeO_3 thin films", **Acta Physica Sinica** 63, 117801 (2014); (IF= 0.845)
184. S. A. Yamini, H. Wang, Z. M. Gibbs, Y. Z. Pei, D. R. G. Mitchell, S. X. Dou, and G. J. Snyder, "Thermoelectric performance of tellurium-reduced quaternary p-type lead-chalcogenide composites", **Acta Materialia** 80, 365 (2014); (IF= 3.940)
185. S. A. Yamini, H. Wang, D. Ginting, D. R. G. Mitchell, S. X. Dou, and G. J. Snyder, "Thermoelectric performance of n-Type $(\text{PbTe})_{0.75}(\text{PbS})_{0.15}(\text{PbSe})_{0.1}$ composites", **ACS Applied Materials & Interfaces** 6, 11476 (2014); (IF = 5.900)
186. J. P. Yang, X. F. Qian, M. J. Chen, J. W. Fan, H. K. Liu, and W. X. Zhang, "A triblock-copolymer-templating route to carbon spheres@SBA-15 large mesopore core-shell and hollow structures", **RSC Advances** 4, 48676 (2014); (IF = 3.708)
187. S. Yang, J. Ju, Y. C. Qiu, Y. X. He, X. L. Wang, S. X. Dou, K. S. Liu, and L. Jiang, "Peanut leaf inspired multifunctional surfaces", **Small** 10, 294 (2014); (IF= 7.514)



188. X. J. Yang, Y. D. Huang, X. C. Wang, D. Z. Jia, W. K. Pang, Z. P. Guo, and X. C. Tang, "High rate capability core-shell lithium titanate@ceria nanosphere anode material synthesized by one-pot coprecipitation for lithium-ion batteries", *Journal of Power Sources* 257, 280 (2014); (IF= 5.211)
189. W. K. Yeoh, X. Y. Cui, B. Gault, K. S. B. De Silva, X. Xu, H. W. Liu, H. W. Yen, D. Wong, P. Bao, D. J. Larson, I. Martin, W. X. Li, R. K. Zheng, X. L. Wang, S. X. Dou, and S. P. Ringer, "On the roles of graphene oxide doping for enhanced supercurrent in MgB₂ based superconductors", *Nanoscale* 6, 6166 (2014); (IF= 6.739)
190. A. H. Yonamine, S. A. Fedoseev, D. I. dos Santos, and A. V. Pan, "Magnetic properties of YBCO/LCMO superlattices with and without STO interlayers", *Advanced Materials Research* 975, 101 (2014); (IF= N/A)
191. Z. J. Yue, D. H. Seo, K. Ostrikov, and X. L. Wang, "Defects induced ferromagnetism in plasma-enabled graphene nanopetals", *Applied Physics Letters* 104, 092417 (2014); (IF= 3.515)
192. C. F. Zhang, R. X. Yu, T. F. Zhou, Z. X. Chen, H. K. Liu, and Z. P. Guo, "Mass production of three-dimensional hierarchical microfibers constructed from silicon-carbon core-shell architectures with high-performance lithium storage", *Carbon* 72, 169 (2014); (IF= 6.160)
193. L. J. Zhang, S. F. Li, Y. B. Tan, Z. W. Tang, Z. P. Guo, and X. B. Yu, "Synthesis and hydrogen release properties of alkyl-substituted amine-boranes", *Journal of Materials Chemistry A* 2, 10682 (2014); (IF= N/A)
194. M. Zhang, X. W. Gao, Z. F. Zi, J. M. Dai, J. Z. Wang, S. L. Chou, C. H. Liang, X. B. Zhu, Y. P. Sun, and H. K. Liu, "Porous Ni_{0.5}Zn_{0.5}Fe₂O₄ nanospheres: synthesis, characterization, and application for lithium storage", *Electrochimica Acta* 147, 143 (2014); (IF= 4.086)
195. R. Y. Zhang, Y. J. Du, D. Li, D. K. Shen, J. P. Yang, Z. P. Guo, H. K. Liu, A. A. Elzatahry, and D. Y. Zhao, "Highly reversible and large lithium storage in mesoporous Si/C nanocomposite anodes with silicon nanoparticles embedded in a carbon framework", *Advanced Materials* 26, 6749 (2014); (IF= 15.409)
196. Z. Zhang, Z. Jin, Q. Pan, Y. Xu, X. Lin, G. Ma, and Z. X. Cheng, "Temperature dependent photoexcited carrier dynamics in multiferroic BiFeO₃ film: A hidden phase transition", *Applied Physics Letters* 104, 151902 (2014); (IF= 3.515)
197. Z. J. Zhang, S. L. Chou, Q. F. Gu, H. K. Liu, H. J. Li, K. Ozawa, and J. Z. Wang, "Enhancing the high rate capability and cycling stability of LiMn₂O₄ by coating of solid-state electrolyte LiNbO₃", *ACS Applied Materials & Interfaces* 6, 22155 (2014); (IF= 5.900)
198. Z. J. Zhang, Q. Y. Zeng, S. L. Chou, S. J. Li, H. J. Li, K. Ozawa, H. K. Liu, and J. Z. Wang, "Tuning three-dimensional TiO₂ nanotube electrode to achieve high utilization of Ti substrate for lithium storage", *Electrochimica Acta* 133, 570 (2014); (IF= 4.086)
199. H. Y. Zhao, H. Kimura, Z. X. Cheng, M. R. Osada, J. L. Wang, X. L. Wang, S. X. Dou, Y. Liu, J. D. Yu, T. Matsumoto, T. Tohei, N. Shibata, and Y. Ikuhara, "Large magnetoelectric coupling in magnetically short-range ordered Bi₅Ti₃FeO₁₅ film", *Scientific Reports* 4, 5255 (2014); (IF= 5.078)
200. H. Y. Zhao, L. X. Wang, D. Z. Jia, W. Xia, J. Li, and Z. P. Guo, "Coal based activated carbon nanofibers prepared by electrospinning", *Journal of Materials Chemistry A* 2, 9338 (2014); (IF= N/A)
201. C. Zhong, J. Z. Wang, D. Wexler, and H. K. Liu, "Microwave autoclave synthesized multi-layer graphene/single-walled carbon nanotube composites for free-standing lithium-ion battery anodes", *Carbon* 66, 637 (2014); (IF= 6.160)
202. T. F. Zhou, W. K. Pang, C. F. Zhang, J. P. Yang, Z. X. Chen, H. K. Liu, and Z. P. Guo, "Enhanced sodium-ion battery performance by structural phase transition from two-dimensional hexagonal-SnS₂ to orthorhombic-SnS", *ACS Nano* 8, 8323 (2014); (IF= 12.033)
203. J. C. Zhuang, W. K. Yeoh, X. Y. Cui, J. H. Kim, D. Q. Shi, Z. X. Shi, S. P. Ringer, X. L. Wang, and S. X. Dou, "Enhancement of transition temperature in Fe_xSe_{0.5}Te_{0.5} film via iron vacancies", *Applied Physics Letters* 104, 262601 (2014); (IF= 3.515)
204. J. C. Zhuang, W. K. Yeoh, X. Y. Cui, X. Xu, Y. Du, Z. X. Shi, S. P. Ringer, X. L. Wang, and S. X. Dou, "Unabridged phase diagram for single-phased FeSe_xTe_{1-x} thin films", *Scientific Reports* 4, 7273 (2014); (IF= 5.078)