科研工作

科研项目

科研成果

科研成果

2014年以来代表性论文(JCR2区以上)

①Wang LingLi, et al. Capacitive humidity sensitivity of SnO_2:Sn thin film grown on silicon nanoporous pillar array. Sensors & Actuators B Chemical 229(2016):513-519.

②Li Zijiong, et al. Controlled synthesis of $Ni(OH)_2$/graphene composites and their transformation to NiO/graphene for energy storage. Electrochimica Acta 212(2016):390-398.

③Li Tao, et al. Effect of synthesizing temperatures on the microstructure and electrical property of $CaCu_3Ti_4O_{12}$ ceramics prepared by sol-gel process. Journal of Alloys & Compounds 684(2016):315-321.

④Gong Gaoshang, et al. Lead-free relaxor ferroelectric ceramics $Sr_{4+x}Ca_{1-x}BiTi_3Nb_7O_{30}$, with tunable transition temperature. Journal of Materials Science 51.15(2016):7336-7342.

⑤Xue Renzhong, et al. Effect of doping ions on the structural defect and the electrical behavior of $CaCu_3Ti_4O_{12}$ ceramics. Materials Research Bulletin 76(2016):124-132.

⑥Yang Yang, et al. Electronic structure and d x2−y2-wave superconductivity in FeS. Phys.Rev.B 93.10(2016):104514.

⑦Dai Haiyang, et al. Studies on the structural, electrical and magnetic properties of Ce-doped $BiFeO_3$, ceramics. Journal of Alloys & Compounds

672(2016):182-189.
⑧Li Zijiong, et al. Ultrafast growth of carbon nanotubes on graphene for capacitive energy storage. Nanotechnology 27.2(2015):025401.
⑨Li Zijiong, et al. Effect of reaction temperature and time on the electrochemical properties of nickel hydroxide nanosheets. Applied Surface Science 383(2016):268-275.
⑩Wang Lingli, et al. Methanol sensing properties of honeycomb-like SnO_2 grown on silicon nanoporous pillar array. Journal of Alloys & Compounds 682(2016):170-175.
⑪Wang Lingli, et al. Morphology dependent field emission characteristics of ZnS/silicon nanoporous pillar array. Applied Surface Science 384(2016):530-533.
⑫Wang Yongqiang, et al. Phonon density of states of single-crystal $SrFe_2As_2$, across the collapsed phase transition at high pressure. Phys.Rev.B94.1(2016):014516.
⑬Dai Haiyang, et al. Effect of Eu, Ti co-doping on the structural and multiferroic properties of $BiFeO_3$ ceramics. Ceramics International 40.10(2014): 15617-15622.
⑭Li Zijiong, et al. Freestanding polyaniline nanorods grown on graphene for highly capacitive energy storage. Nanotechnology 26.6(2015):065401.
⑮Yang Kun, et al. Sucrose release from agar gels: Effects of dissolution order and the network inhomogeneity. Food Hydrocolloids 43(2015):100-106.
⑯Yang Kun, et al. Sucrose release from agar gels: Correlation with sucrose content and rheology. Food Hydrocolloids 43(2015):132-136.
⑰Li Zijiong, et al. 3D (Three-dimensional) sandwich-structured of ZnO (zinc oxide)/rGO (reduced graphene oxide)/ZnO for high performance supercapacitors. Energy 69.5(2014):266-271.
⑱Li Tao, et al. Effect of defect on the nonlinear and dielectric property of $Ca_{(1-x)}SrxCu_3Ti_4O_{12}$ ceramics synthesized by sol–gel process. Journal of

Alloys & Compounds 599.12(2014):145–149.
⑲Wang Zheng, et al. The influence of agar gel texture on sucrose release. Food Hydrocolloids 36.36(2014):196-203.
⑳Li Haining, et al. In situ crystallization of ionic liquid [Emim][PF_6] from methanol solution under high pressure. Journal of Physical Chemistry B118.29(2014):8684.

2014年以来授权发明专利

①一种高强耐热铸造镁合金及制备方法，ZL 201410787879.9，李子炯。
②镁合金复合表面防护处理设备及方法，ZL 201410343474.6，李子炯。
③一种六方硒化铜纳米片的制备方法，ZL 201410253913.4，李子炯。
④车轮踏面缺陷非接触式动态检测装置及其检测方法，ZL 201110361994.6，张志峰。
⑤一种键合连接的硅基与砷化镓基的太阳电池，ZL 201510619638.8, 程学瑞。

2014年以来所获奖励

①氮化物半导体低维结构的光学性质，河南省教育厅优秀科技成果奖一等奖，豫教[2014]05396，蒋逢春。
②大型工件直径在线光电检测系统，河南省教育厅优秀科技成果奖二等奖，豫教[2015]03407号，张志峰。
③新型功能陶瓷高温超导/巨介电/多铁材料的设计、制备与改性，河南省教育厅优秀科技成果奖一等奖，豫教[2015]03283号，陈镇平。
④高能量存储二维纳米材料制备的关键技术及应用，河南省教育厅优秀科技成果奖一等奖，豫教[2016]01543，李子炯。
⑤棉花质量无损光电检测系统，河南省教育厅优秀科技成果奖二等奖，豫教[2016]01677号，张志峰。
⑥列车轮对故障在线检测系统，河南省教育厅优秀科技成果奖二等奖，豫教[2016]01676号，张志峰。
⑦棉花质量无损检测技术开发及应用，河南省科学技术进步奖三等奖，张志峰。