



STATE KEY LABORATORY OF FIRE SCIENCE
求真务实，开拓创新



学术论文

2000年及之前

2001年

2002年

2003年

2004年

2005年

2006年

2007年

2008年

2009年

2010年






















2011年

首页 > 科学研究 > 学术论文 > 2011年

2011年

- Bao CL, Song L, Guo YQ, Hu Y (2011) Preparation and characterization of flame-retardant polypropylene/alpha-titanium phosphate (nano)composites. *Polymers for Advanced Technologies* 22(7), 1156-1165. [In English]
 论文链接: <http://dx.doi.org/10.1002/pat.1976>
- Cai YB, Gao DW, Wei QF, Gu HL, Zhou S, Huang FL, Song L, Hu YA, Gao WD (2011) Effects of Ferric Chloride on Structure, Surface Morphology and Combustion Property of Electrospun Polyacrylonitrile Composite Nanofibers. *Fibers and Polymers* 12(1), 145-150. [In English]
 论文链接: <http://dx.doi.org/10.1007/s12221-011-0145-x>
- Cai YB, Ke HZ, et al. (2011) Effects of nano-SiO₂ on morphology, thermal energy storage, thermal stability, and combustion properties of electrospun lauric acid/PET ultrafine composite fibers as form-stable phase change materials. *Applied Energy* 88(6), 2106-2112. [In English]
 论文链接: <http://dx.doi.org/10.1016/j.apenergy.2010.12.071>
- Cai YB, Xu XL, Wei QF, Yao XL, Qiao H, Song L, Hu YA, Huang FL, Gao WD (2011) Structure and Morphological Evolvement of Electrospun Polyacrylonitrile/Organic-Modified Fe-Montmorillonite Composite Carbon Nanofibers. *International Journal of Polymer Analysis and Characterization* 16(1), 24-35. [In English]
 论文链接: <http://dx.doi.org/10.1080/1023666x.2011.538828>
- Chen BCB, Lu SX, Li CH, Kang QS, Lecoustre V (2011) Initial fuel temperature effects on burning rate of pool fire. *Journal of Hazardous Materials* 188(1-3), 369-374. [In English]
 论文链接: <http://dx.doi.org/10.1016/j.jhazmat.2011.01.122>
- Chen DN, Jin HF, Wang ZD, Zhang LD, Qi F (2011) Unimolecular Decomposition of Ethyl Hydroperoxide: Ab Initio/Rice-Ramsperger-Kassel-Marcus Theoretical Prediction of Rate Constants. *Journal of Physical Chemistry A* 115(5), 602-611. [In English]
 论文链接: <http://dx.doi.org/10.1021/jp1099305>
- Chen HX, Zhao WT, Liu NA (2011) Thermal Analysis and Decomposition Kinetics of Chinese Forest Peat under Nitrogen and Air Atmospheres. *Energy & Fuels* 25, 797-803. [In English]
 论文链接: <http://dx.doi.org/10.1021/ef101155n>
- Chen LJ, Song L, Lv P, Jie GX, Tai QL, Xing WY, Hu YA (2011) A new intumescent flame retardant containing phosphorus and nitrogen: Preparation, thermal properties and application to UV curable coating. *Progress in Organic Coatings* 70(1), 59-66. [In English]
 论文链接: <http://dx.doi.org/10.1016/j.porgcoat.2010.10.002>
- Chen PP, Wang XS (2011) Experimental study of water drop impact on wood surfaces. *International Journal of Heat and Mass Transfer* 54(17-18), 4143-4147. [In English]
 论文链接: <http://dx.doi.org/10.1016/j.ijheatmasstransfer.2011.05.005>
- Dai JK, Liu NA, Shu LF (2011) Applicability of bi-pseudo component separated-stage model for decomposition of lignocellulosic materials in air at multiple heating rates. *Journal of Thermal Analysis and Calorimetry* 104(3), 983-990. [In English]
 论文链接: <http://dx.doi.org/10.1007/s10973-010-1237-3>
- Fang J, Tu R, Guan JF, Wang JJ, Zhang YM (2011) Influence of low air pressure on combustion characteristics and flame pulsation frequency of pool fires. *Fuel* 90(8), 2760-2766. [In English]
 论文链接: <http://dx.doi.org/10.1016/j.fuel.2011.03.035>
- Guo YQ, Bao CL, Song L, Yuan BH, Hu Y (2011) In Situ Polymerization of Graphene, Graphite Oxide, and Functionalized Graphite Oxide into Epoxy Resin and Comparison Study of On-the-Flame Behavior. *Industrial & Engineering Chemistry Research* 50(13), 7772-7783. [In English]
 论文链接: <http://dx.doi.org/10.1021/ie200152x>
- Han YQ, Chen HX, Liu NA (2011) New incremental isoconversional method for kinetic analysis of solid thermal decomposition. *Journal of Thermal Analysis and Calorimetry* 104(2), 679-683. [In English]
 论文链接: <http://dx.doi.org/10.1007/s10973-010-1029-9>
- Hu LH, Liu SA, Xu Y, Li D (2011) A wind tunnel experimental study on burning rate enhancement behavior of gasoline pool fires by cross air flow. *Combustion and Flame* 158(3), 586-591. [In English]



- 论文链接: <http://dx.doi.org/10.1016/j.combustflame.2010.10.013>
-  Hu LH, Zhu S, Chow WK, Huo R, Chen ZB, Tang F (2011) Vertical Temperature Profile of a Buoyant Plume in an Atrium. *Experimental Heat Transfer* 24(1), 15-33. [In English]
论文链接: <http://dx.doi.org/10.1080/08916152.2010.502050>
-  Hu SA, Hu YA, Song L, Lu HD (2011) Effect of modified organic-inorganic hybrid materials on thermal properties of cotton fabrics. *Journal of Thermal Analysis and Calorimetry* 103(2), 423-427. [In English]
论文链接: <http://dx.doi.org/10.1007/s10973-010-1093-1>
-  Hu XK, He YP, Li ZH, Wang JA (2011) Combustion characteristics of n-heptane at high altitudes. *Proceedings of the Combustion Institute* 33, 2607-2615. [In English]
论文链接: <http://dx.doi.org/10.1016/j.proci.2010.07.025>
-  Huang X, Wang XS, Liao GX (2011) Characterization of an effervescent atomization water mist nozzle and its fire suppression tests. *Proceedings of the Combustion Institute* 33, 2573-2579. [In English]
论文链接: <http://dx.doi.org/10.1016/j.proci.2010.06.001>
-  Huang XJ, Sun JH, Ji J, Zhang Y, Wang QS (2011) Flame spread over the surface of thermal insulation materials in different environments. *Chinese Science Bulletin* 56(15), 1617-1622. [In English]
论文链接: <http://dx.doi.org/10.1007/s11434-010-4187-z>
-  Ji J, Zhong W, Li KY, Shen XB, Zhang Y, Huo R (2011) A simplified calculation method on maximum smoke temperature under the ceiling in subway station fires. *Tunnelling and Underground Space Technology* 26(3), 490-496. [In English]
论文链接: <http://dx.doi.org/10.1016/j.tust.2011.02.001>
-  Kong DP, Lu SX, Feng L, Xie QM (2011) Uncertainty and sensitivity analyses of heat fire detector model based on Monte Carlo simulation. *Journal of Fire Sciences* 29(4), 317-337. [In English]
论文链接: <http://dx.doi.org/10.1177/0734904110396314>
-  Kong QH, Hu Y, Song L, Tang YW (2011) Kinetics of thermo-oxidative degradation of polypropylene/aluminum trihydroxide/organo Fe-montmorillonite nanocomposites. *Journal of Thermal Analysis and Calorimetry* 104(3), 1145-1151. [In English]
论文链接: <http://dx.doi.org/10.1007/s10973-011-1346-7>
-  Lei J, Liu NA, et al. (2011) Experimental research on combustion dynamics of medium-scale fire whirl. *Proceedings of the Combustion Institute* 33, 2407-2415. [In English]
论文链接: <http://dx.doi.org/10.1016/j.proci.2010.06.009>
-  Li SC, Chen Y, Li KY (2011) A mathematical model on adjacent smoke filling involved sprinkler cooling to a smoke layer. *Safety Science* 49(5), 670-678. [In English]
论文链接: <http://dx.doi.org/10.1016/j.ssci.2011.01.001>
-  Li YY, Cai JH, Zhang LD, Yang JZ, Wang ZD, Qi F (2011a) Experimental and modeling investigation on premixed ethylbenzene flames at low pressure. *Proceedings of the Combustion Institute* 33, 617-624. [In English]
论文链接: <http://dx.doi.org/10.1016/j.proci.2010.06.159>
-  Li YY, Cai JH, Zhang LD, Yuan T, Zhang KW, Qi F (2011b) Investigation on chemical structures of premixed toluene flames at low pressure. *Proceedings of the Combustion Institute* 33, 593-600. [In English]
论文链接: <http://dx.doi.org/10.1016/j.proci.2010.05.033>
-  Liu L, Hu YA, Song L, Gu XZ, Ni ZH (2011a) Fabrication of Lamellar Nanostructure from Cage-like Poly-anion Silicate and Surfactant by Template-directed Synthesis. *Journal of Composite Materials* 45(3), 307-319. [In English]
论文链接: <http://dx.doi.org/10.1177/0021998310378903>
-  Liu L, Hu YA, Song L, Ni ZH (2011b) Novel PS Composites by Using Artificial Lamellar Hybrid from Octa(gamma-chloroaminopropyl) POSS and Surfactant. *Polymer-Plastics Technology and Engineering* 50(1), 73-79. [In English]
论文链接: <http://dx.doi.org/10.1080/03602559.2010.512353>
-  Lu HD, Song L, Hu YA (2011) A review on flame retardant technology in China. Part II: flame retardant polymeric nanocomposites and coatings. *Polymers for Advanced Technologies* 22(4), 379-394. [In English]
论文链接: <http://dx.doi.org/10.1002/pat.1891>
-  Lu HD, Wilkie CA (2011a) Fire performance of flame retardant polypropylene and polystyrene composites screened with microscale combustion calorimetry. *Polymers for Advanced Technologies* 22(1), 14-21. [In English]
论文链接: <http://dx.doi.org/10.1002/pat.1697>
-  Lu HD, Wilkie CA (2011b) The influence of alpha-zirconium phosphate on fire performance of EVA and PS composites. *Polymers for Advanced Technologies* 22(7), 1123-1130. [In English]
论文链接: <http://dx.doi.org/10.1002/pat.1891>
-  Lu HD, Wilkie CA, Ding M, Song L (2011a) Flammability performance of poly(vinyl alcohol) nanocomposites with zirconium phosphate and layered silicates. *Polymer Degradation and Stability* 96(7), 1219-1224. [In English]
论文链接: <http://dx.doi.org/10.1016/j.polymdegradstab.2011.04.014>
-  Lu HD, Wilkie CA, Ding M, Song L (2011b) Thermal properties and flammability performance of poly(vinyl alcohol)/alpha-zirconium phosphate nanocomposites. *Polymer Degradation and Stability* 96(5), 885-891. [In English]
论文链接: <http://dx.doi.org/10.1016/j.polymdegradstab.2011.01.036>
-  Lv W, Song WG, Fang ZM (2011) Three-lane changing behaviour simulation using a modified optimal velocity model. *Physica a-Statistical Mechanics and Its Applications* 390(12), 2303-2314. [In English]
论文链接: <http://dx.doi.org/10.1016/j.physa.2011.02.035>
-  Ni XM, Chow WK, Li QW, Tao CF (2011) Experimental Study of New Gas-Solid Composite Particles in Extinguishing Cooking Oil Fires. *Journal of Fire Sciences* 29(2), 152-176. [In English]
论文链接: <http://dx.doi.org/10.1177/0734904110385064>

-  Nie SB, Song L, Bao CL, Qian XD, Guo YQ, Hong NN, Hu Y (2011) Synergistic effects of ferric pyrophosphate (FePP) in intumescent flame-retardant polypropylene. *Polymers for Advanced Technologies* 22(6), 870-876. [In English]
论文链接: <http://dx.doi.org/10.1002/pat.1590>
-  Pan Y, Jiang JC, Wang R, Jiang JJ (2011) Predicting the net heat of combustion of organic compounds from molecular structures based on ant colony optimization. *Journal of Loss Prevention in the Process Industries* 24(1), 85-89. [In English]
论文链接: <http://dx.doi.org/10.1016/j.jlp.2010.11.001>
-  Ping P, Wang QS, Sun JH, Feng XY, Chen CH (2011) Effect of sulfites on the performance of LiBOB/gamma-butyrolactone electrolytes. *Journal of Power Sources* 196(2), 776-783. [In English]
论文链接: <http://dx.doi.org/10.1016/j.jpowsour.2010.07.064>
-  Qian XD, Song L, Hu YA, Yuen RKK, Chen LJ, Guo YQ, Hong NN, Jiang SH (2011) Combustion and Thermal Degradation Mechanism of a Novel Intumescent Flame Retardant for Epoxy Acrylate Containing Phosphorus and Nitrogen. *Industrial & Engineering Chemistry Research* 50(4), 1881-1892. [In English]
论文链接: <http://dx.doi.org/10.1021/ie102196k>
-  Qie JF, Yang LZ, Wang YF, Dai JK, Zhou XD (2011) Experimental Study of the Influences of Orientation and Altitude on Pyrolysis and Ignition of Wood. *Journal of Fire Sciences* 29(3), 243-258. [In English]
论文链接: <http://dx.doi.org/10.1177/0734904110392961>
-  Shan XY, Zhang P, Song L, Hu Y, Lo SM (2011) Compound of Nickel Phosphate with Ni(OH)(PO₄)(²⁻) Layers and Synergistic Application with Intumescent Flame Retardants in Thermoplastic Polyurethane Elastomer. *Industrial & Engineering Chemistry Research* 50(12), 7201-7209. [In English]
论文链接: <http://dx.doi.org/10.1021/ie2001555>
-  Sun XQ, Hu LH, Chow WK, Xu Y, Li F (2011) A theoretical model to predict plume rise in shaft generated by growing compartment fire. *International Journal of Heat and Mass Transfer* 54(4), 910-920. [In English]
论文链接: <http://dx.doi.org/10.1016/j.ijheatmasstransfer.2010.10.012>
-  Tai QL, Chen LJ, Song L, Hu YA, Yuen RKK (2011) Effects of a Phosphorus Compound on the Morphology, Thermal Properties, and Flammability of Polystyrene/MgAl-Layered Double Hydroxide Nanocomposites. *Polymer Composites* 32(2), 168-176. [In English]
论文链接: <http://dx.doi.org/10.1002/pc.21022>
-  Tai QL, Hu Y, Yuen RKK, Song L, Lu HD (2011) Synthesis, structure-property relationships of polyphosphoramides with high char residues. *Journal of Materials Chemistry* 21(18), 6621-6627. [In English]
论文链接: <http://dx.doi.org/10.1039/c0jm03959d>
-  Tang Y, Zhuge JF, Lawrence J, McKee J, Gou JH, Ibeh C, Hu Y (2011) Flame retardancy of carbon nanofibre/intumescent hybrid paper based fibre reinforced polymer composites. *Polymer Degradation and Stability* 96(5), 760-770. [In English]
论文链接: <http://dx.doi.org/10.1016/j.polyimdegradstab.2011.02.013>
-  Telesca L, Song WG (2011) Time-scaling properties of city fires. *Chaos Solitons & Fractals* 44(7), 558-568. [In English]
论文链接: <http://dx.doi.org/10.1016/j.chaos.2011.05.001>
-  Tian W, Song WG, Lu W, Fang ZM (2011) Experiment and analysis on microscopic characteristics of pedestrian movement in building bottleneck. *Science China-Technological Sciences* 54(7), 1730-1736. [In English]
论文链接: <http://dx.doi.org/10.1007/s11431-011-4425-x>
-  Wang BB, Tai QL, Nie SB, Zhou KQ, Tang QB, Hu Y, Song L (2011) Electron Beam Irradiation Cross Linking of Halogen-Free Flame-Retardant Ethylene Vinyl Acetate (EVA) Copolymer by Silica Gel Microencapsulated Ammonium Polyphosphate and Char-Forming Agent. *Industrial & Engineering Chemistry Research* 50(9), 5596-5605. [In English]
论文链接: <http://dx.doi.org/10.1021/ie102394q>
-  Wang CJ, Yan WG, Guo J, Guo CM (2011) Computer Simulation of Blast Wall Protection under Methane-Air Explosion on an Offshore Platform. In 'Intelligent Computing and Information Science, Pt II. Vol. 135.' Ed. R Chen) pp. 321-326. (Springer-Verlag Berlin: Berlin)
-  Wang CJ, Yan WG, Guo J, Guo CM (2011b) Parallel Computation of Three Dimensional Gaseous Detonation Wave. *Information-an International Interdisciplinary Journal* 14(3), 893-898. [In English]

