

## 研究论文

- 弹丸对加筋板穿甲的数值模拟研究 ..... 杨世全, 唐平, 谌勇 (561)  
毁伤增强型破片探索研究 ..... 黄亨建, 黄辉, 阳世清, 杨攀, 张彤, 习彦, 卢校军 (566)  
装药内球形孔隙随加载率变形特性的数值模拟 ..... 魏可臻, 张奇 (570)  
3,5-二硝基吡唑合成研究 ..... 汪营磊, 张志忠, 王伯周, 郑晓东, 周彦水 (574)  
一种改进的 3-氨基-4-硝基呋咱合成方法 ..... 张君启, 张炜, 朱慧, 王春华, 王有为 (577)  
一种重结晶黑索今的冲击波感度研究 ..... 封雪松, 赵省向, 李小平 (581)  
细菌纤维素在炸药环境中的酶解研究 ..... 杜艳芳, 陈彦, 聂福德, 裴重华 (583)  
高降压速率下复合底排药剂瞬变燃烧特性研究 ..... 陆春义, 周彦煌, 余永刚 (587)  
Mg-Al/PTEE 烟火药爆炸性能的研究(英) ..... Bogdan ZYGMUNT (592)  
增能钝感单基药的燃烧特性 ..... 梁勇, 王琼林, 于慧芳, 刘少武, 张远波, 李丽 (597)  
新型起爆药双呋咱硝基酚钾盐的研究 ..... 张裕峰, 盛涤伦, 马凤娥, 朱雅红, 陈利魁, 杨斌 (600)  
关于“试验信息熵” ..... 蔡瑞娇, 柳维旗, 董海平 (604)  
火工品可靠性评估小样本试验设计方法 ..... 董海平, 蔡瑞娇 (608)  
红磷与纳米氧化铝组合烟幕对 10.6 μm 激光的消光系数研究 ..... 王玄玉, 潘功配 (612)  
TNAZ 的第一原理分子力学力场 ..... 王喜军, 赵立峰, 孙淮 (616)  
HMX 热膨胀系数的分子动力学模拟研究 ..... 肖继军, 黄辉, 李金山, 张航, 马秀芳, 肖鹤鸣 (622)  
用定量结构性质关系(QSPR)预测芳香系炸药的密度 ..... 来蔚鹏, 廉鹏, 王伯周, 贾思媛, 张海昊, 薛永强, 庞先勇 (626)  
DNTF 的非等温结晶研究—I. 在 HMX 中的结晶动力学 ..... 周文静, 覃光明, 张皋, 刘子如, 衡淑云, 任晓宁 (629)  
含能材料热感度的概率分布研究 ..... 王鹏, 杜志明 (633)  
基于人工神经网络和混合遗传算法的炸药爆速预测 ..... 马忠亮, 徐方亮, 刘海燕, 张文才 (637)  
氧化呋咱二聚体分子间相互作用的理论计算 ..... 陈天娜, 汤业朋, 宋华杰 (641)  
反相气相色谱法研究端羟基聚丁二烯粘合剂的表面性质 ..... 杜美娜, 罗运军, 杨寅, 刘晶如, 吕勇 (646)  
NEPE 推进剂粘合剂性能的分子模拟研究 ..... 姚维尚, 李倩, 谭惠民 (650)  
HNIW 在硝酸中的转晶技术研究 ..... 金韶华, 杨博, 刘进全, 雷向东, 陈树森 (656)  
HNIW 的热重-质谱(TG-MS)研究 ..... 董林茂, 李晓东, 杨荣杰 (660)  
估算正负离子标准水合焓的一种简易方法 ..... 赵凤起, 胡荣祖, 徐司雨, 高红旭, 仪建华 (664)  
高氯酸碳酰肼锰和硝酸碳酰肼锰的晶格能研究 ..... 郑秋雨, 乔小晶, 杨利, 邵风雷 (666)  
强化 Fenton 法降解含能材料废水的研究(英) ..... 刘作华, 周小霞, 杜军, 刘仁龙, 陶长元 (670)  
变温红外光谱检测火炸药的一些关键技术 ..... 潘清, 郑林 (676)

## 读者·作者·编者

- 《含能材料》2007 年第 3 期被 EI 收录论文(VIII) 2008 年《发射药、烟火剂、火工品研究论文专辑》征稿启事(VIII) 更正(580)  
向作者致谢(596) 《爆破》杂志征订启事(607) 《火力与指挥控制》期刊简介(659) 向审稿人致谢(680) 《含能材料》征订启事(XIV)  
2007 年(第 15 卷)总目次 ..... (IX)

# CHINESE JOURNAL OF ENERGETIC MATERIALS

## CONTENTS Vol. 15 , No. 6 , 2007

Numerical Investigation on Perforation of Projectile Impacting Stiffened Plate .....	YANG Shi-quan, TANG Ping, CHEN Yong (561)
Preliminary Research on Damage Enhanced Fragment .....	HUANG Heng-jian, HUANG Hui , YANG Shi-qing, YANG Pan, ZHANG Tong, XI Yan, LU Xiao-jun (566)
Numerical Simulation on Transformation Characteristic of Global Hole in Charge with Loading Rate .....	WEI Ke-zhen, ZHANG Qi (570)
Synthesis of 3,5-Dinitropyrazole .....	WANG Ying-lei, ZHANG Zhi-zhong, WANG Bo-zhou, ZHENG Xiao-dong, ZHOU Yan-shui (574)
Synthesis of 3-Amino-4-nitrofurazan by an Improved Method .....	ZHANG Jun-qi, ZHANG Wei, ZHU Hui, WANG Chun-hua, WANG You-wei (577)
The Shock Sensitivity of a Recrystallizing RDX .....	FENG Xue-song, ZHAO Sheng-xiang, LI Xiao-ping (581)
Enzymatic Hydrolysis of Bacterial Cellulose Under RDX Circumstance .....	DU Yan-fang, CHEN Yan, NIE Fu-de, PEI Chong-hua (583)
Combustion of Composite Base Bleed Charge Under Rapid Depressurization .....	LU Chun-yi, ZHOU Yan-huang, YU Yong-gang (587)
Explosive Properties of the Mg-Al/PTFE Composition .....	Bogdan ZYGMUNT (592)
Combustion Properties of the Energy-increased Desensitized Single-base Propellant .....	LIANG Yong, WANG Qiong-lin, YU Hui-fang, LIU Shao-wu, ZHANG Yuan-bo, LI Li (597)
New Primary Explosive Bis-furoxano-nitrophenol Potassium Salt .....	ZHANG Yu-feng, SHENG Di-lun, MA Feng-e, ZHU Ya-hong, CHEN Li-kui, YANG Bin (600)
Study on "Test Information Entropy" .....	CAI Rui-jiao, LIU Wei-qi, DONG Hai-ping (604)
New Test Design Method with Small Samples for Reliability Assessment of Initiating Explosive Devices .....	DONG Hai-ping, CAI Rui-jiao (608)
Extinction Coefficient of Red Phosphorus Smoke Combined with Nanometer Alumina to 10.6 $\mu$ m Laser Emission .....	WANG Xuan-yu, PAN Gong-pei (612)
The First Principle Force Field for Energetic Material TNAZ .....	WANG Xi-jun, ZHAO Li-feng, SUN Huai (616)
A MD Simulation Study of the Coefficients of Thermal Expansion for $\beta$ -HMX Crystal .....	XIAO Ji-jun, HUANG Hui, LI Jin-shan, ZHANG Hang, Ma Xiu-fang, XIAO He-ming (622)
Prediction of Density of Aromatic Explosives by Quantitative Structure-property Relationships(QSPR) Method .....	LAI Wei-peng, LIAN Peng,WANG Bo-zhou,JIA Si-yuan, ZHANG Hai-hao,XUE Yong-qiang,PANG Xian-yong (626)
Non-isothermal Crystallization of DNTF: I . Crystallization Kinetics in HMX .....	ZHOU Wen-jing, QIN Guang-ming, ZHANG Gao, LIU Zi-ru, HENG Shu-yun, REN Xiao-ning (629)
Probability Distribution of Thermal Sensitivity of Energetic Materials .....	WANG Peng, DU Zhi-ming (633)
Predicting the Detonating Velocity of Explosives Based on Artificial Neural Network and Hybrid Genetic Algorithm .....	MA Zhong-liang, XU Fang-liang, LIU Hai-yan, ZHANG Wen-cai (637)
Theoretical Study on Intermolecular Interaction of Euroxan Dimers .....	CHEN Tian-na, TANG Ye-peng, SONG Hua-jie (641)
Surface Properties of Hydroxyl Terminated Polybutadiene Determined by Inverse Gas Chromatography .....	DU Mei-na, LUO Yun-jun, YANG Yin, LIU Jing-ru, LÜ Yong (646)
Molecular Simulation on Properties of NEPE Propellant Binders .....	YAO Wei-shang, LI Qian, TAN Hui-min (650)
Crystal Transition of HNIW in Nitrate Acid .....	JIN Shao-hua, YANG Bo, LIU Jin-quan, LEI Xiang-dong, CHEN Shu-sen (656)
Thermal Decomposition of HNIW by TG-MS .....	DONG Lin-mao, LI Xiao-dong, YANG Rong-jie (660)
A Simple Method of Estimating the Standard Hydrous Enthalpy of Cation and Anion .....	ZHAO Feng-qi, HU Rong-zu, XU Si-yu, GAO Hong-xu, YI Jian-hua (664)
The Lattice Energy of [ Mn(CH <sub>2</sub> ) <sub>3</sub> ](NO <sub>3</sub> ) <sub>2</sub> and [ Mn(CH <sub>2</sub> ) <sub>3</sub> ] (ClO <sub>4</sub> ) <sub>2</sub> .....	ZHENG Qiu-yu, QIAO Xiao-jing, YANG Li, SHAO Feng-lei (666)
Enhanced-Fenton Process for Degradation of Wastewater Containing Energetic Compounds .....	LIU Zuo-hua, ZHOU Xiao-xia, DU Jun, LIU Ren-long, TAO Chang-yuan (670)
Some Key Techniques of Measuring Propellants and Explosives by Temperature-dependent FTIR .....	PAN Qing, ZHENG Lin (676)
Annual Cumulative Contents (Vol. 15 ,2007) .....	( IX )