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Progress in the Constitutive Models Including Damage of Energetic Materials

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Abstract: The studies and developments in science community of energetic materials with damage mechanics were introduced from two aspects, which are the macro-mechanics phenomenon and the micro-statistic mechanics. The description viewpoints and application ranges of each model were compared and analyzed. It's necessary to upbuild the multi-scale analysis model, and systematically investigate the damage evolution under different loading modes to establish more reasonable constitutive model of energetic materials.

Key words: solid mechanics; energetic materials; constitutive model; continuum damage mechanics; micro-statistics damage mechanics; multi-scale analysis

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《绿色·高能·钝感弹药专辑》征稿

随着人们环保意识的增强,“绿色”理念已在全球范围内受到重视,高能、低感及绿色环保成为武器弹药发展的新趋势。为此,《含能材料》将于2010年第6期(12月)组织出版《绿色·高能·钝感弹药专辑》,内容涉及新型高能、低感及零(低)污染的新型含能材料的合成、配方、性能测试与表征及相关技术的研究与应用,绿色弹药的发展、洁净硝化等。

欢迎科研工作者来稿,来稿时请注明《绿色·高能·钝感弹药专辑》。