# Publications: Myoung-Gyu Lee

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# International Journal

#### 2008

- **Lee MG**, Lim HJ, Wagoner RH, Adams BL, "Dislocation-based Single Crystal Constitutive Equations", (to be submitted) **Int. J. Plasticity** (IF=4.113)
- Zhuang S, **Lee MG**, Keum YT, Wagoner RH, "Enhancing Implicit Finite Element Sheet Forming Simulation: Improved N-CFS algorithm and Advanced Contact Searching", (to be submitted) **Int. J. Numer. Method Eng.** (IF=1.497)
- Kim J, **Lee MG**, Barlat F., Wagoner RH, Chung K "Plane stress elasto-plastic formulation for sheet metal forming based on the two dimensional strain rate potential of the Srp2004", (to be submitted, Feb. 2008) **Int. J. Plasticity** (IF=4.113)
- Kim JH, **Lee MG**\*, Chung K, Kim SJ, Wagoner RH, "Reverse Effect of Constraint Force on Sidewall Curl after Springback of Tension-Compression Asymmetric Materials", (submitted, Dec. 2007) **Mech. Mater.** (IF=2.106)
- **Lee MG**\*, Kim JH, Chung K, Kim SJ, Wagoner RH, Kim HY, " Analytical Springback Model for AZ31B Magnesium alloy sheet", **Int. J. Plasticity** (in revision) (IF=4.113)
- **Lee MG**, Chung K, Keum YT, Wagoner RH, "A numerical method for rapid estimation of drawbead restraining force based on non-linear, anisotropic constitutive equations", (accepted) **Int. J. of Solids Struct. (IJSS)** (IF=1.529)
- **Lee MG**, Ryou H, Kim C, Chung K, "Constitutive Equations in Crashworthiness", (in press) **Metals and Materials Int.** (IF=1.025).
- **Lee MG\***, Kim SJ, Wagoner RH, Chung K, Kim HY, "Constitutive Modeling of Anisotropic/asymmetric Hardening behavior of Mg alloy sheets: application to sheet springback", (in press) **Int. J. Plasticity** (IF=4.113)
- Kim JH, **Lee MG**\*, Han CS, "Determination of Wrinkling Criteria of Polymer Membrane by Nonlinear Elastic Finite Element Method", **Polymer and Polymer Composites** 16(3) xxx-xxx(2008) (IF=0.361)
- **Lee MG**\*, "Quantitative analysis of upset texture by crystal plasticity finite element analysis", (in press) **Int. J. Mater. Product Technol.(IJMPT)**, (IF=0.291)
- Kim JH, **Lee MG**, Ryou H, Chung K, Youn JR, Kang TJ, "Development of Nonlinear Constitutive Laws for Asymmetric/Anisotropic Glass/Kevlar Fiber Reinforced Composites", **Polymer Composites** 29(2) 216-228 (IF=1.163)

**Lee MG**, Wagoner RH, Lee JK, Chung K, Kim HY, "Constitutive Modeling of Anisotropic/asymmetric Hardening behavior of Mg alloy sheets", **Int. J. Plasticity** 24(4) 545-582 (2008) (IF=4.113)

## <u> 2007</u>

**Lee MG**, Choi JG, Kim HY, Wagoner RH, Lee JK, "Experimental study of Springback in Draw bend test for AZ31B Mg alloy sheets", **Advanced Materials Research** 26-28 389-392 (2007)

In: Proceedings of the Sixth Pacific Rim International Conference on Advanced Materials and Processing (PRICM-6), Jeju, Korea, November 6-9 (2007)

**Lee MG**, Kim D, Chung K, Wagoner RH, "Semi-analytic hybrid method to predict springback in draw bend test", **ASME J. Appl. Mech.** 74 1264-1275 (2007) (IF=0.943)

Ryou H, **Lee MG**, Kim C, Chung K, "Numerical Evaluation of Crashworthiness for Automotive Sheet Alloys", **Key Engineering Materials** 345-345 1537-1540 (2007).

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**Lee MG**, Kim D, Chung K, Wagoner RH, "Springback Prediction Based on Two-Surface Model", **Int. J. Plasticity** 23 1189-1212 (2007) (IF=4.113)

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# <u>2005</u>

Boger RK, Wagoner RH, Barlat F, **Lee MG**, Chung K, "Tension/Compression Testing of Sheet Material", **Int. J. Plasticity** 21(12) 2319-2343 (2005) (IF=4.113)

Chung K, Lee MG, Kim D, Kim C, Wenner ML, Barlat F, "Spring-back Evaluation

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**Lee MG**, Kim D, Chung K, Youn JR, Kang TJ, "Combined Isotropic-Kinematic Law for Orthotropic Fiber-Reinforced Composites", **Polymer and Polymer Composites** 12 (3) 225-234 (2004) (IF=0.361)

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Han CS, **Lee MG**, Chung K, Wagoner RH, "Integration Algorithms for Planar Anisotropic Shells with Isotropic and Kinematic Hardening At Finite Strains," **Comm. Numer. Methods in Eng.** 19 473-490 (2003) (IF=0.513)

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**Lee MG** et al., "The Viscoelastic Bending Stiffness of Fiber-Reinforced Composite Illiazov C-Rings," **Composite Science and Technology** 61 (16) 2491-2500 (2001) (IF=2.027)

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**Lee MG**, Kim SJ, Kim HY, "Springback Prediction by Using Constitute Behavior of Mg Alloy Sheet", **Transactions of Materials Processing (in Korean**, invited) (Dec. 2007)

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**Lee MG**, Lee CJ, Chung K, Kim JK, Kang TJ, "Viscoelastic Bending Behaviors of Unidirectional Fiber Reinforced Composite C-Rings with Asymmetric Material Properties," **Journal of the Korean Society for Composite Materials (in Korean)** 13 (5) 18-30 (2000).

# **Conference Proceedings**

Li L, **Lee MG**, Anderson PM, "A Quantized Crystal Plasticity Finite Element Model for Stress-Strain Response of Nanocrystalline Metals," **MRS Spring Meeting 2008**, San Francisco, CA, March 24-28 (2008).

**Lee MG**, Kim SJ, Han HN, Chung WC, "Application of Transformation Induced Plasticity to Press Quenched Automotive Part," **International Conference on Technology of Plasticity**, **ICTP 2008**, Gyeongju, Korea, September 7-11 (submitted) (2007).

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- Wagoner RH, **Lee MG**, Adams BL, "Multi-Scale Model and Verification of Dislocation/Grain Boundary Interactions", **Proceedings of Plasticity'07**, Alyeska, Alaska, USA, June 2-7 (2007).
- Chung K, Lee MG, Kim D, Kim C, Wenner ML, Wagoner RH, "Application of Two-Surface Plasticity for Spring-back Prediction", Proceedings of Plasticity'07, Alyeska, Alaska, USA, June 2-7 (2007).
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- **Lee MG**, Kim D, Kim C, Wenner ML, Chung K, "Spring-Back Evaluation of Automotive DP-Steel and Aluminum Alloy Sheets Based on Combined Isotropic-Kinematic Hardening Law," **The 12<sup>th</sup> Technical Symposium(AUTOMAT 2003)**; Automotive Materials & Application Technologies for Light weighting
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