

Zonghoon Lee

Position: Assistant Professor

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◆ Selected recent publications (more than 40 publications & 400 citations)

1. K. Kim*, Z. Lee* et al., "Grain Boundary Mapping in Polycrystalline Graphene," ACS NANO, 5(3), pp.2142-2146, 2011. (The Journal Cover of March 2011, Featured on the Perspective of the journal)
2. K.J. Jeon* and Z. Lee*, "Size-dependent interaction of Au nanoparticles and graphene sheet," Chemical Communications, 47, pp.3610-3612, 2011.
3. K.J. Jeon, Z. Lee et al., "Fluorographene: a wide bandgap semiconductor with ultraviolet luminescence," ACS NANO, 5 (2), pp.1042-1046, 2011.
4. F.I. Allen et al., "Chemical mapping of a block copolymer electrolyte by low-loss EFTEM spectrum imaging and principal component analysis," Ultramicroscopy, 111(3), pp.239-244, 2011.
5. K. Erickson et al., "Determination of the local chemical structure of graphene oxide and reduced graphene oxide," Advanced Materials, 22 (40), pp.4467-4472, 2010.
6. J.M. Yuk et al., "Direct fabrication of zero- and one-dimensional metal nanocrystals by thermally assisted electromigration," ACS NANO, 4 (6), pp.2999-3004, 2010. (Featured Highlights on NPG Asia Materials published by Nature publishing group)
7. Z. Lee* et al., "Tensile deformation and fracture mechanism of bulk bimodal ultra-fine grained Al-Mg alloy," Metallurgical and Materials Transactions A, 41A, pp.795-801, 2010. (A featured article on TMS eNews of the month)
8. A. Dato*, Z. Lee* et al., "Clean and highly ordered graphene synthesized in the gas phase," Chemical Communications, pp.6095-6097, 2009. (Google search "real graphene" to find the atomic resolution image of graphene)
9. Z. Lee* et al., "Direct imaging of soft-hard interfaces enabled by graphene," Nano Letters, Vol.9, No.9, pp.3365-3369, 2009. (The Journal Cover of March 2010, Featured on Science & Technology Concentrates News in C&EN magazine)
10. A. Dato et al., "Substrate-free gas-phase synthesis of graphene sheets," Nano Letters, Vol.8, No.7, pp.2012-2016, 2008.

◆ Patents (2 U.S. Patents and 6 Korea Patents)

1. Nanocomposite Films, U.S. Patent No. 7758708 Granted, 2010.
2. Substrate-Free Gas-Phase Synthesis of Graphene Sheets, U.S. Patent Pending, 2011

◆ Activities

Journal Peer Reviewer for more than 14 international journals including Nano Letters, Advanced Materials, ACS NANO, Chem Commun, Journal of Mater Chem etc.

Journal Editorial Board Member: International Journal of Nano Science, Nano Engineering and Nanotechnology

◆ Group Members

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"What is seen was not made out of what was visible" (Hebrew 11:3)