

# Keon Jae Lee, Ph.D

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## Education

Ph.D degree in University of Illinois at Urbana-Champaign, May, 2006.

## Experience

2009-current: **Professor**, Department of Materials Science and Engineering, KAIST  
2018-current: *Young KAST member*, Korea Academy of Science and Technology  
2013-2014: **Visiting Professor**, MGH, Harvard Medical School, Harvard University.  
2012-2015: **Director**, Flexible and Nanobio National Research Lab.

## Research Interests

*Flexible piezoelectric acoustic sensors*  
*Flexible GaN/GaAs microLED for display and biomedical applications*  
*Flexible large scale integration (LSI)*  
*Flexible memory (memristor and phase change memory)*  
*Laser material interactions for flexible electronics*  
*Stretchable healthcare sensors*  
*Self-powered flexible electronic systems*

## Honors and Awards

2017 Prof. Lee won KAIST Fusion Research Award & Outstanding Paper Award from Nano Convergence  
2017 'Keynote Speaker' at APSMR (Hokkaido) & IUPAC (Nanjing)  
2016 'Keynote Speaker' at IUTAM Conference in Hangzhou, China.  
2015-2016 Invited talk at IEDM (Washington 2015) & ISSCC (San Francisco 2016) & Stanford Univ.  
2015-2016 Invited talk at MRS (Spring & Fall 2015), MRS (Spring & Fall 2016) & MRS (Spring 2017)  
2015 Prof. Lee won 'Advanced Materials Scientist Award' from IAAM (Sweden).  
2015 Prof. Lee won '2014 KAIST Top 10 Research Award'  
2015 'Keynote Speaker' at EUROMAT Conference in Poland  
2014 Prof. Lee won Minister's Award from Ministry of Science, ICT and Future Planning  
2014 Cover articles for Advanced Materials, Energy Environ. Sci., Adv. Func. Mater.  
2013 Prof. Lee gave an invited talk at Harvard Medical School & MIT in Boston.  
2012 Flexible battery is highlighted in Nature as 'The Most Viewed Papers in Science'  
2012 Prof. Lee won '2012 Merck Young Scientists Awards'  
2012-2013 Cover feature article for Advanced Materials and Advanced Energy Materials  
2012 National Research Lab. from National Research Foundation of Korea.  
2012 'Keynote Speaker' at International SPIE Conference in San Diego  
2012 'Plenary Speaker' at International CSMNT Conference  
2011 Prof. Lee won 'KAIST 2011 Technology Innovation Award'  
2010 Thin Film Nanogenerator is selected as 'Top 10 Lifestyle Innovation Technology', Donga Science  
2009 George Smith Award for the best paper published in IEEE Elect. Dev. Lett.  
2006 Three dimensional chips are published in Science  
2006 Printed semiconductor technology won "2006 Innovation Award" from Wall Street Journal  
2006 Printed semiconductor technology is licensed to Semprius Inc.

## Publications

~150 patents in the field of flexible and nanoelectronics. More than 60 of these are licensed.  
~90 SCI papers in journal including *Science*, *Nature Materials*, *Nature Comm.*, *Nano Letters*, *Advanced Materials*, *ACS Nano*, *Adv. Energy Mater.*, *Energy Environ. Sci.*, *Adv. Func. Mater.*, *Nano Energy*, *Small* etc.