



## Erica M.K. Davis, Ph.D.

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## Overview

Erica M.K. Davis, Ph.D., focuses her practice on patent prosecution and litigation in the areas of nanotechnology, electrical and computer technology, cleantech, fabrication/manufacturing, internet technologies, and software.

Erica has worked in various capacities in the additive manufacturing field, both as a process engineer and as part of an in-house legal team. She completed her doctoral dissertation in electrical engineering at the University of Texas at Austin and has authored or co-authored over 10 academic journal publications in the field of semiconductor optoelectronics.

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## Additional insights

### Publications

- E.M. Krivoy, S. Rahimi, H.P. Nair, R. Salas, S.J. Maddox, D.J. Ironside, Y. Jiang, G. Kelp, G. Shvets, D. Akinwande, and S.R. Bank, "Growth and characterization of single crystal rocksalt LaAs using LuAs barrier layers," *Appl. Phys. Lett.*, Vol. 101, No. 22, Pp. 221908 (November 2012)
- E.M. Krivoy, H.P. Nair, A.M. Crook, S. Rahimi, S.J. Maddox, R. Salas, D.A. Ferrer, V.D. Dasika, D. Akinwande, and S.R. Bank, "Growth and characterization of LuAs films and nanostructures," *Appl. Phys. Lett.*, Vol. 101, No. 14, Pp. 141910 (October 2012)
- E.M. Krivoy, A. Vasudev, S. Rahimi, R. Synowicki, H.P. Nair, D.J. Ironside, G. Kelp, G. Shvets, D. Akinwande, M.L. Lee, M. Brongersma and S.R. Bank, "Rare-earth monpnictide alloys for tunable, epitaxial semimetallic films," in preparation for *Nano Lett* (July 2015)
- V.D. Dasika, E.M. Krivoy, H.P. Nair, K.W. Park, E.T. Yu, and S.R. Bank, "InAs quantum dot size and density control using Bi as a surfactant," *Appl. Phys. Lett.*, Vol. 105, No. 25, Pp. 253104 (December 2014)
- K.W. Park, E.M. Krivoy, H.P. Nair, S.R. Bank, and E.T. Yu, "Cross-sectional scanning thermal microscopy of ErAs/GaAs superlattices grown by molecular beam epitaxy," *Nanotechnology*, Vol. 26, No. 26, Pp. 265701 (July 2015)
- S. Rahimi, E.M. Krivoy, J. Lee, M.E. Michael, S.R. Bank and D. Akinwande, "Temperature and thickness dependence of electrical resistivity of La(x)Lu(1-x)As," *AIP Advances*, Vol. 3, 082102 (August 2013)
- R. Salas, E. M. Krivoy, A. M. Crook, H. P. Nair and S. R. Bank. *Proceedings of SPIE*. 8106, 81060P (2011)
- B. Wang, E. Hinds, and E. Krivoy. *Proceedings of SPIE*. 7461, 746110 (2009)

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## Services

Patent

Patent Litigation

## Industries

Electrical & Computer Technology

Software & Internet

Cleantech

Manufacturing

## Admissions

U.S. Patent and Trademark Office (2019)

## Languages

English

Spanish

## Education

Ph.D., Electrical Engineering, University of Texas at Austin (2013) Dissertation entitled "Rare-earth monopnictide alloys for tunable, epitaxial metals"

M.S., Electrical Engineering, University of Texas at Austin (2010)

B.S., Physics, Carnegie Mellon University (2007) with minor in Hispanic Studies