CURRICULUM VITAE

Dr. Luke Nyakiti, M.S. PhD.

WORK CONTACT DATA

Texas A & M University,

P. O Box 1675 Galveston, Texas 77553

PMEC Building 3027 Room 214

Tel. Office: 1(409)740-4505

Fax: 1(409)741-7153

Email: nyakitil “at” tamu.edu; nyakitil “at” tamug.edu

EDUCATION

Post-Doc.	Mechanical Engineering, Texas Tech University, Lubbock Texas, 2009
PhD.	Mechanical Engineering and Materials Science, Texas Tech University, 2008
M.Sc.	Solid State Physics, Wichita State University, 2004
B.Sc. Ed.	Mathematics and Physics, Egerton University, 1998

ACADEMIC APPOINTMENTS AND EXPERIENCE

08/2013 – *Present*	**Assistant Professor** (100% FT), Department of Marine Engineering Technology (Primary), Texas A&M University- Galveston Campus, P.O Box 1675, Texas 77543-1675
02/2014 – *Present*	**Assistant Professor** (Courtesy Appointment with 0% FT) and **Graduate Faculty**, Department of Material Science and Engineering (Affiliated), Dwight Look College of Engineering, Texas A&M University, College Station, TX 77843-3003
06/2008 – 12/2008	**Lecturer**, (100% FT) Department of Material and Mechanical Engineering, Texas Tech University, Lubbock Texas 77409
08/2002 – 12/2014	**Graduate Teaching Assistant**, Wichita State University

PROFESSIONAL PREPARATION AND EXPERIENCE

01/2010 – 07/2013	**Postdoctoral Research Fellowship**, Power Electronics Division, U.S. Naval Research Laboratory
2009	**Postdoctoral Research Fellow**, Mechanical Engineering, Texas Tech University Lubbock, Texas
01/2005 – 05/2008:	**Graduate Research Assistant**; Department of Material and Mechanical Engineering, Texas Tech University, Lubbock Texas 77409

NEW COURSE DEVELOPED AND/OR IMPROVED

MSEN 685	Fundamentals of Transmission Electron Microscopy – Developed new Graduate Course
MASE 213	Properties of Engineered Materials – Modified by adding New content and increasing credit hours from 1 to 3 and routing it through the course change approval

OCEN 213	Properties of Engineered Materials - Modified by adding New content to meet new ABET outcome requirement for OCEN department
MARE 309	Marine Construction Materials - Introduced the New Laboratory experimental Modules
MARE 209	Mechanics of Materials (Improved Experiments and Introduced New experiment modules)

PUBLICATIONS

Book Chapters Publications

1. Gaskill, D. K. and **L. O. Nyakiti**, "Formation of Epitaxial Graphene" in Graphene Nanoelectronics - From material to Circuits; (ed) Raghu Murali, Springer, page 137 – 165, Springer; 2012 edition (April 30, 2012), ISBN-10: 1461405475, ISBN-13: 978-1461405474 [Citation 2]
2. "Properties of Materials and Mechanics: Laboratory Experiments" Materials Science Laboratory Manual, by Luke Nyakiti

Refereed Journals Articles Published Since Joining TAMUG (2013 – 2018)

1. Myers-Ward, R., R. Stahlbush, **L. Nyakiti**, Anindya Nath, P Wu, C. Eddy Jr., DK Gaskill, "Converting BPDs to TEDs in a Thin Buffer Layer", Nature Scientific Reports, accepted waiting minor corrections
2. Domtau, D.L., J. Simiyu, E.O. Ayieta, **L.O. Nyakiti**, B. Muthoka, J.M. Mwabora, "Effects of TiO_2 Thickness and Electrolyte Concentration on Photovoltaic Performance of Dye-Sensitized Solar Cell", Surface Review and Letters, 24 (05), 1750065 (2017) [*Citation 1*] (*Performed annealing and Characterization TiO_2 and manuscript write up*)
3. Cai, X., A.B. Sushkov, M.M. Jadidi, **L.O. Nyakiti**, R.L. Myers-Ward, D.K. Gaskill, T.E. Murphy, M.S. Fuhrer, H.D. Drew, Nano Letters 15 (7), 4295-4302 (2015). "Plasmon-Enhanced Terahertz Photodetection in Graphene", [*Citations 50*] (*performed growth, electronic carrier mobility and concentration of Epitaxial graphene and metal contacts using standard photolithography technique, wrote manuscript and addressed reviewers' questions*)
4. Robinson, Z.R, G.G. Jernigan, M. Currie, J.K Hite, K.M. Bussmann, **L.O. Nyakiti**, N.Y. Garces, A. Nath, M.V. Rao, V.D. Wheeler, R.L. Myers-Ward, J.A. Wollmershauser, B.N. Feigelson, C.R. Eddy, D.K. Gaskill "Challenges to graphene growth on SiC (000-1): Substrate effects, hydrogen etching and growth ambient" Carbon, 81, 73-82 (2015) [*Citation 10*] *performed graphene growth, Epitaxial graphene and metal contacts using standard photolithography technique, wrote manuscript and addressed reviewers' questions*
5. Robinson, Z.R., G.G. Jernigan, K.M. Bussmann, **L.O. Nyakiti**, N.Y. Garces, A. Nath, V.D. Wheeler, R.L. Myers-Ward, D.K. Gaskill, C.R. Eddy, "Graphene Growth on SiC (000-1): Optimization of Surface Preparation and Growth Conditions", International Society for Optics and Photonics, In Proceedings of Carbon Nanotubes, Graphene, and Emerging 2D Materials for Electronic and Photonic Devices VIII, 95520Y, San Diego, CA, USA, 16 September 2015. [*Citation 2*] [*performed graphene growth and AFM analysis and contributed in writing the manuscript]*
6. Giusca, C.E., V. Panchal, M. Munz, V.D. Wheeler**, L.O. Nyakiti**, R.L. Myers-Ward, D.K. Gaskill, O. Kazakova, "Water Affinity to Epitaxial Graphene: The Impact of Layer Thickness", Advanced Materials Interfaces 2, 1500252 (2015). [*Citations 19*] [*perform graphene growth and data analysis*]
7. Hwang, W.S., P. Zhao, K. Tahy, **L.O. Nyakiti**, V.D. Wheeler, R.L. Myers-Ward, C.R. Eddy Jr,

D.K. Gaskill, J.A. Robinson, W. Haensch, H.G. Xing, A. Seabaugh, D. Jena, "Graphene nanoribbon field-effect transistors on wafer-scale epitaxial graphene on SiC substrates", Applied Physics Letters 3, 011101 (2015). [*Citation 42*] (*conceived the experimental idea and design and graphene growth*)

8. Cai, X., A.B. Sushkov, R.J. Suess, M.M. Jadidi, G.S. Jenkins, **L.O. Nyaki**ti, R.L. Myers-Ward, S. Li, J. Yan, D.K. Gaskill, T.E. Murphy, H.D. Drew & M.S. Fuhrer, "Sensitive room-temperature terahertz detection via the photothermoelectric effect in graphene", **Nature Nanotechnology** 9, 814–819 (2014). [*impact factor 36.64*] [*Citation 208*] (*Synthesized high electronic quality of epitaxial graphene and all authors contriubuted equally to the discussion and writing of the manuscript*)
9. Tadjer, M.J., T.J. Anderson, R.L. Myers-Ward, V.D. Wheeler, **L.O. Nyakiti**, Z. Robinson, C.R. Eddy Jr, D.K. Gaskill, A.D. Koehler, K.D. Hobart, F.J. Kub, "Step edge influence on barrier height and contact area in vertical heterojunctions between epitaxial graphene and n-type 4H-SiC", Applied Physics Letters 104, (7) 073508 (2014) [*Citation 5*] (*developed growth optimization and hall carrier mobility measurements*)
10. Hernández, S.C., V.D. Wheeler, M.S. Osofsky, G.G. Jernigan, V.K. Nagareddy, A. Nath, E.H. Lock, **L.O. Nyakiti**, R.L. Myers-Ward, K. Sridhara, A.B. Horsfall, C.R. Eddy Jr, D.K. Gaskill, S.G. Walton, "Plasma-based chemical modification of epitaxial graphene with oxygen functionalities", Surface and Coatings Technology 241, 8 (2014) [*Citation 15*] (synthesized characterized and analyzed high quality EG on SiC and wrote part of the manuscript)
11. Neek-Amal, M., P. Xu, D. Qi, P.M. Thibado, **L.O. Nyakiti**, V.D. Wheeler, R.L. Myers-Ward, C.R. Eddy Jr, D.K. Gaskill, F.M. Peeters, "Membrane amplitude and triaxial stress in twisted bilayer graphene deciphered using first-principles directed elasticity theory and scanning tunneling microscopy", Phys. Rev. B 90, (6) 064101 (2014) [*Citation 6*]
12. Suess, R.J., X. Cai, M.M. Jadidi, A.B. Sushkov, G.S. Jenkins, J.Yan, **L.O. Nyakiti**, R.L. Myers-Ward, D.K. Gaskill, T.E. Murphy, H.D. Drew, and M.S. Fuhrer, "Characterization of Fast Temporal Photoresponse in a Broadband Graphene Photodetector," " in CLEO: 2014, OSA Technical Digest (online) (Optical Society of America, 2014), paper FTu2B.3 ISBN 9781557529992
13. Myers-Ward, R.L., N.A. Mahadik, V.D. Wheeler, **L.O. Nyakiti**, R.E. Stahlbush, E.A. Imhoff, K.D. Hobart, C.R. Eddy Jr., D.K. Gaskill, "Spontaneous Conversion of Basal Plane Dislocations in 4° Off-Axis 4H–SiC Epitaxial Layers", Crystal Growth and Design 14 (11) 5331 (2014) [*Citation 3*]
14. Xu, P., D. Qi, J.K. Schoelz, J. Thompson, P.M. Thibado, V.D. Wheeler, **L.O. Nyakiti**, R.L. Myers-Ward, C.R. Eddy, D.K. Gaskill, M. Neek-Amal, F.M. Peeters, "Multilayer graphene, Moiré patterns, grain "boundaries and defects identified by scanning tunneling microscopy on the m-plane, non-polar surface of SiC", Carbon 80, 75 (2014) [*Citation 13*]
15. Hwang, S.W., K. Tahy, P. Zhao, **L.O Nyakiti**, V.D Wheeler, R.L Myers-Ward, C.R Eddy Jr, D.K. Gaskill, H.G. Xing, A. Seabaugh, D. Jena, "Electronic transport properties of top-gated epitaxial-graphene nanoribbon field-effect transistors on SiC wafers", Journal of Vacuum Science & Technology B 32, (1) 012202 (2014) [*Citation 3*]

Refereed Journals: (*Experiments Conceived and/or data collected Prior to Joining TAMUG. Data Analysis and Manuscript Write-up concluded at TAMUG*)

16. Hwang, W.S., K. Tahy, P. Zhao, L.O. Nyakiti, V.D. Wheeler, R.L. Myers-Ward, C.R. Eddy Jr, D.K. Gaskill, H.G. Xing, A. Seabaugh, "Transportation properties of top-gated epi-graphene nanoribbon field-effect transistors on SiC wafer", 2013 arXiv.org https://arxiv.org/pdf/1310.6823

17. Myers-Ward, R., D.K. Gaskill, R.S. Stahlbush, N.A. Mahadik, V. Wheeler, **L.O. Nyakiti**, C.R. Eddy, "Managing basal plane dislocations in SiC: perspective and prospects", ECS Transactions, 50, 3, 103-108 (2013) [*Citation 5*]
18. Cai, X., A.B. Sushkov, R.J. Suess, M.M. Jadidi, G.S. Jenkins, **L.O. Nyakiti**, R.L. Myers-Ward, J. Yan, D.K. Gaskill, T.E. Murphy, H.D. Drew, M.S. Fuhrer, "Sensitive room-temperature terahertz detection via photothermoelectric effect in graphene", arXiv preprint arXiv:1305.3297 (2013)
19. Emery, J.D., B. Detlefs, H.J. Karmel, **L.O. Nyakiti**, D.K. Gaskill, M.C. Hersam, J. Zegenhagen, M.J. Bedzyk, "Chemically-Resolved Interface Structure of Epitaxial Graphene on SiC (0001)", Physical Review Letters **111,** 215501 (2013) [*Citation 44*]
20. Abadier, M., R.L. Myers-Ward, N.A. Mahadik, R.E. Stahlbush, V.D. Wheeler, **L.O. Nyakiti**, C.R. Eddy, Jr., D.K. Gaskill, H. Song, T.S. Sudarshan, Y.N. Picard, M. Skowronski, "Nucleation of In-grown Stacking Faults and Dislocation Half-loops in 4H-SiC Epitaxy", Journal of Applied Physics 114, 123502 (2013) DOI: 10.1063/1.4821242, [*Citation 6*]
21. Nepal, N., N.A. Mahadik, **L.O. Nyakiti**, S.B. Qadri, M.J. Mehl, J.K. Hite, C.R. Eddy, Jr., "Epitaxial Growth of Cubic and Hexagonal InN Thin Films via Plasma-Assisted Atomic Layer Epitaxy**"**, Crystal Growth & Design **13** (4), 1485–1490 (2013)
22. Moon, J.S., H.-C. Seo, M. Antcliffe, D. Le, C. McGuire, A. Schmitz, **L.O. Nyakiti**, D.K. Gaskill, P.M. Campbell, K.M. Lee, P. Asbeck, "Graphene FETs for Zero-Bias Linear Resistive FET Mixers", IEEE Electron Device Letters **34**, (3), 465 (2013) [*Citation 52*]
23. Currie, M., T. Anderson, V. Wheeler, **L.O. Nyakiti**, N. Garces, R.L. Myers-Ward, C.R. Eddy, Jr. F.J. Kub, D.K. Gaskill, "Mode-locked 2-μm wavelength fiber laser using a graphene-saturable absorber", Optical Engineering **57** (7) 076101 (2013) [*Citation 8*]

Refereed Journals for work done before Joining Texas A&M University (Before 2013**)**

24. Xu, P., M.L. Ackerman, S.D. Barber, J.K. Schoelz, D. Qi, P.M. Thibado, V.D. Wheeler**, L.O. Nyakiti**, R.L. Myers-Ward, C.R. Eddy, Jr., D.K. Gaskill "Graphene manipulation on 4H-SiC(0001) using scanning tunneling microscopy, Japanese Journal of Applied Physics **52**, 035104 (2013). [*Citation 7*]
25. Nagareddy, V.K., H.K. Chan, S.C. Hernández, V.D. Wheeler, R.L. Myers-Ward, **L.O. Nyakiti,** C.R. Eddy, Jr., S.G. Walton, J.P. Goss, N.G. Wright, D.K. Gaskill, A.B. Horsfall, "Detection of polar chemical vapors using epitaxial graphene grown on SiC (0001)", Appl. Phys. Lett. **102**, 173103 (2013) [*Citation 7*]
26. Xu, P., M.L. Ackerman, S.D. Barber, J.K. Schoelz, P.M. Thibado, V.D. Wheeler, **L.O. Nyakiti**, R.L. Myers-Ward, C.R. Eddy Jr, D.K. Gaskill, "Competing scanning tunneling microscope tip-interlayer interactions for twisted multilayer graphene on the a-plane SiC surface", Surface Science 617, 113-117 (2013) [*Citation 7*]
27. Xu, P., S.D. Barber, J.K. Schoelz, M.L. Ackerman, D. Qi, P.M. Thibado, V.D. Wheeler, **L.O. Nyakiti**, R.L. Myers-Ward, C.R. Eddy Jr, D.K. Gaskill, "Atomic-scale movement induced in nanoridges by scanning tunneling microscopy on epitaxial graphene grown on 4H-SiC (0001)", Journal of Vacuum Science & Technology B 31, (4) 04D101 (2013)
28. Nepal, N., V.D. Wheeler, T.J. Anderson, F.J. Kub, M.A. Maestro, R.L. Myers-Ward, S.B. Qadri, J.A. Freitas, S.C. Hernandez, **L.O. Nyakiti**, S.G. Walton, K. Gaskill, C.R. Eddy, Jr. "Epitaxial growth of III-Nitride/graphene Heterostructures for Electronic Devices", Appl. Phys. Express **6**, 061003 (2013) [*Citation 31*]

29. Moon, J.S., H.-C. Seo, F. Stratan, M. Antcliffe, A. Schmitz, R.S. Ross, A.A. Kiselev, V.D. Wheeler, L.O. Nyakiti, D.K. Gaskill, L. Kang-Mu, P.M. Asbeck, "Lateral Graphene Heterostructure Field-Effect Transistor", Electron Device Letters, IEEE 34, (9) ,1190–1192,(2013) DOI: 10.1109/LED.2013.2270368 [*Citation 43*]
30. **Nagareddy**, **V.K.**, S.C. Hernández, V.D. Wheeler, **L.O. Nyakiti**, R.L. Myers-Ward, C.R. Eddy, J. P. Goss, N.G. Wright, S.G. Walton, D.K. Gaskill, A.B. Horsfall, "High Temperature Stability of Oxygen Functionalized Epitaxial Graphene/Metal Contact Interfaces", Materials Science Forum 740 – 742, 145-148 (2013)
31. Kühne, P.; A. Boosalis, C. Herzinger, **L. Nyakiti,** V. Wheeler, R. Myers-Ward, C. Eddy, D. Gaskill, M. Schubert, T. Hofmann, "Optical Hall effect measurement of coupled phonon mode-Landau Level transitions in epitaxial Graphene on silicon carbide ",MRS Proceedings, Cambridge University Press: pp mrsf12-1505-w07-44, 2013 [*Citation 1*]
32. Nagareddy, V. K., H.K. Chan, S.C. Hernández, V.D. Wheeler, **L.O. Nyakiti**, R.L. Myers-Ward, C.R. Eddy, Jr, J.P. Goss, N.G. Wright, S.G. Walton, D.K. Gaskill, A.B. Horsfall, "Improved Chemical Detection and Ultra-Fast Recovery Using Oxygen Functionalized Epitaxial Graphene Sensors", IEEE Sensors Journal**13**, (8), 2810 (2013) [Citation 5]
33. Anderson, T.J., K.D. Hobart, **L.O. Nyakiti**, V.D. Wheeler, R.L. Myers-Ward, J.D. Caldwell, F.J. Bezares, D.K. Gaskill, C.R. Eddy, F.J. Kub, G.G. Jernigan, M.J. Tadjer, E.A. Imhoff, "Electrical Characterization of the Graphene-SiC Heterojunction", Materials Science Forum **717 - 720**, 641-644 (2012)
34. Moon, J.S., H.C. Seo, M. Antcliffe, S. Lin, C. McGuire, D. Le, **L.O**. **Nyakiti,** D.K. Gaskill, P.M Campbell, K.M. Lee, P. Asbeck, "Graphene FET-Based Zero-Bias RF to Millimeter-Wave Detection ", IEEE Electr Device Letters 2012, 33 (10), 1357-1359. [*Citation 35*]
35. **Nyakiti, L.O.**, V.D. Wheeler, N.Y. Garces, R.L. Myers-Ward, C.R. Eddy, Jr., and D.K. Gaskill, Special issue, MRS Bulletin Volume **37**, December 2012 "Enabling Graphene based Technologies: Towards Wafer Scale Production of Epitaxial Graphene", [*Citation 41*]
36. **L.O. Nyakiti**, R.G. Lee, Z. Gu, J.H. Edgar, J. Chaudhuri, "Polarity determination of rough and smooth surface grains in AlN crystals", Cryst. Res. Technol. **47 (**11), 1134–1139 (2012) [*Citation 2*]
37. Anderson, T.J., K.D. Hobart, **L.O. Nyakiti**, V.D. Wheeler, R.L. Myers-Ward, J.D. Caldwell, F.J. Bezares, D.K. Gaskill, C.R. Eddy, Jr, F.J. Kub, G.G. Jernigan, M.J. Tadjer, and E.A. Imhoff, "Investigation of the Epitaxial Graphene/p-SiC Heterojunction", IEEE Electron Device letters **33**, 11, 2012 [Citation 12]
38. Walton, S.G., S.C. Hernández, M. Baraket, V.D. Wheeler, L.O. Nyakiti, R.L. Myers-Ward, C.R. Eddy, D.K. Gaskill, "Plasma-based chemical modification of epitaxial graphene", Materials Science Forum 717, 657-660 (2012) [*Citation 8*]
39. Imhoff, E.A., K.D. Hobart, F.J. Kub, M.G. Ancona, R.L. Myers-Ward, N.Y. Garces, V.D. Wheeler, L.O. Nyakiti, C.R. Eddy, D.K. Gaskill, "Positive temperature coefficient SiC PiN diodes", Materials Science Forum **717**, 981-984 (2012) [*Citation 5*]
40. Tadjer, M.J., T.J. Anderson, K.D. Hobart, **L.O. Nyakiti,** V.D. Wheeler, R.L. Myers-Ward, D.K. Gaskill, C.R. Eddy, Jr., F.J. Kub, F. Calle, "Vertical conduction mechanism of the epitaxial graphene/n-type 4H-SiC heterojunction at cryogenic temperatures", Applied Physics Letters **100**, 193506 (2012). [*Citation 10*]
41. **Nyakiti, L.O.**, R.L. Myers-Ward, V.D. Wheeler, E.A. Imhoff, F.J. Bezares, H. Chun, J.D. Caldwell, A.L. Friedman, B.R. Matis, J.W. Baldwin, P.M. Campbell, J.C. Culbertson, C.R.

Eddy, G.G. Jernigan, D.K. Gaskill, "Bilayer Graphene Grown on 4H-SiC (0001) Step-Free Mesas", Nano letters **12** (4), 1749–1756 (2012) [*Citation 58*]

42. Wheeler, V., N. Garces, **L. Nyakiti**, R. Myers-Ward, G. Jernigan, J. Culbertson, C. Eddy Jr., D. K. Gaskill, "Fluorine functionalization of epitaxial graphene for uniform deposition of thin high-κ dielectrics", Carbon, **50**, 6, 2307, 2012 [*Citation 65*]
43. Hwang, W.S., K. Tahy, **L.O. Nyakiti**, V.D. Wheeler, R.L. Myers-Ward, C.R. Eddy, Jr., D.K. Gaskill, H.G. Xing, A. Seabaugh, D. Jena, "Fabrication of top-gated epitaxial graphene nanoribbon FETs using hydrogen-silsesquioxane", J. Vac. Sci. Technol. B, **30**, 3, 03D104 - 03D104-4, 2012 [*Citation 17*]
44. Frye, C.D., J.H. Edgar, Y. Zhang, K. Cooper, **L.O. Nyakiti** and D.K. Gaskill "Synthesis of Icosahedral Boron Arsenide Nanowires for Betavoltaic Applications", (2012). MRS Proceedings, 1439, pp 69-75 doi:10.1557/opl.2012.1156
45. Jernigan, G.G., T.J. Anderson, J.T. Robinson, J.D. Caldwell, J.C. Culbertson, M.G. Ancona, V.D. Wheeler, **L.O. Nyakiti**, R. Myers-Ward, A.L. Davidson, A.L. Friedman, P.M. Campbell, D.K. Gaskill, "Bilayer Graphene by Bonding CVD Graphene to Epitaxial Graphene", Journal of Vacuum Science and Technology B, **30** (3) 03D110 (2012) [*Citation 12*]
46. Nagareddy, V., J. Goss, N. Wright, A. Horsfall, S. Hernández, V. Wheeler, **L**. **Nyakiti,** R. Myers-Ward, C. Eddy, S. Walton, "Oxygen functionalised epitaxial graphene sensors for enhanced polar organic chemical vapour detection,", 2012 IEEE Sensors, IEEE: 2012; pp 1-4. [*Citation 2*]
47. Gaskill, D.K., J.K. Hite, J.C. Culbertson, G.G. Jernigan, J.L. Tedescso, **L.O. Nyakiti**, V.D. Wheeler, R.L. Myers-Ward, N.Y. Garces, C.R. Eddy, Jr., "Observations on C-face SiC Graphene Growth in Argon", Materials Science Forum **679-680**, 789-792 (2011) [*Citation 1*]
48. Jankowski, A.F., **L.O**.**Nyakiti,** A.H.Tanvir, R.T. Humphrey, "High Strain-rate Scratch Testing of Nanoscale Materials" The Twenty-first International Offshore and Polar Engineering Conference, International Society of Offshore and Polar Engineers: ISOPE-I-11-407, 2011 [*Citation 1*]
49. Chung, S., V. Wheeler, R.L Myers-Ward, **L.O Nyakiti,** C.R. Eddy, D.K. Gaskill, M. Skowronski, Y.N. Picard, "Secondary electron dopant contrast imaging of compound semiconductor junctions", Journal of Applied Physics **110** (1), 014902 (2011) [*Citation 7*]
50. Myers-Ward, R.L., **L.O. Nyakiti,** J.K. Hite, O.J. Glembocki, F.J. Bezares, J.D. Caldwell, E.A. Imhoff, K.D. Hobart, J.C. Culbertson, Y.N. Picard, V.D. Wheeler, C.R. Eddy, D.K. Gaskill, "Growth of 4H- and 3C-SiC Epitaxial Layers on 4H-SiC Step-Free Mesas" Materials Science Forum **679**, 119-122 (2011) [*Citation 1*]
51. **Nyakiti, L.**, J. Chaudhuri, Z. Gu, J.H. Edgar, "Transmission Electron Microscopy study of defects in AlN crystals with rough and smooth surface grains", Journal of Crystal Growth **312**, 3479 (2010) [*Citation 4*]
52. Jankowski, A.F., and **L.O. Nyakiti**, "Anomalies in Hall-Petch Strengthening for Nanocrystalline Au-Cu Alloys Below 10 nm Grain Size", Surface and Coatings Technology 205 1398 (2010) [Citation 5]
53. **Nyakiti, L.O.**, A. Jankowski, "Characterization of strain-rate sensitivity and grain boundary structure in nanocrystalline gold-copper alloys", Metallurgical and Materials Transactions A **41**, 838 (2010) [*Citation 19*]
54. Lee, R.G., **L. Nyakiti**, A. Idesman, J. Chaudhuri, "Modeling of the effects of different substrate materials on the residual thermal stresses in the aluminum nitride crystal grown by sublimation", Journal of Applied Physics **105**, 033521 (2009) [Citation 1]

55. **Nyakiti, L.O.**, A. Jankowski, J. Chaudhuri, "High –Resolution Electron Microscopy Characterization of nanocrystalline Grain Boundaries in Gold – Copper Alloys", Thin film Solids **517**, 1182 (2008) [*Citation 9*]
56. Aurongzeb, D., D.Y. Song, G. Kipshidze, B. Yavich, **L. Nyakiti**, R. Lee, J. Chaudhuri, H. Temkin and M. Holtz, "Growth of GaN Nanowires on Epitaxial GaN", Journal of Electronic. Materials, **37**, 8, 1076 (2008) [*Citation 10*]
57. Edgar, J.H., L. Du, **L. Nyakiti**, and J. Chaudhuri, "Native oxide and hydroxide and their implications for bulk AlN crystal growth", Journal of Crystal Growth **310**, 17, 4002– 4006 (2008) [*Citation 23*]
58. Chaudhuri, J., R.G. Lee, **L.O. Nyakiti**, Z. Gu, J.H. Edgar, P. Li, "Thermal oxidation of single crystal aluminum nitride – a high resolution transmission electron microscopy study", Materials Lett. **62**, 16, 2465-2468 (2008) [*Citation 5*]
59. Chaudhuri, J., R.G. Lee, **L. Nyakiti**, J. Armstrong, Z. Gu, J.H. Edgar, and J.G. Wen, "Transmission electron microscopy study of defect-selective etched (010) ScN crystals", Mater. Lett. 62 27 (2008) [*Citation 1*]
60. Chaudhuri, J., **L. Nyakiti**, R.G. Lee, Z. Gu, J.H. Edgar, J.G. Wen, "Thermal oxidation of single crystalline aluminum nitride", J. Material Characterization **58**, 672 (2007)
61. Lee, R.G., A. Idesman, **L. Nyakiti**, J. Chaudhuri, "Modeling of residual thermal stresses for aluminum nitride crystal growth by sublimation", Journal of Applied Physics **102**, 6, 063525 (2007) [*Citation 6*]
62. Chaudhuri, J., **L. Nyakiti**, R.G. Lee, Y. Ma, P. Li, Q.L. Cui, L.H. Shen, "Molybdenum Nitride nanoparticles - High-Resolution Transmission Electron Microscopy study", Journal of Materials Letters.61 26,4763 (2007) [*Citation 5*]
63. Gu, Z., J.H. Edgar, D.W. Coffey, J. Chaudhuri, **L. Nyakiti**, R.G. Lee, and J.G. Wen, "Defect selective etching of scandium nitride crystals", Journal of Crystal Growth, 293, 2, 242 (2006) [*Citation 8*]
64. Edgar, J., Z. Gu, K. Taggart, J. Chaudhuri, L. Nyakiti, R. Lee, R. Witt, "Oxidation of Aluminum Nitride for Defect Characterization", In MRS Proceedings, Cambridge University Press: 2006; pp 0892-FF21-02. [*Citation 1*]
65. Chaudhuri, J., **L.O. Nyakiti**, P. Lu, J.H. Edgar, P. Li, "Transmission electron microscopy study of interface region of AlN/6H-SiC", MRS Proceedings, 1040, 1040-Q10-05 (2007), doi:10.1557/PROC-1040-Q10-05
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Publication that Received Recognition by Various Organizations

1. Cai, X., A.B. Sushkov, R.J. Suess, M.M. Jadidi, G.S. Jenkins, **L.O. Nyaki**ti, R.L. Myers-Ward, S. Li, J. Yan, D.K. Gaskill, T.E. Murphy, H.D. Drew, M.S. Fuhrer, "Sensitive room-temperature

terahertz detection via the photothermoelectric effect in graphene", **Nature Nanotechnology** 9, 814–819 (2014). [*impact factor 36.64*] [*Citation 208*] *The Invention was Recognized by local, national and International Media coverage organizations as well as venture capitalists for potential commercial integration*.

2. Nepal, N., V.D. Wheeler, T.J. Anderson, F.J. Kub, M.A. Mastro, R.L. Myers-Ward, S. B. Qadri, J.A. Freitas, S.C. Hernandez, **L.O. Nyakiti**, S.G. Walton, K. Gaskill, C.R. Eddy Jr,, "Epitaxial Growth of III–Nitride/Graphene Heterostructures for Electronic Devices", Appl. Phys. Express 6 (6) 061003 (2013) [*Citation 21*], *The Japan Society of Applied Physics 2014 award was bestowed to the authors for the contributions in research that resulted in the first-time successful synthesis of large area high quality GaN on templated graphene on SiC*
3. **Nyakiti, L.O.**, V.D. Wheeler, N.Y Garces, R.L. Myers-Ward, C.R. Eddy, Jr., and D.K. Gaskill, "Enabling Graphene based Technologies: Towards Wafer Scale Production of Epitaxial Graphene", Special issue, MRS Bulletin Volu*me **37**, December 2012 [Citation 41]; featured on a special issue during a MRS Fall Meeting*
4. **Nyakiti, L.O.**, A. Jankowski, "Characterization of strain-rate sensitivity and grain boundary structure in nanocrystalline gold-copper alloys", Metallurgical and Materials Transactions A, 41 838 (2010) [*Citation 19*]; *The paper was nominated by TMS- Mettalurgical and materials transaction for outstanding investigation of grain boundary dependence on strain rate sensitivity of Au-Cu nanocrystallong alloy, and was consequently made an open access as a resource paper for the research community*

On the Cover Page of A Journal

1. Chaudhuri, J., R.G. Lee, **L.O. Nyakiti**, Z. Gu, J.H. Edgar, and P. Li, "Thermal oxidation of single crystal aluminum nitride – a high resolution transmission electron microscopy study", Materials Lett. **62**, 16, 2465-2468 (2008) [*Citation 5*] *One of the TEM images that I did analyze was featured on the cover of material Characterization Journal, an international Journal on material structure and behaviour*

Selected Peer Reviewed Proceeding Journals, Long Abstracts and Presentation [Invited Papers are indicated] (Since Joining Texas A&M University (2013-2016) – (Graduate Student Underlined)

1. Wheeler, V., N. Nepal, **L.O. Nyakiti**, D.R. Boris, S. Walton, D.J. Meyer, B.P. Downey, C. Eddy Jr. "Atomic Layer Epitaxy of Ultra-wide Bandgap Ga_2O_3 Films", AVS 65th International Symposium and Exhibition, Long Beach Ca, October 21-26, 2018.
2. Eddy, C.R., Jr., N. Nepal, S.G. Rosenberg, V.R. Anderson, J.M. Woodward, C. Wagenbach, A.C. Kozen, Z.R. Robinson**, L.O. Nyakiti**, S.B. Qadri, M.J. Mehl, K.F. Ludwig and J. K. Hite, "In situ Studies of Surface Morphological Evolution During Indium Nitride Growth by Atomic Layer Epitaxy", Submitted at the AVS Pacific Rim Symposium on Surfaces, Coatings and Interface, Waikoloa Beach Hawaii, December 2-6 (PacSurf 2018). https://pacsurf2018.avs.org
3. Sridhara, K., Evgeniya Lock, Boris Feigelson and **Luke Nyakiti**, "Assessing the electronic and Magnetic Properties of functionalized hexagonal Boron Nitride", Presented at Graphene 2018 Conference, Dresden Germany, June 26-30 2018.
4. Sridhara, K., B. Feigelson, J. K Hite, A. Tigli, T. Cagin, **L. Nyakiti**, "APCVD growth of Multilayered hexagonal Boron Nitride on Ni-Cu Alloys", Submitted and presented at European Materials Research Society Meeting held in Strasbourg, France, June 18-22, 2018
5. (INVITED) Eddy Jr. C.R., , N. Nepal, S.G. Rosenberg, V.R. Anderson, J.M. Woodward, C. Wagenbach, A.C. Kozen, Z.R. Robinson, **L.O. Nyakiti**, S.B. Qadri, M.J. Mehl, K.F. Ludwig

and J. K. Hite, "In situ Studies of Atomic Layer Processes with Synchrotron Radiation", presented at the 2018 AVS Mid-Atlantic Chapter DC Regional Meeting held 24 May 2018 at NIST in Gaithersburg, MD.

6. Wheeler, V.D., N. Nepal, **L.O. Nyakiti,** D.R. Boris, S.G. Walton, D.J. Meyer, "Phase Control of Ga2O3 Films Grown by Atomic Layer Epitaxy", CR Eddy Jr., 45th Conference on Physics and Chemistry of Surfaces and Interfaces (PCSI 45), January 14 – 18, 2018, Kona, Hawaii, Paper PCSI-WeA14, Room Keauhou II, 3:05 PM
7. [INVITED], **Nyakiti, L.O.**; J. Hite, Z. Robinson, K. Sridhara, R.L. Myers-Ward, M. Currie, C.R. Eddy, D.K. Gaskill, "Bottom up Synthesis of Few-Layer Van-der Waals Heterostructures on Multifarious Semiconducting Substrates232nd ECS Meeting October 1-6, 2017 http://ma.ecsdl.org/content/MA2017-02/29/1257.abstract
8. V. Wheeler, A.C. Kozen, B.P. Downey, M. Currie, N. Nepal, D.J. Meyer, D.R. Boris, S.G. Walton, C.R. Eddy, Jr, **L.O. Nyakiti**, "The Power of Atomic Layer Deposition – Moving Beyond Amorphous Films", America Vacuum Society 64th International Symposium and Exhibition VT-WeA11, Tampa Florida Oct 29-Nov 3 2017
9. Sridhara K., B.N. Feigelson, J.K. Hite, **L.O. Nyakiti**, "Controlled Growth of Multilayered Hexagnal Boron Nitride on Ni-Cu Alloys, America Vacuum Society 64th International Symposium and Exhibition 2D-ThP15, Tampa Florida Oct 29-Nov 3 2017
10. Wheeler, V., N. Nepal**, L. Nyakiti** , D. Boris , S. Walton , D. Meyer , C. Eddy Jr., "Phase Control of Ga_2O_3 Films Deposited by Atomic Layer Epitaxy", 2nd International Workshop on Ga2O3 and Related Materials 12-15 September 2017, Parma, Italy http://www.iwgo2017.unipr.it/wp-content/uploads/2017/08/Technical-Programme.pdf
11. Eddy Jr., C.R., , N. Nepal, N.A. Mahadik, **L.O. Nyakiti**, S.B. Qadri, M.J. Mehl, J.K. Hite, "Atomic Layer Epitaxy of III-N Semiconductors", Presented at 53rd Summer Annual Conference of the Korean Vaccum Society, 2017, 8, 88-88 http://www.dbpia.co.kr/Journal/ArticleDetail/NODE07247682
12. **Nyakiti, L.O.**, R.L. Myers-Ward, M. Currie, J.K. Hite, K. Sridhara, E. Clancy, C.R. Eddy Jr., D.K. Gaskill, "Synthesis of MoS_2 on Homogeneous Single Layer Epitaxial Graphene on 6H-SiC(0001)", Pacific Rim Meeting on Electrochemical and Solid State Science (PRIME 2016) October 2 – 7; Honolulu Hawaii, https://ecs.confex.com/ecs/230/webprogram/Paper95302.html
13. Sridhara, K., B. Feigelson, A. Tigli, J.K. Hite, T. Cagin, E. Clancy**, L. Nyakiti**, "Growth of hexagonal boron nitride on Cu-Ni alloys", Graphene 2017 March 28 – 31, Barcelona, Spain.
14. **Nyakiti, L.**; Z. Robinson, R. Myers-Ward, M. Currie, J. Hite, **K. Sridhara,** C. Eddy, E. Clancy, D. K. Gaskill, "Synthesis of Few Layer $MoSe_2$ on Homogeneous Single Layer Epitaxial Graphene on Si-Face 6H-SiC", Materials Research Society Spring Meeting April 17-21, 2017 Phoenix, Arizona
15. **[**INVITED**]** Nepal, N., V.R. Anderson, J.K. Hite, N.A. Mahadik, S.B. Qadri, **L.O. Nyakiti**, M.J. Mehl, V.D. Wheeler, D.J. Meyer, B.P. Downey, M.A. Mastro, C.R. Eddy, Jr, "Low Temperature Plasma-Assisted Atomic Layer Epitaxy of III-V Nitride Semiconductors**",** Society of Vacuum Coater's 60th Annual Technical Conference. April 29-May 4 2017, Providence, Rhode Island. http://www.asminternational.org/web/svc-techcon-2017.
16. [INVITED] Gaskill, D.K., P. Xu, D. Qi, J.K. Schoelz, J. Thompson, P.M. Thibado, V.D. Wheeler, R.L. Myers-Ward , C.R. Eddy, Jr. , M. Neek-Amal , F. M. Peeters, **L.O. Nyakiti,** "Epitaxial Graphene Opens New Avenue to potential Applications", Graphene Week, held at the University of Warsaw, Poland 13-17 June 2016

17. **Nyakiti, L.O.,** Z. Robinson, R.L. Myers-Ward, M. Currie, J. Hite, K. Sridhara, E. Clancy, C.R. Eddy, D.K. Gaskill. "Synthesis of MoS_2 on Homogeneous Single layer Epitaxial Graphene on 6H-SiC (0001**2016** ECS PRiME Meeting, Honolulu, Hawaii. https://ecs.confex.com/ecs/230/webprogram/Paper95302.html
18. **Nyakiti, L.O.**, K. Sridhara, M. Kane, E. Clancy, R.L. Myers-Ward, M. Currie, D.K. Gaskill, "Bottom-up Synthesis of WSe2 on Templated Monolayer EG/6H-SiC(0001)", Spring 2016 Materials Research Society Meeting
19. Sridhara, K., B.N. Feigelson, J.K. Hite, V. Anderson, A. Nath, F. Kub, **L.O. Nyakiti**, "CVD growth of Hexagonal Boron Nitride Films on Cu-Ni Alloys", America Vacuum Society 63rd International Symposium and Exhibition EM-FrM5, Nashville, Tennessee, Nov 6-Nov 11 2016 http://www2.avs.org/symposium2016/ProgramBooks/ProgramBook_Complete.pdf
20. Sridhara, K., B. Feigelson, J.K. Hite, M.S. Fuhrer, D.K. Gaskill, **L.O. Nyakiti**, "Growth of CVD-graphene on thermally annealed and electropolished Cu substrates", Graphene **2016** April 19th -22 held in Genova, Italy. http://www.grapheneconf.com/GENERAL/programme.php
21. **Nyakiti, L.O.**, V.D. Wheeler, R.L. Myers-Ward, A. Nath, B.R. Matis, J.W. Baldwin, C.R. Eddy Jr., D.K. Gaskill, "Electrical and Structural Characterization of Graphene Synthesized on m- and a-Plane 6H-SiC", Nanotech and Techconnect 2015 Conference, June 2015 Washington
22. Chan, H.K., V D. Wheeler, V.K. Nagareddy**, L.O. Nyakiti**, R.L. Myers-Ward, N.Y. Garces, J.P. Goss, N.G. Wright, C.R. Eddy Jr., D.K. Gaskill, A.B. Horsfall, "The study of trapping states and its correlation to gate hysteresis and noise on the Al_2O_3 and HfO_2 atomic layer deposited epitaxial graphene field effect transistor." 42nd Conference on the Physics and Chemistry of Surfaces and Interfaces January 18-22, 2015, (PCSI-42), **2015**
23. Sridhara, K.S., B.N. Feigelson, J.K. Hite, A. Nath, M. Fuhrer, D.K. Gaskill, H. Castaneda, **L.O. Nyakiti**, "Thermally Annealed and Electropolished Cu Substrates for CVD Growth of 2D Materials: Graphene, h-BN and MoS_2" October 2015 http://www2.avs.org/symposium2015/Papers/Paper_2D+EM+NS+PS+SP+SS+TF-MoM3.html
24. [INVITED] Robinson, Z.R., G.G. Jernigan, K.M. Busmann, **L. O. Nyakiti**, N.Y. Garces, A. Nath, V.D. Wheeler, R.L. Myers-Ward, D.K. Gaskill, C.R. Eddy, "Graphene growth on SiC(000-1): optimization of surface preparation and growth conditions", Proc. SPIE 9552,Carbon Nanotubes, Graphene, and Emerging 2D Materials for Electronic and Photonic Devices VIII, 95520Y (September 16, 2015); doi:10.1117/12.2191616 http://proceedings.spiedigitallibrary.org/proceeding.aspx?articleid=2443200
25. **Nyakiti, L.O.**, K. Sridhara, M. Kane, E. Clancy, R.L. Myers-Ward, M. Currie, D.K. Gaskill, "Bottom-up Synthesis of WSe2 on Tempalated Monolayer EG/6H-SiC(0001)", Materials Research Society Meeting. Spring 2016
26. **Nyakiti, L.O.,** V.D. Wheeler, R.L. Myers-Ward, A. Nath, B.R. Matis, J.W. Baldwin, C.R. Eddy Jr., D.K. Gaskill, "Electrical and Structural Characterization of Graphene Synthesized on m- and a-Plane 6H-SiC", Nanotech and Techconnect 2015 Conference, June 2015 Washington DC.
27. [INVITED] **Nyakiti, L.O.**, "Beyond Epitaxial Graphene: Emerging 2D Materials System", Whitacre College of Engineering, Texas Tech University. May 2015
28. [INVITED] **Nyakiti, L.,** K. Sridhara, "Success and Challenges in the synthesis of epitaxial graphene on SiC for electronic applications**"** 2015. at the center for integrated Bio and Nano Systems at University of Houston's Cullen College of Engineering; http://www.ee.uh.edu/research/seminar/201510/ece-seminar-luke-nyakiti

29. [INVITED] **Nyakiti, L.O.,** N. Nepal, V.D. Wheeler, T.J. Anderson, F.J. Kub, M.A. Mastro, R.L. Myers-Ward, S.B. Qadri, J.A. Freitas, S.C. Hernandez, S.G. Walton, K. Gaskill, C.R. Eddy, Jr. "Epitaxial Growth of III-Nitride/Graphene Heterostructures for Electronic Devices" The 75th JSAP Autumn Meeting September **2014**, Hokkaido University, Sapporo Japan

30. [INVITED] **Nyakiti, L.O.**, K. Sridhara "Advancements in Epitaxial Graphene for Electronic Applications"; presented at Texas A&M University - College Station March of **2014**

31. **Nyakiti, L.O.**, V.D. Wheeler, R.L. Myers-Ward, Z.R. Robinson, A. Nath, N.Y. Garces, C.R. Eddy Jr., D.K. Gaskill, "Spectroscopic and Microscopic Properties of Homogeneous Large-Area Graphene Synthesized on m- and a-Plane 6H-SiC", MRS Spring Meeting **2014**

32. [INVITED] Gaskill, D.K., H.K. Chan , V.D. Wheeler, V.K. Nagareddy, **L.O. Nyakiti**, A. Nath, R.L. Myers-Ward, Z.R. Robinson, N.Y. Garces, M.V. Rao, J.P. Goss, N.G. Wright, C.R. Eddy, Jr., A.B. Horsfall, "The Low Frequency Noise Spectrum in Gated Epitaxial Graphene Field Effect Transistors", Bulletin of the American Physical Society 59 **2014** http://absimage.aps.org/image/MAR14/MWS_MAR14-2013-005470.pdf

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34. [INVITED] Qi, D., P. Xu ,J. Thompson , M. Ackerman, S. Barber, K. Schoelz, P. Thibado, **L.O. Nyakiti** , R.L. Myers-Ward, C.R. Eddy, Jr., D.K. Gaskill, "STM Studies of Graphene Grown on Non-Polar Surfaces of SiC", Bulletin of the American Physical Society 59 **2014**, http://absimage.aps.org/image/MAR14/MWS_MAR14-2013-000767.pdf

35. Robinson, Z., G. Jernigan, K. Bussmann, M. Currie, R. Myers-Ward, V. Wheeler, **L. Nyakiti,** S. Oida, J. Hannon, C. Eddy, D.K. Gaskill, "Effect of Oxygen on Sublimation Growth of Graphene on C-face SiC", Bulletin of the American Physical Society 59 **2014**. http://absimage.aps.org/image/MAR14/MWS_MAR14-2013-007230.pdf

36. Suess, R.J., X. Cai, M.M. Jadidi, A.B. Sushkov, G.S. Jenkins, J. Yan, **L.O. Nyakiti**, R.L. Myers-Ward, D.K. Gaskill, T.E. Murphy, H.D. Drew, M.S. Fuhrer, "Characterization of Fast Temporal Photoreponse in a Broadband Graphene Photodetector", "The annual Conference on Lasers and ElectroOptics", (CLEO **2014**) held June 8-13 in San Jose, CA.

37. Moon, J., H.C. Seo, M. Antcliffe, D. Le, A. Schmitz, K.-A. Son, J. Schaffner, H.J. Song, **L.O. Nyakiti**, V.D. Wheeler, R.L. Myers-Ward, C.R. Eddy, Jr., D.K. Gaskill, K.-M. Lee, P. Asbeck, "Graphene and Graphene Heterostructure FETs and High-Dynamic-Range RF Applications," GOMAC 2014, Charleston, SC, March 31 – April 3, 2014.

38. Cai, X., A. Sushkov, R. Suess, M. Jadidi, G. Jenkins, **L. Nyakiti**, R. Myers-Ward, V. Wheeler, C. R. Eddy, Jr., J. Yan, D.K. Gaskill, T. Murphy, H.D. Drew, "Sensitive Room-Temperature Terahertz Detection via Photothermoelectric Effect in Graphene", submitted to March **2014** meeting of the American Physical Society, March 3-7 Denver, Colorado. http://meetings.aps.org/Meeting/MAR14/Event/216498

39. Chan, H.K., V.D. Wheeler, V.K. Nagareddy, **L.O. Nyakiti**, A. Nath, R.L. Myers-Ward, Z.R. Robinson, N.Y. Garces, M.V. Rao, J.P. Goss, N.G. Wright, C.R. Eddy Jr., D.K. Gaskill, A. B. Horsfall, "Ultra-low 1/f Noise in Top Gated Epitaxial Graphene Field Effect Transistors," 44th IEEE Semiconductor Interface Specialists Conference, Arlington, VA, Dec. 5-7, 2013.

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k-Dielectrics," AVS Fall 2013, Long Beach, CA, Oct 27 - Nov 1, 2013.

41. Robinson, Z.R., G. Jernigan, K. Bussmann, R. Myers-Ward, V. Wheeler, **L. Nyakiti**, Satoshi Oida, J.B. Hannon, C.R. Eddy, Jr., D.K. Gaskill, "Graphene Growth on SiC (000-1) in Argon," AVS Fall 2013, Long Beach, CA, Oct 27 - Nov 1, 2013.
42. Myers-Ward, R.L., V.D. Wheeler, N.A. Mahadik, R.E. Stahlbush, **L.O. Nyakiti**, Z. Robinson, A. Nath, C.R. Eddy, Jr., D.K. Gasill, "Putting an End to BPDs Starts with Hydrogen Etching," International Conference on SiC and Related Materials held in Miyazaki, Japan Sept 30 – Oct 4, 2013.
43. Tadjer, M., R. Myers-Ward, T. Anderson, V. Wheeler, A. Nath, M. Currie, **L. Nyakiti**, Z. Robinson, T. Feygelson, B. Pate, C. Eddy, Jr., D.K. Gaskill, A.D. Koehler, K. Hobart, F. Kub, "Optimization of the epitaxial graphene/n-type 4H-SiC heterojunction", International Conference on Diamond and Carbon Materials, Sept 2, 2013.
44. Abadier, M., R.L. Myers-Ward, N.A. Mahadik, R.E. Stahlbush, V.D. Wheeler, **L.O. Nyakiti,** C.R. Eddy, Jr., D.K. Gaskill, H. Song, T.S. Sudarshan, Y.N. Picard, M. Skowronski, "Evidence of Two-Dimensional Nucleation during 4H-SiC Homoepitaxy on 4° Off-Cut Substrates," International Conference on SiC and Related Materials held in Miyazaki, Japan Sept 30 – Oct 4, 2013.
45. Robinson, Z.R., K. Bussman, G.G. Jernigan, **L.O. Nyakit**, R.L. Myers-Ward, V.D. Wheeler, A. Nath, M.V. Rao, C.R. Eddy, Jr., D.K. Gaskill, "Polytype Dependence of Graphene Growth on SiC (000-1)", International Conference on SiC and Related Materials held in Miyazaki, Japan Sept 30 – Oct 4, 2013.

Proceeding Papers and Presentations Before Joining Texas A&M University

46. [INVITED] Myers-Ward, R.L., N.A. Mahadik, R.E. Stahlbush, V.D. Wheeler, **L.O. Nyakiti**, A. Nath, C.R. Eddy, Jr., D.K. Gaskill, "BPD Conversion in a Thin SiC Buffer Layer", TMS 2013, San Antonio, TX, 3-7 March 2013.
47. Nepal, N., V.D. Wheeler, T.J. Anderson, F.J. Kub, M.A. Mastro, R.L. Myers-Ward, S.C. Heranandez, F. Bezares, J.A. Freitas, **L.O. Nyakiti**, A.D. Koehler, D.K. Gaskill, K.D. Hobart, and C.R. Eddy, Jr., "Growth of II-N Semiconductors on XeF2 Functionalized Epitaxial Graphene," 40th conference on the Physics and Chemistry of Surfaces and Interfaces (PCSI-40), Waikoloa, HI, January 20-24, 2013.
48. Myers-Ward, R.L., N.A. Mahadik, R.E. Stahlbush, V.D. Wheeler, **L.O. Nyakiti**, A. Nath, C.R. Eddy, Jr., D.K. Gaskill, "BPD Conversion in a Thin SiC Buffer Layer", TMS 2013, San Antonio, TX, March 6, 2013.
49. Drew, D., X. Cai, A. Sushkov, G. Jenkins, M. Fuhrer, **L.O. Nyakiti**, V.D.Wheeler, R.L. Myers-Ward, N.Y. Garces, C.R. Eddy, Jr., D.K. Gaskill, "Single layer graphene plasmonic detector for broadband THz spectroscopy", APS March Mtg, Baltimore, MD, March 18-22, 2013. [*Citation 1*]
50. Lock, E.H., S. Hernández, M. Laskoski, S.P. Mulvaney, B.S. Simpkins, P.E. Sheehan, T.J. Anderson, F.J. Bezares, V.D. Wheeler, F.J. Kub, J.T. Robinson, S.W. Schmucker, J.D. Caldwell, K.D. Hobart, B.N. Feygelson, **L.O. Nyakiti**, R.L.Myers-Ward, C.R. Eddy, and D.K. Gaskill, S.G. Walton, "On the Transfer Print of Graphene to Multiple Substrates," Society of Vacuum Coaters 56th Annual Technical Conference, Providence, RI (April 20 - 25, 2013).
51. Hernández, S.C., F.J. Bezares, C.J. Bennett, C.E. Junkermeier, S.D. Tsoi, R. Stine, E.H. Lock, D.R. Boris, J.T. Robinson, V.D. Wheeler, **L.O. Nyakiti**, R.L. Myers-Ward, J.D. Caldwell, C.R. Eddy Jr., D.K. Gaskill, T.L. Reinecke, P.E. Sheehan, S.G. Walton, "Controlling the

Chemistry of Graphene Locally," Society of Vacuum Coaters 56th Annual Technical Conference, Providence, RI (April 20 - 25, 2013).

52. Kühne, P., A. Boosalis, C.M. Herzinger, **L.O. Nyakiti**, V.D. Wheeler, R.L. Myers-Ward, C.R. Eddy, Jr., D.K. Gaskill, M. Schubert, T. Hofmann, "Reflection-type optical-Hall effect measurement of Landau-level transitions in epitaxial graphene on silicon carbide – coupled phonon mode," Intl Conf. on Spectroscopic Ellipsometry, Kyoto, Japan, May 26-31, 2013.
53. Nagareddy, V.K., S.C. Hernández, H.K. Chan, V.D. Wheeler, **L.O. Nyakiti**, R.L. Myers-Ward, C.R. Eddy Jr., J.P. Goss, N.G. Wright, S.G. Walton, D.K. Gaskill, A.B. Horsfall, "Electrical and structural characterisation of oxygen functionalised epitaxial graphene and metal contact interfaces," Graphene Week, Chemnitz, Germany, June 2-7, 2013.
54. Robinson, Z., **L. Nyakiti**, M. Currie, A. Nath, R. Myers-Ward, V. Wheeler, M. Rao, C.R. Eddy, Jr., D.K. Gaskill, "Polytype Dependence of Graphene Growth on SiC (000-1)," Graphene Week, Chemnitz, Germany, June 2-7, 2013.
55. Abadier, M., R.L. Myers-Ward, N. Mahadik, R.E. Stahlbush, V.D. Wheeler, **L.O. Nyakiti**, C.R. Eddy, Jr., D.K. Gaskill, H. Song, T.S. Sudarshan, Y.N. Picard, M. Skowronski, "Nucleation of In-Grown Stacking Faults and Dislocation Half-Loops in 4H-SiC Epilayers Deposited at High Growth Rate", submitted to the 55th Electronic Materials Conference to be held in South Bend, IN, 26-28 June 2013.
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