Rattikorn Yimnirun, Ph.D.
Professor of Materials Science

School of Energy Science and Engineering (ESE)
Vidyasirimedhi Institute of Science and Technology (VISTEC)
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Education

Ph.D. in Materials Science and Engineering (Ceramic Science) (1995-2001)
The Pennsylvania State University, University Park, USA
Thesis: Direct and Converse Measurements of Electrostriction in Low Permittivity Dielectrics
Advisor: Prof. Dr. Robert E. Newnham
Committee Members: Profs. L. Eric Cross, Kenji Uchino, David J. Green and Qiming Zhang

M.S. in Physics (1994-1995)
The University of Tennessee, Knoxville, USA

M.Sc. in Physics (Solid State Physics) (1991-1993)
Chiang Mai University, Chiang Mai, Thailand
Thesis: Effects of Porosity on Electrical Properties of Barium Titanate Ceramics
Advisor: Prof. Dr. Tawee Tunkasiri

B.Sc. in Physics (Second-Class Honor) (1987-1991)
Khon Kaen University, Khon Kaen, Thailand
Thesis: Transversely Excited N_2 laser and High Power CO_2 Lasers
Advisor: Asst. Prof. Pipat Chokesuwattanasakula

Research Interest: Smart and Intelligent Materials and Devices, Electronic Ceramics and Ferroelectrics, Crystal Chemistry and Physics, Structure-Property Relations, Dielectric and Electromechanical Properties of Materials, Piezoelectricity, Ferroelectricity and Electrostriction, Instrumentations and Measurements of Dielectric, Piezoelectric, Ferroelectric and Electromechanical Properties, Applications of Synchrotron Techniques for Materials Characterizations

Teaching

- *Materials Science and Engineering Courses*: Ferroelectric Materials, Properties of Materials, Fabrication of Materials, Electroceramics, Applications of Electromaterials, Advanced Funtional Materials
- *Graduate and Undergraduate Physics Courses*: Physics I&II, Mechanics, Electrodymanics, Statistical Mechamics, X-Ray Absorption Spectroscopy and Applications
- *Graduate Applied Physics Courses*: Applied Electrodymanics, Quantum Physics

Work Experience

Professor of Materials Science (2017-Present)
Vidyasirimedhi Institute of Science and Technology Technology, Thailand

Professor of Materials Science (2016-2017)
School of Physics, Institute of Science, Suranaree University of Technology, Thailand

Associate Professor of Materials Science (2009-2016)
School of Physics, Institute of Science, Suranaree University of Technology, Thailand

Associate Professor of Materials Science (2008-2009)
Department of Physics and Materials Science, Chiang Mai University, Thailand

Assistant Professor of Materials Science (2004-2008)
Department of Physics, Faculty of Science, Chiang Mai University, Thailand

Lecturer of Materials Science (2001-2004)
Department of Physics, Faculty of Science, Chiang Mai University, Thailand

Administrative Experience

2017-2021: Dean of School of Energy Science and Engineering, VISTEC (with several active and acting functions as Vice President for Academic and Students Affairs)
2013-2015: Executive Consultant to PTT's RAIST/RASA (VISTEC/KVIS) Project
2009-2015: Head of Research Department (with several functions as Head of School of Physics and on behalf of Dean of Science)
2011-2015: DPST and Honors Programs Coordinator
2009-2015: Member of Academic Senate, SUT
2009-2015: Executive Board Member of Institute for Research and Development (IRD), SUT
2012-2015: Executive Board Member of NANOTEC-SUT-SLRI Research Collaboration
2011-2014: SLRI Research Consult for Industrial Applications
2009-2021: Several Subcommittee/Adhoc/Working Groups in Universities and Organizations

Professional Activities

- IEEE-UFFC Ferroelectrics Committee Member
- Chairman of Asian Ferroelectrics Association (AFA)
- Founding Chairman of The American Ceramic Society-Thailand Chapter
- Founding Chairman of IEEE-Magnetic Society-Thailand Chapter
- Board of Directors and AdHoc Member of NSTDA, SLRI, NARIT, NRCT, IPST
- Executive Board Member for several professional and scientific societies
- International Advisory Committee for several international and national conferences
- Chairman and Organizing Committee for several international and national conferences
- Plenary/Keynote/Invited Speaker at several international and national conferences
- Session Chair and Co-Chair at several international and national conferences
- Guest Editor, Editor, Editorial Board for several internaional and national journals
- Regular Referee for more than 60 international and national journals

Academic and Social Services:

1) 2020-2023: Chairman of Asian Ferroelectrics Association (AFA)
2) 2019-2022: Chairman (and Founder) of American Ceramic Society-Thailand Chapter
3) 2019-2022: Chairman of IEEE-Magnetic Society-Thailand Chapter
4) 2016-2022: Founder and Advisor of Materials Research Society of Thailand
5) 2009-2021: Advisor to Elementary School Home School System for Children Foundation
6) 2015-2020: Founder of Junior and Senior High School Home School System for Children Foundation
7) 2009-2021: Member of Several Committees and Subcommittees in Universities and Government Organizations

Training Programs:

1) SUT Young Executives (SUT/2012)
2) Public Directors Institute: Corporate Governance for Directors and Senior Executives of Regulators, State Enterprises and Public Organizations: PDI#22) (PDI/2020)

Visiting Programs:

1) German-Thai Symposium on Nanoscience and Nanotechnology (GTSNN) (CMU/2008)
2) Oregon State University-Iowa State University Visits (OSU-ISU/2010)
3) SUT Young Executives Visiting Program to Universities in Singapore (SUT/2011)
4) University of Texas at San Antonio Visit (UTSA/2012)
5) Okinawa Institute of Science and Technology (OIST-PTT Group/2014)

Administrative Accomplishment:

Academic:

1) One of the two key founders (mainly with Prof. Dr. Jumras Limtrakul (President of VISTEC) and PTT Group Team) in establishing VISTEC since the start of the project by Dr. Pailin Chuchoottaworn (CEO of PTT) with responsibility in every aspect of the whole project. Since then, VISTEC is now considered one of the top research-oriented academic institution, not only in Thailand, but in also ASEAN countries and worldwide.

2) While being at SUT, Institute of Science has become one of the top in Thailand with several schools ranked highly (Top 3) in CHE-TRF Ranking. Physics was ranked the top in the country for several years.

Research:

1) Administrating several research groups and research areas at CMU, SUT, and VISTEC to reach the top rankings in term of number of publications and establishing research collaboration among your scientists, all of whom has gone to winning top research awards in Thailand.
2) Taking part in several research collaborations with NANOTEC and SLRI to establish experimental stations in SLRI

3) One of the main founders of SUT-Seagate-NANOTEC Nanofactory Facility at SUT to acquire the donation of HDD Equipment from Seagate with the market value of more than 1 Billion Thai Baht.

Social Services:

1) Taking part in several social activities, both nationally and internationally, resulting in the establishment of several international organizations to put Thailand on maps of several areas.
2) Establishing Home School Networks to provide alternative educational platforms for children from primary to secondary schools (currently pushing for vocational and university levels).

Research Translation:

1) Actively involved in trying to move research outputs to commercial products at VISTEC.
2) Working closely (through professional societies) with industrial partners (starting with WD in 2009 until today with Seagate) to maintain the strong collaboration between universities and industries, a key element for innovation-driven economy.

Award and Honors

- DPST Hall of Fame (DPST) (2020)
- Outstanding Young Researcher Award from Chiang Mai University (CMU) (2009)
- Outstanding Mid-Career Researcher Award from Thailand Research Fund (TRF) (2008)
- Outstanding Research Award from the Thailand Research Fund (TRF) (2007)
- Outstanding Young Researcher Award from the Thailand Research Fund (TRF) (2005)
- Thailand Research Fund Research Scholar (2004-2010)
- Distinguished Alumni of the Development and Promotion in Science and Technology Talented Student Program (DPST) (2005)
- Recipient of the Development and Promotion in Science and Technology Talented Student Program (DPST) from Thai Government (1984-2001)
- Outstanding Graduate Student Award from Chiang Mai University, Thailand (1993)
- The Best Graduate Student Poster Award at the 100th Annual American Ceramics Society Meeting, Cincinnati, OH (1998)
- The Chung Soo Yoo Award for the Best Graduate Student Poster Presentation at the 56th Annual Pittsburgh Diffraction Conference, Pittsburgh, PA (1998)
- The Graduate Student Traveling Support Awards for IEEE Conference on Electrical Insulation and Dielectric Phenomena (CEIDP) Annual Meeting (1998-1999)

Publications Authors and co-authors of more than 433 articles in international and national refereed journals, and more than 250 presentations in various international conferences and meetings.

The list of key research areas and statistics are as follows (as of July 21, 2022)
Overall number of publications of 433 in SCOPUS Database with h-index = 32 and citation = 4392 (Google Scholar Database: h-index = 34, citation = 5404).

Key Research Areas:
Dielectric, Piezoelectric, Ferroelectric Properties of Functional Materials (138 Articles)
Synthesis and Characterization of Functional Materials (77 Articles)
Uniaxial Stress Dependent Dielectric and Ferroelectric Properties (44 Articles)
Applications of Synchrotron Techniques for Materials Characterization (53 Articles)
Scaling Behavior in Functional Materials (19 Articles)
Modeling and Computational Materials Physics (31 Articles)
Electrostriction (8 Articles)
Preparation and Characterization for Energy Storage Applications (3 Articles)
Preparation and Characterization for Glass and Applications (3 Articles)
Others (Publications in International Proceedings and National Journals) (66 Publications)

List of Research Publications

Dielectric, Piezoelectric, Ferroelectric Properties of Functional Materials (138 Articles)

1. Jaiban, P., Lu, M. H., Eknapakul, T., Chaiyachad, S., Yao, S. H., Pisitpipathsin, N., Unruan, M., Siriroj, S., Ke. R. H., Mo, S. K., Watcharapasorn, A., **Yimnirun, R.,** Tokura, Y., Shen, X., Hwang H. Y., Maensiri, S., & Meevasana, W. (2020). Spectral weight reduction of two-dimensional electron gases at oxide surfaces across the ferroelectric transition. *Scientific reports*, *10*(1), 1-7.
2. Wongdamnern, N., Unruan, M., & **Yimnirun, R**. (2020). Changes of dielectric and ferroelectric properties of functional materials under external electric field and compressive stress. *Ferroelectrics*, *569*(1), 324-347.
3. Prasatkhetragarn, A., **Yimnirun, R**., & Ren, J. Normal/relaxor ferroelectric characteristics of lead-based PZT–PXN ceramics prepared by columbite/wolframite precursors method. *Ferroelectrics,* Vol, 552(1), 165-171 (2019).
4. Unruan, S., Unruan, M., & **Yimnirun, R**. Temperature dependence of dielectric properties for BFO-BTO-BZT ceramics. *Journal of Metals, Materials and Minerals,* Vol, 28(2) (2019).
5. Jaiban, P., Tongtham, M., Wannasut, P., Pisitpipathsin, N., Namsar, O., Chanlek, N., Pojprapai, S., **Yimnirun, R**., Guo, R., Bhalla, A. S., & Watcharapasorn, A. Phase characteristics, microstructure, and electrical properties of $(1-x)BaZr_{0.2}Ti_{0.8}O_3$-$(x)(Ba_{0.7}Ca_{0.3})_{0.985}La_{0.01}TiO_3$ ceramics. *Ceramics International*, *45*(14), 17502-17511 (2019).

6. Padchasri, J., Rujirawat, S., **Yimnirun, R.,** & Kolodiazhnyi, T. Analysis of the low-temperature dielectric relaxation in $CH_3NH_3PbI_3$ partially substituted with Sn and Ba. *Applied Physics A: Materials Science & Processing*, 124 (2018).
7. Unruan, M., Unruan, S., Inkong, Y., & **Yimnirun, R**. Large electro-mechanical energy conversion in PZT-PNN ceramics. *Ferroelectrics*, Vol, 535(1), pp. 25-31 (2018).
8. Unruan, S., **Yimnirun, R**., Unruan, M., & Tipakontitikul, R. Effect of BaZr0. 4Ti0. 6O3 addition on electrical and magnetic properties of multiferroic (1-x)$BiFeO_3$-x$BaTiO_3$ ceramics. *Ferroelectrics*, Vol, 534(1), pp. 103-109 (2018).
9. Jaiban, P., Watcharapasorn, A., **Yimnirun, R**., Guo, R., & Bhalla, A. S. Dielectric, ferroelectric and piezoelectric properties of $(Ba_{0.7}Ca_{0.3})Ti_{1-x}Cu_xO_{3-x}$ ceramics. *Journal of Alloys and Compounds*, Vol, 759, pp. 120-127 (2018).
10. Padchasri, J., **Yimnirun, R**., & Kolodiazhnyi, T. Correlation between the 1: 2 atomic order and microwave dielectric loss in the off-stoichiometric Ba $(Zn_{1/3}Ta_{2/3})O_3$. *Journal of the European Ceramic Society*, Vol, 38(9), p. 3412-3415 (2018).
11. Kolodiazhnyi, T., Padchasri, J., & **Yimnirun, R**. Effect of temperature and stoichiometry on the long-range 1: 2 cation order in $BaZn_{1/3}Ta_{2/3}O_3$. *Journal of the European Ceramic Society*, Vol, 38(4), pp. 1517-1523 (2018).
12. Wattanasarn, H., Photankham, W., Kongpimai, J., Thanachayanont, C., & **Yimnirun, R**. Effect of ZnO addition on ferroelectric properties of $_{0.94}$ Pb $(Fe_{1/2}Nb_{1/2})O_3$-$_{0.06}PbTiO_3$ and $_{0.9}$Pb $(Fe_{1/2}Nb_{1/2})O_3$-$_{0.1}PbTiO_3$ ceramics. *Integrated Ferroelectrics*, Vol, 187(1), pp. 33-44 (2018).
13. Phewphong, S., Photankham, W., Kongpimai, J., Seetawan, T., **Yimnirun, R**., Thanachayanont, C., & Wattanasarn, H. Dielectric and ferroelectric properties of Pb $(Fe_{1/2}\ Nb_{1/2})\ O_3$ modification on Pb $(Zr_{0.52}Ti_{0.48})\ O_3$ ceramics. *Integrated Ferroelectrics*, Vol 187(1), pp. 89-99 (2018).
14. Jaiban, P., Watcharapasorn, A., **Yimnirun, R**., Guo, R., Bhalla, A. S., Effects of donor and acceptor doping on dielectric and ferroelectric properties of $Ba_{0.7}Ca_{0.3}TiO_3$ lead-free ceramics. *Journal of Alloys and Compounds*, Vol 695, pp. 1329-1335 (2017).
15. Wattanasarn, H., Photankham, W., Pattumma, P., **Yimnirun, R.,** Phase Transition and Dielectric Properties of 0.9Pb$(Fe_{1/2}Nb_{1/2})O_3$-0.1$PbTiO_3$ Modified with Nano ZnO. Pertanika *Journal of Science & Technology*, Vol 25(2) (2017).
16. Potong, R., Rianyoi, R., Ngamjarurojana, A., **Yimnirun, R.,** Guo, R., Bhalla, A. S., & Chaipanich, A. Thermal expansion behaviors of 0–3 connectivity lead-free barium zirconate titanate-Portland cement composites. *Ceramics International*, Vol 43, pp. S129-S135 (2017).
17. Jaita, P., Butnoi, P., Sanjoom, R., Randorn, C., **Yimnirun, R.,** Rujijanagul, G. Electric field-induced strain response of lead-free Fe_2O_3 nanoparticles-modified $Bi_{0.5}(Na_{0.80}K_{0.20})_{0.5}TiO_3-0.03(Ba_{0.70}Sr_{0.03})TiO_3$ piezoelectric ceramics. *Ceramics International*, Vol 43, pp. S2-S9 (2017).
18. Jaiban, P., Watcharapasorn, A., **Yimnirun, R**., Guo, R., Bhalla, A.S., Effects of donor and acceptor doping on dielectric and ferroelectric properties of $Ba_{0.7}Ca_{0.3}TiO_3$ lead-free ceramics, *Journal of Alloys and Compounds*, DOI: 10.1016/j.jallcom.2016.10.274 (2016).

19. Prasatkhetragarn, A., Ngamjarurojana, A., **Yimnirun, R.**, Relaxor-like behavior and ferroelectric evolution in (1-x)[0.5BZT−0.5PT]−(x)BKT ternary system, *Integrated Ferroelectrics*, Vol 175 (1), pp. 81-86 (2016).
20. Sareein, T., Albutt, N., Unruan, M., Funsueb, N., Ngamjarurojana, A., **Yimnirun, R.**, Effect of hybrid doping on dielectric behavior of barium titanate ceramics, *Integrated Ferroelectrics*, Vol 175 (1), pp. 96-101 (2016).
21. Wattanasarn, H., Photankham, W., Seetawan, T., **Yimnirun, R.**, Thanachayanont, C., Petnoi, N., Pojprapai, S., Dielectric and ferroelectric properties modification of $07PbMg_{1/3}Nb_{2/3}O_3$-$0.3Pb(Zr_{0.52}Ti_{0.48})O_3$ ceramics by $Ba(Zn_{1/3}Nb_{2/3})O_3$, *Materials Research Bulletin*, Vol 76, pp. 292-299 (2016).
22. Wongmaneerung, R., Tipakontitikul, R., Jantaratana, P., Bootchanont, A., Jutimoosik, J., **Yimnirun, R.**, Ananta, S., Structure and phase formation behavior and dielectric and magnetic properties of lead iron tantalate-lead zirconate titanate multiferroic ceramics, *Materials Research Bulletin*, Vol 75, pp. 91-99 (2016).
23. Jaita, P., Jarupoom, P., **Yimnirun, R.**, Rujijanagul, G., Cann, D.P., Phase transition and tolerance factor relationship of lead-free $(Bi_{0.5}K_{0.5})TiO_3$-$Bi(Mg_{0.5}Ti_{0.5})O_3$ piezoelectric ceramics, *Ceramics International*, Vol 42 (14), pp 15940-15949 (2016).
24. Chaipanich, A., Zeng, H.R., Li, G.R., Yin, Q.R., **Yimnirun, R.**, Jaitanong, N., Piezoelectric Force Microscope Investigation and Ferroelectric Hysteresis Behavior of High Volume Piezoelectric Ceramic in 0-3 Lead Zirconate Titanate-Cement Composites, *Ferroelectrics*, Vol 492 (1), pp. 54-58 (2016).
25. Pisitpipathsin, N., Sratta, Y., Unruan, S., Promsawat, M., Marungsri, B., **Yimnirun, R.**, Rattanachan, S., Pojprapai, S., Effect of Temperature on Ferroelectric and Piezoelectric Behaviour of Mn-Doped 0.75BF-0.25BT Multiferroic Ceramics, *Ferroelectrics*, Vol 489 (1), pp. 110-117 (2015).
26. Kasian, P., Thongbai, P., Yamwong, T., Rujirawat, S., **Yimnirun, R.**, Maensiri, S., The DC bias voltage effect and non-linear dielectric properties of titanate nanotubes, *Journal of Nanoscience and Nanotechnology*, Vol 15 (11), pp. 9197-9202 (2015).
27. Jaiban, P., Namsar, O., Jiansirisomboon, S., Watcharapasorn, A., **Yimnirun, R.**, Electrical Properties of La-Doped $Ba_{0.7}Ca_{0.3}TiO_3$ Lead-Free Ceramics, *Ferroelectrics*, Vol 487 (1), pp. 86-93 (2015).
28. Jarupoom, P., Jaita, P., **Yimnirun, R.**, Rujijanagul, G., Cann, D.P., Enhanced piezoelectric properties near the morphotropic phase boundary in lead-free $(1-x)(Bi_{0.5}K_{0.5})TiO_3$-$xBi(Ni_{0.5}Ti_{0.5})O_3$ ceramics, *Current Applied Physics*, Vol 15 (11), pp. 1521-1528 (2015).
29. Wattanasarn, H., Photankham, W., Seetawan, T., **Yimnirun, R.**, Thanachayanont, C., Effect of $Ba(Zn_{1/3}Nb_{2/3})O_3$ modification on structure and ferroelectric properties of $0.6Pb(Mg_{1/3}Nb_{2/3})O_3$-$0.4Pb(Zr_{0.52}Ti_{0.48})O_3$ ceramics, *Ceramics International*, Vol 41 (7), pp. 8367-8376 (2015).
30. Wattanasarn, H., Photankham, W., Inthachai, S., Seetawan, T., **Yimnirun, R.**, Thanachayanont, C., MPB Phase Transition and Microstructure of (1-X)PMN- x PZT Activated by 0.05BZN Ceramics, *Integrated Ferroelectrics*, Vol 165 (1), pp. 19-28 (2015).

31. Prasatkhetragarn, A., Triamnak, N., **Yimnirun, R.**, Cann, D.P., Morphotropic phase boundary of $0.875Pb(Zr_xTi_{1-x})O_3$–$0.125Pb(Mg_{1/3}Nb_{2/3})O_3$ Ceramics, *Ferroelectrics*, Vol 470 (1), pp. 280-286 (2014).
32. N. Jaitanong, **R. Yimnirun**, H.R. Zeng, G.R. Li, Q.R. Yin, A. Chaipanich, Piezoelectric properties of cement based/PVDF/PZT composites, *Materials Letters*, Vol. 130, pp. 146-149 (2014).
33. Sareein, T., Unruan, M., Ngamjarurojana, A., Ananta, S., **Yimnirun, R.**, Dielectric relaxation time behavior of B-site hybrid-doped $BaTiO_3$ ceramics, *Ferroelectrics*, Vol. 458, pp. 56-63 (2014).
34. Jaiban, P., Jiansirisomboon, S., Watcharapasorn, A., **Yimnirun, R.**, Guo, R., Bhalla, A.S., Diffuse dielectric behavior of $(Bi_{0.5}Na_{0.5})Zr_{1-x}Ti_xO_3$ lead-free ceramics, *Ferroelectrics*, Vol. 458, pp. 174-180 (2014).
35. Rianyoi, R., Potong, R., **Yimnirun, R.**, Chaipanich, A., Effect of barium titanate particle size on electrical properties of 0-3 barium titanate-portland cement composites, *Integrated Ferroelectrics*, Vol. 150, pp. 147-154 (2014).
36. Wongsaenmai, S., Maensiri, S., **Yimnirun, R.**, Effects of manganese addition on phase formation behavior and dielectric properties of $((K_{0.5}Na_{0.5})_{0.935}Li_{0.065})NbO_3$ ceramics, *Key Engineering Materials*, Vol 608, pp. 206-211 (2014).
37. Rianyoi, R., Potong, R., Ngamjarurojana, A., **Yimnirun, R.**, Guo, R., Bhalla, A.S., Chaipanich, A., Acoustic and electrical properties of 1-3 connectivity bismuth sodium titanate-Portland cement composites, *Materials Research Bulletin*, Vol 60, pp. 353-358 (2014).
38. Ketsuwan, P., Prasatkhetragarn, A., Ngamjarurojana, A., Ananta, S., **Yimnirun, R.**, Dielectric aging of Cr-doped PZT ceramics, *Integrated Ferroelectrics*, Vol. 149, pp. 67-74 (2013).
39. Sratta, Y., Chandarak, S., Unruan, M., Kantha, P., Marungsri, B., **Yimnirun, R.**, Pojprapai, S., Effect of temperature on ferroelectric properties of bismuth ferrite-barium titanate, *Integrated Ferroelectrics*, Vol. 148, pp. 67-72 (2013).
40. Potong, R., Rianyoi, R., Ngamjarurojana, A., **Yimnirun, R.**, Guo, R., Bhalla, A.S., Chaipanich, A., Effect of particle size on dielectric properties and hysteresis behavior of 0-3 barium zirconate titanate-portland cement composites, *Integrated Ferroelectrics*, Vol. 148, pp. 131-137 (2013).
41. Jaiban, P., Jiansirisomboon, S., Watcharapasorn, A., **Yimnirun, R.**, Guo, R., Bhalla, A.S., Thermal expansion behavior of $(Bi_{0.5}Na_{0.5})Zr_{1-x}Ti_xO_3$ ceramics, *Integrated Ferroelectrics*, Vol. 148, pp. 124-130 (2013).
42. Jaitanong, N., Vittayakorn, W.C., Zeng, H.R., Yin, Q.R., **Yimnirun, R.**, Chaipanich, A., Piezoelectric properties and domain configurations of PZT ceramic with NiO addition, *Integrated Ferroelectrics*, Vol. 149, pp. 95-101 (2013).
43. Rianyoi, R., Potong, R., **Yimnirun, R.**, Guo, R., Bhalla, A.S., Chaipanich, A., Electromechanical coupling coefficient of 1-3 connectivity barium titanate-portland cement composites, *Integrated Ferroelectrics*, Vol. 148, pp. 138-144 (2013).
44. Phuetthonglang, A., Marungsri, B., Oonsivilai, A., Kantha, P., **Yimnirun, R.**, Pojprapai, S., Effect of heat treatment on aging degradation of the piezoelectric properties of lead zirconate titanate, *Integrated Ferroelectrics*, Vol. 149, pp. 75-82 (2013).

45. Triamnak, N., **Yimnirun, R.**, Pokorny, J., Cann, D.P., Relaxor characteristics of the phase transformation in $(1-X)BaTiO_3$-$xBi(Zn_{1/2}Ti_{1/2})O_3$ perovskite ceramics, *Journal of the American Ceramic Society*, Vol. 96, pp. 3176-3182 (2013).
46. Wongmaneerung, R., Ngamjarurojana, A., **Yimnirun, R.**, Ananta, S., Thermal expansion and polarization behavior in lead Titanate/Zinc Oxide nanocomposite ceramics, *Key Engineering Materials*, Vol. 547, pp. 107-113 (2013).
47. Srisombat, L., Ananta, S., Singhana, B., Lee, T.R., **Yimnirun, R.**, Chemical investigation of Fe^{3+}/Nb^{5+}- doped barium titanate ceramics, *Ceramics International*, Vol. 39, pp. S591-S594 (2013).
48. Prasatkhetragarn, A., Arthan, A., Jantaratana, P., Vittayakorn, N., Yotburut, B., **Yimnirun, R.**, Ferroelectromagnetic characteristic of Na-doped $0.75BiFeO_3$-$0.25BaTiO_3$ multiferroic ceramics, *Ceramics International*, Vol. 39, pp. S245-S248 (2013).
49. Prasatkhetragarn, A., Muangkonkad, P., Aommongkol, P., Jantaratana, P., Vittayakorn, N., **Yimnirun, R.**, Investigation on ferromagnetic and ferroelectric properties of (La,K)-doped $BiFeO_3$-$BaTiO_3$ solid solution, *Ceramics International*, Vol. 39, pp. S249-S252 (2013).
50. Jaiban, P., Jiansirisomboon, S., Watcharapasorn, A., **Yimnirun, R.**, Guo, R., Bhalla, A.S., High- and low-field dielectric responses and ferroelectric properties of $(Bi_{0.5}Na_{0.5})Zr_{1-x}Ti_xO_3$ ceramics, *Ceramics International*, Vol. 39, pp. S81-S85 (2013).
51. Prasatkhetragarn, A., Jantaratana, P., Vittayakorn, N., Yotburut, B., **Yimnirun, R.**, Ferroelectric and ferromagnetic properties of K-doped $0.7BiFeO_3$-$0.3BaTiO_3$ multiferroic ceramics, *Ferroelectrics*, Vol. 451, pp.109-115 (2013).
52. Ketsuwan, P., Prasatkhetragarn, A., Ngamjarurojana, A., Ananta, S., **Yimnirun, R.** Aging behavior of (Cr,Nb)-doped PZT ceramics, *Ferroelectrics*, Vol. 452, pp. 13-21 (2013).
53. Rianyoi, R., Potong, R., Ngamjarurojana, A., **Yimnirun, R.**, Guo, R., Bhalla, A.S., Chaipanich, A., Acoustic, dielectric and piezoelectric properties of 1-3 connectivity barium titanate-portland cement composites, *Ferroelectrics*, Vol. 452, pp. 76-83 (2013).
54. Potong, R., Rianyoi, R., Ngamjarurojana, A., **Yimnirun, R.**, Guo, R., Bhalla, A.S., Chaipanich, A., Acoustic and piezoelectric properties of 0-3 barium zirconate titanate-portland cement composites-effects of BZT content and particle size, *Ferroelectrics*, Vol. 455, pp. 69-76 (2013).
55. Jaitanong, N., Zeng, H.R., Li, G.R., Yin, Q.R., **Yimnirun, R.**, Chaipanich, A., Investigations on morphology and domain configurations in 0-3 lead magnesium niobate titanate-portland cement composites by SEM and PFM, *Ferroelectrics*, Vol. 455, pp. 111-116 (2013).
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Synthesis and Characterization of Functional Materials (77 Articles)

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Uniaxial Stress Dependent Dielectric and Ferroelectric Properties (44 Articles)

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Scaling Behavior in Functional Materials (19 Articles)

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Others (Publications in International Proceedings and National Journals) (66 Publications)

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