#### **Curriculum Vitae**

Brief Profile: Dr. Annapureddy Venkateswarlu was born on April 2, 1986 in Nellore, A.P (India). He received his Doctor of Philosophy (Ph.D) in Physics from Indian Institute of Technology Roorkee (IIT-R), India. He was a postdoctoral researcher at Korea Institute of Materials Science, South Korea, from 2014 to 2017. He received his Master's and Bachelor's degrees from Sri Venkateswara University (India). He also worked for a brief time as Young Scientist Research Fellow at Raja Ramanna Centre for Advanced Technology (RRCAT), India. Prior to joining NITT, he worked as a DST-INSPIRE FACULTY member at CSIR-National Physical Laboratory, Delhi, India. His current research interests include the development and processing of the flexible energy harvesters (like magnetoelectric energy harvesters, piezoelectric nanogenerators and triboelectric energy harvesters) for standalone electronic devices, Energy Storage Materials, Smart Actuators, Photostrictive & Multifunctional nano-structured materials for smart electronics, and smart sensors for non-destructive testing (NDT). He has authored more than 45 research articles in peer-reviewed international journals and two-book chapters. He has delivered invited talks at various international and national symposiums and conferences. Dr. Annapureddy can be reached by email at annp@nitt.edu.

1. Name: Dr. Annapureddy Venkateswarlu

2. Designation: Assistant Professor

3. Office Address: Room No. PH-227, Department of Physics, NIT-Trichy,TN-620015

4. Telephone (Direct) (Optional): +91-9177977948 (Mobile)

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5. Email (Primary): <a href="mailto:annp@nitt.edu">annp@nitt.edu</a>
Email (Secondary): reddydph@gmail.com

6. **Fields of Specialization**: Flexible energy harvesters, Energy Storage Materials, Smart Actuators, Photostrictive & Multifunctional nano-structured materials, and Smart Sensors for Non-Destructive Testing (NDT).

#### 7. Employment Profile

S.No.	Job Title	Employer	From	То
1.	Assistant Professor	NIT-Trichy, Tiruchirappalli, TN-620015	18-04-2018	Present
2.	DST-Inspire Faculty	National Physical Laboratory, New Delhi, India	July 2017	April 2018
3.	Post Doc	Korea Institute of Materials Science (KIMS), Changwon, South Korea	June 2014	April 2018

## 8. Academic Qualifications (From Highest Degree to High School):

Examination	Board / University	Year	Division/ Grade	Subjects
Doctor of Philosophy (Ph.D)	IIT-Roorkee, India	2014	-	Physics
Master of Science (M.Sc)	Sri Venkateswara University, A.P, India	2008	Outstanding	Physics
Bachelor of Science (B.Sc)	Sri Venkateswara University, A.P, India	2006	Distinction	Physics, Chemistry and Mathematics
Higher Secondary Certificate (+2 class)	Directorate of Govt. Examinations, A.P, India	2003	Distinction	Physics, Chemistry and Mathematics
Secondary School Certificate (10 <sup>th</sup> class)	Directorate of Govt. Examinations, A.P, India	2001	Distinction	General

### 9. Academic/Administrative Responsibilities within the University

Positio	on	Faculty/Department/Centre/Institution	From	То
M. Tech (NDT)	Evaluation	NITT	02.07.2020	Present
of Projects	committee			
member				
Syllabus	Revision	NITT	10.04.2020	09.03.2021
(M.Tech.)	committee			
member				
PhD Coordinato	r	NITT	30.08.2020	Present

#### 10. Academic/Administrative Responsibilities outside the University

Position	Position		Institution		From	То	
Ph.D	Doctoral	Central	Central University of Tamil			2022	Present
Committee Me	mmittee Member Nadu						
Ph.D	Doctoral	SRM Ur	SRM University			2021	Present
Committee Member							
Ph.D	Doctoral	VIT University				2020	Present
Committee Me	ember						

### 11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization
2021	Best Department Performer	NIT-Tiruchirappalli
	Award (Assistant Professor)	
2019	Faculty Award: Certificate of	NIT-Tiruchirappalli
	Appreciation	
2017	Outstanding Research	Korea Institute of Materials
	Achievement Award 2016	Science (KIMS), South Korea
2017	DST-Inspire Faculty	DST, Govt. of India
2009	CSIR-UGC (National Eligibility	CSIR-UGC, India
	Test for Lectureship)	
2007	Young Scientist Research Fellow	RRCAT, Indor, India
2006	University Topper in	Sri Venkateswara University,
	Mathematics in B.Sc (100 %	A.P, India
	marks)	
2003	State Level Topper in	Directorate of Govt.
	Mathematics and Physics in 12th	Examinations, A.P, India
	std. (100 % marks)	
2001	Gold Medal, Prakasam District	Gov. of A.P, India
	Science Fair,	Gov. of 71.1, mala
2001	Xth Class Topper of the School	ZPHS School, PI Padu,
		Prakasam, A.P, India
		, ,

#### 12. Fellowships

Year of	Name of the Fellowship		Awarding	From	То
Award			Organization	(Month/Year)	(Month/Year)
2014	Research S Fellowship	cientist	Korea Institute of Materials Science (KIMS), South Korea	Jun 2014	Jun 2017
2011	Senior Re Fellowship	esearch	MHRD, India	July 2011	May 2014
2011	Junior Re Fellowship	esearch	MHRD, India	July 2009	July 2011

#### 13. Details of Academic Work

(i) Curriculum Development

S. No.	Name of the Lab	UG / PG / Research	Amount Spent for Equipment	Points
1.	Flexible & Multi- Functional Materials Device Lab	Research & PG	>75 Lakhs	4

(ii) Courses taught at Postgraduate and Undergraduate levels

S.No.	Name of the theory		No. of Students
	courses taught		
1.	PH653-CLASSICAL	2018, 2019, 2020,	>100
	MECHANICS	2021	
2.	PH658	2019	25
	INSTRUMENTATION		
3.	PH603-ADVANCE	2019, 2020, 2021,	>100
	NDE TECHNIQUES-II	2022	
4.	PHIR11- Physics	2018, 2019, 2020,	>300
	•	2021, 2022	

#### (iii) Projects guided at Postgraduate level

Title of the Thesis	Guide / CoGuide	Roll Number of Student
Structural, Optical, Magnetic	Guide	213220022
and Magneto-dielectric		
Properties of Bismuth		
Substituted Yttrium Iron Garnet		
Structural, Magnetic, Dielectric	Guide	213220013
and Magneto-dielectric		
Properties of Lead Free		
$Ni_{0.5}Zn_{0.5}Fe_2O_4$ and		
$Ba_{0.85}Ca_{0.15}Zr_{0.1}Ti_{0.9}O_3$ Based		
Multiferroic Composites for		
Green-Energy Applications		
A Magnetoelectric Energy	Guide	213219017
Harvester with Lead-free		
Piezoelectric 0.5Ba(Zr <sub>0.2</sub> Ti <sub>0.8</sub> )		
O <sub>3</sub> -0.5(Ba <sub>0.3</sub> Ca <sub>0.7</sub> )TiO <sub>3</sub>		
Composite to Enhance the		
Output Performance		
Flexible piezoelectric	Guide	213217015
composites for enhanced		
mechanical energy harvesting		

Lead-Free Material Based Multifunctional Structures For Mechanical and Magnetic Energy Harvesting	Guide	213218003
Remnant Wall Thickness Measurement in Pipes Using Broadband Wavelength and Frequency EMAT	Guide	213119011
DEFECT DETECTION & CHARACTERIZATION USING REAL TIME RADIOSCOPY & PHASED ARRAY ULTRASONIC TESTING on BUTT WELDED TUBULAR JOINTS & THEIR COMAPARTIVE STUDY	Guide	213119012
A Magnetoelectric Energy Harvester With Lead Free Piezoelectric 0.5BaZrTiO <sub>3</sub> BaCa <sub>0.7</sub> TiO <sub>3</sub> Composite to Enhance the Output Performance	Guide	213219017

## (iv) Other contribution(s)

S.No.	Name of the Post	From	То
1.			
2.			
3.			

### 14. Details of Major R&D Projects

Title of Project	Eunding Agangy	Dura	ation	Status
Title of Project	Funding Agency	From	То	Ongoing/ Completed
Conversion of	Department of	07/2017	06/2022	Completed
Waste Energy	Science &			
into	Technology, DST,			
Useful Electricity	Govt. of India			
for Wireless				

Sensor Nodes Conversion of Waste Energy into Useful Electricity for Wireless Sensor Nodes				
Unleashing the full potential of magnetoelectric coupling in (Ba,Ca)(Ti,Zr)O3 based Multifunctional composite layered structures for healthier energy harvesting applications	Science and Engineering Research Board (SERB), India	12/2019	12/2021	Completed

## 15. Number of PhDs guided

Name of the PhD	Title of PhD	Role(Supervisor/ Co-	Year of
Scholar	Thesis	Supervisor)	Award
Kaarthik J	Multifunctional Materials for Energy Harvesting and Sensor applications	Supervisor	Ongoing
Kaushiga C	High Energy Density Dielectric Capacitors	Supervisor	Ongoing
Sradha G	Multifunctional Materials for Sensors and Energy Harvesting Devices	Supervisor	Ongoing
Nayak Ram	Design and Optimization of strain powered Smart Magnetoelectric Thin Films for simultaneous wireless power Transmission and Magnetic Field Sensing	Supervisor	Ongoing

16. Participation in Workshops/ Symposia/ Conferences/ Colloquia /Seminars/ Schools etc. (mentioning the role)

Date (s)	Title of Activity	Level of Event (Internation al/ National/ Local)	Role (Participant/ Speaker/ Chairperson, Paper presenter, Any other)	Event Organized by	Venue
March 24-25,2022	2 <sup>nd</sup> International Conference on Materials Genome (ICMG- II)	Internationa l	Participant	SRM University - AP	Virtual
14-16 <sup>th</sup> April,2 022	International confereces on advances in chemical and material sciences (ACMS-2022)	Internationa 1	Paper presenter	Indian Institute of Chemical Engineers	Virtual
Septem ber 9 to 11,2020	International Virtual Conference on Recent Trends in Energy Materials (INCRTEM- 2020)	Internationa 1	Participant	Alagappa University	Virtual
27-28 <sup>th</sup> August 2020	International Virtual Conference on Advances in Functional Materials (AFM 2020)	Internationa 1	Paper Presenter	Kalinga Institute of Technology	Virtual
Nov. 4-6,2015	2015 Fall Meeting of The Korean Ceramic Society: 1 <sup>st</sup> International Symposium on Emerging Functional Materials	Internationa 1	Paper presenter		Incheon, South Korea
Nov. 6- 9,2016	4th International Conference on Electronic Materials and	Internationa 1	Paper presenter		Jeju Island, South Korea

	T		T	1	
	Nanotechnology				
	for Green				
	Environment				
	(ENGE 2016)				
Nov.	3 <sup>rd</sup> International	Internationa	Paper presenter		Jeju island,
17-20,	Conference on	1			South
2015	Advanced				Korea
	Electromaterials				
	(ICAE 2015),				
Feb. 2-	11 <sup>th</sup>	Internationa	Paper presenter		Muju
4, 2015	Ferroelectricity	1	T wp or prosonior		Resort,
1, 2010	Union	•			South
	Symposium				Korea.
	Symposium				Korca.
August	The International	Internationa	Paper presenter		Jeju
21-24,	Workshop on	1	T upor presenter		Island,
2016	Piezoelectric	1			South
2010	Materials and				Korea.
	Applications &				Roica.
	Energy				
	Conversion				
	Materials and				
	Devices 2016				
	(IWPMA &				
Nov.	ECMD 2016)	Internationa	Doman mussantan		Chanavyan
	Korea-Japan Ceramics	_	Paper presenter		Changwon
26-29,	Ceramics	1			, C 41
2014					South
					Korea.
Feb. 01-	International	Internationa	Paper presenter		Bikaner,
02,	Conference on		1 aper presenter		India
2013	Recent trends in	1			muia
2013					
	Applied Physics				
	& Material				
1541	Science (RAM)	Intornat'	Doman		Charrier'
15th -	International	Internationa	Paper presenter		Chennai
17th	Conference on	1			
June	Advances in				
2012.	Manufacturing				
	Technology				
	(ICAMT),				
	Chennai Institute				
	of Technology,				
	Chennai				

July 22-	IEEE Magnetics	Internationa	Paper presenter	SRM	Chennai
27, 2012.	Society Summer School, SRM	1		University	
	University, Chennai, India,				
Nov.	International	Internationa	Paper presenter	IIT-Roorkee	IIT-
02-04, 2012.	Conference on Advances in Materials and Processing Challenges and Opportunities at IIT-Roorkee, India.	1			Roorkee
March 28- April 3, 2011.	Harish-Chandra Research Institute	Internationa 1	Paper presenter	Harish- Chandra Research Institute	Allahabad
Decem ber 5- 10, 2011.	ICMS Cambridge University Winter School on Chemistry and Physics of Materials	Internationa 1	Paper presenter	Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR	Bangalore, India
Dec 20 to 23, 2010.	International Conference on Quantum Effects in Solids of Today (I- CONQuEST)	Internationa 1	Paper presenter	National Physical Laboratory	National Physical Laboratory , New Delhi India
March 5-6, 2010	National Conference on Smart, Electronic and Engineering Materials 2010 (SEEMs'10)	National	Paper presenter	Baba Farid College of Engineering and Technology	Bathinda.
Decem ber 2-4, 2010.	XVI National Seminar on Ferroelectric and Dielectrics	National	Paper presenter	Guru Ghasidas Vishwavidya laya	Guru Ghasidas Vishwavid yalaya, Bilaspur (C.G.)
Feb 25-26, 2012.	National Conference on Advances in	National	Paper presenter	IIT-Roorkee	IIT- Roorkee, India

	Physics (NCAP-2012)				
April 13- 14,2012	National Conference Global Upcoming on Environment Science & Engg. 2012 (GUEST'12)	National	Paper presenter	Punjab Technical University Giani Zail Singh Campus	Punjab Technical University Giani Zail Singh Campus, Bathinda,
Dec. 03-07, 2012.	57th DAE- Solid State Physics Symposium	National	Paper presenter	IIT-Bombay	IIT- Bombay, India
14 <sup>th</sup> and 15 <sup>th</sup> Feb. 2013.	Futuristic and Emerging Areas in Technology: Issues and Challenges	National	Paper presenter	PTU GZS Campus	PTU GZS Campus, Bathinda
Decem ber 5- 10, 2011.	ICMS Cambridge University Winter School on Chemistry and Physics of Materials	Workshop	Paper presenter	Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR)	Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR)
March 28- April 3, 2011	International School and Conference on Functional Materials	Workshop	Paper presenter	Harish- Chandra Research Institute,	Harish- Chandra Research Institute, Allahabad
July 22- 27, 2012	5 <sup>th</sup> IEEE Magnetics Society Summer School	Workshop	Paper presenter		SRM University , Chennai, India

17. Workshops/ Symposia/ Conferences/ Colloquia/Seminars Organized (as Chairman/ Organizing Secretary/ Convenor / Co-Convenor)

Title of Activity	Level of Event (International/	Date (s)	Role	Venue
	National/ Local)			

#### 18. Invited Talks delivered

Topic	Year	Inviting Organization
FDP on Challenges and	2020	JNTUA College of Engineering,
Opportunities of Energy		Anantapur, AP
and Sensor Applications		
One Day State Level	2019	Holy Cross College Trichy
Seminar on Advanced		
Functional Materials		
International Conference	2018	SRM AP
on Green Energy		
Technologies for Smart		
Cities (GETSC-2018)		
Conference and Exhibition	2019	Indian Society for Non-
on Non Destructive		Destructive Testing (ISNT)
Evalution 2019		
Recent Trends in Physics	2021	Central University of Tamil
		Nadu
AICTE Sponsored QIP	2022	IIITDM Kancheepuram
Short Term Course on		
Sensors Technology,		
Department of Sciences		
and Humanities (Physics)		

#### 19. Membership of Learned Societies

Type of Membership (Ordinary	Organization	Membership No. with
Member/ Honorary Member / Life		date
Member)		

### 20. Academic Foreign Visits

Country	Duration of Visit	Programme
South Korea	3 years	Invited scientist (PostDoc)

#### 21. Publications

## (A) Refereed Research Journals:

Author(s)	Title of Paper	Journal	Volume (No.)	Page numbers	Year	Impact Factor of the Journal (Optional)
V. Annapureddy, G. D. Varma, and R. Nath	Optical and electrical properties of spray pyrolysis deposited nano crystalline BiFeO <sub>3</sub> films	AIP Advances	1	042140- 0421410	2011	1.579
V. Annapureddy, N. P. Pathak, and R. Nath,	Particle size dependent magnetic properties and phase transitions in multiferroic BiFeO <sub>3</sub> nano-particles	Journal of Alloys and Compounds	543	206-212	2012	4.175
V. Annapureddy, N. P. Pathak, and R. Nath	Effect of pore size on ferroelectric properties of multiferroic BiFeO <sub>3</sub> films prepared on porous silicon	Current Applied Physics	12	451-455	2012	2.010
V. Annapureddy, N. P. Pathak, and R. Nath	Domain Switching in Spray Pyrolysis Deposited Nano- crystalline BiFeO <sub>3</sub> Films	Physica Scripta	86 (6)	065701	2012	1.28
V. Annapureddy, N. P. Pathak, and R. Nath	Magnetoelectric coupling in spray pyrolysis nano-crystalline BiFeO <sub>3</sub> films	Thin Solid Films	527	358-362	2013	1.94
V. Annapureddy, N. P. Pathak, and R. Nath	Enhanced magnetoelectric coupling in transition-metal-doped BiFeO <sub>3</sub> thin films	Solid State Communications	171	40-45	2013	1.458
L. S. Dev, U. Verma,  V. Annapureddy, L.  Singh, N. Dabra, J. S.  Hundal, R. Nath	Structural and Ferroelectric Studies on KNO3: Polyethylene Oxide Nanocomposite Films	Journal of Nanoelectronics and Optoelectronics	9 (3)	397-400	2014	0.989
V. Annapureddy, N. Dabra, Jasbir S.	Tunablity in Three- Component Ba <sub>0.5</sub> Sr <sub>0.5</sub> TiO <sub>3</sub> - Graphite- Poly (Vinylidene	Science of Advanced Materials	6	235-242	2014	1.671

Hundal,N. P. Pathak and R. Nath	Fluoride) Nano-composite Films					
V. Annapureddy, N. Dabra, J. S. Hundal N. P. Pathak, and R. Nath	Structural and Multiferroic Properties of Nano-composite Ba <sub>0.5</sub> Sr <sub>0.5</sub> TiO <sub>3</sub> - Bi <sub>0.9</sub> La <sub>0.1</sub> Fe <sub>0.9</sub> Mn <sub>0.1</sub> O <sub>3</sub> Thin Film Heterostructures	Science of Advanced Materials	6	1043- 1051	2014	1.671
V. Annapureddy, N. Dabra, J. S. Hundal, N. P. Pathak, and R. Nath	Enhancement of Multiferroic Properties in Nano-Hetero- structured Multilayer Bi <sub>0.9</sub> La <sub>0.1</sub> Fe <sub>0.9</sub> Mn <sub>0.1</sub> O <sub>3</sub> - BiFeO <sub>3</sub> - Zn <sub>0.91</sub> Cr <sub>0.09</sub> O Thin Films	Science of Advanced Materials	6	1228- 1235	2014	1.671
V. Annapureddy, A Kumar, L S Dev, N Kumar, R Nath	Leaf-Like-Dendritic Cesium Nitrate: Poly (Ethylene Oxide) Composite Films and Their Thermal and Ferroelectric Properties	Integrated Ferroelectrics	159 (1)	114-120	2015	0.486
V. Annapureddy, M. Kim, H. Palneedi, H-Y. Lee, S-Y.Choi, W-H Yoon, D-S. Park, J-J Choi, B-D Hahn, C-W Ahn, J-W Kim, D-Y. Jeong, and J. Ryu	Low-loss Piezoelectric Single- Crystal Fibers for Enhanced Magnetic Energy Harvesting with Magnetoelectric Composite	Advanced Energy Materials	6	1601244	2016	24.884
G-T. Hwang*, V. Annapureddy* (*Equal Contribution), J. H. Han, D. J. Joe, C. Baek, D. Y. Park, D. H. Kim, C. K. Jeong, K-I Park, J-J Choi, D. K. Kim, J. Ryu	Self-powered Wireless Sensor Node Enabled by an Aerosol- deposited PZT Flexible Energy Harvester	Advanced Energy Materials	6	1600237	2016	24.884
V. Annapureddy,H-Y Lee, W-H Yoon, H-J Woo, J-H Lee, P. Haribabu, H-J Kim, D- Y Jeong, S N Yi, and J Ryu	Enhanced Magnetic Energy Harvesting Properties of Magneto-Mechano-Electric (MME) Generator by Tailored Geometry	Applied Physics Letters	109	093901	2016	3.521
E. L. Tsege, G. H. Kim,  V. Annapureddy, B.  Kim, H-K Kim and Y-  H Hwang	Flexible Lead-Free Piezoelectric Nanogenerator Based on Vertically Aligned BaTiO3 Nanotube Arrays on Ti-mesh Substrate	RSC Advances	6 (84)	81426- 81435	2016	3.11
P. Haribabu, I. Choi, G-Y. Kim, V. Annapureddy, D. Maurya, S. Priya, J-W Kim, K. J. Lee, S-Y	Tailoring the Magnetoelectric Properties of Pb(Zr,Ti)O <sub>3</sub> Film Deposited on Amorphous Metglas Foil by Laser Annealing	Journal of the American Ceramic Society	99 (8), (2016)	2680– 2687	2016	2.841

Choi, S-Y Chung, S-J L. Kang, J. Ryu						
V. Annapureddy, J. Choi, J-W. Kim, B D. Hahn, C.W. Ahn, and J. Ryu	Dependence of Ferroelectric Properties of Modified Spin- coating Derived PZT Thick Films on Crystalline Orientation	Journal of the Korean Ceramic Society	68 (1)	1390– 1394	2016	0.24
B. Kaur, L. Singh, V. Annapureddy, D-Y. Jeong, N. Dabra, and J. S. Hundal	AC Impedance Spectroscopy, Conductivity and Optical Studies of Sr doped Bismuth Ferrite Nanocomposites	International Journal of Electrochemical Science	11 (5)	4120- 4135	2016	1.68
P. Haribabu*, V. Annapureddy* (*Equal Contribution),S. Priya, and J. Ryu	Status and Perspectives of Multiferroic Magnetoelectric Composite Materials and Applications	Actuators	5 (1)	-	2016	2.76
P. Haribabu, H G Yeo, G-T Hwang, <u>V.</u> Annapureddy, J-W Kim, S T-McKinstry, J Ryu	Flexible, high performance magnetoelectric heterostructure of <100>- oriented Pb(Zr <sub>0.52</sub> Ti <sub>0.48</sub> )O <sub>3</sub> film grown on Ni foil	APL Materials	5	096111	2017	4.335
V. Annapureddy, P. Haribabu, W-H Yoon, D-S Park, J-J Choi, B-D Hahn, C-W Ahn, J-W Kim, D-Y Jeong, J Ryu	A pT/√ Hz sensitivity ac magnetic field sensor based on magnetoelectric composites using low-loss piezoelectric single crystals	Sensors and Actuators A: Physical	260	206	2017	2.499
V. Annapureddy, J-H Kang, P. Haribabu, J-W Kim, C-W Ahn, S-Y Choi, S D Johnson, J Ryu	Growth of self-textured barium hexaferrite ceramics by normal sintering process and their anisotropic magnetic properties	Journal of the European Ceramic Society	37	4701– 4706	2017	3.411
J Jung*, <u>V.</u> Annapureddy*(*Equal Contribution),G-T Hwang, Y Song, W Lee, W Kang, J Ryu, and H Choi	High-performance Thick-film Piezoelectric Micromachined Ultrasonic Transducer by Granule Spray Vacuum in Process	Applied Physics Letters	110 (21)	212903	2017	3.521
P Haribabu, D Maurya, G-Y Kim, <u>V.</u> Annapureddy, M Noh, C-Y Kang, J-W Kim, J- J Choi, S-Y Choi, S-Y Chung, S-J L. Kang, S Priya, J Ryu	Unleashing the full potential of magnetoelectric coupling in film hetero-structures	Advanced Materials	29 (10)	1605688	2017	25.809

K-W Lim, P. Mahesh,  V. Annapureddy, G-T  Hwang, J-J Choi, G-Y  Kim, S N Yi, and J Ryu	Energy storage characteristics of <001> oriented Pb (Zr0. 52Ti0. 48) O3 thin film grown by chemical solution deposition  Enhanced self-biased	Thin Solid Films	660	434-438	2018	1.939
P. Haribabu, D. Maurya, L. D. Geng, H-C. Song, G-T. Hwang, P. Mahesh, V. Annapureddy, Y. S. Oh, S-C. Yang, Y. U. Wang, S. Priya, J. Ryu	magnetoelectric coupling in laser annealed Pb(Zr,Ti)O <sub>3</sub> thick film deposited on Ni foil	ACS Applied Materials & Interfaces	10 (13)	11018– 11025	2018	8.456
V. Annapureddy, Y Kim, G-T Hwang, H W Jang, S-D Kim, J-J Choi, B Cho, and J Ryu	Room-Temperature Solid- State Grown WO <sub>3-δ</sub> Film on Plastic Substrate for Extremely Sensitive Flexible NO2 Gas Sensors	Advanced Materials Interfaces	5 (1)	1700811	2018	4.713
Z Chu, <u>V.</u> <u>Annapureddy</u> , M J P  Asl, P. Haribabu, J Ryu  and S Dong	Review: Dual-Stimulus Magnetoelectric Energy Harvesting	MRS Bulletin	43	199-205	2018	5.199
D. Maurya, P. Mahesh,M-G Kang,L. D.Geng, N. Sharpes, V. Annapureddy, P. Haribabu, R.Sriramdas, Y.Yan, H-C Song, Y. U.Wang, J Ryu, and S Priya	Review: Lead-Free Piezoelectric Materials and Composites for High Power Density Energy Harvesting	Journal of Materials Research	33 (16)	2235– 2263	2018	1.673
P. Haribabu, J HPark, D Maurya, P. Mahesh, G- T Hwang, <u>V.</u> <u>Annapureddy</u> , J-W Kim, J-J Choi, B-D Hahn, S Priya, K J Lee, and J Ryu	Review: Laser irradiation of metal oxide films and nanostructures: applications and advances	Advanced Materials	30 (14)	1705148	2018	25.809
V. Annapureddy, S-M Na, G-T Hwang, , P Haribabu, W-H Yoon, B-D Hahn, J-W Kim, C-W Ahn, D-S Park, J- J Choi, D-Y Jeong, A B. Flatau, S Priya, K-H Kim, and J Ryu	Exceeding Milli-Watt Powering Magneto-Mechano- Electric Generator for Standalone-Powered Electronics	Energy & Environmental Science	11(4)	818-829	2018	33.21
S Park, A Kumar, Kaarthik J, <u>V.</u> <u>Annapureddy*,</u> J Ryu*, (*corresponding authors)	Lead-free single crystal fibers based magneto-mechano-electric generator for scavenging high-robustness ambient magnetic energy	Electronic Materials Letters	16	369–375	2020	1.89

M. Peddigari, K. Woo, SD. Kim, M.S. Kwak, J.W. Jeong, JH. Kang, SH. Lee, J.H. Park, KI. Park, V.  Annapureddy, J. Jang, Y. Min, CW. Ahn, JJ. Choi, BD. Hahn, WH. Yoon, J. Ryu, GT. Hwang	Ultra-magnetic field sensitive magnetoelectric composite with sub-pT detection limit at low frequency enabled by flash photon annealing	Nano Energy	90	106598	2021	19.069
A.R. Jayakrishnan, J.P.B. Silva, K. Kamakshi, <u>V.</u> <u>Annapureddy</u> , I.F. Mercioniu, K.C. Sekhar	Semiconductor relaxor 0-3 type composites A novel strategy for energy storage capacitors	Journal of Science: Advanced Materials and Devices	6(1)	19-26	2021	7.382
P.V.K. Yadav, B. Ajitha, <u>V.</u> <u>Annapureddy</u> , Y.A.K. Reddy, A. Sreedhar	Improved UV photodetector performance of NiO films by substitutional incorporation of Li	Materials Letters	301	130296	2021	3.574
T. Garg, <u>V.</u> <u>Annapureddy</u> , K.C.  Sekhar, DY. Jeong, N.  Dabra, J.S. Hundal	Dielectric Properties and Phase Stabilization of PVDF Polymer in (1-x)PVDF/xBCZT Composite Films	Journal of Electronic Materials	50	5567– 5576	2021	1.938
T. Garg, <u>V.</u> <u>Annapureddy</u> , K.C.  Sekhar, DY. Jeong, N.  Dabra, J.S. Hundal	Modulation in polymer properties in PVDF/BCZT composites with ceramic content and their energy density capabilities	Polymer Composites	41 (12)	5305- 5316	2020	3.17
D.R. Patil, <u>V.</u> <u>Annapureddy</u> , J. Kaarthik, A. Thakre, J. Akedo, J. Ryu	Piezoelectric Thick Film Deposition via Powder/Granule Spray in Vacuum: A Review	Actuators	9 (3)	59	2020	2.76
H.S. Choi, V. Annapureddy*, N. Park, JW. Jeong, G T. Hwang, J. Ryu (*corresponding author)	High-Performance Magneto-Mechano-Electric Generator through Magnetic Flux Concentration Optimization	Sustainable Energy & Fuels	6	2700- 2708	2022	6.367

## (B) Conferences/Workshops/Symposia Proceedings

Author(s)	Title of	Title of the	Page	Conference	Venue	Year
	Abstract/ Paper	Proceedings	numbers	Theme		

V. Annapureddy, N. P. Pathak, and R. Nath	Study of Structural Phase Transition and Optical Properties in BiFeO <sub>3</sub> - BiMnO <sub>3</sub> Thin Films	AIP Conference Proceedings	1512, 46- 47 (2013)	7 <sup>th</sup> DAE- Solid State Physics Symposium	IIT Bombay, India	2013
Anil K. Yadava, <u>V.</u> Annapureddy, V. Sharma, N. P. Pathak, and R. Nath	Thickness dependent dielectric tunable properties of barium strontium titanate thin films	AIP Conference Proceedings	1536, 505-506 (2013)	International Conference on Recent trends in Applied Physics & Material Science (RAM)	Bikaner, India	2013
V. Annapureddy, N. P. Pathak, and R. Nath	Structural, Optical and Ferroelectric Properties of BiCoO <sub>3</sub> :BiFeO <sub>3</sub> composite films	Advanced Materials Research	585, 260- 264	International Conference on Advances in Materials and Processing Challenges and Opportunities	IIT Roorkee, India	2012

(C) Books & Monographs

(C) BOOKS & MOI	ograpiis			
Author(s)	Title of Book/Monograph	Name of	Year of	ISSN/ISBN
		Publishers	Publication	Number
B.G. Baraskar,	Ferroelectric Materials for	Elesevier	2021	978-0-08-102802-
T.C. Darvade,	Energy Harvesting and	Woodhead		5
R.C. Kambale,	Storage Harvesting: Stray	Publishing		
J. Ryu, <u>V.</u>		Series		
<b>Annapureddy</b>	Magnetic Field for			
	Powering Wireless			
	Sensors			
J.Kaarthik, R.C.	Multifunctional	Elesevier	2023	9780128193327
Kambale, V.	Piezoelectric Oxide	Woodhead		
<b>Annapureddy</b>	Nanostructures	Publishing		
		Series		
	Composite Multiferroics			
	for Magnetic Energy			
	Harvesting			