

**Name** Dr. D. ARIVUOLI  
([arivuoli@annauniv.edu](mailto:arivuoli@annauniv.edu),  
[arivuoli@gmail.com](mailto:arivuoli@gmail.com))

**Designation:** Professor Professor and Head  
Crystal Growth Centre Department of Physics  
Anna University Anna University  
Chennai-25 Chennai-25

**Teaching experience** : 25 years

**Research Experience** : 32 years

### **AWARDS/ HONOURS/ FELLOWSHIPS**

**Member, Tamilnadu State Panel for Koodamkulam Nuclear Power Project**

**76<sup>th</sup> Indian Science Congress Madurai Kamaraj University  
Eminent Scientist Endowment Award, 2009**

**Work on Nanoindentation is being referred in international journals as  
'Arivuoli et al MODEL', Polymer 46 (2005) 4032-4040 (Europe)**

**A New thermo dynamical model proposed for the predicting the melting point of  
nanoparticles (J. Nanoscience and Nanotechnology, Vol 11 (2011)1-8 (USA))**

**Member,  
UGC expert Committee for Major research projects 2011, 2012**

**Member,  
UGC expert Committee for colleges with potential for excellence 2012**

**Member,  
UGC expert Committee for autonomous status to colleges, 2011**

**Member,  
UGC expert Committee for Minor research projects, 2011**

### **Editor –in--Chief**

International journal of Nanomaterials and Technology (India)

### **Associate Editor**

Research Journal of Nanoscience and Technology

### **Editorial Board Member:**

1. The open journal of Mechanical Engineering, (**USA**)
2. The open journal of Recent patents in Mechanical engineering (**USA**)
3. The Journal of Crystallization Physics and Chemistry (**INDIA**)
4. International journal of Biosciences and Technology (**INDIA**)
5. Energy Focus (**USA**) American Scientific Publishers

### **REVIEWER: International Journals of Elsevier Publications, UK**

Journal of American Ceramic society  
NANOTECHNOLOGY  
Wear  
Semiconductor science and Technology  
Measurement science and Technology  
Journal Physics D: Applied Physics  
Journal of Condensed Matter Physics  
J. Surface and coatings technology  
Applied surface science

### **Previous assignments in Anna University**

1. **Member, Anna University Sports Board (1996-2008)**
2. **Assistant Executive Warden, CEG Hostels (1994-2002)**
3. **Deputy Chairman, Anna University Sports Board (2009)**
4. **Director, Crystal Growth Centre, Anna University (2009-12)**

### **Best paper presentation Award**

1. National Conference on Application oriented materials (NCAOM 2006)  
SRM Institute of Science and Technology, Kattankulathur, Tamil Nadu  
21<sup>st</sup> and 22<sup>nd</sup> April 2006.
2. **Nucleation Studies of Nanomaterials Using Thermo dynamical Approach”**  
National Seminar on Advances in Materials Science (NSAMS – 2008)  
4<sup>th</sup> and 5<sup>th</sup> February 2008 M.S University, Tirunelveli, Tamil Nadu.
3. **“Nanoindentation Studies of III – V Semiconducting Thin Films”**  
National Conference on Recent Advances in Materials Science – 09 (RAMS’09)  
21<sup>st</sup> and 22<sup>nd</sup> August 2009, Sree Sevugan-Annamalai College, Devakottai, Tamil Nadu.

<b>Employment</b>	<b>Period</b>	<b>Nature of duties</b>
<b>Professor and Head Department of Physics</b>	31-5-2012 onwards	Administration, Teaching and Research
<b>Director Crystal Growth Centre</b>	01-07-2009 to 31 May 2012	Administration, Teaching and Research
<b>Professor Crystal Growth Centre</b>	From 26-10-2010	Teaching and Research
<b>Professor Department of Physics</b>	From 05-06-2007 to 26-10-2010	Teaching and Research
<b>Asst. Professor Department of Physics</b>	From 15-07-2003 to 04-06-2007	Teaching and Research
<b>Asst Professor Dept of Electrical and Electronics Engineering</b>	23-06-2002 to 14-07-2003	Teaching and Research
<b>Asst Professor Crystal Growth Centre</b>	From 20-07-2000 To 22-06-2002	Teaching and Research
<b>Senior Lecturer Crystal Growth Centre</b>	From 14-4-1995 To 05-06-1999	Teaching and Research
<b>Lecturer Crystal Growth Centre</b>	From 31-3-1989 to 04-06-1999	Teaching and Research
<b>Research Associate (CSIR) Direct awardee Crystal Growth Centre</b>	25-4-88 to 30-3-89	Teaching and Research
<b>Senior Research Fellow Crystal Growth Centre</b>	28-9-85 to 24-4-88	Research
<b>Junior Research Fellow, Crystal Growth Centre</b>	28-9-83 to 27-9-85	Research

## **TEACHING**

(B.E, B.Tech, M.Sc, M.Phil., and M.Tech, Ph.D)

1. Crystal growth - Theory and experimental methods
2. Physical Metallurgy
3. Materials science
4. Physics of materials and optoelectronics
5. Solid State Detectors
6. Photonics and integrated optics
7. Photonics materials and devices
8. Nanoscience and Technology
9. Research methodology
10. Engineering Physics
11. Characterization of materials
12. Lithography and fabrication

<b>Award/Fellowship</b>	<b>Place</b>	<b>Nature of work</b>
ICTP Awardee (1989-90)	MASPEC-CNR, PARMA, ITALY	VPE Growth of III-V compounds
ICTP, April 1990	Lisbon, Portugal	X European conference on condensed matter
ICTP Awardee December 1991	Trieste, Italy	School on optoelectronics
ICTP awardee 1991-92	MASPEC-CNR, PARMA, ITALY	MOVPE growth of GaAs/Si, InGaP/InP compounds
MASPEC-CNR Parma, April-May 1992	Bratislava Czechoslovakia	International workshop on characterization of semiconductor substrates and structures
University of Lyon May 1992	Lyon, France	First EXMATEC workshop
MASPEC-CNR, Parma	Torino, Italy	European school on semiconductors
Commonwealth Fellowship 1998-99	Lancaster University, England	LPE growth and characterization of Infrared materials
ACU fellowship April 1999	University of Turku, Finland	International summer school on metal and metal surfaces
ACU fellowship September 1999	Glasgow Scotland	International conference on crystallography
ACU fellowship Sep- Oct 1999	IMEM-CNR, Parma	Growth of InAsSb/InSb by MOVPE
MASPEC-CNR, Parma, September 1999	Universita di Napoli, Napoli, Italy	Italian conference on crystallography
ICTP, Italy October 1999	MASPEC-CNR, Parma	Growth of InAsSb/InSb by MOVPE
Taipei, Taiwan February 2002	NSF, Taiwan	INEER retreat and workshop
NSF, Taiwan December 2006	Lungwa University, Taiwan	Taiwan – India conference on Nanomaterials
	University of Bologna, Bologna	Electrical characterization of semiconductors
Nanofab, Venice	IMEM-CNR, Parma, Italy	Joint research programme
Nanofab, Venice	Univeristy of Venice, Italy	Joint research programme

Degree(supervision)	PhD	M.Phil	M.Tech	M.Sc
Completed	14	16	12	42
Ongoing	12			

### **Board of Studies, Member**

1. Anna University, Chennai
2. SRM University, Kattankulathur, Chennai
3. Chettinad hospitals and University, Chennai
4. Noorul Islam University, Nagercoil
5. Bharathiyar University, Coimbatore

### **ACHIEVEMENTS IN Crystal Growth Centre (during 2009 to 2012) as Director**

1. Responsible for the **new Crystal Audi** with a seating capacity of 120 with ductable air conditioning with sound proof side walls  
**(Inaugurated on 18<sup>th</sup> August 2010)**
2. Responsible for bringing in a grant of 78 lakhs under DST-FIST ( in engineering sciences) in 2010.  
Established AFM laboratory in the Crystal Growth Centre 2012  
**(Inaugurated on 13<sup>th</sup> March 2012)**
3. Responsible for bringing in **4.2 crores from UGC under XI plan** and the orders for the following characterization equipment have been placed in January 2012.and equipment are being installed.
  1. **Powder XRD** 60 Lakhs (LC opened April 12)
  - SEM with EDAX** 90 Lakhs (item received May 12)
  - FTIR with imaging** 60 lakhs (LC opened May 12)
  2. **Second floor in CGC** 100 Lakhs (approval from AU building committee and Syndicate received in April 2012)
4. Responsible for developing the state of the art facility for vibration free room for the installation of SPM coupled Nanoindenter (costing 1.35 Crores)  
**(Inaugurated on 26<sup>th</sup> August 2011)**
5. Responsible for developing the HRXRD and PL facility in the first floor of the Centre **(Inaugurated on 26<sup>th</sup> August 2011)**
6. Responsible for construction of the new toilet facility for the centre which was a long pending issue. (work started in January 12)

## **Collaboration with research laboratories**

1. IMEM-CNR, Parma, Italy
2. Lancaster University, Lancaster, UK
3. Department of Physics, University of Bologna, Bologna, Italy
4. Center for photonic devices, Piestany, Bratislava, Slovakia
5. University of Parma, Italy
6. Institute of metallurgy and semiconductor materials, Shanghai, China

FELLOW, Indian Chemical Society, Calcutta

FOUR TIMES selected for Young Physicist colloquium organized by Indian Physical Society (1986, 1989, 1990, 1991)

Selected among Best Five for the INSA (Indian National Science Academy) Young Scientist Award, April 1989.

Selected among Best Five for the ISCA (Indian Science Congress Association) Young Scientist Award, June, 1989

Selected among Best Five for the INSA (Indian National Science Academy) Young Scientist Award, May, 1992.

CSIR Research Associate, Direct awardee, 1988-89

ICTP fellowship award 1989-90 (Italy), 1991-92 (Italy)

Biography included in Marquis WHO'S WHO (USA)

"WHO's WHO in the WORLD" 15<sup>th</sup> edition

"WHO's WHO in Finance and Industry" 30<sup>th</sup> edition

"WHO's WHO in Science and Engineering" 4<sup>th</sup> edition

Biography included in "2000 outstanding people of the 20<sup>th</sup> century" by International Biographical Center, Cambridge U.K.

"International Man of the Year 1996-97, awarded by the International biographical Society, Cambridge, United Kingdom.

Nominated for "International Who's Who of Intellectuals" - published in 13<sup>th</sup> edition of International biographical Society, Cambridge, United Kingdom.

Biography also included in International Biography, 26<sup>th</sup> edition of International Biographical Center, Cambridge, U.K

Commonwealth fellowship award, 1998-99

Association of commonwealth Universities (UK) travel grant awardee, 1999

ICTP (Italy) travel grant awardee, 1999

## Research Projects

Sl. No	Title of the project	Amount (Lakhs)	Duration	Funding agency	Status of the project
1	Development of Photonic devices with emphasis on epitaxy of semiconducting materials.	17	(1991-92)	MHRD	Completed
2	Development of facilities for the growth of laser quality ruby and sapphire Crystals.	8.00	(1993-95)	MHRD	Completed
3	Growth of GaAs and InP bulk crystals	54.16	(1990-95)	DOE	Completed
4	Growth of binary, ternary and quaternary epilayers by hydride VPE and their characterisation	1500 USD	(1993)	ICTP (Italy)	Completed
5	Growth of semiconducting laser materials for optoelectronics	5.00	(1992-93)	MHRD	Completed
6	Growth of laser and non-linear crystals	146.00	(1993-2001)	DAE	Completed
7	Development of materials science with emphasis on semi conducting materials	12.00	(1991-93)	MHRD	Completed
8	Growth and characterisation of oxyhalides of antimony and bismuth	1.89	(1994-97)	UGC	Completed
9	Irradiation effects of GaN epitaxial layers	1.24	(2002-05)	NSC	completed
10	Irradiation effects of wafer bonded GaAs/Si for solar cell applications	1.24	(2001-02)	NSC	completed
11	Growth and characterisation of cholestrol crystals	2.65	(2001-04)	UGC	completed
12	Growth and characterization of InGaAsSb /InAs epilayers suitable for 2.54 micron laser	5000 USD	(2002)	ICTP Italy	completed
13	Preparation of directed self assembly of GaN and InGaN quantum dots for the fabrication of LEDs	234.	2010-13	D I T	ongoing
14	Nanomechanical characterization of biomimetic materials	9.94	2010-13	UGC	ongoing
15	UGC XI plan grant (2011-12)	424	2011-12	UGC	ongoing
16	DST-FIST	78	2009-14	DST	ongoing

## **International /National / workshop / organized**

### **Co-Coordinator**

**ISTE** summer school organized during June 5-16, 1991, at Crystal growth Center, Anna University, Chennai, India .

### **Coordinator**

**UGC, India, Refresher school** on Recent advances in crystal Growth and characterization, during May 28 - June 17, 2001.

### **Convener,**

**International workshop on Nanoscience and Technology,**  
13-17, February, 2006 Sponsored by **ICTP, Italy** and Anna University,  
Chennai 25

### **Coordinator,**

**AICTE** faculty development programme on **Fundamentals of Nanoscience and Technology,** 8-31, January 2007 at Anna University, Chennai 25.

### **Coordinator,**

**"Introduction to Nanoscience"** a two days course organized for **M/s. Philips International, Bangalore** during 2-3, February 2007 at Anna University,  
Chennai 25.

### **Coordinator,**

**TEQIP** sponsored orientation programme on **Introduction to Nanoscience and Technology,** 30-31, March, 2007 at Anna University, Chennai 25.

### **Coordinator,**

**TEQIP** sponsored Community Development programme on **Introduction to Nanoscience and Technology,** for school teachers  
29-30, September, 2007 at Anna University, Chennai 25

**Coordinator,** Introduction to Nanotechnology, organized by Science city,  
Chennai, during January 3-7, 2008

### **Coordinator,**

**TNSCST, Chennai and NCSTC, New Delhi** sponsored One day Awareness programme on current trends in nanotechnology for final year BE/BTech students of engg. Colleges, 31 October, 2008 at Anna University Chennai

### **Convener,**

Advanced Level **International workshop on Nanoscience and Technology,**  
23-27, February, 2009 Anna University, Chennai 25

### **Convener,**

**International workshop on Advances in Nanoscience and Technology,**  
28-30, October, 2009 Anna University, Chennai 25



**Convener**  
**UGC awareness programme on Recent Trends in Crystal Growth and Characterization, 30 March, 2010, Anna University, Chennai**

**Coordinator**  
**Awareness programme on Nanoscience and Technology, 23-27, August, Science City, Chennai**

**Convener,**  
**Indo-Italian advanced level workshop on semiconductor nanostructures, ultra thin films and applications,**  
**08-10, September, 2010 Anna University, Chennai 25**

**Convener,**  
**International workshop on wide band gap semiconductor nanostructures**  
**10-11, January, 2011 Anna University, Chennai 25**

**Coordinator**  
**International workshop on Advanced functional Nanomaterials, 21-24 February 2011, Anna University, Chennai 25**

**Coordinator**  
**International Workshop on Biomedical Sciences and Technologies, 2-4 March, Anna University, Chennai 25**

**Convener,**  
**Asia- Pacific workshop on materials characterization, 22-24 September 2011, Anna University, Chennai 25**

### **Books/proceedings**

Written a chapter on "Principles of Verneuil growth" for the encyclopedia on Materials science published in 2001 by the **Elsevier publishers, U.K.**

Written a review article on "Nonlinear optical materials and its applications" for the "Pramana" journal published in 57, 871-883, 2001

## **FIRST EVER REPORT TO THE LITERATURE**

1. Growth of bulk single crystals of BiSeI overcoming needle morphology (25 x 10 x 8 mm<sup>3</sup>)
2. Growth of hollow crystals of V-VI-VII group compounds (SbSI, BiSI, BiSeI, SbSeBr, SbSeI)
3. Growth of arsenic chalcogenides (AsSI, AsSeI, AsOI)
5. Mechanical properties of V-VI-VII group compounds
6. Mechanical properties of doped InP and GaAs/InP epilayers

Pearson's Handbook of Crystallographic Data for Intermetallic Phases (1985) Ed. P. Villars and L.D. Calvert

Atlas of crystal structures types for Intermetallic phases, Ed. J.L.C. Daams, J.H.N. Van Vucht and P. Villars (1993)

## **PROFESSIONAL AFFILIATIONS**

1. Member, SPIE, USA (1993-1995)
2. Life member, Indian Association for Crystal Growth, Anna University
3. Member, Indian Science congress Association, Calcutta
4. Member, Indian Physical Society, Calcutta
6. Fellow, Indian Chemical Society, Calcutta
- 7. Member, Asian Association of Nanoscience and Nanotechnology**

## **Countries visited**

1. Italy
2. Portugal
3. Bratislava, Slovakia
4. France
5. England, U.K
6. Seili, Turku, Finland
7. Vienna, Austria
8. Taiwan
9. Singapore
10. Thailand
11. Japan

## LIST OF PUBLICATIONS in International/national journals

1.	<p>NANOMATERIALS FOR NONLINEAR OPTICAL (NLO) APPLICATIONS: <b>A REVIEW</b>  Suresh Sagadevan and <b>Arivuoli Dakshanamoorthy</b>  <b>Rev.Adv.Mater. Sci.</b> 30 (2012) 14-34</p>
2.	<p><b>A Thermo Dynamical Model</b> for the Shape and Size Effect on Melting of Boron Carbide Nanoparticles  Antoniammal, Paneerselvam, <b>Arivuoli, Dakshanamoorthy</b>  <b>Journal of Nanoscience and Nanotechnology</b>, Volume 12, Number 2, February 2012 , pp. 993-1000(8)</p>
3.	<p>Size and Shape Dependence on Melting Temperature of Gallium Nitride Nanoparticles  Paneerselvam Antoniammal and <b>Dakshanamoorthy Arivuoli</b>  <b>Journal of Nanomaterials</b>  Volume 2012, Article ID 415797, 11 pages  doi:10.1155/2012/415797</p>
4.	<p>“Synthesis, Optical and Dielectric Properties of Tris-Glycine Zinc Chloride Single Crystals”  S.Suresh, and <b>D.Arivuoli</b>  <b>Journal of Minerals &amp; Materials Characterization &amp; Engineering</b>, Vol.10, No.6, (2011), pp. 517-526.</p>
5.	<p>“Growth, Theoretical, Optical and Dielectric Properties of L-Tartaric Acid NLO Single Crystals “  S.Suresh, and <b>D.Arivuoli</b>  <b>Journal of optoelectronics and biomedical materials</b>, Vol.No.3, (2011), pp.63-68</p>
6.	<p>“Synthesis and Characterization of Pb<sup>+</sup> Doped MgO Nanocrystalline Particles”  S.Suresh, and <b>D.Arivuoli</b>  <b>Digest Journal of Nanomaterials and Biostructures</b>, Vol.6, No.4, (2011), pp. 1597-1603.</p>
7.	<p>“Growth, Optical, Mechanical and Dielectric Properties of Glycine Zinc Chloride NLO Single Crystals”  S.Suresh, and <b>D.Arivuoli</b>  <b>Journal of Minerals &amp; Materials Characterization &amp; Engineering</b>, Vol.10, No.12, (2011), pp. 1131-1139.</p>
8.	<p>Morphological Control of Porous SiC Templated by As-synthesized form of Mesoporous Silica  Sakthivel TamilSelvan, Salem S.Aldeyab, JavaidZaidi,S.M, <b>Dakshanamoorthy Arivuoli</b>, Katsuhiko Ariga, Toshiyuki Mori, Ajayan Vinu  <b>J.Nanosci. Nanotechnol.</b> (Doi:10.1166/jnn.2011.4203, in press2011)</p>
9.	<p>Preparation of highly ordered mesoporous SiC with rod shaped morphology and tunable pore diameters using polycarbosilane precursor  Sakthivel TamilSelvan,Salem S.Aldeyab, Javaid SM. Zaidi, <b>Dakshanamoorthy Arivuoli</b>, Katsuhiko Ariga, Toshiyuki Mori, AjayanVinu,  <b>J. Mater.Chem.</b>, (Doi:10.1039/C1JM10545K,inpress2011)</p>
10.	<p>Bent crystals obtained by low energy plasma enhanced chemical vapour deposition for medical applications  P. Joice Sophia, I. Neri, V. Guidi, <b>D. Arivuoli</b> ,  <b>Il Nuovo Cimento C</b>, vol. 34 (4/5) 2011.</p>

11.	Mechanical properties of some binary, ternary and quaternary III–V compound semiconductor alloys R. Navamathavan, <b>D. Arivuoli</b> , G. Attolini, C. Pelosi and Chi Kyu Choi <i>Physica B: Condensed Matter</i> , Volume 392, 2007, Pages 51-57
12.	AFM studies of microindented GaN and InGaN <i>Materials Letters</i> , Volume 63, Issue 5, 28 February 2009, Pages 515-518 D. Geetha, <b>D. Arivuoli</b> , G. Mangamma
13.	Growth and characterization of selenium sulfide (SeS) and selenium tin sulfide (SeSnS <sub>2</sub> ) microcrystals Original Research Article <i>Journal of Crystal Growth</i> , Volume 263, Issues 1–4, 1 March 2004, Pages 498-503 P. Premchander, K. Baskar, R. Jayavel, <b>D. Arivuoli</b> , M. Palanichamy
14.	In vitro solubility, growth and characterization of cholesteryl acetate <i>Journal of Crystal Growth</i> , Volume 267, Issues 1–2, 15 June 2004, Pages 301-305 N.Meenakshi Sundaram, <b>D. Arivuoli</b> , R. Dhanasekaran, S.Narayana Kalkura
15.	Principles of the Verneuil Growth Technique <b><i>Encyclopedia of Materials: Science and Technology (Second Edition)</i></b> , 2001, Pages 7854-7856 <b>D. Arivuoli</b>
16.	Growth and characterization of hydroxyapatite crystals by hydrothermal method <i>J. Mater. Sci:Mater.Med</i> 18 (2007)895
17.	Mechanical properties of InAs/InP semiconductor alloys <b><i>Applied Surface Science</i></b> , Volume 253, 2006, Pages 2657-2661 R. Navamathavan, <b>D. Arivuoli</b> , G. Attolini, C. Pelosi and Chi Kyu Choi
18.	Characterization of surface deformation around Vickers indentations in InGaAsP epilayers on InP substrate <b><i>Applied Surface Science</i></b> , Volume 253, 2006, Pages 2973-2977 R. Navamathavan, V. Ganesan, <b>D. Arivuoli</b> , G. Attolini, C. Pelosi and Chi Kyu Choi
19.	Micro indentation studies of Hg <sub>0.7</sub> Cd <sub>0.3</sub> Te/CdTe compound semiconductor alloy <i>Materials Letters</i> , Volume 60, Issue 24, October 2006, Pages 2949-2953 R. Navamathavan, <b>D. Arivuoli</b> , G. Attolini, C. Pelosi and Chi Kyu Choi
20.	Enhanced wear resistance of Ti-5Al-2Nb-1Ta orthopedic alloy by nitrogen ion implantation <b><i>Tribology International</i></b> , Volume 39, Issue 6, June 2006, Pages 548-552 S. Gokul Lakshmi and <b>D. Arivuoli</b>
21.	Tribological behaviour of plasma nitrided Ti-5Al-2Nb-1Ta alloy against UHMWPE <b><i>Tribology International</i></b> , Volume 37, Issue 8, August 2004, Pages 627-631 S. Gokul Lakshmi and <b>D. Arivuoli</b>
22.	In vitro solubility, growth and characterization of cholesteryl acetate N. Meenakshi sundaram, <b>D.Arivuoli</b> , R. Dhanasekaran and S. Narayana Kalkura <i>Journal of Crystal Growth</i> , 267 (2004),301-305
23.	Influence of an organic and an inorganic additive on the crystallization of dicalcium phosphate dihydrate <i>Journal of Crystal Growth</i> , Volume 285, 1 December 2005, Pages 380-387 T.K. Anee, N. Meenakshi Sundaram, <b>D. Arivuoli</b> , P. Ramasamy and S. Narayana Kalkura
24.	Investigations of structural and optical analysis of SeS and SeSnS <sub>2</sub> micro

	crystals P. Premchander, <b>D. Arivuoli</b> and K. Baskar Journal of Crystal Growth, Volume 267, 2004, Pages 166-172
25.	Synthesis of stoichiometric nano crystalline hydroxyapatite by ethanol-based sol-gel technique at low temperature T. Anne Kuriakose, S. Narayana Kalkura, M. Palanichamy, <b>D.Arivuoli</b> , Karsten Dierks, G. Bocelli, and C. Betzel J. Crystal Growth, 263 (2004) 517-523.
26.	Growth and characterization of selenium sulfide (SeS) and selenium tin sulfide (SeSnS <sub>2</sub> ) micro crystals P. Premchander, K. Baskar, R. Jayavel, <b>D.Arivuoli</b> and M. Palanichamy Journal of Crystal Growth 263 (2004) 495-503.
27.	Effect of SeS <sub>2</sub> treatment on the surface modification of GaAs and adhesive wafer bonding of GaAs with silicon P. Premchander, R. Jayavel, <b>D.Arivuoli</b> and K, Baskar Journal of Crystal Growth 263 (2004) 454-458
28.	Photoluminescence studies of heavily doped homoepitaxial layers of InP <b>D.Arivuoli</b> , G. A. Krier, G. Attolini and C. Pelosi J. Phys.D: Appl. Phys., (In press)
29.	Growth and characterization of uric acid and anhydrous uric acid crystals P. Mehaboob, T. Iruan and <b>D.Arivuoli</b> Crys. Res. Tech (in press)
30.	Photoluminescence studies of doped InP <b>D.Arivuoli</b> , A. Krier and R. Fornari , J. Phys.D: Appl. Phys.,
31.	Effect of N <sup>+</sup> ion implantation on the corrosion behaviour of Ti-6Al-7Nb and Ti-5Al-2Nb-1Ta orthopaedic alloys in Hanks solution S. Gokul Lakshmi, S. Tamilselvi, N. Rajendran and <b>D.Arivuoli</b> <b>J. Applied Electrochemistry</b> , 34(2004) 271-276.
32.	Electrochemical behaviour and characterization of plasma nitrided Ti-5Al-2Nb-1Ta orthopaedic alloy in Hanks solution S. Gokul Lakshmi, S. Tamilselvi, N. Rajendran, M.A.K. Babi and <b>D.Arivuoli</b> <b>Surface and coatings Technology</b> 182-183 (2004) 293-299.
33.	Invitro corrosion behaviour of plasma nitrided Ti-6Al-7Nb orthopaedic alloy in Hanks solution S. Gokul Lakshmi, S. Tamilselvi, N. Rajendran, M.A.K. Babi and <b>D.Arivuoli</b> Science and Technology of Advanced Materials, 4 (2003) 415-419.
34.	Preparation and Characterisation of Ti/BaTiO <sub>3</sub> /InP MIS structures G. Sonia, M. Senthil kumar, <b>D.Arivuoli</b> , J. Kumar and K. Baskar International journal of Modern Physics B 16(2002)281-286
35.	Surface modification and characterization of Ti-Al-V alloys S. Gokul Lakshmi, <b>D.Arivuoli</b> and B. Ganguli Materials Chemistry and Physics, 76 (2002)187-190.
36.	Growth and characterization of bismuth Thiourea chloride (BTC) G. Kanchana, <b>D.Arivuoli</b> , L. Kazimierz and R. Fornari Indian Journal of Physics 75A(2) 2001
37.	Nanoindentation studies of (111) GaAs/InP epilayers R.Navamathavan, <b>D.Arivuoli</b> , G.Attolini, C.Pelosi <b>Applied Surface Science</b> (2001) 119-125.
38.	Growth and characterization of antimony Thiourea bromide (ATB) G. Kanchana and <b>D.Arivuoli</b> Indian Journal of Physics 75A(2) 2001
39.	Spectroscopic studies of BiSeI, SbSeI compounds and BiSbSSeI solid solutions G. Kanchana and <b>D.Arivuoli</b> Indian Journal of Engineering and Materials Sciences 8(2001)373-376

40.	Nanoindentation studies of GaAs/InP heterostructures <b>D.Arivuoli</b> , G.Attolini, C.Pelosi, N.S.Lawson and A.Krier Mater. Chem. Phys. 66 (2000) 207-212.
41.	Micro hardness studies of binary, ternary and quaternary III-V compound alloys, R. Navamadhavan, <b>D.Arivuoli</b> , G. Attolini and C. Pelosi Indian Journal of Physics 33(2000) 233-237
42.	Hollow morphology of gel grown bismuth Thiourea chloride single crystals <b>D.Arivuoli</b> , K. Kazimierz, R. Fornari and G. Kanchana J. Crystal growth (accepted for publication)
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