

# CURRICULUM VITAE

Shuit-Tong LEE  
 Professor (Chair) of Materials Science  
 Department of Physics and Materials Science  
 City University of Hong Kong  
 83 Tat Chee Avenue  
 Kowloon, Hong Kong  
 Tel: 852-2788-9606  
 Fax: 852-2784-4696  
 E-mail: [apannale@cityu.edu.hk](mailto:apannale@cityu.edu.hk)  
 Internet: <http://www.cityu.edu.hk/cosdaf/>



## EDUCATION:

- 11/1974 - 10/1976      **Postdoctoral fellow with Professor David Shirley**  
 University of California, Berkeley, California, USA 94720  
 Research Projects:  
 I. Electronic structure of atoms and molecules studied by high temperature VUV photoemission.  
 II. Fluorescence study of rare gases using synchrotron radiation
- 9/1971 - 8/1974      **Ph.D. in Physical Chemistry**  
 University of British Columbia, Vancouver, Canada  
 Thesis supervisors: Profs. C. A. McDowell and D. C. Frost  
 Thesis: Unconventional Photoelectron Spectroscopic Studies: PES of Some Transient Species and Reactive Molecules
- 9/1969 - 8/1971      **M.Sc. in Chemistry**  
 University of Rochester, Rochester, New York, USA
- 9/1965 - 6/1969      **B.Sc. in Chemistry (minor in Physics)**  
 The Chinese University of Hong Kong, Chung Chi College, Hong Kong

## EMPLOYMENT HISTORY AND POSITIONS HELD:

- 1996 – present      **City University of Hong Kong, Hong Kong SAR**
- ☛ 1998 – present      **Director**  
 - Centre Of Super-Diamond and Advanced Films,  
 - City University - Fudan University Joint Laboratory on Surface and Thin Film Physics
- ☛ 3/1996 – present      **Professor (Chair) of Materials Science**  
 Department of Physics & Materials Science

- 3/1995 - 3/1996      **Associate Professor**  
 Department of Physics & Materials Science
  
- 10/1994 - 3/1995      **Senior Lecturer**  
 Department of Physics & Materials Science
  
- 1976 – 1993**                      **Eastman Kodak Company, Rochester, New York, USA**
  
- 6/1986 - 9/1993      **Group Leader**, Ion Beam Technology group (4 Ph.D.'s, 2 Technicians)  
 Analytical Sciences Division, USA
  
- 6/1983 - 6/1986      **Group Leader**, Surface Science Group (4 Ph.D.'s, 3 M.Sc.'s 2 Technicians)
  
- 12/1980 - 6/1985      **Senior Research Scientist**, Corporate Research Labs.
  
- 11/1976 - 10/1980      **Research Scientist**, Corporate Research Labs.

## RESEARCH INTERESTS:

Nanoscience and nanotechnology, organic electroluminescence and optoelectronics, organic emitting diode (OLED) / Polymeric emitting diode (PLED) display technology, thin films and super-hard coatings, surface science and modification applied to organics, polymers, interfaces, nanomaterials, and thin films

## AWARDS:

- *National Natural Science Award (2<sup>nd</sup> Class Award)*  
 State Council of the People's Republic of China
  
- 2002                      *National Natural Science Award (2<sup>nd</sup> Class Award)*  
 State Council of the People's Republic of China
  
- 2002                      *The Croucher Award - Senior Research Fellowship*  
 The Croucher Foundation, Hong Kong SAR
  
- 2001                      *Humboldt Research Award*  
 Alexander von Humboldt Foundation, Germany
  
- 1999                      *Shenyang Science & Technology Award (1<sup>st</sup> Class Award)*  
 Shenyang Government of Science & Technology, Shenyang

## PROFESSIONAL ROLES:

- Directorship:**  
 2001 – present      **Director**  
 Nano-organic Photoelectronic Laboratory  
*Technical Institute of Physics and Chemistry, CAS, Beijing*

## ➤ Editorship of International Refereed Journals:

### Overseas Journals:

2004 – present	<b>Regional Editor for Asia</b> , <i>Physica Status Solidi A, B &amp; C</i> (IF:0.95-0.99) Publisher: Elsevier Science, Europe
1995 – present	<b>Associate Editor</b> , <i>Diamond and Related Materials</i> (IF: 1.87) Publisher: Elsevier Science, Europe
2003 – present	<b>Editorial Board</b> , <i>Applied Physics Letters</i> (IF: 4.05) Publisher: The American Institute of Physics, USA
2003 – present	<b>Editorial Board</b> , <i>Journal of Applied Physics</i> (IF: 2.17) Publisher: The American Institute of Physics, USA
2000 – present	<b>Advisory Editorial Board</b> , <i>Advanced Functional Materials</i> (IF: 4.80) Publisher: WILEY-VCH Verlag GmbH & Co. KGaA, Germany
2003 – present	<b>Honorary Editorial Board</b> , <i>Applied Nanoscience</i> Publisher: Open Mind Journals Ltd., New Zealand
2005	<b>Guest Editor</b> , Nanotechnology (Special Issue in 2005) Publisher: Institute of Physics Publishing, UK

### Mainland Journals:

2002 – present (till 2005)	<b>Editorial Board</b> , <i>Journal of Materials Science &amp; Technology</i> (SCI listed journal)
1999 – present	<b>Editorial Board</b> , <i>New Carbon Materials</i>
2004 – present	<b>Editorial Board</b> , <i>Chinese Physical Society – Journal of Luminescence</i>
2004 – present	<b>Editorial Board</b> , <i>Nanotechnology &amp; Precision Engineering</i>

## ➤ Research Committee:

2002 – present (till 2005)	<b>863 Specialist</b> 863 High Tech Research and Development Program in “High-Resolution Panel Display Technology” <i>Ministry of Science and Technology, P.R. China</i>
2004 – present	<b>RGC Panel Member</b> Physical Sciences Panel of the <i>Research Grants Council (RGC)</i> Hong Kong SAR
2002 – 2003	<b>Member of the Evaluation Panel</b> Department of Engineering & Material Science <i>National Natural Science Foundation of China</i>
2001 – present	<b>Member of Reviewing Panel Committee</b> , Research proposal for nanoscience and nanotechnology, <i>National Science Council, Taiwan</i>

## ➤ Reviewer for research proposals / journals papers:

### Research Proposal:

1987 – 1993	The US National Science Foundation
1987 – 1993	The US Naval Research Laboratory
1987 – 1993	The US Air Force Office
2003 – present	National Science Science Award State Council of the People's Republic of China
1995 – present	RGC of Hong Kong

International refereed Journals:

- *Science*
- *Physical Review Letters*
- *Journal of American Chemical Society*
- *Advanced Materials*
- *Advanced Functional Materials*
- *Journal of Applied Physics*
- *Applied Physics Letter*
- *Journal of Physical Chemistry*
- *Nano Letters*
- *Physical Review B*
- *Journal Vacuum Science & Technology*
- *Diamond and Related Materials*
- *Journal of Chemical Physics*
- *Chemical Physics Letters*

➤ **Honorary Position - Advisory/ Guest Professor**

1998 – 2001	<i>Institute of Physics, CAS, Beijing</i>
2000 – 2002	<i>Peking University, Beijing</i>
2000 – present	<i>Technical Institute of Physics and Chemistry, CAS, Beijing</i>
1998 – present	<i>Fudan University, Shanghai</i>
2002 – present	<i>Shanghai Jiao Tong University, Shanghai</i>
2000 – present	<i>Jilin University, Changchun</i>
2000 – present	<i>Zhejiang University, Hangzhou</i>
1996 – present	<i>Hunan University, Hunan</i>
1995 – present	<i>Dalian University of Science and Technology, Dalian</i>
2003 – present	<i>Changchun Institute of Optics and Fine Mechanics, Changchun</i>
2002 – present	<i>Xian Institute of Technology, Xian</i>

➤ **Government Committees & Community Services**

2003 – present	Review Committee Member <i>Department of Chemistry, National Taiwan University</i>
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2003 – present	Member of the Solicitors Disciplinary Tribunal Panel <i>Court of Final Appeal, Hong Kong SAR</i>
2003 – present	Member <i>Municipal Services Appeals Board, The Government of HKSAR</i>
- present	Chairman <i>Anna Leung-yee Tang Scholarship Fund</i>
1997 – present	Member of the Executive Committee <i>HK Student Aid Society, Hong Kong SAR</i>
1998 – present	Adjudicator <i>Registration of Persons Tribunal, The Government of HKSAR</i>

## ACADEMIC RESEARCH EXPERIENCE:

### Principal and Co-Principal Investigator of the following funded projects:

S.T. Lee is the Principal Investigator of over 30 research projects, including Innovation and Technology Fund, RGC and Industrial projects with total sum over HK\$46M last 10 years.

#### Principal investigator:

1. **Band Gap Engineering in II-VI Single-Crystal Nanoribbons for Lasing Applications in the Visible-UV Region**, Competitive Earmarked Research Grant, 2006-2008 (HK\$ 532,344)
2. **Single Nanostructure Optical and Lasing Characterization**, CityU Strategic Research Grant, 2005-2008 (HK\$ 180,000)
3. **Science and Technology of Silicon Nanowire (Renewal)**, RGC Central Allocation, Grant 2005-2008 (HK\$3,450,000)
4. **Controlled Synthesis and Optical Properties of II-VI Semiconductor Nanostructures**, CAS - Croucher Funding Scheme for Joint Laboratories, 2004-2007 (HK\$ 800,000)
5. **An alternative to Indium-Tin-Oxide (ITO) Transparent Conducting Electrode--with Emphasis on Aluminum-doped Zinc Oxide (AZO) Electrode**, Contract Research Project, 2005-2006 (HK\$850,000)
6. **Organic Light Emitting Diode**, Contract Research Project, 2005-2006 (HK\$2,000,000)
7. **Synthesis and Characterization of ZnS Nanowires and Nanoribbons**, Competitive Earmarked Research Grant, 2004-2007 (HK\$ 455,800)
8. **Organic Light Emitting Diode**, Contract Research Project, 2004-2005 (HK\$900,000)
9. **Surface States of Semiconducting Nanowires**, Germany/HK Joint Research Scheme, 2005 (HK\$ 29,800)
10. **Optical and Lasing Properties of Zinc Oxide Nanostructure**, Competitive Earmarked Research Grant, 2003-2006 (HK\$ 705,408)
11. **Group Research in "Organic Electroluminescence" – Renewal funding**, RGC Central Allocation, Grant 2003-2005 (HK\$1,800,000)
12. **Science and Technology of Silicon Nanowire**, RGC Central Allocation, Grant 2002-2004 (HK\$1,680,000)
13. **Organic Light Emitting Displays**, Contract Research Project – Shenzhen SAST Enterprise, 2003-2004 (HK\$ 1,400,000)
14. **Fundamentals of Nano Devices**, Chinese Academy of Sciences, P.R. China, Grant 2002-2006 (RMB\$ 1,000,000)
15. **Applied R&D in Organic Light Emitting Materials**, Chinese Academy of Sciences, P.R. China, Grant 2002-2004 (RMB\$ 1,500,000)
16. **Structural and Electrical Characterization of Si Nanowires**, Competitive Earmarked Research Grant, 2001-2003 (HK\$ 391,160)

17. **Organic Electroluminescent Flat-panels for Hong Kong**, Innovation & Technology Fund, 2001-2003 (HK\$ 5,810,000)
18. **Controlled Growth of Intramolecular Junction Structures in Carbon Nanotubes**, CityU SRG Grant 2002-2004 (HK\$ 200,000)
19. **Study of Nucleation and Growth of Carbon Nanotubes**, CityU SRG Grant 2002-2004 (HK\$ 228,272)
20. **Synthesis of Ordered Organic Materials and Their Applications in Organic Light Emitting Diodes and Laser Devices**, NSFC/RGC Grant 2001-2004 (HK\$590,000)
21. **Organic Light Emitting Diodes**, 863 Project-Mainland, P.R. China (RMB\$1,600,000) (2000-2003)
22. **International Conference on New Diamond Science and Technology**, General Support Fund, Innovation and Technology Commission (HK\$200,000) (2000)
23. **Ion Beam Synthesis of Nanoscale Materials**, Germany/HK Joint Research Scheme 2000-2002 (\$30,000)
24. **Studies of Electrode Modifications for Use with Conjugated Polymer Light-emitting Devices**, UK/HK Joint Research Scheme 2000-2001 (\$73,200)
25. Industrial Support Fund: **Establishment of Organic Electroluminescent Display Technology in Hong Kong** (\$17,024,000) (\$14,924,000 from Industry Department, \$800,000 from COTCO, \$800,000 from Varitronix, \$500,000 from University Matching Fund) (1998-2001)
26. **Group Research into Organic Electroluminescence**, RGC Central Allocation Scheme (\$4,200,000) (1998-2001)
27. **Growth of Diamond on Fe-based Materials and Characterization of Interfacial Structure**, RGC Competitive Earmarked Research Grant 1998-2000 (\$480,000)
28. **Atomic Structure of Diamond Surfaces**, Competitive Earmarked Research Grant (\$405,000) (1999 - 2000)
29. **Applications of Diamond-like Carbon(DLC) and Nitrogen-doped Carbon (CNx) in Organic Light-emitting Diode**, Research Grants Council/Competitive Earmarked Research Grant (\$545,000) (1998 - 2000)
30. **Interface Structure and Engineering in Organic Light Emitting Diodes**, Research Grants Council of the Universities Grants Committee of Hong Kong (\$958,100). (6/1997 - 5/1999)
31. **Failure Analysis and Process Evaluation of AMR and Spin-valve GMR heads**, Donation Projects (\$622,560) (4/1998 - 4/2002)
32. **Diamond Heteroepitaxy of Silicon**, Research Grants Council of the Universities Grants Committee of Hong Kong (\$470,600) (9/1996 - 8/1998)
33. **A High Resolution Electron Energy Loss Spectrometer (HREELS)**, RGC Central Allocation (\$3,700,000) (1996-2000)
34. **Surface and Negative Electron Affinity Properties of Diamond**, Research Grants Council of the Universities Grants Committee of Hong Kong (\$711,000) (12/1995 - 11/1997)
35. **Characterization of Diamond and Related Thin Films by Convergent Beam Electron Microscopy**, UK/Hong Kong Joint Research Scheme (\$77,000) (12/1996 - 11/1997)
36. **Ion Beam Approach to Heteroepitaxial Nucleation and Growth of Diamond**, City University of Hong Kong (\$350,000) (8/1995 - 5/1997)
37. **Mechanistic Study of Negative Electron Affinity of Diamond**, City University of Hong Kong (\$370,000) (Completed with Outstanding Achievement) (1995 - 1997)

#### Co-Principal investigator / Co-investigator:

S.T. Lee is the Co-Investigator of over 20 research projects, including Innovation and Technology Fund, and RGC projects with total sum over HK\$20M last 10 years.

1. **Synthesis of Stress-free Vubic Boron Nitride Films via Electron-bombardment-enhanced Surface Reactions**, RGC Competitive Earmarked Research Grant, 2006-2008 (HK\$ 680,037)
2. **Interface Engineering of Organic Heterojunctions**, RGC Competitive Earmarked Research Grant, 2006-2007 (HK\$ 413,324)
3. **Facility for Single Nano-object Characterization (Raman/NSOM/AFM)**, RGC Central Allocation Equipment Grant, 2004-2005 (HK\$2,700,000)
4. **Nano-structuring of Diamond Films for Field Electron Emission Applications**, RGC Competitive Earmarked Research Grant, 2004-2006 (HK\$ 700,394)

5. **Carrier Injection Barrier and Interface Dipole at Metal/Organic Interface**, RGC Competitive Earmarked Research Grant, 2004-2007 (HK\$ 866,877)
6. **Diamond Coatings for Hong Kong Manufacturing Industry**, Innovation and Technology Support Fund (\$9,860,000) (2000-2003)
7. **Lowering Operating Voltage of Organic Light-emitting Diodes by Improving Electron Transport Capability**, RGC Competitive Earmarked Research Grant (\$520,000) (2000-2002)
8. **Electrode Modification and Interface Optimization of Polymer Light Emitting Diodes**, RGC Competitive Earmarked Research Grant (\$790,000) (2000-2002)
9. **Ion Beam Nucleation of Diamond**, RGC Competitive Earmarked Research Grant, (\$778,817) (2000-2002)
10. **Co-operative Research in Active Matrix Organic Light Emitting Diode Displays**, (\$1,080,000) RGC Funding for Co-operative Research Centres (2000-2002)
11. **Fabrication of Solid State Organic Lasers for Short Wavelength Applications**, RGC Competitive Earmarked Research Grant (575,000) (1999-2001)
12. **Degradation Mechanism of Organic Electroluminescent Devices**, RGC Competitive Earmarked Research Grant (\$986,000) (1999-2002)
13. **Synthesis and Characterization of Semiconductor Nanowires**, RGC Competitive Earmarked Research Grant (\$405,000) (1999-2002)
14. **Growth and Characterization of Semiconductor Nanocomposites**, RGC Competitive Earmarked Research Grant (\$420,000) (1999-2002)
15. **Study of Nano Materials Using Synchrotron Radiation**, CityU Strategic Research Grant (7001112, On-going)
16. **Towards Design of Luminescent and Electron-transport Organic Molecules for Light Emitting Device**, CityU Strategic Research Grant
17. **Synthesis Towards Single Crystal Diamond Film**, RGC Competitive Earmarked Research Grant, (\$560,000) (1998-2000)
18. **Heteroepitaxial Growth of Beta-silicon Carbide on Silicon**, RGC Competitive Earmarked Research Grant (\$500,000) (1998-2000)
19. **Surface Vibrational Spectroscopy: A High Resolution Electron Energy Loss Spectrometer**, RGC Central Allocation Scheme for \$2.4 million (3/1996)
20. **Synthesis and Characterization of Cubic Boron Nitride**, Research Grants Council of the Universities Grants Committee of Hong Kong (\$672,100) (6/1997 - 5/1999)
21. **Metallization of Diamond for Thermal Management**, Research Grants Council of the Universities Grants Committee of Hong Kong (\$360,000) (6/1997 - 5/1999)
22. **Transmission Electron Microscopy Study of Phase Transition and Defects in Octagonal Quasicrystals**, City University of Hong Kong (\$390,000) (7/1997 - 6/1999)
23. **Modification of Diamond by Metal Ion Beam Enhanced Deposition and Its Applications**, City University of Hong Kong (\$350,000) (8/1996 - 7/1998)
24. **Industrial Applications of Diamond-like Carbon (DLC) to Plastics**, Hong Kong Government Industry Department (\$986,000) (1995 - 1997)
25. **Growth and Characterization of Carbon Nitride Films**, Research Grants Council of the Universities Grants Committee of Hong Kong (\$470,600) (1995 - 1997)
26. **Study of Thermal Properties of Diamond Materials by Holographic Interferometry**, City University of Hong Kong (\$350,000) (12/1994 - 1996)

Attracted and brought to City University of Hong Kong equipment valued at ~HK\$ 6 million from Eastman Kodak Company (1994 - 1995)

## RESEARCH STUDENTS:

### PhD graduates / students:

4 PhD. in progress	Wei Wei CHEN, Siew Ling CHEW, Yanqing LI, Ho TANG
2005	1 graduate: F. Chi Kan AU
2004	4 graduates: Wing Kwong WONG, Suidong WANG, Fu Long WONG, Yuen YAO
2003	3 graduates: Baoxiu MI, Man-Keung FUNG, Chi Pui LI
2002	2 graduates: Xin Tai ZHOU, Samuel Cheng Hao LEE
2000	1 graduate: Zhi Qiang GAO
1999	3 graduates: Kai-Wai WONG, Xiaosong SUN, Chao SUN

### MPhil graduates / students:

4 MPhil in progress	Kai Chun LAU, Tsz Yan LUI, Chin Wai LAW, Ting Fung CHUNG
2004	4 graduates: Junxian DING, Xiang DONG, Chunya GENG, Chung On POON
2001	1 graduate: Wai Yuen LAI
1999	2 graduates: Man-Keung FUNG, Lai-Man HUNG
1998	1 graduate: Hin-Koon WOO

## CONFERENCE ORGANIZED:

### **Chairman / Organizing Committee Member :**

- 2006 Organizing Chair  
*The 6th International Conference on Electroluminescence of Molecular Materials and Related Phenomena (ICEL-6)*, Hong Kong SAR, 7-10 August 2006.
  - 2005 Member of Organizing Committee  
*The 10th International Conference on New Diamond Science and Technology (ICNDST-10)*, Japan, 11-14 May 2005
  - 2004 Chairman  
*Inter-Pacific Workshop on Nanoscience and Nanotechnology*  
City University of Hong Kong, Hong Kong SAR, 22-24 November 2004
  - 2003 Organizing Committee Member  
*Symposium on "Advances in Carbon-based Materials", The 5th International Meeting of Pacific Rim Ceramic Societies*, 29 September – 5 October 2003
  - 2002 Chairman  
*The 2<sup>nd</sup> Cross-Strait Workshop on "Nano Science and Technology"*  
City University of Hong Kong, Hong Kong SAR, 9-11 December 2002
- Organizing Committee Member  
*Symposium G, "Advanced Materials and Devices for Large Area Electronics"*, IUMRS-ICEM2002, Xian, China, 10-14 July 2002



- 2001 Organizing Committee Member  
*Symposium G, "Plastic Electronics – Materials & Devices", International Conference on Materials for Advanced Technologies, Singapore, 1-6 July 2001*
- 2000 Chairman  
*The 7<sup>th</sup> International Conference of New Diamond Science and Technology (ICNDST-7), City University of Hong Kong, Hong Kong SAR, 24-28 July, 2000.*

Chairman  
*The International Union of Materials Research Societies – 6<sup>th</sup> International Conference in Asia (IUMRS-ICA2000), City University of Hong Kong, 24-28 July, 2000*
- 1999 Chairman  
*Asia Pacific Symposium on Organic Electroluminescent Materials and Displays, City University of Hong Kong, Hong Kong SAR, 8-11 June, 1999*

Organizing Committee Member  
*Symposium E, "Diamond & Related Materials", IUMRS 1999, Beijing, China, 13-18 June, 1999*

Organizing Committee Member  
*The International Conference on Surface Modification of Metals by Ion Beams (SMMIB), Beijing, China, 19-24 Sept. 1999*

### **International Committee Member:**

- 2006 Member of International Advisory Committee  
*ECI Conference - Innovative Nanoscale Approach to Dynamic Studies of Materials, Japan, 9-14 January 2006*
- 2005 Member of International Committee  
*The 16<sup>th</sup> European Conference on Diamond, Diamond-Like Materials, Carbon Nanotubes, Nitrides & Silicon Carbide*  
France, 11-16 September 2005

Member of International Advisory Committee  
Applied Diamond Conference on Nanocarbon 2005, Argonne, USA, 15-19 May, 2005

Member of International Committee  
The 5th International Conference on Electroluminescence of Molecular Materials and Related Phenomena (ICEL-5), USA, 17-27 January 2005

Member of International Committee  
The First International Conference on One-Dimensional Nanomaterials (ICON)  
Taipei, 9-13 January 2005
- 2004 Member of International Scientific Steering Committee  
*The 15<sup>th</sup> European Conference on Diamond, Diamond-Like Materials, Carbon Nanotubes, Nitrides & Silicon Carbide*  
Italy, 12-17 September 2004

Member of Program Committee  
*The 9th International Conference on New Diamond Science and Technology*

(ICNDST-9), Japan, 26-29 March 2004

Member of International Advisory Committee  
*Conference on Dynamics of Disordered Materials on the Nanometer Scale*  
 Vietnam, 22-27 February 2004

■ 2003 Member of International Scientific Steering Committee  
*The 14<sup>th</sup> European Conference on Diamond, Diamond-Like Materials, Carbon Nanotubes, Nitrides & Silicon Carbide*  
 Austria, 7-12 September 2003

■ 2002 Member of International Scientific Steering Committee  
*The 13<sup>th</sup> European Conference on Diamond, Diamond-Like Materials, Carbon Nanotubes, Nitrides & Silicon Carbide*  
 Spain, 8-13 September 2002

Member of Program Committee  
*The 8th International Conference on New Diamond Science and Technology (ICNDST-8)*, Australia, 21-26 July 2002

## PATENTS:

1. K. Y. Ko, S. Chen, and **S.T. Lee**, "Isolation region in a group III-V semiconductor device and method of making the same", US Patent No. 5,399,900, March 21, 1995.
2. L.S. Hung, C.W. Tang and **S.T. Lee**, "Conductive electron injector for light-emitting diodes", US patent no. 5,608,287, March 4, 1997.
3. **S.T. Lee**, C.S. Lee, I. Bello, Y.W. Lam and H. K. Woo, "Method of heteroepitaxial growth of beta silicon carbide on silicon", US Patent No.5,879,450, March 9, 1999.
4. **S.T. Lee**, C.S. Lee, Z.D. Lin and Y.W. Lam, "Deposition method for heteroepitaxial diamond", US Patent No. 6,063,187, May 16, 2000.
5. **S.T. Lee**, C.S. Lee, N. Wang, I. Bello, C.H. L. Lai, X.T. Zhou and F.C.K. Au, "Method for growing beta-silicon carbide nanorods, and preparation of patterned field-emitters by chemical vapor deposition (CVD)", US Patent no. 6,221,154, April 2001.
6. **S. T. Lee**, N. Wang, C. S. Lee and I. Bello, "Growth method for silicon nanowires and nanoparticle chains from silicon monoxide", US Patent no. 6,313,015, November 6 2001.
7. **S. T. Lee**, Z. B. Deng and W. A. Gambling, "Organic electroluminescent device with improved hole injecting structure", US Patent No. 6,351,067, 26 February 2002.
8. **S. T. Lee**, C. S. Lee and Z. Q. Gao, "White and colored organic electroluminescent devices using single emitting material by novel color change technique", US Patent no. 6,521,360, 18 February 2003.
9. **S.T. Lee**, C.S. Lee, L.S. Hung, M.X. Mi, Z.Q. Gao, "Organic electroluminescent elements", US Patent no. 6,613,458, 2 September 2003.
10. **S.T. Lee**, I. Bello, C.S. Lee, Q. Li, N.G. Shang, "Large area silicon cone arrays fabrication and cone based nanostructure modification", US Patent No. 6,761,803, 13 July 2004.
11. **S. T. Lee**, C. S. Lee, P. F. Wang, Z. Y. Xie, "Electroluminescent Devices", US Patent No. 6,833,202, 21 December 2004.
12. **S.T. Lee**, C.S. Lee, P.F. Wang, Z.Y. Xie, "Organic electroluminescent devices using pyrazolo[3,4b]quinoxaline derivatives", US Patent No. 6,861,162, 1 March 2005.
13. **S.T. Lee**, W.J. Zhang, I. Bello, C.Y. Chan, "Fabrication of Single Crystal Diamond Tips and their Arrays", US Patent No. 6,902,716, 7 June 2005.
14. **S.T. Lee**, X. Jiang, C.S. Lee, F.L. Wong, "High-quality aluminum-doped zinc oxide layer als transparent conductive electrode for organic light-emitting devices", US Patent 6,917,158 B2, 12 July 2005.

15. **S. T. Lee**, C. P. Li, X. H. Sun, N. B. Wong, C. S. Lee, Boon K. Teo, "Room temperature solutions synthesis of multiwalled carbon nanostructures", US Patent application no. 10/273,242.
16. I. Bello, W.J. Zhang, **S.T. Lee**, "Cubic boron nitride/ diamond composite (cBND) layers", US Patent application no. 10/366,880, 14 February 2003.
17. **S.T. Lee**, C.S. Lee, P.F. Wang, B.X. Mi, "Electroluminescent devices", US Patent application no. 10/357, 616 (March 2003).
18. **S.T. Lee**, C.S. Lee, L.S. Hung, B.X. Mi, Z.Q. Gao, "Red-emitting organic electroluminescent elements", US Patent application No. 10/391,265, filed on 18 March 03.
19. **S.T. Lee**, C.S. Lee, S.L. Lai, M.Y. Chan, "Organic electroluminescent devices formed with rare earth metal containing cathode", US Patent application no. 10/656,641 (pending).
20. C.S. Lee, **S.T. Lee**, Y. Lifshitz, S.W. Tong, "Ultraviolet light-illuminated fluorocarbon films for OLED applications", US Patent application no. 11/124,686, filed on 9 May 05.
21. **S.T. Lee**, C.S. Lee, B.X. Mi, P.F. Wang, "Improvement in red-emitting electrophosphorescent Devices", US Patent application (pending), submitted to lawyer for filing.
22. **S.T. Lee**, C.S. Lee, P.F. Wang, Z.Y. Xie, "Organic electroluminescent device using phenazine dyes – neutral red derivatives", US Patent application (pending).
23. **S.T. Lee**, C.S. Lee, J.Y. Li, "Organic light-emitting devices containing morphologically stable hole transporting materials", US Patent application (pending).

## BOOK CHAPTERS:

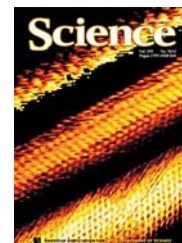
1. M.K. Fung, C.S. Lee, S.T. Lee, "Metal/Polymer Interface Studies for Organic Light-Emitting Devices" in *Electroluminescence — From Synthesis to Devices*, (in press) edited by K. Müllen, U. Scherf, Publisher: Wiley-VCH Verlag GmbH & Co. KGaA.
2. **S.T. Lee**, R. Q. Zhang and Y. Lifshitz, "Oxide-assisted growth of silicon and related nanowires: growth mechanism, structure and properties", in "*The Chemistry of Nanomaterials*", (2004), edited by C.N.R. Rao, A. Müller, A.K. Cheetham, Wiley-VCH Verlag GmbH & Co. KGaA.
3. **S.T. Lee**, R.Q. Zhang and Y. Lifshitz, "Silicon-based nanowires" in "*Nanowires and Nanobelts – Materials, Properties and Devices, Metal and Semiconductor Nanowires*" (Vol. 1), (2003) edited by Z.L. Wang, Kluwer Academic Publisher.
4. L.S. Liao, C.S. Lee, **S.T. Lee**, M. Inbasekaran and W.W. Wu, "Metal/polyfluorene interface and surface: structures and stability" in "*Conjugated Polymer and Molecular Interfaces: Science and Technology for Photonic and Optoelectronic Applications*", (2002) edited by W.R. Salaneck, K. Seki, A. Kahn and J.J. Pireaux, Marcel Dekker.
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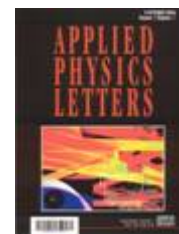
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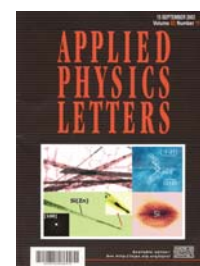
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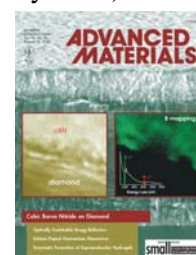
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485. H. K. Woo, **S. T. Lee**, C. S. Lee, I. Bello and Y. W. Lam, "Diamond films grown by hot filament chemical vapor deposition from a solid carbon source", *J. Vac. Sci. Tech.* **A15**, 1997, 2988.
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## REPORTS

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2. D. A. Shirley, R. L. Martin, B. E. Mills, S. Suzer, **S. T. Lee**, E. Matthias, and R. A. Rosenberg, 'Electron correlation in atoms from electron spectroscopy', Report, LBL-5442, 14 pp, Lawrence Berkeley Lab. University of California, 1976.
3. **S. T. Lee**, 'Ionization potentials of AgX by Photoelectron spectroscopy', Kodak Internal Report, 1977.
4. **S. T. Lee**, 'Experimental energy levels and spectral sensitization of (evaporated dye) / (evaporated AgBr) system', Kodak Internal Report, 1977.

## INVITED TALKS:

Over 90 invited conference lecturers and invited talks to industrial, research institutes and academic groups.

### Nanomaterials & nanotechnology

1. **S.T. Lee**, Plenary Talk – "Synthesis and novel properties of semiconductor nanowires and nanoribbons", "Supramolecular chemistry/inorganic chemistry", SSCI-4 Singapore International Chemical Conference, 8-10 Dec 05, Singapore.
2. **S.T. Lee**, "Chemical and bio-sensing properties of silicon nanowires", The 2nd China-Korea workshop on Nanowires and Nanotubes, 27-30 October 2005, Beijing.
3. **S.T. Lee**, "Chemical and bio-sensing properties of silicon nanowires", The 4th Cross-Strait Workshop on Nanoscience and Nanotechnology, Lijiang, 22-25 August 2005, Lijiang.
4. **S.T. Lee**, "Chemical and bio-sensing properties of silicon nanowires", NATO Research Workshop on Nanocomposites, 23-25 May 2005, Greece.
5. **S.T. Lee**, "Chemical and bio-sensing properties of silicon nanowires", The 1st Conference on Nanoscience and Nanobiology, 4-7 May 2005, Qingdao.
6. **S.T. Lee**, "Novel properties of Si and II-VI nanowires and nanoribbons", International Conference on One-dimensional Nanomaterials, 10-15 January 2005, Taipei

7. **S.T. Lee**, “Optoelectronic Properties of Semiconducting Nanowires and Nanoribbons”, MRC Workshop on “Science & Technology of Semiconducting Nanowires”, 15-16 November 2004, Zurich
8. **S.T. Lee**, “Semiconducting nanowires – synthesis, characterization and novel properties”, 51st AVS International Symposium, 14-19 November, 2004, USA.
9. **S.T. Lee**, “Atomic structure and electron properties of silicon nanowire surfaces”, Beijing-TEDA 2004 Scanning Probe Microscopy, Sensors and Nanostructures, 23-26 May 2004, Beijing, P.R. China
10. **S. T. Lee**, Plenary Talk – “Novel properties and applications of semiconducting nanomaterials”, The 6th International Symposium of Northeastern Asian Nanoscience and Technology, 6-10 May 2004, Shanghai, P.R. China.
11. **S.T. Lee**, Plenary Talk – “Novel properties and applications of semiconducting nanomaterials”, The 3<sup>rd</sup> Cross-Strait Workshop on Nanoscience and Nanotechnology, 27-29 April 2004, Hualian, Taiwan.
12. **S.T. Lee**, “Semiconducting Nanowires – synthesis, characterization and novel properties”, NSC/NSF Joint Workshop on Nanoscience and Nanotechnology, 6-9 November 2003, Tianan, Taiwan
13. **S.T. Lee**, “Ordered arrays of semiconducting nanowires”, Workshop on Selective, Patterned and Self-assembled Growth of Nano-structures, 6-8 January 2003, Hong Kong University of Science & Technology, Hong Kong.
14. **S.T. Lee**, “Recent advances in semiconductor nanocrystalline materials”, Conference on “Optical Properties of Nanocrystals”, SPIE’s Annual Meeting, 10-11 July 2002, Seattle, USA
15. **S.T. Lee**, “Semiconductor nanowires – synthesis, characterization and novel properties”, 2002 Hsinchu Materials Nanotechnology Forum, 11-13 December 2002, Taipei
16. **S.T. Lee**, “Semiconductor nanowires synthesis, characterization and novel properties”, Symposium F: Nanocrystalline Semiconductor Materials and Devices, MRS Fall Meeting, 2-6 December 2002, Boston, USA
17. C.S. Lee, **S.T. Lee**, “Laser ablation synthesis of inorganic nanowires”, The Asian Symposium on Recent Trend in Applications of Laser Abaltion", 14-15 Nov 2002, Nagasaki, Japan.
18. **S. T. Lee**, “Semiconductor nanowires – synthesis, characterization and novel properties”, The APS Meeting, 17-19 April, 2002, Korea.
19. **S.T. Lee**, “Semiconductor nanomaterials synthesis and characterization”, IUPAC-Workshop on Advanced Materials – II (Nanostructured Advanced Materials), 13-16 February 2002, Bangalore, India.
20. **S.T. Lee**, “Semiconductor nanowires - synthesis and characterization”, International Chemical Conference in Materials Chemistry, 23-26 February 2002, NTU, Taipei
21. **S.T. Lee**, “Recent Advances in Semiconductor Nanomaterials”, Croucher Advanced Study Institute on Nano Science and Technology: Novel Structure and Phenomena, 6-11 January 2002, HKUST, HKSAR
22. **S. T. Lee**, "Oxide-assisted growth of one-dimensional semiconductor nanomaterials", Jun 2000, Argonne National Laboratory, USA
23. **S.T. Lee**, "Oxide-assisted growth of one-dimensional semiconductor nanomaterials", Sep 25-26 2000, Iowa State University, USA
24. **S.T. Lee**, "Oxide-assisted growth of one-dimensional semiconductor nanomaterials", Oct 30-Nov 1 2000, XiangShan workshop on nanoscience and nanotechnology, Beijing, China
25. **S.T. Lee**, "Oxide-assisted growth of one-dimensional semiconductor nanomaterials", Nov 2-6 2000, College of Science, Zhejiang University, Hangzhou, China
26. **S.T. Lee**, "Oxide-assisted growth of one-dimensional semiconductor nanomaterials", 30 Oct 30- 1 Nov 2000, XiangShan workshop on nanoscience and nanotechnology, Beijing, China.
27. **S.T. Lee**, “Oxide-assisted synthesis of one-dimensional semiconductor nanomaterials”, MRS Fall Meeting – Symposium A: Nanotubes and Related Materials, Nov 27-30 2000, USA
28. **S.T. Lee**, "Oxide-assisted synthesis & characterization of semiconductor nanowires", ACS 103rd Annual Meeting and Exposition, 22-25 April 2001, Indiana, USA.
29. **S.T. Lee**, "Very low-field electron emission from nanocarbon materials", July 2-4 2001, The International Topical Meeting on Field Electron Emission from Carbon Materials, Moscow, Russia.
30. **S.T. Lee**, " Oxide-assisted synthesis & characterization of semiconductor nanowires", Aug 5-11 2001, 8th International Conference on Composites Engineering (ICCE/8), Spain.

31. **S.T. Lee**, "Synthesis and properties of semiconductor nanowires", The 1st Worldwide Chinese Symposium on High Tech Chemistry, 15-18 Aug 2001, Chengdu, China.
32. **S.T. Lee**, "STM research of nanowires", International Conference on "Nano Science and Technology", 18-25 Aug 2001, Urumqi, China.
33. **S.T. Lee**, "Growth and nucleation of diamond", 12th European Conference on Diamond, Diamond-Like Materials, Carbon Nanotubes, Nitrides & Silicon Carbide, 2-7 Sept 2001, Budapest, Hungary.
34. **S.T. Lee**, Plenary Talk - "Semiconductor Nanowires – synthesis, characterization and novel properties", National Conference on Nanosciences and Surface Sciences & ECM-92, 23-26 March 2003, Beijing, P.R. China
35. **S.T. Lee**, Plenary Talk - "Semiconducting Nanowires – synthesis, characterization and novel properties", International Symposium on Physical Chemistry of Surface Nano-structure and Related Materials, 19-21 October 2003, Xiamen, P.R. China
36. **S. T. Lee**, "Nanomaterials", Symposium on Nanomaterials Sciences; Jan 7, 2000, Institute of Physics, CAS, Beijing.
37. **S. T. Lee**, "Semiconductor Nanowires; Synthesis, Structure and Properties". The International Union of Pure and Applied Chemistry Workshop on Advanced Material: Nanostructured Systems (IUPAC-WAM-1); Jul 14 to Jul 18, 1999, Hong Kong University for Science & Technology (HKUST)
38. **S. T. Lee**, N. Wang, Y. F. Zhang and Y. H. Tang, "Semiconductor Nanowires: Synthesis, Structure and Properties". Symposium A: Nanostructural Materials. The Fifth IUMRS International Conference on Advanced Materials, IUMRS-ICAM, June 13-18, 1999, Beijing, China.
39. **S. T. Lee**, "Nano-scale materials from laser ablation". The Croucher Advanced Study Institute (ASI): Physics and Chemistry of Nano-structured Materials; Jan 10 to Jan 15, 1999 at Hong Kong University of Science and Technology (HKUST)

**Organic Electroluminescence**

40. **S.T. Lee**, Plenary Talk – “Electronegativity concept and carrier injection barriers at metal/organic interfaces”, The 5th International Conference on Electroluminescence of Molecular Materials and Related Phenomena (ICEL-5), 17-21 January 2005, USA
41. **S.T. Lee**, “(a) Electronegativity and carrier injection barrier at organic/metal interfaces (b) STM and photoluminescence study of molecular aggregation and degradation mechanism of OLEDs”, International Symposium on Super-Functionality Organic Devices, 25-28 October, 2004, Japan.
42. **S.T. Lee**, “The current status and development strategy for OLEDs”, 2003 Workshop on Advanced Materials Development Trends and the Future, 20-24 December 2003, Hong Kong SAR.
43. **S.T. Lee**, “Photoemission Study of Polyfluorene-Metal Interfaces”, Symposium on “Polymers and Organic Materials for Electronic, Optoelectronic, and Photonic Devices”, ICMAT2003, 8-12 December 2003, Singapore.
44. **S.T. Lee**, “Metal-Polyfluorene Interfaces”, The 2nd Japan-Sweden Symposium on Advanced Spectroscopy for Organic Materials for Electronic Applications (ASOMEA-2), 21-25 October 2003, Shonan, Japan.
45. **S.T. Lee**, “Metal-Polyfluorene Interfaces”, The 4<sup>th</sup> International Conference on Electroluminescence of Molecular Materials and Related Phenomena (ICEL-4), 27-30 August 2003, Korea.
46. **S.T. Lee**, “Photoemission study of polymer-metal interfaces”, Symposium B: Polymer/Metal Interfaces-Fundamentals, Properties, and Applications, MRS Fall Meeting, 2-6 December 2002, Boston, USA
47. **S.T. Lee**, “HREELS Study of Surfaces and Interfaces in OLEDs”, Conference on Organic Light Emitting Materials and Devices, SPIE's Annual Meeting, 7-12 July 2002, Seattle, USA.
48. **S.T. Lee**, “Interface study and control in OLED”, International Workshop on Electroluminescent Science and Technology, 4 March 02, Chinese University of Hong Kong, HKSAR
49. **S.T. Lee**, "OLED surface and interfaces studied by high-resolution energy loss spectroscopy", The International Symposium on Organic Electronic and Photonic Materials and Devices, 30 Oct-01 Nov 01, Osaka, Japan.
50. **S.T. Lee**, "Organic light emitting diode - from research to commercialization", Forum on the Commercialization of Research Output from Universities of Beijing and Hong Kong, 20-21 Sep 01, Hong Kong.
51. **S.T. Lee**, "Surface and interface properties in OLED", CLC-9 Beijing' 2001, 17 -18 Sep 01, Beijing.
52. **S.T. Lee**, "Polyfluorene-metal surface & interfaces", Symposium C, Materials Research Society (MRS) Spring Meeting, 16-21 April 2001, San Francisco, USA
53. **S.T. Lee**, "Interface engineering in organic electroluminescent devices", 21 Dec 2000, 2000 International Workshop on OLED, National Chiao Tung University, Hsinchu, Taiwan.
54. **S.T. Lee**, "Polyfluorene/metal surface and interface", ACS Poly-Millennium 2000 Conference, 11-14 Dec 2000, Hawaii, USA
55. **S.T. Lee**, "Organic light-emitting materials and devices", Symposium on the Development of Materials Science and Engineering Abroad 2000, 20 Aug -26 Aug, Dalian, China
56. **S.T. Lee**, "Surface and interface properties of OLED", Jun 23 2000, Bell Labs, Lucent Technologies, USA
57. **S.T. Lee**, "Surface and interface properties of OLED", Jun 22 2000, Princeton University, USA
58. **S.T. Lee**, "Organic light-emitting diodes", Jun 20 2000, Dow Chemical, USA
59. **S. T. Lee**, "OLED optimization via process engineering", The 2000 Mini Symposium on OLED Materials; Apr 15 to Apr 16, 2000, National Taiwan University, Taipei
60. **S. T. Lee**, "Improving OLED performance via process engineering", Electroluminescence from Organic Materials; Dec 10 to Dec 11, 1999, Korea
61. **S.T. Lee and C.S. Lee**, "High performance organic light-emitting devices through optimisation and new design", The 5th International Conference on the Science and Technology of Display Phosphors; Nov 8 to Nov 10. 1999, San Diego, California, USA
62. **S. T. Lee**, "Surface and Interface Studies in Organic Light-Emitting Diodes", 9th International Symposium on Surface and Interface Physics; Oct 31 to Nov 2, 1999, Zhejiang University, Hangzhou, China
63. **S. T. Lee**, “Performance optimization of organic electroluminescent devices”. Organic Light-Emitting Materials and Devices, The International Society for Optical Engineering (SPIE); Jul 18 to Jul 23, 1999, Colorado Convention Center in Denver, Colorado, USA

64. **S. T. Lee**, "Performance optimization of organic electroluminescent devices". Symposium P: Display Materials. The Fifth IUMRS International Conference on Advanced Materials, IUMRS-ICAM, June 13-18, 1999, Beijing, China.
65. Y.M. Wang and **S. T. Lee**, "Surface and Interface Properties in Organic Light-Emitting Diodes". ESOI99 Workshop; Jun 12 to Jun 13, 1999, Nayoya University, Japan
66. **S. T. Lee** and C. S. Lee, "Research and Development of Organic Electroluminescent Devices in City University of Hong Kong". A Symposium on Display Technologies: Mini to Mega; Mar 9 to Mar 10, 1999 at Hong Kong Productivity Council (HKPC), Hong Kong

#### **Nanodiamond, Cubic-Boron Nitride and Nanostructuring:**

67. **S. T. Lee**, "Diamond Nucleation: New Insights and Understanding", The 9<sup>th</sup> International Conference on New Diamond Science and Technology, 26-29 March 2004, Japan.
68. **S.T. Lee**, "Diamond (Heteroepitaxial) nucleation by ion beam impact: a reality", International conference on metallurgical coatings and thin films, 30 Apr - 4 May 2001, San Diego, CA, USA.
69. **S.T. Lee**, "Applications of Advanced Thin Films Coatings and Technologies in Electronics Industry", Sep 1-2 2000, Annual Meeting of the Taiwan Association for Thin Films and Coating Technology, Luhkang, Changhua, Taiwan.
70. **S.T. Lee**, "Ion-assisted diamond nucleation and growth", 26-29 Jun 2000, Gordon Research Conference, USA
71. **S. T. Lee** and R.Q. Zhang, "Ion-assisted diamond nucleation and growth". The 6<sup>th</sup> International Symposium on Diamond Materials, The Electrochemical Society (ECS); Oct 17 to Oct 22, 1999, Honolulu, Hawaii, USA
72. **S. T. Lee**, Recent studies on diamond surfaces. (E86) Symposium E: Diamond Films and Related Materials. The Fifth IUMRS International Conference on Advanced Materials, IUMRS-ICAM, June 13-18, 1999, Beijing, China.
73. **S. T. Lee**, I. Bello, R.Q. Zhang and W.J. Zhang, "The formation of SiC interface and its effects on diamond nucleation". Inaugural Symposium on Surface Engineering at TMS Annual Meeting; Feb 28 to Mar 4, 1999 at San Diego, California
74. **S. T. Lee**, 'surface electron affinity of diamond', Second Joint Meeting of the Chinese Physical Societies, August 11-15, 1997, Taipei, Taiwan
75. **S. T. Lee**, 'Surface electron affinity of diamond', Second International Conference - 'Characterization and Processing of Advanced Materials' 19-22 May, 1997, the University of Hong Kong, Hong Kong
76. **S. T. Lee**, 'Surface science applied to diamond research', First Annual Conference, The Physical Society of Hong Kong, 19th June, 1996, CUHK.
77. **S. T. Lee**, 'Synthesis and characterization of diamond materials', Department of Applied Physics, Hong Kong Polytechnic University, 16 November, 1995.
78. **S. T. Lee**, 'Properties of Diamond', Cable TV, Hong Kong, 4 July 1995.
79. **S. T. Lee**, 'HREELS and XPS studies of diamond surfaces', Hong Kong Surface Science Workshop, University of Hong Kong, June, 1995, Hong Kong.
80. **S. T. Lee**, 'HREELS and Related Studies of Diamond Surfaces', The 2nd NIRIM International Symposium on Advanced Materials - New Directions in Ultimate Analysis -, March 6-10, 1995, Tsukuba, Japan.
81. **S. T. Lee**, 'Synthesis and characterization of carbon-based materials', Department of Physics, University of Hong Kong, January, 1995.
82. **S. T. Lee**, 'Diamond Synthesis by unconventional methods', Department of Chemistry, Hong Kong University of Science and Technology, April, 1993.'
83. **S. T. Lee**, 'Diamond Synthesis by unconventional methods', Department of Chemistry, National Jiao Tong University, Taiwan, April, 1993.
84. **S. T. Lee**, 'Diamond film formation by carbon ion implantation and related methods', Int. Conf. on Metallurgical Coatings and Thin Films, April 6-10, 1992, San Diego, California.
85. **S. T. Lee**, 'Ion beam deposition of diamond and diamond-like films', Materials Research Laboratory, The Pennsylvania State University, University Park, Pa, March, 1991.

#### **Other Research Areas:**

86. **S.T. Lee**, "Overview of COSDAF", Jun 2000, Dow Chemical, USA
87. **S. T. Lee**, 'Implantation-induced intermixing of GaAs/AlGaAs superlattices', The Electrochemical society Meeting, Hollywood, Florida, October, 1989.
88. **S. T. Lee**, 'Silicon and arsenic redistribution during heat treatment of silicon-rich tungsten silicide', Department of Physics, Queen's University, Kingston, Canada, March, 1986.
89. **S. T. Lee**, 'Oxygen diffusion in silicon', Department of Mechanical Engineering, University of Rochester, May, 1985.
90. **S. T. Lee**, 'Experimental energy levels and spectral sensitization of (evaporated dye)/(evaporated AgBr) system', Department of Chemistry, The Chinese University of Hong Kong, Hong Kong, July, 1983.
91. **S. T. Lee**, 'Surface and thin film compositional analysis' Institute of Semiconductors, Academia Sinica, Beijing, China, July, 1983.
92. **S. T. Lee**, 'Experimental energy levels and spectral sensitization of (evaporated dye)/(evaporated AgBr) system', Institute of Semiconductors, Academia Sinica, Beijing, China, July, 1983.
93. **S. T. Lee**, 'Diffusion of implanted phosphorus in polysilicon', Institute of Semiconductors, Academia Sinica, Beijing, China, July, 1983.
94. **S. T. Lee**, 'Electronic structure of supported metal clusters', Institute of Semiconductors, Academia Sinica, Beijing, China, July, 1983.
95. **S. T. Lee**, 'Electronic structure of metal clusters', Xerox Research Center, Webster, NY, January 20, 1981.