CHAPTER-X

ALPHABETICAL SUBJECT INDEX

NOTE

1) This is an alphabetical index to subjects

2) The index number against each item is page number of the text.

3) Names of authors and titles of those documents referred to in the text are not included in this index. They are listed in the bibliographical list given in Chapter-IX.

4) The following abbreviation has been used:

irt = in relation to

A
Alloy junction silicon diodes 41
Aluminium gate process 78
Amorphous semiconductors 31
Analysis of subjects 79
Authors, socio-economic environment 106
B
Backward diode  43
BARTT diode  45
Biblioprofile, semiconductor device
technology  217
Bi-directional thyristors  64
Bipolar integrated circuits  68
Bipolar integrated circuit technology  76
Books  279

C
Chemical vapour deposition  35
CMOS  57, 79
CMOS ICs  69
Colloquium proceedings  220
Complimentary silicon controlled
rectifier (CSCR)  62
Components of information system  308
Compound semiconductors  29
Conference proceedings  220
Consolidation of knowledge  311
Contributors, specializations of  112
Crystal growth  34
Cumulative indexes  -315
Current papers  315
Cutting process  35
Descrete semiconductor devices 36

Ranking of institutions 174

Design of information systems 330

Diac 65

Diffused junction diodes 41

Diffusion technique 73

Diode thyristors 64

Dissemination channels 310

Dissemination media 310

Distribution of specialists, among institutions 118

DMOS 57, 79

Documents,

Geographical distribution 224

Language distribution 226

Variety 218

Variety in semiconductor device technology 221

DTL 68, 79

E

ECL 68, 78

Electrical and electronic abstracts 314

Electronic materials and information service (EMIS) 319
Electronics era 3
Elemental semiconductors 28
Feedback from users 324
Field effect transistors 55
Forecasting
- IRT semiconductor device technology 299

Gate controlled switch (GCS) 62
Gate turn-off thyristors (GTO) 62
GDITL 78
Geographical distribution of documents 224
- institutions 170
- specialists 107
Germanium alloy diffused technique 72
Germanium alloy junction technique 72
Germanium junction diodes 40
Germanium point contact method 71
Growth from elemental sources 35
Growth from foreign substances 35
Growth from the melt 34
Gunn effect diode 45
HEXFET 57
High power rectifier diodes 39
High voltage bipolar technology 76
HMOS 57, 79
HTL 68, 78

I

I^2L 68, 78
Idea plane, semiconductor device technology 27
Identification of inter-relationship of subjects 79
IMPATT diode 46
Information brokers 330
Information explosion 18
Information industry 330
Information resources 306
Information scientists, task of 20
Information seeking behaviour 330
Information, seepage of 251
Information source, institution 116
Information sources 308
Information system, components of design 330
Information transfer communication 327
Information users 320
Feedback 324
Innovation consultants 330
Innovation managers 329
INSPEC on-line 317
INSPEC support services 320
INSPEC topic service 317
Institutional affiliation of specialists 115
Institutional profile,
  semiconductor device technology 159
Institutional representation of
  specialists 191
Institutional support to knowledge
devolution 162
Institution as information source 166
Institutions
  geographical distribution 170
  Document contributions 174
  Specialists 190
  Ranking 193
  Types 167
Insulate gate field effect
transistors (IGFET)

See
  Metal oxide semiconductor
  Field effect transistors (MOSFET)
Integrated circuits

See Semiconductor integrated circuits

Integrated circuit technology 75

J

Japan up date 317
Junction field effect transistors 55
Junction transistors 53

K

Key abstracts 326
Knowledge development 161
   Institutional support 162
Knowledge function 310

L

Language distribution of documents 226
Laser diode 49
Light activated silicon controlled rectifier (LASCR) 61
Light activated silicon controlled switch (LASCSS) 61
Light emitting diode (LED) 49
Low power rectifier diodes 39
Low voltage bipolar technology 76
LSA diode 46
Magnetic tape service 318
Materials preparation 34
Metal oxide semiconductor field effect transistor 56
Metal oxide semiconductor integrated circuits 68
Metal oxide semiconductor integrated circuit technology 78
Methodology 23, 338
Microwave diodes 44
MOSFET 57
Mobility of specialists,
Country to country 139
Institution to institution 136
Monetary costing
Integrated Semiconductor device technology 299
Multiple authorship 127
N
NMOS 57, 79
NMOS ICs 69
Organizational system design 306
Periodical publications 219
Periodicals, productivity ranking 229
Perspectives, short and long term irt technology 276
Photo diode 49
Photo transistors 58
PIN diode 44
Planar diodes 41
Planar epitaxial diodes 41
Planar technology 74
PMOS 57, 79
PMOS ICs 69
Point contact diode 37
Point contact method 71
Point contact transistors 51
Productivity ranking of periodicals 229
Professional profile 106
Programmable unijunction transistor (POT) 63
Publication profile of specialists 124

R

R&D factory
irt technology production 262

Ranking of institutions,
on the basis of documents 174, 184
on the basis of specialists 193
Rectifier diodes 39
Referral function 311
Retrieval components 313
Reverse blocking diode thyristor 63
Reverse blocking tetrode thyristors 63
Reverse blocking triode thyristors 60
RTL 68, 78

S
Schockley diode 63
Schottky barrier diode 48
Scientists 328
SDI 316
Seepage of information 251
Semiconductor device manufacture 69
Semiconductor devices 35
Semiconductor device technology,
    role in electronics 10
    variety of documents 221
Semiconductor diodes 37
Semiconductor integrated circuits 65
    Ranking of institutions 184
Semiconductor materials 27
Semiconductor materials applications 31
Silicon alloying and diffusion
    technology 73
Silicon alloy junction technique 73
Silicon bilateral switch (SBS) 65
Silicon controlled rectifier (SCR) 60
Silicon controlled switch (SCS) 63
Silicon diodes 41
Silicon gate process
Silicon unilateral switch (SUS) 61
Small signal diodes 40
Socio-economic environment
  Art author 106
Solution growth 35
SOS 79
SOS - ICs 69

Specialists,
  document contributions to
    inter country publications 42
  geographical distribution 107
  institutional affiliation 115
  publication profile 124
  Ranking of institutions 193
  Subjectwise institutional representation 191
Specialization of contributors 112
Special purpose diodes 47
Standard bipolar technology 76
Storage and retrieval components 313
STTL 68, 78
Subjectwise institutional representation of specialists 191
Suggestions on thesis 338
Surge suppressor diode 43
Symposia proceedings 220

T
Technologies for semiconductor device manufacture 69
Technologists 329
Technology change, patterns of 260
Technology development 258
    irt complexity 272
Technology impact on information 18
Technology life cycle 265
Technology market 273
Technology marketing
    irt semiconductor products 280
Technology transfer profile 257
Third wave civilization 2
Thyristors 58
Traic 64
Transistors 50
TRAPATT diode 46
Triode thyristor 64
TTL 68, 78
<table>
<thead>
<tr>
<th>Term</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tunnel diode</td>
<td>48</td>
</tr>
<tr>
<td>Unidirectional thyristors</td>
<td>58</td>
</tr>
<tr>
<td>Unijunction transistors</td>
<td>54</td>
</tr>
<tr>
<td>Vapour phase growth</td>
<td>35</td>
</tr>
<tr>
<td>Varactor diode</td>
<td>47</td>
</tr>
<tr>
<td>Variable capacitance diode</td>
<td>47</td>
</tr>
<tr>
<td>Variety of documents</td>
<td>218</td>
</tr>
<tr>
<td>VMOS</td>
<td>57, 79</td>
</tr>
<tr>
<td>VMOS ICs</td>
<td>69</td>
</tr>
<tr>
<td>Voltage reference diode</td>
<td>42</td>
</tr>
<tr>
<td>Voltage regulator amplifiers</td>
<td>68</td>
</tr>
<tr>
<td>Voltage regulator diode</td>
<td>42</td>
</tr>
<tr>
<td>XMOS</td>
<td>57, 79</td>
</tr>
<tr>
<td>XMOS ICs</td>
<td>69</td>
</tr>
<tr>
<td>Zener diodes</td>
<td>41</td>
</tr>
<tr>
<td>Zone refining</td>
<td>35</td>
</tr>
</tbody>
</table>