

Index

- a-Si *see* amorphous silicon
a-Si/a-SiGe tandem solar cells 546–51
a-Si/a-SiGe/a-SiGe triple-junction solar cells 546–51
a-Si:H 29
a-Si:H solar cells, optical design 537–40
ABAQUS 245
ABN Amro Bank NV 1108
absorber layer design of *pin* solar cell 533–4
absorber region 87
absorption coefficient 70, 72–4, 341, 507
absorption coefficient spectra 519
acceptors 69–70
accumulator capacity 957–62
activation energy 807
ADO louver system 1032
Advanced Photovoltaic Solar Array (APSA) 435
Advanced Photovoltaics Systems, Inc. 512
African Development Bank 1114
Air Mass 62–3, 914, 916
Air Mass Zero (AM0) spectrum 417
air pollution 997–9
albedo-collecting modules 472
albedo irradiance 931
AlGaAs 360
AlGaAs/GaInP TJIC 397
AlInP window layers 391–2
alternating current (AC) 34
alternative peak power ratings 715
aluminothermic reduction of silica 201
aluminum alloys 158
aluminum back surface field 281
aluminum industry 158
Alwitra Evalon roofing foil 1030
AM/PM method 716
- ambient temperature, diurnal variations of 933–4
ambipolar diffusion coefficient 108
Amonix Inc 496
amorphous silicon (a-Si) 21, 27–9, 153, 176, 505
 alloying 518–20
 atomic structure 513–14
 defects 514–15
 deposition, miscellaneous methods 526
 deposition techniques 520–1
 metastability 514–15
 optical properties 518–20
amorphous silicon (a-Si)-based photovoltaics, critical issues for further enhancement and future potential 559
- amorphous silicon (a-Si)-based solar cells continuous roll-to-roll manufacturing on stainless steel substrates 553–5
module manufacturing 553–8
- amorphous silicon (a-Si) module 955
manufacturing cost, safety, and miscellaneous issues 556–7
performance 557–8
production on glass superstrate 555–6
- amorphous silicon (a-Si) photovoltaics, status and competitiveness 558
- amorphous silicon (a-Si) *pin* cells 528–41
- amorphous silicon (a-Si)/single-crystalline silicon 176
- amorphous silicon (a-Si) solar cells 505–65, 1033–4
designs for 508–13
overview 505–13
substrate and superstrate designs 509–10