	20.5.1	Estimation of the Direct and Diffuse Components of	
		Horizontal Radiation, Given the Global Radiation	920
	20.5.2	2 Estimation of the Hourly Irradiation from the Daily	
		Irradiation	925
	20.5.3	B Estimation of the Radiation on Surfaces on Arbitrary	
		Orientation, Given the Components Falling on a Horizontal	
		Surface	927
	20.6 Dium	al Variations of the Ambient Temperature	933
		ts of the Angle of Incidence and of the Dirt	934
		Calculation Tools	937
		Generation of Daily Radiation Sequences	937
		2 The Reference Year	937
		3 Shadows and Trajectory Maps	939
		ation on Most Widely Studied Surfaces	940
		Fixed Surfaces	943
		2 Sun-tracking Surfaces	945
		3 Concentrators	946
,		enerator Behaviour under Real Operation Conditions	947
		The Selected Methodology	949
		2 Second-order Effects	953
,		bility and Sizing of Stand-alone PV Systems	956
		Case of Solar Home Systems	962
		y Yield of Grid-connected PV Systems	964
	20.13 Energ		966
		owledgements	960 967
	Refer	6	967 967
	iterer		201
A 1	Б.		
21		Analysis and Environmental Aspects of Photovoltaic	071
	Systems		971
		Whisnant, Stephen A. Johnston and James H. Hutchby	070
	21.1 Back		972
		omic Analysis	973
		Key Concepts	973
	21.2.2 General Methodology		980
		3 Case Studies	984
	-	y Payback and Air Pollution Reduction	997
	21.4 Prosp	ects for the Future	999
	Refer	ences	1003
22	PV in Architecture		1005
	Tjerk H. Reijenga		
	22.1 Introd		1005
	22.1.1	Photovoltaics (PV) as a Challenge for Architects and	
		Engineers	1005
	22.1.2	2 Definition of Building Integration	1006