1. Record Nr. UNIORUON00081682

Autore	PETRIE, William Matthew Flinders
Titolo	Buttons and design scarabs : Illustrated by the Egyptian collection in University College, London / William Matthew Flinders Petrie
Pubbl/distr/stampa	34 p., 30 c. di tav. ; 32 cm
Edizione	[London : Aris & Phillips]
Descrizione fisica	First published by the British School of Archaeology in Egypt, 1925
Disciplina	932.074
Soggetti	SCARABEI (Amuleti) - Collezioni
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr. UNINA9910817352903321

Autore	Walker Andy (Howard Andy)
Titolo	Solar energy : technologies and the project delivery process for buildings / / Andy Walker
Pubbl/distr/stampa	Hoboken, : Wiley, 2013
ISBN	9781118416549 1118416546 9781785392689 1785392689 9781118842973 1118842979 9781118419335 1118419332
Edizione	[1st ed.]
Descrizione fisica	1 online resource (312 p.)
Collana	RSMeans
Disciplina	690/.83704724
Soggetti	Solar buildings - Design and construction Solar energy
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa

Livello bibliografico	Monografia
Note generali	Includes index.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	SOLAR ENERGY; CONTENTS; FOREWORD; PREFACE; ACKNOWLEDGMENTS; 1 Delivering Solar Energy Projects; HISTORY AND CURRENT USE OF SOLAR ENERGY; ADVANTAGES OF SOLAR ENERGY; Provide a Financial Return on Investment; Safety and Security of the Energy System; Less Pollution than Fossil Fuel; Statutes and Mandates; Marketing Green Buildings; Social Equity; Economic Development; SOLAR ENERGY PROJECT DELIVERY PROCESS; Goal-setting; Team Building; Screening; Site Evaluation; Solar Energy Projects in New Construction; Feasibility Study and Life-Cycle Cost Analysis; Example of Calculating Present Worth Factor Secure Funding or Financing Request for Proposals; Contract Documents; Schematic Design; Design Development; Construction Documents; Construction Administration; Commissioning; Long-term Monitoring and Verification of Performance; INTEGRATION OF SOLAR ENERGY INTO THE EXISTING INFRASTRUCTURE; Grid-Integration: Effects of Intermittent Solar Energy Sources on the Utility System; Utility Regulatory Policy; Net Metering; Predicting and Achieving Utility Cost Savings (Performance Simulation); Optimizing the Size of a Solar System; OPTIMIZATION USING CALCULUS (DERIVATIVE EQUAL TO ZERO) Example Calculation of Optimal Solar System Size Strategies for Maximizing Integration of Solar Energy with Conventional Utilities; Example of Solar Storage; Microgrids; REFERENCES; 2 The Solar Energy Resource; STRUCTURE OF THE SUN; Core; Radiative Zone; Convection Zone; Photosphere; Outer Layers; NUCLEAR FUSION: THE SOURCE OF THE SUN'S POWER; THE SPECTRAL NATURE OF SOLAR RADIATION; Wavelength and Frequency; Energy of a Photon; ASTM Standard Solar Spectrum; POSITION OF THE SUN IN THE SKY; Time-of-Year: Declination and the Seasons; Time-of-Day: Standard Time, Solar Time, and the Hour Angle Solar Altitude Angle, (degrees)DIRECT BEAM, DIFFUSE, AND GLOBAL SOLAR INSOLATION IN THE PLANE OF A SOLAR COLLECTOR SURFACE; Solar Constant; Direct Normal Insolation, Ibeam I (W/m2, Btu/hr/ft2); Diffuse Solar Insolation, Idiffuse I (W/m2, Btu/hr/ft2); Ground Reflected Radiation, I ground reflected I (W/m2, Btu/hr/ft2); Global Solar Radiation in the Plane of a Solar Collector Surface; INCIDENT ANGLE OF DIRECT BEAM SUN ON A SURFACE; Horizontal Surface; Vertical Walls; Fixed Tilt; Horizontal East-West Axis Tracking the Altitude of the Sun Horizontal North-South Axis Tracking the Azimuth of the Sun Tilted Axis Tracking the Azimuth of the Sun; Two-Axis Tracker; Example Calculation of Solar Insolation Incident on a Surface; THE EFFECT OF SHADE; Example Calculation: Spacing Rows of Collectors to Avoid Shading; SOLAR RESOURCE MEASUREMENT; SOLAR RESOURCE MAPS AND DATA; TYPICAL METEOROLOGICAL YEAR (TMY) WEATHER DATA; FORECASTING THE SOLAR RESOURCE HOURS OR DAYS INTO THE FUTURE; Conventional Weather Forecasting; Sky Imaging; Numerical Weather Prediction; DIAGNOSIS OF SOLAR ENERGY SYSTEM PERFORMANCE USING SOLAR RESOURCE DATA COMPUTER TOOLS FOR ANALYSIS OF SOLAR POSITION AND SOLAR RESOURCES
Sommario/riassunto	Solar Energy is an authoritative reference on the design of solar energy systems in building projects, with applications, operating principles, and simple tools for the construction, engineering, and design professional. The book simplifies the solar design and engineering process, providing sample documentation and special tools that

provide all the information needed for the complete design of a solar energy system for buildings to enable mainstream MEP and design firms, and not just solar energy specialists, to meet the growing demand for solar energy systems in building projects.