Record Nr. UNINA9910253977203321 Autore Konis Kyle Titolo Effective Daylighting with High-Performance Facades: Emerging Design Practices / / by Kyle Konis, Stephen Selkowitz Cham: .: Springer International Publishing: .: Imprint: Springer. . Pubbl/distr/stampa 2017 **ISBN** 3-319-39463-0 Edizione [1st ed. 2017.] Descrizione fisica 1 online resource (XVI, 269 p. 233 illus., 183 illus. in color.) Collana Green Energy and Technology, , 1865-3529 729.28 Disciplina Soggetti Energy consumption Buildings—Design and construction Buildina Construction Engineering, Architectural Renewable energy resources Design **Energy Efficiency Building Construction and Design** Renewable and Green Energy Design, general Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references at the end of each chapters. The Challenge of Effective Daylighting -- The Role of Metrics in Nota di contenuto Performance-based Design -- Innovative Daylighting Systems -- A Performance-based Design and Delivery Process -- Case Studies --Validating Performance from the Perspective of End Users. Sommario/riassunto The book explores advanced building-facade daylighting design practices based on diverse energy and human-factor performance metrics. It also defines effective daylighting by rethinking the simplified approach to glazing and facade systems to incorporate the local climate and the needs of building occupants as critical drivers of building performance, design solutions and technological innovation. It

discusses state-of-the-art approaches in the context of simulation-

based design workflows, innovative technologies and real project case studies, all targeting low and net-zero energy solutions that enhance occupant comfort. Readers benefit from a comprehensive approach that improves the feedback loop between design intent and performance in use. The book is intended for architects, lighting designers, facade engineers, manufacturers and building owners/operators, as well as advanced students.