1. Record Nr. UNISA996418254103316

Autore	Pitacco Ermanno
Titolo	ERM and QRM in Life Insurance [[electronic resource]] : An Actuarial Primer / / by Ermanno Pitacco
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2020
ISBN	3-030-49852-2
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (236 pages) : illustrations
Collana	Springer Actuarial Lecture Notes, , 2523-3289
Disciplina	368.012
Soggetti	Actuarial science Economics, Mathematical Actuarial Sciences Quantitative Finance
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Preface -- Introduction -- Enterprise Risk Management and Quantitative Risk Management -- The Risk Management process. - Risk Management for life insurance and life annuities. - Risk assessment and impact assessment in life insurance business. - Risk assessment and impact assessment in life annuity business. - Sensitivity testing for long-term care insurance products. - References -- Index.
Sommario/riassunto	This book deals with Enterprise Risk Management (ERM) and, in particular, Quantitative Risk Management (QRM) in life insurance business. Constituting a “bridge” between traditional actuarial mathematics and insurance risk management processes, its purpose is to provide advanced undergraduate and graduate students in the Actuarial Sciences, Finance and Economics with the basics of ERM (in general) and QRM applied to life insurance business. The main topics dealt with are: general issues on ERM, risk management tools for life insurance and life annuities, deterministic and stochastic analysis of the behaviour of a portfolio fund, application of sensitivity testing to assess ranges of results of interest, stress testing to assess the impact of extreme scenarios, and the product development process for life annuity products.

2. Record Nr. UNINA9910674052203321

Autore	Liang Dawei
Titolo	Challenge and Research Trends of Solar Concentrators
Pubbl/distr/stampa	Basel, : MDPI - Multidisciplinary Digital Publishing Institute, 2022
ISBN	3-0365-6038-6
Descrizione fisica	1 electronic resource (178 p.)
Soggetti	Technology: general issues History of engineering & technology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	Primary and secondary solar concentrators are of vital importance for advanced solar energy and solar laser researches. Some of the most recent developments in primary and secondary solar concentrators were firstly presented. A novel three-dimensional elliptical-shaped Fresnel lens analytical model was put forward to maximize the solar concentration ratio of Fresnel-lens-based solar concentrators. By combining a Fresnel lens with a modified parabolic mirror, significant improvement in solar laser efficiency was numerically calculated. A fixed fiber light guide system using concave outlet concentrators was proposed. The absence of a solar tracking structure highlights this research. By shaping a luminescent solar concentrators in the form of an elliptic array, its emission losses was drastically reduced. Simple conical secondary concentrator was effective for thermal applications. New progresses in solar-pumped lasers by NOVA University of Lisbon were presented. By adopting a rectangular fused silica light guide, 40 W maximum solar laser power was emitted from a single Ce:Nd:YAG rod. An aspheric fused silica secondary concentrator and a small diameter Ce:Nd:YAG rod were essential for attaining 4.5 % record solar-to-laser power conversion efficiency. A novel solar concentrator design for the efficient production of doughnut-shaped and top-hat solar laser beams

were also reported. More importantly, a novel solar concentrator approach for the emission of 5 kW-class TEM00 mode solar laser beams from one megawatt solar furnace was put forward at the end of this book, revealing promising future for solar-pumped lasers.