

1. Record Nr.	UNINA9910481958903321
Autore	Anastassiou George A
Titolo	Intelligent Analysis: Fractional Inequalities and Approximations Expanded // by George A. Anastassiou
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2020
ISBN	3-030-38636-8
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (xiv, 525 pages)
Collana	Studies in Computational Intelligence, , 1860-9503 ; ; 886
Disciplina	515
Soggetti	Computational intelligence Automatic control Dynamics Nonlinear theories Computational Intelligence Control and Systems Theory Applied Dynamical Systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	General Ordinary Iyengar Inequalities -- Caputo fractional Iyengar Inequalities -- Canavati fractional Iyengar Inequalities -- General Multivariate Iyengar inequalities -- Multivariate Iyengar inequalities for radial functions -- Multidimensional Fractional Iyengar inequalities for radial functions -- General Multidimensional Fractional Iyengar inequalities -- Delta Time Scales Iyengar Inequalities.
Sommario/riassunto	This book focuses on computational and fractional analysis, two areas that are very important in their own right, and which are used in a broad variety of real-world applications. We start with the important Iyengar type inequalities and we continue with Choquet integral analytical inequalities, which are involved in major applications in economics. In turn, we address the local fractional derivatives of Riemann–Liouville type and related results including inequalities. We examine the case of low order Riemann–Liouville fractional derivatives and inequalities without initial conditions, together with related approximations. In the next section, we discuss quantitative complex

approximation theory by operators and various important complex fractional inequalities. We also cover the conformable fractional approximation of Csiszar's well-known f -divergence, and present conformable fractional self-adjoint operator inequalities. We continue by investigating new local fractional M -derivatives that share all the basic properties of ordinary derivatives. In closing, we discuss the new complex multivariate Taylor formula with integral remainder. Sharing results that can be applied in various areas of pure and applied mathematics, the book offers a valuable resource for researchers and graduate students, and can be used to support seminars in related fields.
