1. Record Nr. UNINA9910557719203321 Autore Luchko Yuri Titolo Fractional Integrals and Derivatives: "True" versus "False" Pubbl/distr/stampa Basel, Switzerland, : MDPI - Multidisciplinary Digital Publishing Institute, 2021 Descrizione fisica 1 electronic resource (280 p.) Soggetti Research & information: general Mathematics & science Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia This Special Issue is devoted to some serious problems that the Sommario/riassunto Fractional Calculus (FC) is currently confronted with and aims at providing some answers to the questions like "What are the fractional integrals and derivatives?", "What are their decisive mathematical properties?", "What fractional operators make sense in applications and why?", etc. In particular, the "new fractional derivatives and integrals" and the models with these fractional order operators are critically addressed. The Special Issue contains both the surveys and the research contributions. A part of the articles deals with foundations of FC that are considered from the viewpoints of the pure and applied mathematics, and the system theory. Another part of the Special issue addresses the applications of the FC operators and the fractional differential equations. Several articles devoted to the numerical

complete the Special Issue.

treatment of the FC operators and the fractional differential equations