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Titolo	The complete works of Gabrio Piola: Volume I : Commented English Translation // edited by Francesco dell'Isola, Giulio Maier, Umberto Perego, Ugo Andreaus, Raffaele Esposito, Samuel Forest
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2014
ISBN	3-319-00263-5
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (816 p.)
Collana	Advanced Structured Materials, , 1869-8433 ; ; 38
Disciplina	530.15
Soggetti	Mechanics Mechanics, Applied Computer mathematics Solid Mechanics Computational Science and Engineering Classical Mechanics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	About the fundamental equations of the motion of bodies whatsoever, as considered following the natural their form and constitution -- On a Debated Principle of Lagrange's Analytical Mechanics And on its Multiple Applications -- 1818 Eulogy in memoriam of Vincenzo Brunacci by Prof. Gabrio Piola -- Least action principle for second gradient continua and capillary fluids: a Lagrangian approach following Piola's point of view -- A still topical contribution of Gabrio Piola to Continuum Mechanics: the creation of peridynamics, non-local and higher gradient continuum mechanics -- Gabrio Piola and Balance Equations -- Gabrio Piola and Mathematical Physics.
Sommario/riassunto	Gabrio Piola works had an enormous impact on the development of applied mathematics and continuum mechanics. An excellent scientific committee who took it upon themselves to translate his complete works. In a second step, they commented Piola's work and compared it to modern theories in mechanics in order to stress Piola's impact on modern science and proofs that he has set milestones in applied

mathematics. This book presents Piola's original Italian texts together with his translations and their comments. It shows impressively that Gabrio Piola's work must still be regarded as a modern theory.
