

Advanced Structured Materials

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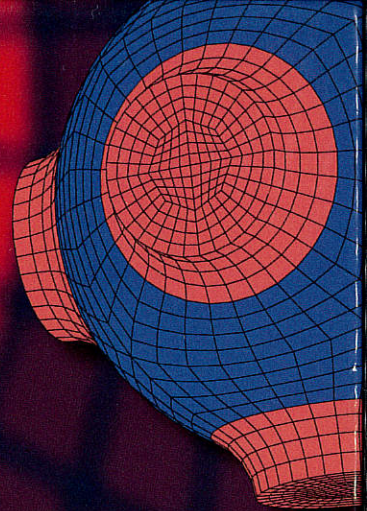
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Preface

In this second volume, we translate another group of works among those published by Gabrio Piola. Our aim is approaching: Probably, we are at one half of the task which we assigned to ourselves. We believe that two more volumes will be enough to give to the scholars who cannot read Italian but can read English, the possibility to access to the complete works by Gabrio Piola. After the translation of the works included in this volume, our conviction is even stronger than before. Piola seems to us a giant in mechanical sciences and, tout court, in mathematical physics. Indeed the very first Memoir published by Piola in 1825 is already full of original results, deep mathematical concepts, and useful mechanical considerations. We have found in this Memoir a formulation of Hamilton principle which surely dates some years before the papers by Hamilton himself. We have found exciting epistemological considerations in his first published work, and we can conclude that his scientific personality was already completely developed at the age of 29 years. In our opinion, the whole history of Continuum Mechanics and some parts of Analytical Mechanics must be rewritten now. We hope that after the reading of our commentaries but especially the word by word translation of Piola's Memoirs, the reader will agree with us.

Rome, Italy
March 2018

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