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	Autore	Arnold V. I (Vladimir Igorevich), <1937-2010, >
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	Sommario/riassunto	First published in 1998 this unique monograph treats topological, group-theoretic, and geometric problems of ideal hydrodynamics and magneto-hydrodynamics from a unified point of view. It describes the necessary preliminary notions both in hydrodynamics and pure mathematics with numerous examples and figures. This book, now accepted as one of the main references in the field, is accessible to

graduates as well as pure and applied mathematicians working in hydrodynamics, Lie groups, dynamical systems, and differential geometry. The updated second edition also contains a survey of recent developments in this now-flourishing field of topological and geometric hydrodynamics.