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Atomic and Molecular Nonlinear Optics: Theory, Experiment and Computation
A homage to the pioneering work of Stanislaw Kielich (1925-1993)

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The papers collected in this volume in honor of the late Stanislaw Kielich cover an impressive range of modern subjects in molecular science. These subjects include, among others, the nonlinear optics of molecules, new approaches to the electronic structure of large molecules, the properties of carbon nanotubes, fluorescence polarization spectroscopy, computational studies of systems of fundamental interest to collision-induced spectroscopy, the simulation of fluids, NLO materials, chemical bonding in complex molecules, the NLO properties of functionalized DNA and the magnetic properties of molecular assemblies. Written by eminent specialists, the papers should offer valuable guidance to a wide community of graduate students and researchers.

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