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Nota di contenuto	Title Page; Table of Contents; CONTRIBUTORS; PREFACE; CONTRIBUTORS TO PREVIOUS VOLUMES; 1 NONCOVALENT INTERACTIONS IN DENSITY FUNCTIONAL THEORY; INTRODUCTION; THEORY BACKGROUND; NONCOVALENT INTERACTIONS IN DFT; PERFORMANCE OF DENSITY FUNCTIONALS FOR NONCOVALENT INTERACTIONS; NONCOVALENT INTERACTIONS IN PERSPECTIVE; ACKNOWLEDGMENTS; REFERENCES; 2 LONG-RANGE INTERPARTICLE INTERACTIONS; INTRODUCTION; THE INTERACTION ENERGY AT LONG RANGE; MOLECULAR QED THEORY; ELECTROSTATIC INTERACTION IN MULTIPOLAR QED; ENERGY TRANSFER; MEDIATION OF RET BY A THIRD BODY DISPERSION POTENTIAL BETWEEN A PAIR OF ATOMS OR MOLECULES; TRIPLE-DIPOLE DISPERSION POTENTIAL; DISPERSION FORCE INDUCED BY EXTERNAL RADIATION; MACROSCOPIC QED; SUMMARY; REFERENCES; 3 EFFICIENT TRANSITION STATE MODELING USING MOLECULAR MECHANICS FORCE FIELDS FOR THE EVERYDAY CHEMIST; INTRODUCTION; MOLECULAR MECHANICS AND TRANSITION STATE BASICS; GROUND STATE FORCE FIELD TECHNIQUES; TSFF TECHNIQUES; CONCLUSION AND PROSPECTS; REFERENCES; 4 MACHINE LEARNING IN MATERIALS SCIENCE; INTRODUCTION; SUPERVISED LEARNING;

UNSUPERVISED LEARNING; SELECTED MATERIALS SCIENCE APPLICATIONS; ADDITIONAL RESOURCES
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