

CONTENTS

1. SAVASTRU, Dan, DONTU, Simona and TAUTAN, Marina Stable periodic wave induced in quadratic nonlinear medium or saturable type Kerr medium.....	7
2. PISARCIUC, Cristian STRUCTURE, MATERIAL PROPERTIES AND APPLICATIONS OF DIAMOND-LIKE MATERIALS.....	13
3. GHICULESCU, Daniela, MARINESCU, Nicolae Ion, and GHICULESCU, Liviu Daniel THE SCENARIOS METHOD APPLIED to PROGNOSIS OF MICRO AND NANOTECHNOLOGIES WITH CONCENTRATED ENERGIES.....	19
4. POPA, Liliana COMPLEX STUDY OF PLASMA HOT MACHINING (PMP).....	26
5. RUGINA, Cristian DIMENSIONAL ANALYSIS OF A HIGH POWER ULTRASONIC SYSTEM USED IN ELECTRODISCHARGE MACHINING.....	34
6. BIRTU, Cristian, and AVRAMESCU, Valeriu ABRASIVE WATER JET CUTTING -TECHNIque, EQUIPMENT, PERFORMANCES.....	40
7. SAVASTRU, Dan, MICLOS, Sorin and LANCRANJAN, Ion THEORETICAL ANALYSIS OF A PASSIVELY Q-SWITCHED ERBIUM DOPED FIBER LASER.....	47
8. NANU, Alexandru Sergiu, MARINESCU, Nicolae Ion, GHICULESCU, Liviu Daniel CONSTRUCTIVE SOLUTIONS OF AN EQUIPMENT FOR ULTRASONICALLY AIDED ELECTRODISCHARGE MACHINING OF MICRO-SLOTS.....	54
9. MICLOS, Sorin, LANCRANJAN, Ion, and SAVASTRU, Dan NUMERICAL ANALYSIS OF A DFB-FL SENSOR BY USING COUPLED-MODE EQUATIONS.....	60
10. GHICULESCU, Daniela, MARINESCU, Nicolae Ion, GHICULESCU, Liviu Daniel, and PÎRNĂU, Claudiu THE RISK CUBE APPLIED TO STRATEGY FORMULATION IN ELECTRODISCHARGE MACHINING FIELD.....	64