Record Nr. UNINA9910437901903321 World Congress on Medical Physics and Biomedical Engineering May **Titolo** 26-31, 2012, Beijing, China / / Mian Long (ed.) Pubbl/distr/stampa Heidelberg;; New York,: Springer, c2013 **ISBN** 1-299-33773-2 3-642-29305-0 Edizione [1st ed. 2013.] Descrizione fisica 1 online resource (2384 p.) IFMBE proceedings, , 1680-0737;; v. 39 Collana Altri autori (Persone) LongMian Disciplina 610.153 Soggetti Medical physics Biomedical engineering Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and indexes. Nota di contenuto Title Page: Shock wave forceps for drug delivery and gene transfection: INTRODUCTION: SHOCK WAVE FORCEPS: IN VITRO EXPERIMENT: CONCLUSIONS; REFERENCES; Breaking strength of porcine large intestines for inserting a colonoscope; INTRODUCTION; IN VIVO COLONOSCOPE TEST: IN VITRO PERFORATION TEST: TENSILE TEST: DISCUSSION: REFERENCES: Localization of Fluorescent Substance in Scatting Turbid Media: Simulation and Phantom Validation; INTRODUCTION: MRETHOD AND CONCEPT: SIMULATION OF FLUORESCENCE DETECTION; BIOMEDICAL STIMULANT PHANTOM EXPERIMENTS: DISUSSIONS AND CONCLUSION: REFERENCES Computer Simulations of Hemodynamic Effects of Different CPR TechniquesINTRODUCTION; METHOD; RESULTS; REFERENCES; Pitch Perception Assessed by Frequency Difference Limen and Frequency Following Response; INTRODUCTION; METHODS; RESULTS; DISCUSSION; REFERENCES; Flow Resistance Estimation of Endotracheal Tube during

the surface modified intraocular lenses; INTRODUCTION; MATERIALS AND METHODS; RESULTS; CONCLUSIONS REFERENCES Design and Development of an Extremely Low Frequency (ELF) Pulsed Electromagnetic Field (PEMF) System for Wound Healing

INTRODUCTION; MATERIALS AND METHODS; RESULTS; DISCUSSION; CONCLUSION; REFERENCES; The evaluation of the biocompatibility on

High Frequency Percussive Ventilation: Preliminary Results;

Promotion: INTRODUCTION: MATERIALS AND METHODS: RESULTS: CONCLUSIONS: REFERENCES: Viability of Lymphocyte of Gamma Irradiated Blood: INTRODUCTION: MATERIALS AND METHODS: RESULTS: DISCUSSIONS; CONCLUSIONS; REFERENCES; Effects of Near Infra red Laser for Cultured Bone Marrow Mesenchymal Stem Cells in Different Densities and irradiation periods; INTRODUCTION; MATERIAL AND METHODS: RESULT AND DISCUSSION: CONCLUSION: REFERENCES Modulation of Radiation - Induced Tumor Necrosis Factor (TNF-) GeneExpression in the Rats Spinal Cord by MelatoninINTRODUCTION: MATERIAL AND METHOD; RESULTS; CONCLUSIONS; REFERENCES; Lowdose irradiation alters the radio-sensitivity of human peripheral blood lymphocytes: INTRODUCTION: MATERIAL AND METHODS: RESULT: CONCLUSIONS: REFERENCES: CHANGES IN LUNG PERFUSION DISTRIBUTION DUE TO RADIATION IN LUNG CANCER PATIENTS TREATED WITH 3D CONFORMAL RADIATION THERAPY AND STEREOTACTIC BODY RADIATION THERAPY; PURPOSE/OBJECTIVE(S):; MATERIALS/METHODS; RESULTS; CONCLUSIONS; REFERENCES Effects of Non-thermal Microwave Exposures on the Proliferation Rate of Saccharomyces Cerevisiae YeastINTRODUCTION: MATERIALS AND METHODS; RESULTS AND DISCUSSIONS; CONCLUSION; REFERENCES; Design of Pulsed Strong Magnetic Fields Generator and Preliminary Application; DEVICE DESIGN; CALIBRATION OF AMPLITUDE INTENSITY OF MAGNETIC INDUCTION; RESULTS; DISCUSSION; REFERENCES; Cell Registration and Flickering Detection for the Complexity Analysis of Red Blood Cell Dynamics with GSM Exposure: INTRODUCTION: MATERIALS AND METHODS; RESULTS; DISCUSSIONS; CONCLUSIONS; **REFERENCES** Study on in Vitro Degradation of Sutures for Decomposable Esophageal Stent

## Sommario/riassunto

The congress's unique structure represents the two dimensions of technology and medicine: 13 themes on science and medical technologies intersect with five challenging main topics of medicine to create a maximum of synergy and integration of aspects on research, development and application. Each of the congress themes was chaired by two leading experts. The themes address specific topics of medicine and technology that provide multiple and excellent opportunities for exchanges.