1. Record Nr. UNINA9910974428803321

Titolo	Biomechanics, Neurorehabilitation, Mechanical Engineering, Manufacturing Systems, Robotics and Aerospace : selected, peer reviewed papers from the 3th (sic) International Conference on Biomechanics, Neurorehabilitation, Mechanical Engineering, Manufacturing Systems, Robotics and Aerospace, October 26-28, 2012, Bucharest, Romania / / edited by Adrian Olaru
Pubbl/distr/stampa	Stafa-Zurich ; ; Enfield, NH : , : Trans Tech Publications, , [2013] ©2013
ISBN	9783038139355 3038139351
Edizione	[1st ed.]
Descrizione fisica	1 online resource (358 p.)
Collana	Applied mechanics and materials ; ; v. 245
Altri autori (Persone)	OlaruAdrian
Disciplina	620.1
Soggetti	Aerospace engineering Space robotics Intelligent control systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	Biomechanics, Neurorehabilitation, Mechanical Engineering, Manufacturing Systems, Robotics and Aerospace; Preface; Table of Contents; Invited Papers; Robotics for Neurorehabilitation: Current State and Future Challenges; Healthier by Safe Persuasion; Hybrid Force-Position Dynamic Control of the Robots Using Fuzzy Applications; Optimization of the Robots Fourier Spectrum by Using the Assisted Research, Neural Network, Smart Damper and LabVIEW Instrumentation; Spartacus IV Auto - Pilot System Presentation Customised for EADFP Platform; About Buckling Bio-Composite Sandwich Bars An Analitical Approach Regarding the Choose of Integration Time and Gain Values during a Thermal Camera Calibration Chapter 1: Biomechatronics and Neurorehabilitation; Computational Modeling of Interaction of Dental Implant with Mandible; Contribution to Analyze and Modeling of the Hand; Evaluation of Surface Roughness Variations

of Solid Dosage Forms in Simulated Physiological Conditions; Study of Straight and Oblique Mandible Fracture Behavior in the Chin Section; Stress-Strain Analysis of Hip Joint after Application of Total Hip Arthroplasty with Consideration of Wear
Rapid Prototyping of a Hand Model for Rehabilitation Selection of Proper Cells Using Connected Components Tracking Algorithms; Chapter 2: Mechanical Engineering; A Novel Variable Impedance Compact Compliant Series Elastic Actuator: Analysis of Design, Dynamics, Materials and Manufacturing; PWM Controlled Proportional Equipment; Results Concerning the Combustion of Liquid Biofuels; How to Enhance Efficiency and Accuracy of the Over-Deterministic Method Used for Determination of the Coefficients of the Higher-Order Terms in Williams Expansion
Effect of Variable Fiber Spacing on Post-Buckling of Boron/Epoxy Fiber Reinforced Laminated Composite Plate Study Concerning the Effect of the Bushings' Deformability on the Static Behavior of the Rear Axle Guiding Linkages; Micro-Crack Propagation in Particulate Composite with Different Types of Matrix; Large Amplitude Vibration Analysis of Composite Beams under Thermal Stresses: Closed-Form Solutions; Dynamic Modelling and Simulation of an Auto Vehicle Steering Mechanism Considering its Elements as Flexible; Expert System for Designing Shaft-Bearing-Gear Transmission Assemblies
Chapter 3: Manufacturing Systems Assessment of Engine Deterioration Based on Oil Fe Data; Model Driven Key Performance Indicators Concepts for Manufacturing Execution Systems; Operations Management in Water and Wastewater Treatment Plants; Drive of Extreme Transport Technique; Experimental Investigation of Cutting Forces at Milling Titanium Alloys Comparing to Others Hard Alloys; Material Handling Mechanisms Used in Flexible Manufacturing Systems; Mechanical Enhancement of Carbon Fiber/Epoxy Composites Based on Carbon Nano Fibers by Using Spraying Methodology
Generation of the Storage Costs Function Using Neural Networks

Sommario/riassunto

The main objective of the special collection of 53 peer-reviewed papers was to gather some of the current knowledge from leading researchers, engineers and scientists in the field of: Biomechanics, Biomechatronics, Neurorehabilitation, Mechanical Engineering, Manufacturing Systems, Robotics, Aerospace.

2.

Record Nr.	UNINA9910736007303321
Autore	Auscher Pascal
Titolo	Boundary Value Problems and Hardy Spaces for Elliptic Systems with Block Structure / / by Pascal Auscher, Moritz Egert
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Birkhäuser, , 2023
ISBN	3-031-29973-6
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (310 pages)
Collana	Progress in Mathematics, , 2296-505X ; ; 346
Altri autori (Persone)	EgertMoritz
Disciplina	515.353
Soggetti	Differential equations Harmonic analysis Operator theory Functional analysis Differential Equations Abstract Harmonic Analysis Operator Theory Functional Analysis
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter. 1. Introduction and main results -- Chapter. 2. Preliminaries on function spaces -- Chapter. 3. Preliminaries on operator theory -- Chapter. 4. Hp - Hq bounded families -- Chapter. 5. Conservation properties -- Chapter. 6. The four critical numbers -- Chapter. 7. Riesz transform estimates: Part I -- Chapter. 8. Operator-adapted spaces -- Chapter. 9. Identification of adapted Hardy spaces -- Chapter. 10. A digression: H -calculus and analyticity -- Chapter. 11. Riesz transform estimates: Part II -- Chapter. 12. Critical numbers for Poisson and heat semigroups -- Chapter. 13. Lp boundedness of the Hodge projector -- Chapter. 14. Critical numbers and kernel bounds -- Chapter. 15. Comparison with the Auscher–Stahlhut interval -- Chapter. 16. Basic properties of weak solutions -- Chapter. 17. Existence in Hp Dirichlet and Regularity problems -- Chapter. 18. Existence in the Dirichlet problems with data -- Chapter. 19. Existence in Dirichlet problems with fractional regularity data -- Chapter. 20. Single layer operators for L

and estimates for L-1 -- Chapter. 21. Uniqueness in regularity and Dirichlet problems -- Chapter. 22. The Neumann problem -- Appendix A. Non-tangential maximal functions and traces -- Appendix B. The Lp-realization of a sectorial operator in L2 -- References -- Index.

Sommario/riassunto

In this monograph, for elliptic systems with block structure in the upper half-space and t-independent coefficients, the authors settle the study of boundary value problems by proving compatible well-posedness of Dirichlet, regularity and Neumann problems in optimal ranges of exponents. Prior to this work, only the two-dimensional situation was fully understood. In higher dimensions, partial results for existence in smaller ranges of exponents and for a subclass of such systems had been established. The presented uniqueness results are completely new, and the authors also elucidate optimal ranges for problems with fractional regularity data. The first part of the monograph, which can be read independently, provides optimal ranges of exponents for functional calculus and adapted Hardy spaces for the associated boundary operator. Methods use and improve, with new results, all the machinery developed over the last two decades to study such problems: the Kato square root estimates and Riesz transforms, Hardy spaces associated to operators, off-diagonal estimates, non-tangential estimates and square functions, and abstract layer potentials to replace fundamental solutions in the absence of local regularity of solutions.