

# **3rd World Conference on Technology, Innovation and Entrepreneurship 2019**

Industry 4.0 Focused Innovation,  
Technology, Entrepreneurship and  
Manufacture

Procedia Computer Science Volume 158

Istanbul, Turkey  
21 – 23 June 2019

Part 1 of 2

**Editor:**

**Sefer Sener**

ISBN: 978-1-7138-0656-1

**Printed from e-media with permission by:**

Curran Associates, Inc.  
57 Morehouse Lane  
Red Hook, NY 12571



**Some format issues inherent in the e-media version may also appear in this print version.**

Copyright© by Elsevier B.V.  
All rights reserved.

Printed with permission by Curran Associates, Inc. (2021)

For permission requests, please contact Elsevier B.V.  
at the address below.

Elsevier B.V.  
Radarweg 29  
Amsterdam 1043 NX  
The Netherlands

Phone: +31 20 485 3911  
Fax: +31 20 485 2457

<http://www.elsevierpublishingsolutions.com/contact.asp>

**Additional copies of this publication are available from:**

Curran Associates, Inc.  
57 Morehouse Lane  
Red Hook, NY 12571 USA  
Phone: 845-758-0400  
Fax: 845-758-2633  
Email: [curran@proceedings.com](mailto:curran@proceedings.com)  
Web: [www.proceedings.com](http://www.proceedings.com)



## Table of Contents

### ENGINEERING SCIENCES AND TECHNOLOGIES

|  |     |
|--|-----|
| Comparison of Different Clustering Methods for Cellular Manufacturing: A Case of Gym Centre<br>Ibrahim Mirac Eliguzel, and Eren Ozceylan . . . . .   | 1   |
| Investigating the academic success of industrial engineering students in terms of various variables<br>İbrahim Halil Korkmaz, Ayca Özceylan, and Eren Özceylan . . . . .   | 9   |
| A deep learning approach for final grasping state determination from motion trajectory of a prosthetic hand<br>Cihan Uyanik, Syed F. Hussaini, Erdem Erdemir, Erkan Kaplanoglu, and Ali Sekmen . . . . .                                 | 19  |
| Path Planning for Industrial Robot Milling Applications<br>Mustafa Çakır, Baran Hekimoğlu, and Cengiz Deniz . . . . .  | 27  |
| A deep learning approach for motion segment estimation for pipe leak detection robot<br>Cihan Uyanik, Erdem Erdemir, Erkan Kaplanoglu, and Ali Sekmen . . . . .  | 37  |
| Rheological and Mechanical Behavior of Mortars with Metakaolin Formulation<br>Nadia Tebbal, and Zine El Abidine Rahmouni . . . . .   | 45  |
| Fabrication of Dual Layer Polyvinyl Alcohol Transdermal Patch: Effect of Freezing-Thawing Cycles on<br>Morphological and Swelling Ability<br>Shafizah Sa'adon, Saiful Izwan Abd Razak, Al Emran Ismail, and Khalida Fakhruddin . . . . . | 51  |
| Ergonomic Room Selection with Intuitive Fuzzy TOPSIS Method<br>Hilal Biderci, and Beyrul Canbaz . . . . .  | 58  |
| Water Heat Pump Application With Double Stage Back Injection<br>Anıl Ünlü, Ergün Carus, and Ahmet Görgülü . . . . .  | 68  |
| Optimization of Distributed CFAR Detection using Grey Wolf Algorithm<br>Houcine Oudira, Amel Gouri, and Amar Mezache . . . . .   | 74  |
| Improvement Instrumental Variables Method for Output Error Model<br>Abdelkader Maddi, Abderrezak Guessoum, and Daoud Berkani . . . . .   | 84  |
| Evaluation of Thermodynamic Analysis of Solar Energy Systems Integrated into Sustainable Buildings<br>with Artificial Neural Network: A Case Study<br>F. Enda Tolon, Arif Karabuga, Mert Tolon, and Zafer Utlu . . . . .                 | 91  |
| Aligning Education for the Life Sciences Domain to Support Digitalization and Industry 4.0<br>Cagatay Catal, and Bedir Tekinerdogan . . . . .  | 99  |
| Setting speed-limit on Industry 4.0 – an outlook of power-mix and grid capacity challenge<br>Tarik Zaimovic . . . . .  | 107 |
| Electronic Design Verification Tests for LED Driver: Analysis and Implementation of Worst Case Tests<br>M. Caner Başol, Ö. Emre Pepeç, K. Yılmaz Kaya, and Murat Ayaz . . . . .  | 116 |

|  |     |
|--|-----|
| Assessment of Environmental Radioactivity and Health Hazard in Soil, Water, and Stone Samples in Siverek Town of Sanliurfa Province in Southeastern Turkey<br>Ilker Can Celik, and Mehmet Kosal . . . . .  | 125 |
| Evaluation of the development level of provinces by grey cluster analysis<br>Ömer Karakoç, Hüseyin Avni Es, and Seniye Ümit Fırat . . . . .  | 135 |
| Clustering analysis application on Industry 4.0-driven global indexes<br>Merve Doğruel Anuşlu, and Seniye Ümit Fırat . . . . .   | 145 |
| Experimental characterization of ordinary concretes obtained by adding construction waste (glass, marble)<br>Messaouda Belouadah, Zine El Abidine Rahmouni, and Nadia Tebbal . . . . .   | 153 |
| Novel Flow Field for Proton Exchange Membrane Fuel Cells Made from 72%-Porous Aluminum Foam<br>Yussef Awin, and Nihad Dukhan . . . . .   | 163 |
| Design and Simulation of ANFIS Controller for Increasing the Accuracy of Leaf Spring Test Bench<br>Elif Üstünişik, and Ahmet Kırılı . . . . .  | 169 |
| Simulation-Based Parametric Study for the Hybrid Superplastic Forming of AZ31<br>Fatima Ghassan Al-Abtah, Naser Al-Huniti, and Elsadig Mahdi . . . . .   | 177 |
| Contribution to the Study of Modified Bitumen Behavior by the Association (EVA-NBR-Plastic Waste) to Aging<br>Boubaker Fethiza Ali, El Djouheur Bennour, Khedoudja Soudani, and Smail Haddadi . . . . .  | 198 |
| Smart beer production as a possibility for cyber-attack within the industrial process in automatic control<br>Valdrin M. Beluli . . . . .  | 206 |
| Innovative new product development: a case study<br>Serkan Altuntas, Esad Beşir Özsoy, and Şiho Mor . . . . .  | 214 |
| Pure Water Production Technology By Electrodeionization Method In Dark Factories Scope<br>Erdal Ertürk, Ergün Carus, and Ahmet Görgülü . . . . .   | 222 |
| Reliability Centered Maintenance Practices in Food Industry<br>Oğuzhan Yavuz, Ersin Doğan, Ergün Carus, and Ahmet Görgülü. . . . .   | 227 |
| Research and Development Approaches and Implementation Issues in Agricultural Machinery Sector; Konya Case<br>Şule ERYÜRÜK, Barış Samim NESİMİOĞLU, Hüseyin Oktay ALTUN, Hulusi AÇIKGÖZ,<br>Semih YUMUŞAK, Hüseyin Bekir YILDIZ, Ahmet ÇALIK, and<br>Ozan İbrahim Ethem BAĞRIYANIK . . . . . | 235 |
| A Hybrid Process Mining Approach for Business Processes in Financial Organizations<br>Fikri Aydemir, Yasar Ugur Pabuccu, and Fatih Basciftci. . . . .  | 244 |
| Feature Selection in Credibility Study For Finance Sector<br>Ali Tunç . . . . .  | 254 |
| An empirical study to explore the interplay of Managerial and Operational capabilities to infuse organizational innovation in SMEs<br>Zulfiqar Ali, Inez Maria Zwetsloot, and Nader Nada. . . . .  | 260 |
| Future Skills Requirements Analysis in Maritime Industry<br>Kadir Cicek, Emre Akyuz, and Metin Celik . . . . .   | 270 |
| A Comparative Research of Machine Learning Impact to Future of Maritime Transportation<br>Emre Akyuz, Kadir Cicek, and Metin Celik . . . . .   | 275 |

|  |     |
|--|-----|
| The Effect of Critical Thinking on Making the Right Decisions in the New Venture Process<br>Naz Yıldız, and Mark Bailey . . . . .  | 281 |
| A Framework for Cyber Crime Investigation<br>Ayşe Okutan, and Yalçın Çebi . . . . .  | 287 |
| Priority Management of the Handoff Requests in Mobile Cellular Networks<br>Messaoud Garah, and Houcine Oudira . . . . .  | 295 |
| Triz Methodology and Applications<br>Ismail Ekmekci, and Emine Elif Nebati. . . . .  | 303 |
| Exchange Rates' Change by Using Economic Data with Artificial Intelligence and Forecasting the Crisis<br>Kemal Güler, and Abdulkadir Tepecik. . . . .  | 316 |
| Pvc and polietilentereftalat in the processes of combustion with substandard coal<br>Tulepov, M.I. Spanova, G.A. Tleuberdi, E. Pustovalov, I.A. Tureshova, G.O. Golovchenko, O.Yu.<br>Aknazarov, S.Kh. Zhunussova, K.Z. Abdrakova, F.Yu. and Baiseitov, D.A. . . . . | 327 |
| Obtaining Carbon materials from rubber crumb<br>Yerbol Tileuberdi, Yerdos Ongarbayev, Zulkhair Mansurov, Yerzhan Imanbayev, Nurzhamal Otarova,<br>and Marat Tulepov . . . . .  | 334 |
| Studies on a Robotic Device that Minimizes End-Point Vibrations for Parkinson Tremor<br>Esra KAYA AYANA, Claudia F. YAŞAR, and Şeref Naci ENGİN . . . . .  | 338 |
| On the Effect of Slung Load on Quadrotor Performance<br>Kamil Yekta Us, A. Cevher, M. Sever, and A. Kırılı. . . . .  | 346 |
| The Stress-Strain State of the Two Shtreks a Weighty Obliquely Layered Massif System With Slits in<br>Terms of Elastic Deformation of Rocks<br>T. Turymbetov, B. Kuatbekov, S. Maulenov, and Z. Aimeshov. . . . .  | 355 |
| Harmonization and Simplification Roles of Technology Transfer Offices for Effective<br>University – Industry Collaboration Models<br>Fatih Tunca, and Özge Nur Kanat . . . . .   | 361 |
| Influence of the addition of glass powder and marble powder on the physical and mechanical behavior of<br>composite cement<br>Messaouda Belouadah, Zine El Abidine Rahmouni, and Nadia Tebbal . . . . .  | 366 |
| Autonomous Climbing Robot for Tank Inspection<br>Özgür Acar, and Claudia F. YaŞar . . . . .  | 376 |
| The Selection of Railway System Projects with Multi Creteria Decision Making Methods: A Case Study<br>for Istanbul<br>Nihan Yücel, and Semra Erpolat Taşabat. . . . .  | 382 |
| Model Selection of Sea Clutter Using Cross Validation Method<br>Taha Houcine Kerbaa, Amar Mezache, and Houcine Oudira . . . . .  | 394 |
| Application of industry 4.0 on biomass liquefaction study: a case study<br>Cemil Koyunoğlu, and Hüseyin Karaca. . . . .  | 401 |
| An Innovative Technology: Augmented Reality Based Information Systems<br>Damla Aslan, Bengü Bayyurt Çetin, and İzzet Gökhan Özbilgin . . . . .   | 407 |
| Islamic Online P2P Lending Platform<br>Mesut Pişkin, and Merve Can Kuş. . . . .  | 415 |

**HEALTH SCIENCES**

|  |     |
|--|-----|
| System for Planning and Performing Staging of Medical Investigations for Diagnosis<br>Eminullah Yaşar, Oktay Yıldırım, Yiğit Ege Miman, Ali Rıza Şişman, and Süleyman Sevinç. . . . .  | 420 |
| Quantification of 2D shape variation of abnormal proximal femurs over normal proximal femurs in bilateral hip MRI: A computerized analysis for Legg-Calve-Perthes disease<br>Abbas Memiş, Songül Varlı, and Fuat Bilgili . . . . . | 426 |
| Drug-Loaded Poly-Vinyl Alcohol Electrospun Nanofibers for Transdermal Drug Delivery: Review on Factors Affecting the Drug Release<br>Shafizah Sa'adon, Saiful Izwan Abd Razak, Al Emran Ismail, and Khalida Fakhruddin . . . . .   | 436 |
| Forecasting of innovation in the light of semantic networks<br>Cigdem Baskici, Suat Atan, and Yavuz Ercil. . . . .   | 443 |

**INDUSTRIAL DESIGN AND ART**

|  |     |
|--|-----|
| 3e Methodology For Tuff Stones As Wall Coating Material<br>Lutfu S. Sua, Unal Yılmaz, and Figen Balo. . . . .                              | 450 |
| Simulation Framework for Wind Energy Attributes with WAsP<br>Unal Yılmaz, Figen Balo, and Lutfu S. Sua. . . . .                            | 458 |
| Single junction photovoltaic cell and sub-modules in optimization of solar farms<br>Lutfu S. Sua, and Figen Balo . . . . .                 | 466 |
| Emotional design: the development of a process to envision emotion-centric new product ideas<br>Teresa Alaniz, and Stefano Biazzo. . . . . | 474 |

**SOCIAL AND BEHAVIORAL SCIENCES**

|  |     |
|--|-----|
| Shades of Automation in the Labor Market<br>Orhun Sevinc . . . . .   | 485 |
| Crowdfunding Awareness in Turkey<br>İbrahim Sırma, Oya Ekici, and Yusuf Aytürk. . . . .  | 490 |
| Examining The Concept of Industry 4.0 Studies Using Text Mining and Scientific Mapping Method<br>Tayfun Yıldız . . . . .   | 498 |
| The Role of Information Technology in Women Entrepreneurship (The Case of E-Retailing in Iran)<br>Leila Mivehchi . . . . .   | 508 |
| A Review of Digital Brand Positioning Strategies of Internet Entrepreneurship in the Context of Virtual Organizations: Facebook, Instagram and Youtube Samples<br>Yagmur Sacide Bahcecik, Senem Seda Akay, and Ali Akdemir . . . . . | 513 |
| The effect of economic growth on energy efficiency: Evidence from high, upper-middle and lower-middle income countries<br>Sefer Sener, and Ahmet Tarik Karakas . . . . .   | 523 |
| The causal relationship between innovation, competitiveness and foreign trade in developed and developing countries<br>Sefer Sener, and Deniz Delican . . . . .  | 533 |
| A Panel Study of the Impact of R&D on Financial Performance: Evidence from an Emerging Market<br>Mahmut Erdogan, and Adilya Yamaltdinova . . . . .   | 541 |
| The Work Safety Culture as a Subculture: The Structure of Work Safety Culture in Turkey<br>Serenay Çalış, and Ufuk Fatih Küçükali . . . . .  | 546 |
| The Reputational Effects of Corporate Political Activities: An Empirical Research<br>Rifat Kamasak, Meltem Yavuz, and Selin Akin. . . . .  | 552 |

|  |     |
|--|-----|
| The Mediating Roles of Solidarity and Intellectual Capital on the Relationship between Resource Dependency Sub-dimensions and Innovation Performance<br>Sevcan Pınar, Mine Afacan Fındıklı, and Ali Mertcan Köse . . . . . | 557 |
| Triple Helix Model and Knowledge-Based Entrepreneurship in Regional Engagement: A Case Study of Thai and UK Universities<br>Suteera Puangpronpitag . . . . .   | 565 |
| Avocado and Coffee Supply Chains Specialization in Colombia<br>Santiago Quintero Ramirez, Bibiana Marín Sánchez, Santiago Cubillos Jimenez, Walter Ruiz Castañeda, and Diana Giraldo Ramirez . . . . .                     | 573 |
| Strategic Logo Placement on Packaging - Using Conceptual Metaphors of Power in Packaging – Evidence from Pakistan<br>Tabassum Riaz, and Muhammad Mudasar Ghafoor . . . . .   | 582 |
| Industry 4.0 in Terms of Industrial Relations and Its Impacts on Labour Life<br>Resul Kurt . . . . .   | 590 |
| A Bibliometric Analysis of Industry 4.0-Focused Turkish E-Accounting Applications<br>Fatma Tektüfekçi . . . . .  | 602 |
| Some Critical Issues in Innovation and Economic Development: Lessons from the Recent Turkish Experience<br>Yusuf Balci . . . . .   | 609 |
| Industry 4.0 and Competitiveness<br>Hasan Çebi Bal, and Çisil Erkan . . . . .  | 625 |
| SMEs in the Contemporary Era of Global Competition<br>Nida Masroor, and Muhammad Asim . . . . .  | 632 |
| Cultivating Entrepreneurs: Role of the University Environment, Locus of Control and Self-efficacy<br>Talat Islam . . . . .   | 642 |
| The Determinants of Entrepreneurship in Turkey<br>Cigdem Borke Tunali, and Sefer Sener . . . . .   | 648 |
| Strategic Entrepreneurial Awareness and Business Performance: Empirical Evidence from Small and Medium-sized Enterprises in Thailand<br>Pankom Sriboonlue . . . . .  | 653 |
| Digital Transformation Process and SMEs<br>Dilber Ulas . . . . .   | 662 |
| The Relationship between Organizational Citizenship Behavior and Entrepreneurial Orientation: A Research in the Hospitality Industry<br>Gizem Taşkıran, and N. Öykü İYİGÜN . . . . .                                       | 672 |
| The Effect of Emotional Capital on Individual Innovativeness: A Research on Bahcesehir University Business Administration Undergraduate Students<br>Cafer Şafak Eysel, and İsmet Burçak Vatansever Durmaz . . . . .        | 680 |
| Industry 5.0 and Human-Robot Co-working<br>Kadir Alpaslan Demir, Gözde Döven, and Bülent Sezen . . . . .   | 688 |
| The Missing-Link between Financial Development and Economic Growth: Financial Innovation<br>Ebubekir Mollaahmetoğlu, and Burçay Yaşar Akçalı . . . . .   | 696 |

|   |     |
|---|-----|
| The Importance of Benchmarking for the Management of the Firm: Evaluating the Relation between Total Quality Management and Benchmarking<br>Ayşenur Erdil, and Hikmet Erbiyik .....   | 705 |
| User anxiety as an external variable of technology acceptance model: A meta-analytic study<br>Aygül Dönmez-Turan, and Merve Kır .....   | 715 |
| Making Sense of Energy-Saving Behaviour: A Theoretical Framework on Strategies for Behaviour Change Intervention<br>Zahirah Mokhtar Azizi, Nurul Sakina Mokhtar Azizi, Nazirah Zainul Abidin, and Sandeeka Mannakkara ..... | 725 |
| An Evaluation on Lifecycle of Products in Textile Industry of Turkey through Quality Function Deployment and Pareto Analysis<br>Ayşenur Erdil .....   | 735 |
| An Analysis on Collaborations between Turkish Beauty YouTubers and Cosmetic Brands<br>Merve Genç, and Burcu Öksüz .....   | 745 |
| Internationalization and Brand Value in Jewellery Industrie<br>Raife Y. Eyiler .....  | 751 |
| Evaluation of the Financial Investment Preferences of Individual Investors from Behavioral Finance: The Case of Istanbul<br>Mustafa Yurttadur, and Havva Ozcelik .....  | 761 |
| The Place of Non-performing Loans in the Turkish Banking Sector<br>Mustafa Yurttadur, Ender Celiktas, and Ebru Celiktas. ....   | 766 |
| Analysis of The Effect of Innovation Strategy and Technological Turbulence on Competitive Capabilities and Organizational Innovativeness in Technology Firms<br>Kudret Celtekliligil, and Zafer Adiguzel .....              | 772 |
| Evaluation of Data Sharing in Production Firms and Innovation Orientation in The Effect of Management Capability on Operational Performance<br>Kudret Celtekliligil, and Zafer Adiguzel .....                               | 781 |
| The Impact of Authentic Leadership Behavior on Job Satisfaction: A Research on Hospitality Enterprises<br>Betül Ayça .....  | 790 |
| Impact of training on employee motivation in human resources management<br>Banu Ozkeser .....   | 802 |
| What Hinder SMEs from Adopting E-commerce? A Multiple Case Analysis<br>Salma Dahbi, and Chihab Benmoussa .....  | 811 |
| Towards Innovative SMEs: An Empirical Study of Regional Small and Medium Enterprises in Thailand<br>Pankom Sriboonlue, and Suteera Puangpronpitag. ....   | 819 |
| Modelling the National Knowledge Ecosystem: Policy Implications for Iran<br>Yaghoub Entezari. ....  | 826 |
| Financial Literacy Assessment in Bosnia and Herzegovina<br>Sanela Halilovic, Azra Zaimovic, Almira Arnaut Berilo, and Tarik Zaimovic .....  | 836 |
| Self- assessment Performance Measurement in Construction Companies: An Application of the EFQM Excellence Model on Processes and Customer Stages<br>Duygu Hidiroğlu .....   | 844 |



|  |     |
|--|-----|
| The Measurement of Industry 4.0 Performance through Industry 4.0 Index: An Empirical Investigation for Turkey and European Countries<br>Hayriye Atik, and Fatma Ünlü . . . . .                                 | 852 |
| Entrepreneurial Intentions of Generation-Z: Compare of Social Sciences and Natural Sciences Undergraduate Students at Bahçeşehir University<br>Cafer Şafak Eysel, and İsmet Burçak Vatansever Durmaz . . . . . | 861 |
| The Use of Blogs as an Example of Internet Entrepreneurship: Turkish Travel Blogs<br>Gözde Karabacak, and Merve Genç . . . . .   | 869 |
| What ecosystem model to support the creation of social innovation technopoles?<br>Zineb Znagui, and Bouchra Rahmouni . . . . .   | 877 |
| Analysis of Factors Leading to Entrepreneurial Intention<br>Emine Banu Bilgiseven, and Murat Kasımoğlu . . . . .   | 885 |
| A Brief Summary of Knowledge Management Domain: 10-Year History of the Journal of Knowledge Management<br>Tuğba Koç, Kadir Kurt, and Adem Akbıyık . . . . .  | 891 |
| The Effect of Organizational Justice and Organizational Commitment on Knowledge Sharing and Firm Performance<br>Salih Zeki Imamoglu, Huseyin Ince, Hulya Turkcan, and Birsen Atakay . . . . .                  | 899 |
| Corporate Governance and Welfare/Corporate Governance in Turkey<br>Faik Çelik . . . . .  | 907 |
| An Investigation on the Volatility of Cryptocurrencies by means of Heterogeneous Panel Data Analysis<br>Cansu Şarkaya İçellioğlu, and Selma Öner . . . . .   | 913 |
| Two Samples Of Enviromental And Green Procurement At Turkcell<br>Mustafa Ozturk . . . . .  | 921 |
| Regulatory Challenges and Solutions for Fintech in Turkey<br>Kazim Degerli . . . . .   | 929 |
| The Effect of Digital Channel Migration, Automation and Centralization on the Efficiency of Operational Staff of Bank Branches<br>Selman Ortaköy, and Zehra Özsürünç . . . . .                                 | 938 |
| Credit Risk Management: A Panel Data Analysis on The Islamic Banks in Turkey<br>Ahmet İncekara, and Harun Çetinkaya . . . . .  | 947 |
| Liquidity Risk Management: A Comparative Analysis of Panel Data Between Islamic And Conventional Banking In Turkey<br>Ahmet İncekara, and Harun Çetinkaya . . . . .  | 955 |
| The Contribution of Participation Banks to the International Trade in Turkey: A Panel Data Analysis<br>Cansu Şarkaya İçellioğlu, and Merve Büşra Engin Öztürk . . . . .  | 964 |
| Fintech Integration Process Suggestion for Banks<br>Okan Acar, and Yusuf Ensar Çıtak . . . . .   | 971 |
| The Effect of Credit Risk on Financial Performance of Deposit Banks In Turkey<br>Ramazan Ekinci, and Gulden Poyraz . . . . .   | 979 |
| A Comparative Analysis of Intellectual Property Rights: A case of Developed versus Developing Countries<br>İlayda Nemlioglu . . . . .  | 988 |

|   |      |
|---|------|
| A novelty on unlocking businesses' potential growth: Intellectual Property Securitisation<br>Ilayda Nemlioglu .....   | 999  |
| Development of Nanotechnology in the World and Nanotechnology Standards in Turkey<br>Hatice Calipinar, and Dilber Ulas .....  | 1011 |
| Investigation of The Relationship Between Brand Value And R&D Activities: Fortune 500 Companies<br>Analysis<br>Serkan Kurt .....  | 1019 |
| Evolution of New Keynesian Economics<br>Özlen Hiç .....   | 1025 |
| Evaluation of Student Information System (SIS) In Terms of User Emotion, Performance and Perceived<br>Usability: A Turkish University Case (An Empirical Study)<br>Denizhan Demirkol, and Cagla Seneler .....   | 1033 |
| Leadership Approach in Occupational Safety: Taiwan Sample<br>Çağdaş Çalış, and Banu Yeşim Büyükkakıncı .....  | 1052 |
| Occupational Health and Safety Management Systems Applications and A System Planning Model<br>Serenay Çalış, and Banu Yeşim Büyükkakıncı .....  | 1058 |
| How Reliable Variables That Entered on SGK Accident e-Notice?<br>Çağdaş Çalış, and Ufuk Fatih Küçükali .....  | 1067 |
| An Analysis of Importance of Innovatice Behaviors of Ground Handling Human Resources in Ensuring<br>Customer Satisfaction<br>Nesrin Ş. Türeli, Vildan Durmaz, Yağmur Sacide Bahçecik, and Senem Seda Akay ..... | 1077 |
| The monetary transmission mechanism in Turkey<br>Ahmet İncekara, and Akmyrat Amanov .....   | 1088 |
| An Evaluation of New Values in Economy and Their Impacts on Future Transformation in Tourism<br>Bahar Turkey, Fusun Istanbulu Dincer, and Mithat Zeki Dincer .....  | 1095 |
| Printed Circular Antenna Array for Reduce SLL and High Directivity Using Cuckoo Search Algorithm<br>Lakhlef Nora, Houcine Oudira, and Christophe Dumond .....   | 1103 |
| The Causality Effects of Manufacturing Sector on Some Macroeconomic Variables in Turkey<br>Cigdem Borke Tunali, and Furkan Boru .....   | 1109 |
| Valorization of aluminum waste on the Mechanical Performance of mortar subjected to cycles of<br>freeze-thaw<br>Nadia Tebbal, and Zine El Abidine Rahmouni .....  | 1114 |
| Innovation and Economic Growth in Developing Countries: Empirical Implication of Swamy's Random<br>Coefficient Model (RCM)<br>Aynur Pala .....  | 1122 |