

CONTENTS

| | |
|---|-----|
| M. Farsi, A.Heidarinasab, B.Honarvar, M. Arjmand, Structure and performance of PDMS as cross-linking agent upon property of blending PDMS, PEG, PES and PAN membranes.... | 5 |
| M. Omidvar, E. Koohestanian, O. Ramezani, The effect of using nanostructures of synthesized lead oxide by mechanical milling on lead-acid battery performance using Taguchi method..... | 12 |
| S. Dehghanpoor, B. Sadeghi, M.Mosslemin, Nano-sawdust-SbCl ₅ as a new, green and effective nano catalyst for one-pot synthesis of pyrano [4,3- <i>b</i>] pyrans..... | 18 |
| M. Rouhi, B. Sadeghi, M.Moslemin, Nano-cellulose-SbCl ₅ as a new heterogeneous nano-catalyst for the one-pot synthesis of spirooxindoles under mild conditions..... | 23 |
| E. Abyar, B. Sadeghi, M.Mosslemin, Nano-kaolin-TiCl ₄ as a new, green and effective nano-catalyst for one-pot synthesis of tetrahydrobenzo[<i>B</i>]pyrans..... | 29 |
| A.Haghighi Shad, D.Masti, M.Athari Allaf, K.Sepanloo, S.A.H.Fegghi, Introduction of KIANA radio-ecological Iranian domestic code for concentration and dose calculation of radio isotopes release at normal and accidental conditions in nuclear installations and chemical facilities..... | 33 |
| A.S. Mohamadhoseini, S. Jamehbozorgi, J. Beheshtian, investigation of interaction between graphene and its compounds as carriers on anti-cancer drug of 5-fluorouracil..... | 59 |
| B.Sadeghi, A. Moradgholi, E. Akbarzadeh, Nano-cellulose-OSO ₃ H as a green and effective nano catalyst for one-pot synthesis of pyrano [2,3- <i>D</i>] pyrimidines..... | 63 |
| M.M. Royaei, A. Pourbabaee, M. Noaparast, The effect of microwave irradiation on operational parameters of copper flotation concentrate bioleaching by irradiated mesophilic bacteria..... | 69 |
| K. Habibi, M. Mamaghani, M. Nikpassand, Examining the synthesis of organic material used as an oxidation inhibitor for all types of lubricating oils..... | 76 |
| L.Nazari, B.Baghernejad, Nano CeO ₂ /ZnO: a powerful catalyst for the very fast synthesis of quinoxaline..... | 83 |
| H.H. Shekarabi, P.A. Azar, A.Javid, A. Hasani, Arsenic (V) removal from aquatic media by electrospun alumina nanofiber..... | 88 |
| P. Mehrani, N. Ghasemi, M. Ramezani, Synthesis and characterization of metal organic framework based on copper particles for storage of zinc oxide nanoparticles..... | 97 |
| A.Ghadami Jadval Ghadam, M. Shanbehpour Theoretical model for simulation of the particles drying using gateway dryer: heat and mass transfer study..... | 102 |
| H. Hashemi, A. Ghadami Jadval Ghadam, Prediction of density for the mixture of octanol and polyethylene glycol using fuzzy and adaptive neuro-fuzzy systems..... | 113 |
| F. Khosravi, H. Irani Behbahani, H.Ghaffarzadeh, A. Vafaeinejad, Evaluation of sustainable landscape services based on the analytic network process (ANP)..... | 119 |
| F. Ghalambaz, A. Farhadi, A.R. Kiasat, R. Badri, Three component one-pot synthesis of some 4H benzo[<i>b</i>]pyran derivatives by using dual organo modified MCM-41 as nanocatalyst.... | 130 |
| M. Ameri Siahooei, Kh. Mehrani, M.Yousefi, Prevent of greenhouse gas emissions in aluminum smelter by carbon nanotube (Monte Carlo simulation)..... | 139 |
| M. Rostami, H. Khorsand, An experimental approach to an optimized method for producing Al ₂ O ₃ -coated aluminum nanopowder as a core-shell superconductor by electro explosion of wire..... | 147 |
| E. Zarrinabadi, R. Abghari, A. Nazari, M. Mirjalili, Modeling and optimization of electromagnetic and saturated magnetic properties of polyester fabrics coated with Ag/kaolin/silica nanocomposites..... | 154 |
| M. Adelizadeh, M Macki Aleagha, A. Behbahaninia, Providing an interpretive structural model of implementation of cleaner production in the pharmaceutical industry..... | 168 |
| KH. Didehban, S.A. Mirshokraie, J. Azimvand, Safranin-O-dye removal from aqueous solution using superabsorbent lignin nanoparticle/polyacrylic acid hydrogel..... | 180 |
| P. Azimi, K. Tahvildari, P. Derakhshy, F. Motiee, Comparison of the advanced oxidation processes and adsorption with chitosan-zeolite composite in reducing the amount of airport wastages containing glycol pollution..... | 188 |

| | |
|---|-----|
| M.F.Yazdanbakhsh, A.Rashidi, M.K.Rahimi, R.Khajavi, H.Shafaroodi, The effect of impregnated alpha-cellulose nanofibers with ciprofloxacin hydrochloride on <i>Staphylococcus aureus in-vitro</i> | 195 |
| A. Meftahi, R. Khajavi, A. Rashidi, M. K. Rahimi, A. Bahador, Enhancement of bacterial cellulose rehydration via BTCA cross-linking..... | 203 |
| S. Sarli, N. Ghasemi, A. Moradi, Optimal Synthesis, Characterization, antibacterial and anticancer assay of green synthesized nickel nanoparticles by <i>Taxus brevifolia</i> leaf extract..... | 209 |
| M.H. Rousta, N. Ghasemi,, M. Ramezani, T. M. Esfahani, Optimal synthesis and characterization of green synthesized silver nanoparticles by <i>Lawsonia Inermis</i> extract.... | 224 |
| A. Samaditabrizi, K. Arzan, M. Tamizifar, The effect of temperature and phosphate treatment for investigation of wear and corrosion of synthesized nano-alumina coatings through sol-gel method on Inconel 718 alloy..... | 230 |
| B. Asadi, N. Ghasemi, M. Rabbani, K. Mahanpoor, Preparation of magnetic nano sponge and the effect of its absorption on β -lactam drugs..... | 238 |
| M.Khodaie, N.Ghasemi, Green synthesis and characterization of copper nanoparticles using <i>Eryngium campestre</i> leaf extract..... | 244 |
| Gh. Chizari Fard, M. Mirjalili, F. Najafi, Preparation of nano cellulose/A-Fe ₂ O ₃ hybrid nanofiber for the cationic dyes removal: optimization characterization, kinetic, isotherm and error analysis..... | 251 |
| M.Hadizadeh, M.H. Mosslemin, B.Sadeghi, [2-(Sulfooxy) ethyl] sulfamic acid (SESA): an efficient heterogeneous recyclable catalyst promoted green synthesis of B-amido carbonyl compounds derivatives by multi-component reactions (MCRs)..... | 262 |
| N. Ghazavi, M. H. Mosslemin, R. Mohebat, <i>Hibiscus sabdariffa</i> : biocatalyst for solvent-free synthesis of dihydropyrimidinone derivatives..... | 270 |
| Z. Heidarneshad, M. Vahedpour, Investigation of unimolecular reaction for C–H and N–H bonds fission in aniline by calculation Arrhenius parameters with RRKM method and analysis of NBO and HOMO, LUMO orbitals..... | 276 |
| A.Dehjurian, J. Lari, A. Motavalizadehkakhky, Identification and quantitative analysis of quercetin and luteolin polyphenol in methanolic extracts of <i>Cirsium arvense</i> with HPLC.. | 285 |
| M. Khazravi, M. Bahmaei, M. Ebrahim Olya, S. Masoud Etehad, Decolourisation of the colored textile industries using a new combination of activated carbon and fiber; kinetic, thermodynamic and isotherm studies..... | 290 |
| M. Dehanzadeh, P. Ziarati, M. Homapour, Identification of a method for detecting and determining mixing palm oil with cream and detection of threshold using the chemical and machine test..... | 301 |
| S. Daneshpajoo, M. Mozdianfard, H. Ebrahimi, Investigation of kinetics and mechanism of the sulfating roasting process of chalcopyrite concentrate for water-leaching | 310 |
| E. Esmaeili, F. Shafiei, QSAR study for the prediction of physico-chemical parameter of category barbiturate compounds by using descriptors structure..... | 319 |
| F. Naye Morad, A. Rashid, R. Khajavi, M. Karim Rahimi, A. Bahador, Extraction water-swellaible fraction of gum tragacanth for innovation in burn wound dressing..... | 326 |
| M. M. Amiri, F. Amiri, F. Foroutan, H. Asghar Rahnamaye Aliabad, Effect of substituted Mn on optical properties of indium oxide and zinc oxide..... | 335 |
| Sh. Bizhanzadeh, M. Daghighi, L. Torkian, Synthesis of porous Al ₂ O ₃ –SiO ₂ nanocomposite xerogel through a sol-gel method and its application in adsorption of heavy metals..... | 341 |