

Oral Presentations

APPLIED PHYSICS

01OP1	A 5.5 NS-PULSED GAUSSIAN LASER BEAM ABLATION OF SILICON IN LIQUIDS Erkan Demirci, Elif Türkan Akşit-Kaya, Ramazan Şahin	93
01OP2	A PRACTICAL METHOD TO SYNTHESIS FEW-LAYERED GRAPHENE SHEETS VIA ELECTROCHEMICAL WITH MICROWAVE ASSISTED EXFOLIATION Ala K. Jihad, Kemal Kocabaş, Metin Yurddaşkal	93
01OP3	A STUDY ON THE WHEATSTONE-BASED ELECTRICAL MEASUREMENT OF TEMPERATURE Coşkun Deniz	94
01OP4	AIR QUALITY PREDICTION FOR AFYON USING ARTIFICIAL NEURAL NETWORKS Yağmur DALBUDAK, Uğur ÖZVEREN	94
01OP5	ARTIFICIAL NEURAL NETWORK MODEL FOR PM10 PREDICTION IN SULTANBEYLİ Halime YAKIŞIK, Uğur ÖZVEREN	95
01OP6	ASSESSMENT OF ACOUSTIC PERFORMANCE OF STRATIFIED COMPOSITES PREPARED FROM RECYCLED PAPER AND POLYURETHANE FOAM Burak Özyürek, Doğukan Bingöl, Merve Sirkeci, Erhan Sancak, Feyza Güzelçimen	95
01OP7	ATOMIC AND ELECTRONIC STRUCTURE OF FEW-LAYER GRAPHENE GROWN ON SiC/Si(001) WAFERS O.V.Molodtsova, A.N.Chaiika, H.-Cwu, And V.Yu. Aristov	96
01OP8	BEAM DIAGNOSTICS IN INJECTOR SECTION OF TARLA FEL FACILITY C. Kaya, A.Aksoy, O.Karslı, B.Koç, O.F.Elcim, H.Yıldız, H.Y.Alan, M.Kaya, H.Ucar, O Yavas	96
01OP9	CHOOSING METAL ALLOY AND DEFINING NEW STANDARDS TO PREVENT BENDING IN SMARTPHONES Ramiz Erdem Aykaç, Engin Başarslan	97
01OP10	DESIGN OF AN ULTRA-SENSITIVE OPTICAL SENSOR FOR ATMOSPHERIC LEVEL METHANE MEASUREMENT Alpgiray Keskin, Gamze Kaya, Necati Kaya	97
01OP11	DETECTING INDENTATION CRACK FORMATION IN GLASS WITH ACOUSTIC EMISSION TECHNIQUE	98

	Ezgi Deniz Kaçar, Lukáš Šimurka, Lukáš Václavek, Jan Tomáščík, İlkey Sökmen, Radim Čtvrtilík	
01OP12	DEVELOPING MINIATURIZED ORTHOGONAL FLUXGATE SENSORS Fatmanur KOCAMAN, Hava CAN, Uğur TOPAL, Fikret YILDIZ	98
01OP13	DIRECT GROWTH OF WO ₃ THIN FILMS ON ITO-COATED GLASS SUBSTRATE AS ELECTROCHROMIC ELECTRODE MATERIALS Mürüvvet ARSLAN, Yunus Emre FIRAT, Seyit Rıza TOKGÖZ, Tülin KOSUKOĞLU, Ahmet PEKSÖZ	99
01OP14	DISTINCTIVE APPLICATIONS OF SYNCHROTRON RADIATION BASED X-RAY RAMAN SCATTERING SPECTROSCOPY Didem Ketenoğlu	99
01OP15	DOUBLE SPLIT RING RESONATOR BASED MICROFLUIDIC SENSOR FOR WASTEWATER TREATMENT APPLICATIONS Olca Altıntaş, Murat Aksoy, Emin Ünal, Muharrem Karaaslan	100
01OP16	DYNAMIC LOCALIZATION IN INHOMOGENEOUS OPTICAL LATTICES Züleyha Öztaş	100
01OP17	EFFECT OF 800 NM WAVELENGTH FEMTOSECOND LASER CLEANING PERFORMANCE ON ANCIENT COIN OBTAINED FROM KONYA REGION Yasemin Gündoğdu, İlker Işık, Abuzer Kızıl, Hamdi Şükür Kilic	101
01OP18	EFFECTIVE MEASUREMENT OF THE WAVELENGTH ACCURACY CALIBRATION BY USING MONTE CARLO UNCERTAINTY CALCULATION Kilin M, Tutunculer H, Meric S.	101
01OP19	ELECTROLUMINESCENCE (EL) STUDY OF 10% INGAN/GAN MQW LED DEVICES H. Baş, O. Özdemir, N. Ayarçı Kuruoğlu, K. Bozkurt, B. Alshehri, K. Dogheche, Q. Gaimard, A. Ramdane, E. Dogheche	102
01OP20	ENERGY HARVESTING SENSOR – PZT _{0,5} MO _{0,5} (M;PVC, PP, PVDF) COMPOSITE THICK FILM EQUIPPED WITH SiO ₂ Israfil Sabikoglu	102
01OP21	ENHANCED ANTIBACTERIAL ACTIVITY OF SILVER-DOPED CHITOSAN NANOFIBERS	103

	Nalan ÇİÇEK BEZİR, Atilla EVCİN, Bilal BOZKURT, Burcu ÖZCAN, Esengül KIR, Gökhan AKARCA, Ozan CEYLAN	
01OP22	EXAMINATION OF THERMOLUMINESCENCE CHARACTERIZATION RARE EARTH DOPED YTTRIUM STANNATE PHOSPHORS WITH FRICTING STIR PROCESSING M. Durukan Gültepe, S. Uysal Satılmış, A. Ege, T.Küçükömeroğlu	103
01OP23	FABRICATION AND CHARACTERIZATION OF SILICON-BASED PIN PHOTODIODE Emre DOĞANCI, Şenol KAYA and, Ercan YILMAZ	104
01OP24	FEMTOSECOND LASER-INDUCED FILAMENTATION CONTROL IN LIQUIDS Alpgiray Keskin, Gamze Kaya, Necati Kaya	104
01OP25	FULLY 3D PRINTED BEAD-PULL MEASUREMENT OF AN ELLIPTICAL CAVITY Anıl Karatay, Fatih Yaman	105
01OP26	GENERATION OF PROGRAMMABLE DIFFRACTIVE LENSES WITH MULTIPLE OR MULTI-OPTICAL AXES, MULTI-FOCUS, DYNAMIC DISTANCE CONTROL OF FOCAL LENGTHS AND ENERGY INTENSITIES AT FOCI Gürkan Çelik, Gamze Kaya, Mustafa Kurt, Necati Kaya	105
01OP27	IDENTIFICATION OF MUSICAL INSTRUMENTS WITH USING AUDIO FEATURES EXTRACTED BY ARTIFICIAL NEURAL NETWORKS Batuhan Hangün, Murat Beken, Önder Eyecioğlu	106
01OP28	INELASTIC X-RAY SCATTERING EXPERIMENTS AT HIGH BRILLIANCE SYNCHROTRON SOURCE PETRA III-DESY Didem KETENOĞLU	106
01OP29	INVESTIGATION OF ELECTROCHROMIC DEVICES BASED ON AMORPHOUS WO ₃ THIN FILMS AND ITO AS COUNTER ELECTRODE Jose Enrique Martinez Medina, Zemzem Uyanik, Sina Rouhi, Mehtap Ozdemir, Elif Sahin Isgin, Gulnur Aygun, Lutfi Ozyuzer	107
01OP30	INVESTIGATION OF PHYSICAL PROPERTIES AND ANTIBACTERIAL ACTIVITY OF CE-DOPED CHITOSAN NANOFIBERS OBTAINED BY ELECTROSPINNING PROCESS	107

	Nalan ÇİÇEK BEZİR, Atilla EVCİN, Emine ŞENOL, Burcu ÖZCAN, Esengül KIR, Gökhan AKARCA, Ozan CEYLAN	
01OP31	INVESTIGATION OF THE TEMPERATURE EFFECT OF THE IPL THERAPY DEVICE ON TISSUE-MIMICKING MATERIAL Mirhasan Seyitsoy, Hüseyin Okan Durmuş, Emel Çetin, Buse Aktürk, Baki Karaböce	108
01OP32	INVESTIGATION OF THE TEMPERATURE EFFECT OF THE LED THERAPY DEVICE ON TISSUE-MIMICKING MATERIAL Mirhasan Seyitsoy, Hüseyin Okan Durmuş, Emel Çetin, Esra Demirkıran, Baki Karaböce	108
01OP33	INVESTIGATION OF TORREFACTION TEMPERATURE FOR THE REMOVAL OF COPPER IONS FROM AQUEOUS SOLUTION USING ALMOND SHELL Sevi YAŞAR and Uğur ÖZVEREN	109
01OP34	INVESTIGATIONS FOR INCREASING THE ACCURACY OF DIELECTRIC CONSTANT MEASUREMENTS Ceren Özkal, Fatih Yaman	109
01OP35	JUDD–OFELT ANALYSIS AND LUMINESCENCE PROPERTIES OF DYSPROSIUM DOPED GLASSES Deniz Koçyiğit, Atlay Güngör, Melis Gökçe, Aytaç Gürhan Gökçe	110
01OP36	LASER INDUCED MOLECULAR ALIGNMENT OF CO ₂ MEASURED WITH ATI YIELDS Mustafa Kurt, Necati Kaya, Gamze Kaya, Arzu Kurt	110
01OP37	MAGNETIC CHARACTERIZATION OF THIN FILM COATED ON SPHERICAL SURFACE Özlem Akın, Zürbiye Çapku, Aylin Ersoy, Fikret Yıldız	111
01OP38	MAGNETIC POLYMER COMPOSITES FOR TECHNICAL AND BIOMEDICAL APPLICATIONS Mohammadreza Pourghaffari, Burak Kaynar, Abdullah Ceylan, Şadan Özcan	111
01OP39	METAMATERIAL INSPIRED SENSOR FOR DETECTION OF ENGINE LUBRICANT OIL CONDITION Olca Altıntaş, Murat Aksoy, Emin Ünal, Muharrem Karaaslan	112
01OP40	NANOSTRUCTURED TiO ₂ LAYER THICKNESS DEPENDENCE OF THE SURFACE MORPHOLOGY AND ACOUSTIC IMPEDANCE	112

	Doğukan Bingöl, Merve Sirkeci, H. İbrahim Efker, Yunus Özen, Meltem Dönmez, Bükem Tanören Bilen, Feyza Güzelçimen	
01OP41	OPTIMIZATION CALCULATIONS OF THE OPTICAL PROPERTIES OF THE MAGNETIC LENS Zahraa Zuhair, Oday Ali Hussein	113
01OP42	OPTIMIZATION OF A NEW ENERGY HARVESTER WITH A FERROMAGNETIC GRANULES CONTAINED FLUID CORE Erol Kurt, Damla Tavşan, H. Hilal Kurt	113
01OP43	OPTICAL AND MECHANICAL PROPERTIES OF MULTI-FUNCTIONAL HYBRID ORGANIC-INORGANIC NANOCOMPOSITES Fatma Beyza Yedikardeş, Refika Budakoğlu, Esra Özkan Zayim	114
01OP44	OPTIMIZATION OF THE QUALITY OF ELECTRON DIFFRACTION IMAGE: CHARACTERISATION OF THIN FILMS PRECESSION Radu MANU, Victor CIUPINĂ, Gabriel PRODAN	114
01OP45	OPTIMUM REACTION CONDITIONS FOR THE PRODUCTION OF NANOFIBERS USING ELECTROSPINNING METHOD Güven AKPINAR, Hilal GÖKTAŞ	115
01OP46	PERSONAL SAFETY SYSTEM OF THE TARLA Hatice Yılmaz Alan, Avni Aksoy, Çağlar Kaya, Özlem Karşlı, Burak Koç, Ömer Faruk Elçim, Melike Kaya, Hüseyin Yıldız, Harun Uçar	155
01OP47	PIEZOELERCTRIC BASED ACOUSTICS FREQUENCY CONVERTER Mustafa Kurt, Bilge Çiğdem Çiftçi	116
01OP48	PREPARATION AND CHARACTERIZATION OF LARGE-AREA TUNGSTEN DISULFIDE (WS ₂) THIN FILMS Mücahit YILMAZ	116
01OP49	PREPARATION OF Eu/Dy-DOPED ZnO THIN FILMS BY SOL-GEL PROCESS Atilla Evcin, Nalan Çiçek Bezir	117
01OP50	PREPARATION OF PAN/PMMA-BASED ANTIBACTERIAL CARBON NANOFIBER BY ELECTROSPINNING METHOD Atilla Evcin, Nalan Çiçek Bezir	117
01OP51	PRODUCING OF CuS THIN FILMS BY DIFFERENT COATING METHODS AND INVESTIGATION OF OPTICAL	118

	PROPERTIES Namık AKÇAY, Ozan KUŞ	
01OP52	PRODUCTION OF V2O5 DOPED SODA-SILICATE GLASSES WITH CLASSICAL MELT-QUENCHING TECHNIQUE AND OPTICAL CHARACTERIZATION OF THESE OXIDE GLASSES Sadiye ÇETİNKAYA ÇOLAK, Barış KINACI	118
01OP53	QUANTUM LABORATORY SETUP FOR FUTURE WIRELESS COMMUNICATION SYSTEMS Muhammad Sohaib J. Solaija, Muhammad Bilal Janjua, Liza Afeef, Armed Tusha, Ahmet Enes Duranay, Hüseyin Arslan Orkun Hasekioğlu	119
01OP54	RECONSTRUCTION OF MEDIUM PARAMETERS FOR METAMATERIAL ANTENNAS VIA RETRIEVAL METHOD Hasan Önder Yılmaz, Fatih Yaman	119
01OP55	SMALL-SCALE VELOCITY FIELD AT THE CORE-MANTLE BOUNDARY CONSTRUCTED FROM THE GUFM1 GLOBAL MODEL Klaudio Peqini, Bejo Duka	120
01OP56	SOLUTIONS OF GAUSS AND BESSEL WAVE IN KTP AND BBO NONLINEAR CRYSTALS Gürkan Çelik, Mustafa Kurt	120
01OP57	SPECTRAL SINGULARITIES AND THEIR APPLICATIONS IN OPTICS Mustafa Sarısamam	121
01OP58	STATUS OF TARLA RF AMPLIFIERS FOR OPERATION O.Karsli, I.E.Colak, O.F.Elcim, B.Koc, C.Kaya, A.Aksoy, H. Ucar, H. Yildiz, H. Y. Alan, M. Kaya	121
01OP59	STRUCTURAL ANALYSIS OF GREEN, RED AND GREEN-RED MIXED MUD USED IN TILE PRODUCTION Hülya Kuru Mutlu	122
01OP60	SYNTHESIS AND CHARACTERIZATION OF SEMI-CONDUCTOR CUS THIN FILM Ali Rıza YILDIRIM, Enis Furkan UÇAR, Mehmet Burak KAYNAR, Abdullah CEYLAN, Şadan ÖZCAN	122
01OP61	SYNTHESIS AND ELECTROCHEMICAL CHARACTERIZATION OF GRAPHENE OXIDE DOPED POLYANILINE COMPOSITE THIN FILMS Yunus Emre FIRAT, Seyit Rıza TOKGÖZ, Mürüvvet ARSLAN, Ahmet PEKSÖZ	123

01OP62	SYNTHESIS OF GRAPHENE FILM BY LOW PRESSURE CHEMICAL VAPOR DEPOSITION AND TRANSFER ON TO THE SILICON SUBSTRATE Oğul Deha Kesik; Dilek Ekin; Enis Furkan Uçar; Mehmet Burak Kaynar; Abdullah Ceylan; Şadan Özcan	123
01OP63	SYNTHESIS OF TiO DOPED COPPER OXIDE NANOPARTICLES BY SOL-GEL METHOD AND INVESTIGATION OF ANTIBACTERIAL PROPERTIES FOR ESCHERICHIA COLI A.Çelik Bozdoğan, G. Kurt Gür	124
01OP64	SYNTHESIS OF ZINC OXIDE NANOROD OVER ZINC OXIDE THIN FILM BY RF SPUTTER AND HYDROTHERMAL METHOD AND THEIR CHARACTERISATION Enis Furkan UÇAR, Şadan ÖZCAN	124
01OP65	TARLA MAIN CONTROL SYSTEM Ömer Faruk ELÇİM	125
01OP66	THE EFFECT OF ATOMIC COMPOSITION ON THE CRYSTAL STRUCTURE AND MAGNETIC PROPERTIES OF NixMnyInz Seçil Söyleriz, Bora Kalkan, Mehmet Acet	125
01OP67	THE MEASUREMENTS OF THE GLOBAL SOLAR RADIATION AND SOLAR ULTRAVIOLET RADIATION DURING 2018 YEAR Muhittin SAHAN	126
01OP68	THE STUDY ON NOISE REDUCTION ANALYSIS OF UNTREATED LEAVES OF PLANTS IN URBAN AREAS Serhun Sağlam, Doğukan Bingöl, Ulaş Yunus Özkan, Bülent Ekici, Feyza Güzelçimen	126
01OP69	TOLUENE SELECTIVE Fe2O3 GAS SENSOR A.Aşikoğlu Bozkurt	127
01OP70	TOTAL IONIZING DOSE ANALYSIS OF A NATIVE DETECTOR AND A SATELLITE ON ORBIT Bugra Kocaman, Murat Harmandalı, Mehmet Kopru, Bekir Solak, Tulun Ergin, Eylem Guven, and Ercan Yilmaz	127
01OP71	TRACING EMI SHIELDING EFFICIENCY OF MAGNETIC ION DOPED COLEMANITE: A TD-DFT+MONTE CARLO STUDY Rıza DİLEK, İzzet Paruğ DURU	128

01OP72	TRACKING PARTICLE NEAR A FLAT SURFACE IN DIGITAL VIDEO MICROSCOPY Harun Yücel	128
01OP73	TRIANGULARLY SHAPED SILICON SUBSTRATES FOR NANO AND MICRO-ELECTROMECHANICAL GENERATORS Tuğra KILIÇ, Enis Furkan UÇAR, Dr. M. Burak KAYNAR, Dr. M. Deniz ÇALIŞKAN, Prof. Dr. Şadan ÖZCAN	129
01OP74	USING FORTIFIED CAGES TO PREVENT CHARGE SOCKET FAILURES IN MOBILE PHONES Ramiz Erdem Aykaç, Engin Başarslan	129
01OP75	VANADIUM OXIDE BASED MICROFABRICATED GAS SENSORS AND THEIR ALCOHOL SENSING PERFORMANCE Alp KILIÇ, Onur ALEV, Çiğdem ÇAKIRLAR, Serkan BÜYÜKKÖSE, Zafer Ziya ÖZTÜRK	130

ASTROPHYSICS and COSMOLOGY

02OP1	A COMPARISON OF THE SUPERNOVAE RATIOS BETWEEN NEARBY AND DISTANT GALAXY CLUSTERS Onur ÜNVER, Murat HÜDAVERDİ	132
02OP2	A SEARCH FOR TRANSIT-TIMING VARIATIONS IN TRES-3B Çağlar PÜSKÜLLÜ	132
02OP3	A STUDY FOR KIC 5621294 AND ITS COMPONENT Ç. NEHİR, İ. BULUT	133
02OP4	ANALYSIS OF APSIDAL MOTION OF ECLIPSING BINARIES: V919 CEP AND V957 CEP A. BULUT, İ. BULUT	133
02OP5	ANALYSIS OF SOME SEMI-DETACHED SYSTEMS OBSERVED BY TESS. F. Aliçavuş	134
02OP6	ASYMMETRIC UNCERTAINTIES IN HIGH ENERGY ASTROPHYSICAL (HEA) DATA: A PYTHON PACKAGE BASED ON MONTE CARLO (MC) SIMULATIONS M Kıyami Erdim, Murat Hüdaverdi	134
02OP7	CLOUDINESS OF OBSERVATORIES USING REMOTE SENSING IN THE WORLD Zühal Kurt, Nazım Aksaker, Kazım Kaba, Mehmet Akif Erdoğan, Derya Öztürk Çetni	135
02OP8	COULD THE CF TUC CONTAIN THE BLACK HOLE CLOSEST TO THE EARTH? F. Aliçavuş, F. Soyduğan, F. Kahraman Aliçavuş, E. Soyduğan	135
02OP9	DATA ANALYSIS OF GALAXY ROTATION CURVES IN AN EXPANDING GÖDEL UNİVERSE AND CORIOLIS EFFECT AS PSEUDO-DARK MATTER Emre Çelebi, Oktay Doğangün	136
02OP10	EASTERN ANATOLIAN OBSERVATORY (DAG) AND OTHER NEAR-INFRARED OBSERVATORIES FROM WINDOW OF PWV Derya Öztürk Çetni, Zühal Kurt, Kazım Kaba, Cahit Yeşilyaprak, Nazım Aksaker,	136
02OP11	ECLIPSE TIMING STUDY OF A QUADRUPLE SYSTEM: KIC 7177553 Ç. Nehir, İ. Bulut	137

02OP12	EVALUATION OF CLOUDINESS OVER EASTERN ANATOLIAN OBSERVATORY (DAG) OF NIGHT TIME (23:00 UTC) Gizem Dilan Boztaş, Kazım Kaba, Ersin Karaman, Cahit Yeşilyaprak	137
02OP13	EXPLORING THE KINEMATICS OF THE MILKY WAY IN KMAP: I. ABSOLUTE MAGNITUDE CALIBRATIONS FOR THE MAIN SEQUENCE STARS Sabiha Tunçel Güçtekin, Özgecan Önal Taş, Selçuk Bilir, Serap Ak, Mürvet Çelebi Demir	138
02OP14	FERMIONS TUNNELLING OF NON-ASYMPTOTICALLY FLAT BLACK HOLES IN KRUSKAL-SZEKERES COORDINATES S. Fatemeh Mirekhtiary, V. Bashiry, A. Abbasi,	138
02OP15	FIRST SPECTROSCOPIC ORBITAL SOLUTIONS OF TWO NEGLECTED ALGOL-TYPE BINARY STARS: GI CEP AND V746 CEP Murat İnanç GÖZÜTOK, and Ahmet ERDEM	139
02OP16	H-ALPHA SPECTRA OF THE EMISSION NEBULAE: NGC1499 Muhittin Sahan, Erdiñç Bolat	139
02OP17	LIGHT CURVE ANALYSIS OF KEPLER DETACHED BINARY STARS: KIC 6766748 AND KIC 8453191 S. Özer, E. Soyduğan And F. Soyduğan	140
02OP18	LIGHT CURVE ANALYSIS OF VERY SHORT-PERIOD BINARY SYSTEM KIC 11494583 A. Bulut, İ. Bulut	140
02OP19	LIGHT CURVE AND PERIOD ANALYSIS OF THE BETA LYRAE TYPE SYSTEM V359 CAS Burcu Özkardeş	141
02OP20	MULTIWAVELENGTH STUDIES OF ULTRA LUMINOUS X-RAY SOURCES IN NGC 4625 AND NGC 4861 Sinan Allak, Melike Özdoğan, Aysun Akyüz, Şenay Avdan, Nazım Aksaker	141
02OP21	NEW TRANSIT OBSERVATION FOR HAT-P-36 B AND HAT-P-36 B Ravide Kezban Seyhan, Nazım Aksaker, Özgür Baştürk	142
02OP22	PHOTOMETRIC MODELLING OF TWO W UMA TYPE STARS: GR TAURUS AND GR BOOTES Ömer Sert, Esin Soyduğan	142

02OP23	PULSATING SEMI-DETACHED ALGOLS: ORBITAL PERIOD CHANGES AND MASS TRANSFER RATES OF SELECTED SYSTEMS S. Özer, F. Soydugan, E. Soydugan	143
02OP24	QUADRATIC EQUATION OF STATE SOLUTIONS FOR BIANCHI TYPE-V UNIVERSE MODEL IN F(R,T) GRAVITY Halife ÇAĞLAR	143
02OP25	SEARCHES FOR UNIFORM METAL DISTRIBUTIONS IN GALAXY CLUSTERS Murat Hüdaverdi, Cemile Ezer, M. Kıyami Erdim	144
02OP26	STRING CLOUD SOLUTIONS IN F(R,T) GRAVITY Halife Çağlar, Sezgin Aygün	144
02OP27	T100 OBSERVATION OF SELECTED MAGNETIC CATAclysmic VARIABLES Dicle ZENGİN ÇAMURDAN	145
02OP28	THE FIRST ORBITAL SOLUTIONS OF TWO ECCENTRIC ECLIPSING BINARY STARS FROM SOUTHERN: V881 SCO AND GV NOR D. Sürgit, A. Erdem, C. A. Engelbrecht	145
02OP29	THE MBH - σ * RELATION OF THE LLAMA SAMPLE OF AGNS Cağlar Turgay, Burtscher L., Brinchmann J., Brandl B. , Davies R. I., Rosario D., Schnorr-Müller A., Shimizu T.,	146
02OP30	THE SHORT-PERIOD ECLIPSING BINARY ISWASP J173327.97+265547.9: PHOTOMETRIC SOLUTION AND PERIOD INVESTIGATION Seda Kaptan, Burcu Özkardeş	146
02OP31	TORSION-ONLY AFFINE GRAVITIES AND ITS SYMMETRY BREAKING Oktay Doğançin	147
02OP32	TRANSFORMATIONS EQUATIONS BETWEEN GALEX AND UBV PHOTOMETRIC SYSTEMS Neslihan Alan, Selçuk Bilir, Mürvet Çelebi Demir, Sabiha Tunçel Güçtekin, Talar Yontan, Olcay Plevne, Serap Ak, Tansel Ak	147
02OP33	TRANSIT TIMING VARIATIONS OF FIVE TRANSITING PLANETS	148

	Özgür Baştürk, Ekrem Murat Esmer, Şeyma Torun, Selçuk Yalçinkaya, Fadel El-Helweh, Mehmet Öncü, Hasan Özgür Albayrak	
02OP34	TUNNELLING AS FERMIONIC EMISSION OF BLACK STRINGS F. S. Mirekhtiary	148
02OP35	TWO-COMPONENT JET OF GW170817 WITH BOXFIT Muhammed Diyaddin İLHAN, Massimiliano De PASQUALE	149

ATOMIC AND MOLECULAR PHYSICS

03OP1	A COMPARATIVE STUDY OF THE STANDARD BESSEL TYPE ORBITALS USING HYPERBOLIC COSINE FUNCTIONS Meral Coşkun, Murat Ertürk	151
03OP2	A COMPUTATIONAL STUDY OF MELTING PROPERTIES OF TRIMETALLIC NANOALLOYS Songül Taran, Ali Kemal Garip	151
03OP3	A DFT STUDY ON MOLECULAR STRUCTURE AND EPR PARAMETERS OF N, N-DIMETHYLFORMAMIDE IN ACETONE AND WATER Ebru Karakaş Sarıkaya, Ömer Dereli	152
03OP4	A STUDY ON THE MEASUREMENT OF MOLECULAR SCATTERING DIFFERENTIAL CROSS SECTIONS OF SOME POTASSIUM COMPOUNDS Burcu AKÇA	152
03OP5	A THEORETICAL STUDY ON THE STRUCTURE OF 2-(BENZO[D]OXAZOL-2-YLTHIO)-1-(3-MESITYL-3 METHYLCYCLOBUTYL)ETHAN-1-ONE Betül Acar, Muharrem Dinçer, Öner Ekici, Alaaddin Cukurovalı	153
03OP6	AN INVESTIGATION OF SI ($S=5/2$, $I=5/2$) SPIN SYSTEM AS TWO QUDIT QUANTUM STATES Melike Türkyolu, Azmi Gençten	153
03OP7	AN INVESTIGATION ON E2 AND M1 TRANSITIONS OF TRIPLY IONIZED LANTHANUM (LA IV) B. Karaçoban Usta, S. Eser, E. Şirin Yıldırım	154
03OP8	AUTONOMOUS ON-CHIP QUANTUM MACHINES IN CIRCUIT QED Yusuf GÜL	154
03OP9	CALCULATION OF LENNARD-JONES (12-6-4) UNTERACTUON ENERGY FOR TETRA SODIUM MESO-TETRAKIS (P-SULPHONATOPHENYL) PORPHYRIN Bahtiyar A. Mamedov, Elif Somuncu, Hatun Cacan	155
03OP10	CIRCULAR POLARIZATION EFFECT DEPENDENCE OF HIGH HARMONIC GENERATION BY EXCITED ARGON ATOM Dilan Alp, İlhan Candan	155
03OP11	CLASSIFYING NEW ATOMIC AND IONIC LINES OF THULIUM	156

	S. Sert, B. Özdalğıç, İ. K. Öztürk, Gö. Başar, Gü. Başar, S. Kröger, A. Kruzins, M. Tamanis, R. Ferber	
03OP12	CONFORMATIONAL FLEXIBILITY OF DIFFERENT PEPTIDES ANTIGEN IN FREE WITH HLA-B51 MOLECULES INVESTIGATED BY MOLECULAR DYNAMICS SIMULATIONS Cenk Denктаş	156
03OP13	CROSS SECTIONS FOR ELECTRON COLLISION WITH DIATOMIC MOLECULES Zehra Nur ÖZER	157
03OP14	DEVELOPMENT OF SOME TWO AND THREE QUTRIT QUANTUM LOGIC GATES Sevcan Terzi, Azmi Gençten	157
03OP15	DNA INTERACTION OF SOME HYDANTOIN-BASED DRUGS WITH MOLECULAR DOCKING CALCULATIONS M. Can Kandemir, Aslan Saları, Bilge Bıçak, and Serda Kecel Gündüz	158
03OP16	EFFECTS OF STATISTICAL APPROACHES ON THE ANALYSIS OF MOLECULAR ISOMERS USING FEMTOSECOND LASER MASS SPECTROMETRY (FLMS) Hamdi Şükür Kılıç, Yasemin Gündoğdu, Mehmet Taşer	158
03OP17	ELECTRON PARAMAGNETIC RESONANCE AND NUCLEAR MAGNETIC RESONANCE STUDY OF SITAGLIPTIN MOLECULE WITH DENSITY FUNCTIONAL THEORY Halil Uğur Taşdemir, Ercan Türkkkan	159
03OP18	EVALUATION OF MOLECULAR INTEGRALS VIA THE FOURIER TRANSFORM METHOD OVER BESSEL TYPE FUNCTIONS Sılay Aytaç Yükçü, Niyazi Yükçü,	159
03OP19	FOLLOWING ELECTRON IMPACT EXCITATION OF SINGLE 111RG, 112CN, 113UUT, 114FL, 115UUP, 116LV TRANSACTINIDES ATOMS O SUBHELL IONIZATION CROSS SECTIONS BY USING LOTZ'S EQUATIONS Mahmut Aydınol	160
03OP20	FOLLOWING ELECTRON IMPACT EXCITATION OF SINGLE(105DB, 106SG, 107BH, 108HS, 109MT, 110DS) TRANSACTINIDES ATOMS O SUBHELL IONIZATION CROSS SECTIONS BY USING LOTZ'S EQUATIONS Mahmut Aydınol	160

03OP21	GAUSSIAN LASER BEAM AND ITS PARAMETERS Habibe Sayraç, Muhammed Sayraç	161
03OP22	HIRSHFELD SURFACES ANALYSIS OF DICLOFENAC ACID Deniz Baylan and Seda G. Sagdinc	161
03OP23	HYDROGEN LIKE PLUTONIUM CALCULATION FOR THE LIFETIMES Güldem ÜRER	162
03OP24	HYPERFINE STRUCTURE MEASUREMENTS OF THULIUM IN IR SPECTRA Sami Sert, Berin Özdalğıç, İpek Kanat Öztürk, Gönül Başar, Günay Başar, Sophie Kröger	162
03OP25	IN SILICO ANALYSIS OF HAIR GROWTH PEPTIDE Serda Kecel-Gunduz, Esra Koc, Bilge Bicak, Aysen E. Ozel and Sevim Akyuz	163
03OP26	INFLUENCE OF DIFFERENT ENVIRONMENTAL FACTORS ON PLA DEGRADATION IN COMPOST AND IN AMBIENT CONDITIONS Mehlika Karamanlioglu, Ümit Alkan	163
03OP27	INVESTIGATION OF STRUCTURAL, GEOMETRIC AND RADICAL PROPERTIES OF N-PROPYL ALCOHOL BY DFTCALCULATIONS Ömer Dereli, Ebru Karakaş Sarıkaya	164
03OP28	INVESTIGATION STRUCTURAL, SPECTROSCOPIC PROPERTIES AND QUANTUM CHEMICAL STUDIES OF 2-((5-BENZYL-4-ETHYL-4H-1,2,4-TRIAZOL-3-YL)THIO)-1-(3-METHYL-3-MESITYLCYCLOBUTYL)ETHAN-1-ONE Betül Acar, Muharrem Dinçer, Öner Ekici, Alaaddin Cukurovalı	164
03OP29	ISOTOPE EFFECT ON MOLECULAR DISSOCIATION BY INTENSE LASER FIELDS IN THE VICINITY OF METALLIC NANOTIP Saba Arife Karakaş, Muratcan Öner ve İlhan Yavuz	165
03OP30	LIFETIMES OF LEVELS IN THE SPECTRA OF IODINE-LIKE LANTHANUM (LA V) BETÜL KARAÇOBAN USTA (B. KARAÇOBAN USTA) AND EBUR ŞİRİN YILDIRIM (E. ŞİRİN YILDIRIM)	165
03OP31	MAGNETIC MOMENT AND PARAMAGNETIC OF MANGANESE IMPURITIES IN THE HOST TLINS2 LAYERED SEMICONDUCTOR: DIAMAGNETIC TO PARAMAGNETIC TRANSITIONS AT LOW	166

	TEMPERATURES. Esra Okumuş, Sibel Tokdemir Öztürk, MirHasan Yu. Seyidov	
03OP32	MOLECULAR DOCKING CALCULATIONS OF PIXANTRONE WITH TOPOISOMERASE II Aslan Saları, M. Can Kandemir, Bilge Bıçak, Serda Kecel Gündüz	166
03OP33	MOLECULAR INSIGHTS ABOUT A-SYNUCLEIN (50-57) FIBRIL AND ITS FAMILIAL MUTATIONS Hakan ALICI	167
03OP34	MOLECULAR STRUCTURE AND CONFORMATIONAL ANALYSIS OF “(R)-2-METHYLAMINO-1-PHENYLETHANOL” Ersin Durgut, Ebru Karakaş Sarıkaya, Ömer Dereli	167
03OP35	MOLECULAR STRUCTURE AND CONFORMATIONAL ANALYSIS OF “PHENACETIN” Ömer Dereli, Ebru Karakaş Sarıkaya	168
03OP36	MOMENTUM PROFILE CALCULATION OF HYDROGEN MOLECULAR ION USING HARTREE-FOCK-ROOTHAAN METHOD Telhat ÖZDOĞAN	168
03OP37	MOMENTUM PROFILE CALCULATION OF HYDROGEN MOLECULE USING HARTREE-FOCK-ROOTHAAN METHOD Telhat ÖZDOĞAN	169
03OP38	MULTIPOLE MOMENTS AND NIKOLA TESLA'S CONTRIBUTIONS TO ELECTROMAGNETISM Niyazi Yükçü, Sılay Aytaç Yükçü	169
03OP39	NEW SCHIFF BASE DERIVATIVES WITH THIOPHENE; DFT STUDY AND ANTIMICROBIAL ACTIVITY Ela Esmer Demir, Nevin Süleymanoğlu, Şahin Direkel, Yasemin Ünver	170
03OP40	OSCILLATOR STRENGTH AND STATIC POLARIZABILITY OF SPHERICAL QUANTUM DOT Y. Yakar, B. Çakır, A. Özmen	170
03OP41	PARALLEL HIGH-ORDER HARMONIC GENERATION FROM ONE ELECTRON ATOM CODE DESIGNED TO RUN ON NO-ECC FOR DOUBLE PRECISION GPUS BASED ON TRINARY MODULAR REDUNDANCY (TMR) USING CUDA O.Oguz, Z.Altun, E.A.Bleda	171

03OP42	PERFORMANCE BENCHMARKS OF THREE DIFFERENT CUDA KERNEL FUNCTION IMPLEMENTATIONS FOR THE SIMULATION OF HIGH-ORDER HARMONIC GENERATION FROM ONE ELECTRON ATOM O.Oguz, Z.Altun, E.A.Bleda	171
03OP43	PHOTON PAIRS, DOUBLE PAIRS, AND QUADRUPLES IN PULSED PARAMETRIC DOWN-CONVERSION S. Cigdem Yorulmaz, Michiel J.A. de Dood	172
03OP44	QUANTUM CHEMICAL INVESTIGATIONS ON C30, C32, C34, C36 AND C38 FULLERENES Kamil Soyarslan, Yusuf Erdogdu	172
03OP45	QUANTUM SYNCHRONIZATION IN A COLLISION MODEL Göktuğ Karpat	173
03OP46	SOME AZO DYES CONTAINING URACIL; DFT STUDY AND ANTIPARASITIC ACTIVITY Pınar Kubaşık, Nevin Süleymanoğlu, Şahin Direkel, Fatih Eyduran, Ülkü Karaman	173
03OP47	SPATIALLY ENTANGLED 4-PHOTON STATES FROM PERIODICALLY POLED POTASSIUM-TITANYL-PHOSPHATE CRYSTAL S. Cigdem Yorulmaz, Michiel J.A. de Dood	174
03OP48	STRONGLY INTERACTING ONE-DIMENSIONAL BINARY BOSE MIXTURES E. Ö. Karabulut	174
03OP49	STRUCTURAL AND DIELECTRIC PROPERTIES OF CU AND FE COATED PZT THIN FILMS Aliye Kahyaoglu, Ahmet Demirkaya	175
03OP50	STRUCTURAL CORRELATIONS IN PARTLY QUENCHED TWO AND THREE COMPONENT IONIC SYSTEMS AND DETECTING THE STRUCTURAL HOLES. Hasan TATLIPINAR	175
03OP51	STRUCTURAL, VIBRATIONAL AND QUANTUM CHEMICAL STUDIES ON C2N (N:0, 4, 6 AND 8) FULLERENES Kamil Soyarslan, Yusuf Erdogdu	176
03OP52	STUDY OF SYNTHESIS, STRUCTURAL, SPECTRAL OF COPPER-NALIDIXIC ACID COMPLEX WITH 1,10-PHENANTROLINE: COMPUTATIONAL AND MOLECULAR DOCKING	176

	Tuğba Aycan, Filiz Öztürk, Melek Fidan, Serkan Demir, Hümevra Paşaoğlu	
03OP53	SUPRAMOLECULAR STRUCTURE AND SPECTROSCOPIC PROPERTIES OF ONE-DIMENSIONAL POLYMER CONTAINING ISOPHTHALATE AND N-(4-AMINOPHENYL)ACETAMIDE Tuğba Aycan, Hümevra Paşaoğlu	177
03OP54	THE CALCULATION OF K SHELL XRF PARAMETERS OF SOME FIRST INNER TRANSITION METALS Mine Uğurlu	177
03OP55	THE CHEMICAL ORDERING OF ICOSAHEDRAL SHAPED TRIMETALLIC AU-AG-PT NANOALLOY CLUSTERS Ali Kemal Garip	178
03OP56	THE CONCENTRATION EFFECT TO K-SHELL FLUORESCENCE CROSS SECTIONS OF $TiXC_{01-X}$ ALLOYS Mine Uğurlu, Tuba Akkuş	178
03OP57	THE GROUND STATE PROPERTIES OF ONE-DIMENSIONAL BOSE GASES WITH STRONG INTERACTIONS E. Ö. Karabulut	179
03OP58	THE LIFETIMES OF HYDROGEN LIKE NEPTUNIUM Güldem Ürer	179
03OP59	THE STRUCTURES AND FREE ENERGY LANDSCAPES OF FVFLM AND KLVFF PEPTIDES PROBED WITH REPLICIA EXCHANGE WITH TUNNELING Nesrin Kılıç	180
03OP60	THEORETICAL CALCULATIONS OF ELECTRON PARAMAGNETIC RESONANCE PARAMETERS OF ACETAMIDE IN WATER Ebru Karakaş Sarıkaya, Ömer Dereli	180
03OP61	THEORETICAL CALCULATIONS OF ELECTRON PARAMAGNETIC RESONANCE PARAMETERS OF LIQUID PHASE ISOPROPYL ALCOHOL Ersin Durgut, Ebru Karakaş Sarıkaya, Ömer Dereli	181
03OP62	THEORETICAL AND EXPERIMENTAL INVESTIGATION OF 1H , ^{13}C NMR AND $NJ(C,H)$ COUPLING CONSTANTS FOR 2-SUBSTITUTED DERIVATIVES OF DIPHENYLPYRALINE Şahin Can Alpaslan, Seda G. Sagdinc	181

03OP63	THEORETICAL AND EXPERIMENTAL STUDIES OF (E)-2- [[(4-FLUOROPHENYL)IMINO)METHYL]-4- NİTROPHENOL COMPOUND Güneş Demirtaş	182
03OP64	THEORETICAL EVALUATION OF MOMENTS OF THE TWO-BODY COLLISION INDUCED SCATTERING DISTRIBUTION OF GASES WITH LENNARD-JONES (2N- N) POTENTIAL Elif Somuncu, Melek Gökbulut	182
03OP65	THEORETICAL STUDY OF NEW SCHIFF BASE 3-(1-N- DITHIOOXAMIDE)IMINOISATINS WITH MORPHOLINE OR DIPHENYLAMINE AS CORROSION INHIBITORS Seda G.Sagdinc, Asli Esmel, Baybars Koksoy	183
03OP66	TOWARD MORE PRECISE AND FLEXIBLE BASIS FUNCTION IN SCF CALCULATIONS: GENERALIZING COMPLETE ORTHONORMAL SETS OF EXPONENTIAL TYPE ORBITALS G. Demirdak, M. Ertürk	183

CONDENSED MATTER PHYSICS

04OP1	A COMPARISON STUDY OF SYNTHESIS AND STRUCTURAL ANALYSES OF MAGNESIUM OXIDE DOPED COBALT FERRITE NANOCOMPOSITES Volkan Kurt, Banu Sng Msrlođlu, znur akr, N. Didem Kahya, Asuman Akođlu Bozkurt	185
04OP2	A DFT STUDY OF ALKALI METAL INTERCALATION IN MXENES/GRAPHENE HETEROSTRUCTURES TOWARDS ION BATTERY APPLICATIONS lker Demirođlu, Ođuz Glseren, Franois M. Peeters, Deniz akr, Cem Sevik	185
04OP3	A VDW-DFT INVESTIGATION OF COMMON SURFACE STRUCTURES OF GRAPHENE AND Au(111) Merve Yortanlı, Ersen Mete	186
04OP4	AB INITIO INVESTIGATION OF SPIN ORBIT COUPLING EFFECT ON THE PHYSICAL PROPERTIES OF BEAu SUPERCONDUCTOR Ertuđrul Karaca	186
04OP5	ACTIVE CARBON TEMPLATE FROM WOOD WASTE Hamzah Al-Kafaween, Atta Ur Rehman Sherwani, Shalima Shawuti, Musa Mutlu Can	187
04OP6	ANALYSES OF DIODE PARAMETERS USING C-V CHARACTERISTICS OF Al/PMMA/PbO/P-Si STRUCTURES Defne Akay, Uđur Gkmen, Sema Bilge Ocak	187
04OP7	ANALYSIS OF A NEWLY COMPOSED Cu-Fe BASED SMA SHOWING ACUTE SME CHARACTERISTICS Oktay Karaduman, Canan Aksu Canbay, Nihan nl, skender zkul	188
04OP8	ANISOTROPIC, ELASTIC AND LATTICE DYNAMICAL PROPERTIES OF MO ₂ AB (A=Al, P, Si) MAX PHASE COMPOUNDS na Ylmaz, lk Bayhan, Ayenur Gencer, Gkhan Src	188
04OP9	BETA IRRADIATION EFFECTS ON IMPEDANCE SPECTRA OF ELECTROSPUN HOLE TRANSPORT NANOFIBERS Yalm Urfa, Ahmet Altndal	189

04OP10	CE3+, DY3+ AND EU3+ DOPED LITHIUM TRIBORATE: SYNTHESIS, CHARACTERIZATIONS AND LUMINESCENCE ENHANCEMENTS Sera İflazoğlu, Ayşen Yılmaz, Enver Bulur	189
04OP11	CHARACTERIZATION OF DLC THIN FILMS DEPOSITED ON GLASS AND SI SUBSTRATES UNDER THE INFLUENCE OF ELECTRIC FIELD WITH ECR-MP METHOD Mehmet Esen, Mustafa Esen	190
04OP12	CHARACTERIZATION OF ELECTRICAL PROPERTIES OF PMMA/PbO STRUCTURES Defne Akay, Uğur Gökmen, Sema Bilge Ocak	190
04OP13	COMPUTATIONAL DETERMINATION OF THE CHEMICAL BONDING AND THE BAND ALIGNMENT AT SAPPHIRE/GaN INTERFACE Gökhan Sürücü, Özge Sürücü	191
04OP14	CORRELATION AND PREDICTION OF DYNAMIC VISCOSITY OF PURE HYDROCARBONS OVER LARGE TEMPERATURE AND PRESSURE RANGES Fatma Dinç	191
04OP15	CR DOPED ZNO THIN FILMS DEPOSITED BY ULTRASONIC SPRAY PYROLYSIS: PHOTOLUMINESCENCE PROPERTIES I. Gunes, E. Sarıca, V. Bilgin	192
04OP16	DFT STUDY FOR THE MECHANICAL AND ELECTRONIC PROPERTIES OF Mg ₃ BH _x (X=1,4,7) COMPOUNDS FOR HYDROGEN STORAGE APPLICATIONS Ayşenur Gencer, Gökhan Sürücü	192
04OP17	DIELECTRIC PROPERTIES OF M _x Ba _{1-x} TiO ₃ (M: Co, Gd, Mn, Sr, Zr) (X=0 AND 0.5) THIN FILMS PRODUCED BY SOL-GEL METHOD P. Colkesen, A. Tumbul, B. Ulug, İ. H. Mutlu	193
04OP18	DOPED GRAPHENE AS TRANSPARENT CONDUCTIVE ELECTRODE Ali Altuntepe, Recep Zan	193
04OP19	EFFECT OF PRECURSOR MOLARİTY ON THE STRUCTURAL, OPTICAL AND ELECTRICAL CHARACTERISTICS ON ZnO THIN FILMS BY SPRAY PNEUMATIC TECHNIQUE WITH ORGANIC SOLAR	194

	HEATER Said BENRAMACHE, Abderrazak Guettaf, Ali Arif, Yacine AOUN, Boubaker BENHAOUA	
04OP20	EFFECT OF RB SUBSTITUTION ON THE STRUCTURAL, PHYSICAL AND SUPERCONDUCTING PROPERTIES OF Bi-2212 SUPERCONDUCTOR İbrahim ERGİN, Bekir ÖZÇELİK, M.A. Madre, A. Sotelo	194
04OP21	EFFECT OF RF SPUTTERING POWER ON THE PHYSICAL PROPERTIES OF Ga DOPED ZnO THIN FILMS Özge SÜRÜCÜ	195
04OP22	EFFECT OF SUBSTRATE TEMPERATURE ON THE PHYSICAL PROPERTIES OF NiO THIN FILMS E. Sarıca, I. Gunes A. Kucukarslan, V. Bilgin	195
04OP23	ELECTRORESISTANCE, ELECTRIC PULSE INDUCED RESISTANCE AND RESISTIVE SWITCHING EFFECT OF CHARGE ORDERED Nd _{0.83} Na _{0.17} MnO ₃ MANGANITE Ali Ekber IRMAK	196
04OP24	ENHANCING TRIBOLOGICAL CHARACTERISTICS OF PISTON RINGS OF INTERNAL COMBUSTION ENGINES USING ECR-CVD COATING METHOD Mustafa ESEN, Mehmet ESEN, Ali Can YILMAZ	196
04OP25	EXPERIMENTAL INVESTIGATION OF SOME THERMAL PROPERTIES OF AL-1,9SC ALLOY Gencer Sarioğlu, Hamza Yaşar Ocak	197
04OP26	EXPERIMENTAL INVESTIGATION OF SOME THERMAL PROPERTIES OF Al-6Mg-1,9Sc ALLOY Gencer SARIOĞLU, Hamza Yaşar OCAK	197
04OP27	EXPLORING THE STRUCTURAL AND MAGNETIC PROPERTIES OF EPITAXIAL THIN FILMS (Ni ₅₃ Mn ₂₀ Ga ₁₉ Fe ₈) _{1-X} Co _X (X= 0, 0.06 AND 0.08) G. Durak Yüzüak, E. Yüzüak, A. Hütten	198
04OP28	FABRICATION OF QUATERNARY HIGH TEMPERATURE SHAPE MEMORY ALLOYS C. Aksu Canbay, İ. Özkul, H. Mustafa Ahmed	198
04OP29	FIRST PRINCIPLES PSEUDOPOTENTIAL CALCULATION OF SUPERCONDUCTIVITY AND ELECTRON-PHONON INTERACTION IN THE BODY CENTERED TETRAGONAL LaPd ₂ Ge ₂ T. Zafer, E. Karaca, H.Y. Uzunok, H. M. Tütüncü, S. Bağcı, G.P. Srivistava	199

04OP30	FIRST PRINCIPLES STUDY OF THE VIBRATIONAL AND THERMOELASTIC PROPERTIES OF BaScO ₃ PEROVSKITE OXIDE Ayşenur Gencer, Gökhan Sürücü	199
04OP31	GRAPHENE OXIDE ASSEMBLED Au-BASED NANOCOMPOSITE FOR TEMPERATURE DEPENDENT INP HETEROJUNCTION DEVICES İmran Kanmaz, Ali Baltakesmez, Cengiz Aykaç, Betül Güzeldir And Mustafa Sağlam	200
04OP32	HALF-METAL PREDICTIONS OF Sc ₂ As COMPOUND: A FIRST-PRINCIPLES CALCULATIONS Evren Görkem Özdemir, Ziya Merdan	200
04OP33	INFLUENCE OF GAMMA IRRADIATION EXPOSURE ON STRUCTURAL, ELECTRICAL AND MAGNETIC PROPERTIES OF Bi-2223 WITH Nb ₂ O ₅ ADDITION Sevgi Ozoglu, Hasan Ağıl	201
04OP34	INFLUENCE OF LAYER THICKNESS ON MAGNETORESISTANCE PROPERTIES OF MULTILAYERED STACK Taner Kalaycı, Fikret Yıldız	201
04OP35	INTERACTION BETWEEN IRIIDIUM OXIDE CLUSTERS AND GRAPHENE LAYER İşıl Ilgaz Aysan, Taylan Görkan, İlkay Özdemir, Ethem Aktürk	202
04OP36	INVESTIGATION OF STRUCTURAL, OPTICAL AND MORPHOLOGICAL PROPERTIES OF InGaN/GaN/Al ₂ O ₃ MQWS Ahmet Kürşat BİLGİLİ	202
04OP37	INVESTIGATION OF SOME PHYSICAL PROPERTIES OF TUNGSTEN TRIOXIDE THIN FILMS DEPOSITED VIA THERMIONIC VACUUM ARC TECHNIQUE Uğur Demirkol, Suat Pat, Nihan Akkurt, Mustafa Özgür, Reza Mohammadigharehbagh, Ali Olkun, Şadan Korkmaz	203
04OP38	INVESTIGATION OF STRESS EFFECT ON SHAPE MEMORY ALLOYS CananAksu Canbay, İskender Özkul, Ece Kalay	203
04OP39	INVESTIGATION OF STRUCTURAL, ELECTRONIC, ELASTIC, OPTICAL AND DYNAMICAL PROPERTIES OF DIFFERENT SPACE GROUP Ga _{1-x} Al _x N ALLOYS Ali Gültekin, Ebru Sever, Mustafa Kemal Öztürk	204

04OP40	INVESTIGATION OF TRANSPORT MECHANISMS OF MONOLAYER GRAPHENE UNDER QUANTUM HALL CONDITIONS Hüseyin Atcı, Sehban Kartal	204
04OP41	JANUS MONOLAYERS OF MXENES: A DFT STUDY Berna Akgenc	205
04OP42	MAGNETIC PHASE TRANSITION BY STRAIN EFFECT ON MONOLAYER A-RUCL ₃ Yelda Kadiođlu, Erol Vatansver, Sevil Sarıkurt, Fatih Ersan, Olcay Üzengi Aktürk, Yusuf Yüksel, Can Ataca, Ethem Aktürk, Ümit Akıncı	205
04OP43	MECHANICAL ALLOYING OF Cu ₂ SnS ₃ Amina Houimi, Serap YİĞİT GEZGİN, Hamdi Şükür KILIÇ	206
04OP44	NONLINEAR OPTICAL PROPERTIES OF A HULTHEN QUANTUM WELL F. Arıcak, M. Tomak	206
04OP45	NVE SIMULATION AND HYPERNETTED-CHAIN CALCULATIONS OF THE SUPERIONIC CONDUCTOR LITHIUM NITRIDE U. Akdere, S. D. Gunay	207
04OP46	OPTICAL AND MORPHOLOGICAL STUDIES OF CoO:Ni THIN FILMS GROWN BY ULTRASONIC SPRAY PYROLYSIS Esra Kus, Ayse Küçükarslan, Vildan Bilgin, Barbaros Demirsalcuk, Idris Akyuz	207
04OP47	OPTICAL PROPERTIES OF SiO ₂ /V _o 2/TiO ₂ NANOSTRUCTURES BY COMPUTATIONAL OPTICAL MODEL Mustafa Coşkun, Özlem Duyar Coşkun	208
04OP48	OVERVIEW OF NANOCERAMIC REINFORCED NICKEL-BASED COMPOSITE COATINGS Ali TOZAR	208
04OP49	PHOTOLUMINESCENCE AND OPTICAL TEMPERATURE SENSING PROPERTIES OF Er ³⁺ /Yb ³⁺ CODOPED CADMIUM NIOBATE Murat Erdem, Selim Burak Cantürk, Mete Kaan Ekmekçi, and Hümeyra Örtücü	209
04OP50	PREPARATION AND CHARACTERIZATION OF FE DOPING CoO THIN FILMS	209

	Esra Kus, Ayse Küçükarslan, Vildan Bilgin, Erhan Tiryaki, Idris Akyuz	
04OP51	PRESSURE EFFECTS ON RASHBA SPLITTING IN BiTeI CRYSTAL Sümevra GÜLER KILIÇ	210
04OP52	PRODUCTION AND OPTICAL PROPERTIES OF DIFFERENT METAL PLASMONIC NANOPARTICLES DEPENDING ON THE PARAMETERS OF PLD TECHNIQUE Hamdi Şükür KILIÇ, Serap YİĞİT GEZGİN	210
04OP53	RIETVELD REFINEMENT OF BORON DOPED COBALT GALLATE SPINEL OXIDES Tamer Karaman, Shalima Shawuti, Musa Mutlu Can	211
04OP54	SELF-ORGANIZED NANO-PARTICLES IN ORGANIC MATRIX: MORPHOLOGY AND THE ELECTRONIC PROPERTIES O.V.Molodtsova, I.M. Aristova, S.V. Babenkov, V.Yu.Aristov	211
04OP55	SENSITIVE DETECTION OF Cu ²⁺ IONS IN AQUEOUS MEDIUM BY PHTHALOCYANINE MODIFIED PIEZOELECTRIC RESONATORS Nursel CAN, Birsal CAN ÖMÜR, Ahmet ALTINDAL	212
04OP56	SIMULATION OF KIDNEY CANCER CELLS BY USING ISING MODEL ON THE CREUTZ CELLULAR AUTOMATON Ziya Merdan, Didem Gökbel Keklikoğlu, Hakkı Taştan	212
04OP57	SIMULATION OF PROSTATE CANCER CELLS BY USING ISING MODEL ON THE CREUTZ CELLULAR AUTOMATON Didem Gökbel Keklikoğlu, Ziya Merdan, Mehmet Tolga Doğru	213
04OP58	SMART MATERIAL CHARACTERIZATION BY THERMAL AND STRUCTURAL ANALYSING TECHNIQUES N. Ünü, C. Aksu Canbay, İ. Ozkul, O. Karaduman	213
04OP59	SMECTIC PHASE TRANSITIONS OF FERROELECTRIC LIQUID CRYSTALS UNDER INFLUENCED ELECTRIC FIELD Avcı Sedat, Kurt Mustafa	214

04OP60	SOL-GEL DEPOSITED SN DOPED ZNO THIN FILMS: MORPHOLOGICAL AND OPTICAL PROPERTIES E. Sarıca, I. Gunes, I. Akyuz, V. Bilgin	214
04OP61	STIRRING ACTIVE PARTICLES TO FORM LIFE CRYSTAL USING CONVECTIVE FLOW Gursoy B. Akguc	215
04OP62	STRUCTURAL AND ELECTRICAL PROPERTIES OF Pr _{1-x} K _x MnO ₃ (X:0; 0.1; 0.2; 0.3;...;1.0) MANGANITE COMPOUNDS E.Göksal, B.Altan and A.Coşkun	215
04OP63	STRUCTURAL AND THERMODYNAMICAL STUDY OF A Cu-RICH SHAPE MEMORY ALLOY WITH NEW COMPOSITION PRODUCED BY HOT ISOSTATIC PRESS (HIP) Oktay Karaduman, Canan Aksu Canbay, Nihan Ünlü, İskender Özkul	216
04OP64	STRUCTURAL CHARACTERIZATION OF GAAS/GAALAS HETEROSTRUCTURES BY XRD METHOD Habibe Sayraç, Muhammed Sayraç, Sezai Elagöz	216
04OP65	STRUCTURAL, ELECTRONIC AND VIBRATIONAL PROPERTIES OF TWO-DIMENSIONAL VAN DER WAALS LAYERED STRUCTURES: INBR, INI, TLCL AND TLBR Sevil Sarıkurt, Fatih Ersan	217
04OP66	STUDY OF CALCINATION AND SYNTERING REPETITION OF PB-DOPED BIZMUTH-BASED HIGH TC SUPERCONDUCTORS BY STRUCTURAL ANALYSES Coşkun Deniz, Raziye Salıř Başaran	217
04OP67	SURFACE, OPTICAL AND ELECTRICAL PROPERTIES OF SN ₁ -XPBXS THIN FILMS I. Gunes, E. Sarıca, A. Kucukarslan, V. Bilgin	218
04OP68	SYNTHESIS AND CHARACTERISATION OF EUROPIUM DOPED ZnGa ₂ O ₄ Tamer Karaman, Gökhan Algün	218
04OP69	SYNTHESIS AND INVESTIGATION OF PHOTOLUMINESCENCE PROPERTIES OF Li ₂ B ₄ O ₇ : EU ³⁺ Sera İflazođlu, Ayşen Yılmaz, Enver Bulur	219
04OP70	SYTHESIS AND MATERIAL CHARACTERIZATION OF LITHIUM DOPED COBALT GALLATE SPINEL OXIDES	219

	Atta ur Rehman Sherwani, Tamer Karaman, Shalima Shawuti, Musa Mutlu Can	
04OP71	TEMPERATURE SENSING BEHAVIOR IN Er ³⁺ /Yb ³⁺ CODOPED LUTETIUM OXYORTHOSILICATE NANOPOWDERS Hümeyra Örtücü, Murat Erdem	220
04OP72	THE ANALYSIS OF AMINO TOLUENE, ANILINE AND BENZOIC ACID IN INP HETEROJUNCTION DEVICES WITH ELECTRICAL PROPERTIES Ali Baltakesmez, İmran Kanmaz, Betül Güzeldir, Mustafa Sağlam	220
04OP73	THE EFFECT OF DIFFERENT WAITING PERIODS FOR SMA UNDER STRESS CananAksu Canbay, İskender Özkul, Ece Kalay	221
04OP74	THE HYDROGEN STORAGE PROPERTIES OF BORON-DOPED GRAPHENE-BASED LAYERED BC ₃ , BC ₇ AND BN STRUCTURES: A FIRST PRINCIPLES STUDY Esra Erođlu	221
04OP75	THE INVESTIGATION OF ELECTRICAL PARAMETERS OF Al/AlQ ₃ +Ru(II)/P-Si SCHOTTKY DIODE IN A WIDE TEMPERATURE RANGE Mehmet Akif ŞAHİNKAYA, Nezir YILDIRIM	222
04OP76	THE MECHANICAL AND ELECTRONIC PROPERTIES OF SPINEL OXIDES VX ₂ O ₄ (X = FE AND MN) BY FIRST PRINCIPLE CALCULATIONS Buğra Yıldız, Aytaç Erkişi, Gökhan Sürücü	222
04OP77	THE OPTICAL AND MORPHOLOGICAL PROPERTIES OF Gd DOPED CuO FILM USING SPIN COATING METHOD I. Candan, S. Baturay	223
04OP78	THE PRODUCTION AND CHARACTERIZATION OF GRAPHENE OXIDE/POLY (VINYL ALCOHOL) N. Ünlü, C. Aksu Canbay	223
04OP79	THE STRUCTURAL AND ELECTRICAL PROPERTIES OF Cu ₂ O/ZnO NANOSTRUCTURE GROWTH ON N-TYPE POROUS Si Alper ÇETİNEL, Gökhan UTLU	224
04OP80	THE STRUCTURAL AND MORPHOLOGICAL PROPERTIES OF Mn DOPED TiO ₂ THIN FILMS Ö. Biçer, Ş. Baturay, İ. Candan, H. Budak Gümgüm	224

04OP81	THE TERNARY AND QUATERNARY SYSTEMS IN CU-BASED SHAPE MEMORY ALLOYS C. Aksu Canbay, İ. Ozkul, H. Mustafa Ahmed	225
04OP82	THEORETICAL INVESTIGATION OF SUPERCONDUCTIVITY IN Mo ₂ C E. Karaca, S.Bağcı, H. M. Tütüncü, H.Y. Uzunok, G.P. Srivistava	225
04OP83	THEORETICAL CALCULATIONS OF FEZR _X (X = P, As, Sb AND Bi) HALF-HEUSLER COMPOUNDS Evren Görkem Özdemir, Ziya Merdan	226
04OP84	TITANIUM DOPED CARBON MULTYLAYER NANOSTRUCTURES OBTAINED BY THERMIONIC VACUUM ARC METHOD V.CIUPINA	226
04OP85	TUNING THE BAND GAP ENERGY OF ZnS THIN FILMS S. S. Yeşilkaya, Ü.Ulutaş	227
04OP86	ZINC MOLAR CONCENTRATION INDUCED STRUCTURAL AND OPTICAL PROPERTIES OF CHEMICALLY DERIVED ZnS THIN FILMS İ. Boz, A. Gökteş, A. Tumbul, A. Kılıç	227

ENERGY

05OP1	COMPARATIVE PERFORMANCE ANALYSIS OF TWO-BED ADSORPTION COOLING SYSTEM USING WATER VAPOR ADSORPTION ON DIFFERENT TYPES OF SILICA GEL Mustafa Anjrini, Muhsin Kılıç	229
05OP2	DETERMINATION AND SPATIAL ANALYSIS OF MUĞLA, TURKEY BIOGAS POTENTIAL BY TIER METHODOLOGIES Hasan Hüseyin Aksu, Onur İnan, Kazım Kumaş, Ali Akyüz, Afşin Güngör	229
05OP3	DYNAMIC MODELLING AND PERFORMANCE EVALUATION OF A PV-DIESEL-WIND-BATTERY STANDALONE SYSTEM FOR REMOTE LOCATIONS IN MUGLA, TURKEY Ayse Fidan Altun, Muhsin Kilic, Mustafa Anjrini	230
05OP4	EFFECT ON ENERGY CONVERSION EFFICIENCY CDTE-BASED SOLAR CELL OF SnO ₂ TRANSPARENT CONDUCTIVE OXIDE LAYER Yunus ÖZEN	230
05OP5	ESTIMATION OF CARBON DIOXIDE EMISSIONS FROM AIRPLANES: A CASE STUDY OF TURKISH AIRPORT Onur İnan, Kazım Kumaş, Hasan Hüseyin Aksu, Ali Akyüz, Afşin Güngör	231
05OP6	FABRICATION OF TERNARY CU ₂ SNS ₃ THIN FILMS BY SULPHURIZATION OF SPUTTERED STACKED METALLIC PRECURSORS N. Akcay, V. F. Gremenok, E. P. Zaretskayac, S. Ozcelik	231
05OP7	HYDROGEN PRODUCTION BY REACTING WATER WITH MECHANICALLY MILLED WASTE COKE CAN Eren Tarık Özcan; Tuğra Kılıç; Mustafa Rizalar; Mehmet Burak Kaynar; Abdullah Ceylan; Şadan Özcan	232
05OP8	INVESTIGATION AND SYNTHESIS OF NEW GENERATION EXCHANGE-COUPLED NANOMAGNETS Mustafa Rizalar; Şadan Özcan; Abdullah Ceylan; Ali Rıza Yıldırım	232
05OP9	MAIN CRITICAL ISSUES OF DESIGN OF PEROVSKITE SOLAR CELLS Bayram KILIÇ, Sunay Türkođan	233

05OP10	SIMULATION OF MUNICIPAL SOLID WASTE GASIFICATION USING ASPEN PLUS Nermin Nur Fuçucu, Uğur Özveren	233
05OP11	MODELING AND SIMULATION OF HAZELNUT HUSK GASIFICATION IN A FLUIDIZED BED GASIFIER USING CYCLE TEMPO Beyzanur Öztürk, Uğur Özveren	234
05OP12	MODELING OF WALNUT SHELL GASIFICATION IN BUBBLING BED REACTOR USING ASPEN PLUS Senem Sezer, Uğur Özveren	234
05OP13	MODELLING OF A BIOMASS GASIFICATION-SOLID OXIDE FUEL CELL POWER SYSTEM USING ARTIFICIAL NEURAL NETWORK Senem Sezer, Uğur Özveren	235
05OP14	PHOTOVOLTAIC PROPERTIES OF STANNITE Cu_2CoSnS_4 (CCTS) THIN FILM ABSORBER Ahmet Tumbul	235
05OP15	RECYCLING OF PHOTOVOLTAIC MODULES Z. Deniz Eygi, Selin Yaralı	236
05OP16	SUITABILITY OF OXIDE SEMICONDUCTORS FOR FUEL CELLS USAGE Musa Mutlu Can	236
05OP17	THE EFFECT OF GROWTH PARAMETERS ON ELECTROCHROMIC PROPERTIES OF TUNGSTEN OXIDE THIN FILMS DEPOSITED BY RF MAGNETRON SPUTTERING Duygu Nuhoglu, Ece Kurt, Öcal Tuna, Esra Zayım	237

HIGH ENERGY PHYSICS and PLASMA PHYSICS

06OP1	15-30 MEV PROTON IRRADIATION FACILITY: METU-DEFOCUSING BEAMLINE AND SUBSYSTEMS C. Seçkin, M. B. Demirköz, A. Avaroğlu, P. Uslu, A. B. Poyrazoğlu, N.Çelik, Ç. Saral, B. Bülbül, A. Albarodi, S.Akçelik, Y. Orhan, E. Kılıç, U. Kılıç, M. Yiğitoğlu, I. Efthymiopoulos, S. Uzun Duran	239
06OP2	A SEMICLASSICAL APPROXIMATION OF THE SPONTANEOUS EMISSION Fatma Figen Binbay	239
06OP3	ANALYSIS OF COAL BY LASER INDUCED PLASMA SPECTROSCOPY TECHNIQUE İlknur Baldan Işık, Hasan Hüseyin Işık, Arif Demir	240
06OP4	ASSOCIATED PRODUCTION OF HIGGS BOSON AT AN ELECTRON-PHOTON COLLISION IN THE TWO HIGGS DOUBLET MODEL Mehmet Demirci	240
06OP5	BUNCH COMPRESSOR DESIGN FOR TARLA Hüseyin Yıldız, Avni Aksoy, Pervin Arıkan	241
06OP6	CHALLENGES IN THE INTEGRATED LUMINOSITY MEASUREMENT AT FUTURE CIRCULAR E+E-COLLIDERS I. Bozovic Jelisavcic	241
06OP7	CHARACTERISTICS OF THE UNDULATOR MAGNETS AND FEL BEAMS OF TARLA FACILITY Avni Aksoy, Şeyma Cemile Biçer, Ömer Yavaş	242
06OP8	COMPONENTS OF THE KAHVELAB HIGH POWER 800 MHZ RF TRANSMISSION LINE O. Koçer, A. Çağlar, A. Kılıçgedik, E. Sunar, G. Türemen, H. Çetinkaya, A. Özbey, V. E. Özcan, N. G. Ünel, F. Yaman	242
06OP9	FULFILLMENT OF GAP-DEPENDENT MAGNETIC SPECIFICATIONS OF A PLANAR HYBRID UNDULATOR: END KICKS, PHASE JITTER AND K PARAMETER Bora Ketenoğlu	243
06OP10	INDIRECT SEARCH OF COLOR OCTET MUON AT THE FUTURE MUON COLLIDERS Dariush Mohammadzadeh	243

06OP11	INVESTIGATION OF ANOMALOUS TQF INTERACTIONS THROUGH FQ COLLISIONS AT THE LHC, FCC AND SPPC BASED MUON-PROTON COLLIDER. Eda Alici, Murat Köksal	244
06OP12	JET MEASUREMENTS AT FUTURE HIGH ENERGY COLLIDERS İlknur Hoş	244
06OP13	MAIN PARAMETERS OF SPPC-BASED "LINAC-RING EA" AND "RING-RING MA" COLLIDERS Bora Ketenoğlu	245
06OP14	MELTING OF P_2 MESON AT EXTREME TEMPERATURES E. Sertbakan, J.Y. Sungu, A. Turkan and E. Veli Veliev	245
06OP15	NEUTRAL HIGGS BOSON PAIR PRODUCTION VIA PHOTON-PHOTON COLLISION IN THE TWO HIGGS DOUBLET MODEL Mehmet Demirci	246
06OP16	PSEUDOSCALAR FORM FACTORS OF THE N-DELTA TRANSITION IN RELATIVISTIC BARYON CHIRAL PERTURBATION THEORY Ayşe Küçükarslan ve Yasemin Ünal Şahin	246
06OP17	SCALAR 4TH TOPOLOGICAL EFFECT Hasan Özgür Çıldıroğlu	247
06OP18	SCALAR HE-MCKELLAR-WILKENS EFFECT B.Hashemi, H.O.Cildiroglu, A.U.Yilmazer	247
06OP19	SEARCH FOR LEPTON FLAVOR VIOLATION IN DECAYS OF THE Z BOSON WITH THE CMS DETECTOR Wael Haj Ahmad	248
06OP20	SEARCHING FOR DARK PHOTONS WITH THE PADME EXPERIMENT Simeon Ivanov, Venelin Kozuharov for the PADME collaboration	248
06OP21	THE IMPACT OF CRYSTAL LENGTH ON CALORİMETER ENERGY RESOLUTION A. Saad, F. Kocak, Z. Kırca	249
06OP22	TRANSITION TO CHAOS IN PLANAR GAS DISCHARGE-SEMICONDUCTOR SYSTEM IN NITROGEN: EFFECT OF FLUID MODELLING APPROACHES Cihan Yeşil, İsmail Rafatov	249

06OP23	UPGRADE OF THE 8 KEV MICROWAVE DISCHARGE ION SOURCE AT KAHVELAB Aytül Adıgüzel, Celal Aşıcı, Hakan Çetinkaya, Duygu Halis Taşdemir, Alis Hamparsunoğlu, Erkan Özcan, Sinan Öz, Gökhan Ünel, Aydın ÖZBEY	250
---------------	--	-----

MATHEMATICAL PHYSICS

07OP1	2+1-DIMENSIONAL Bi-HAMILTONIAN SYSTEM OBTAINED FROM SYMMETRY REDUCTION OF 3+1-DIMENSIONAL HIROTA TYPE EQUATION Devrim Yazıcı	252
07OP2	BIANCHI V UNIVERSE MODEL FOR STRING CLOUD WITH PERFECT FLUID IN LYRA MANIFOLD Elif Kaplan, Can Aktaş	252
07OP3	BIANCHI TYPE-V COSMOLOGY WITH GAMMA LAW EOS IN $F(R,T)$ GRAVITY E. Güdekli, G. D. Açıan Yıldız, D. Sofuoğlu	253
07OP4	BIANCHI-TYPE I UNIVERSE WITH DUST MATTER IN $K(R,T)$ GRAVITY Nazım Ümit Erden, Değer Sofuoğlu	253
07OP5	CONFORMALLY CONSTANT TILTED BIANCHI TYPE-V COSMOLOGICAL MODELS IN $f(R,T)=R+\lambda T$ GRAVITY M. D. Çeçil, Ş. Kesgin, E. Güdekli	254
07OP6	CONFORMALLY FLAT SPACE-TIME WITH RADIATION MATTER IN $F(R)$ THEORY Doğukan Taşer, Melis Ulu Doğru	254
07OP7	CONFORMALLY FLAT TILTED BIANCHI TYPE-III COSMOLOGICAL MODELS IN $f(R,T)$ GRAVITY Ş. Kesgin, M. D. Çeçil, E. Güdekli	255
07OP8	CONTINUOUS AND DISCRETE ROGUE WAVES FOR DIFFERENT INITIAL CONDITIONS S. Tombuloğlu, C. Yuce	255
07OP9	COSMOLOGICAL EVOLUTION AND CONSTRAINT EQUATIONS IN $F(G,T)$ GRAVITY THEORY Değer Sofuoğlu, Ertan Güdekli	256
07OP10	CYLINDRICALLY SYMMETRIC DOMAIN WALL IN UNIMODULAR $F(R)$ GRAVITY Hüseyin Aydın, Melis Ulu Doğru	256
07OP11	DYNAMICAL SYSTEM ANALYSIS OF ROBERTSON-WALKER (RW) MODELS IN GENERAL RELATIVITY A. O. Yılmaz, E. Güdekli	257
07OP12	EXAMINATION OF BIANCHI TYPE-VI ₀ FOR DARK ENERGY IN $F(R,T) = R + \lambda T$ GRAVITY B.Cil, E.Kara, E.Gudekli , D.Sofuoglu	257

07OP13	FRACTIONAL DERIVATIVES GENERALIZATION OF COSMOLOGY Nurşah AKTAY, Ertan GÜDEKLİ	258
07OP14	GÖDEL UNIVERSE MODEL WITH PERFECT FLUID AND HEAT CONDITION IN LYRA MANIFOLD Elif Kaplan and Hüsnu Baysal	258
07OP15	INVESTIGATION OF BIANCHI TYPE-V DARK ENERGY COSMOLOGICAL MODELS IN F(R,T) GRAVITY E. Kara, B. Cil, E. Gudekli, D. Sofuoğlu	259
07OP16	LRS BIANCHI-TYPE I SPACE-TIME IN K(R,T) GRAVITY Nazım Ümit Erden, Değer Sofuoğlu	259
07OP17	PERFECT FLUID LRS BIANCHI TYPE -I- UNIVERSE MODEL IN F(R).F(T) E. Çelik, E. Güdekli	260
07OP18	POWER-LAW SOLUTION IN F(G,T) GRAVITY Değer Sofuoğlu, Ertan Güdekli	260
07OP19	PP-WAVES AS EXACT SOLUTIONS TO GHOST-FREE INFINITE DERIVATIVE GRAVITY Ercan Kilicarslan	261
07OP20	SOLUTIONS FOR SOME DARK ENERGY MODELS IN KALUZA- KLEIN SPACE TIME Elif Ece Demir, Can Aktaş	261
07OP21	SPACE-TIME GEOMETRY OF PERFECT FLUID DISTRIBUTION IN F(R,T) GRAVITATION THEORY Cihan Kömürcü, Hüsnu Baysal	262
07OP22	STRING CLOUD WITH PERFECT FLUID MATTER DISTRIBUTION FOR HOMOGENOUS AND ANISOTROPIC SPACE-TIME IN F(R,T) GRAVITY Cihan Kömürcü, Can Aktaş	262
07OP23	THE PURITY AND ENTROPY OF A MULTI-SITE DISSIPATIVE SYSTEM DRIVEN BY RANDOM TELEGRAPH NOISE Arzu Kurt, Matteo Rossi, Jyrki Piilo, and Resul Eryiğit	263
07OP24	THEORETICAL DETERMINATION OF THE ENERGY AND THE WAVE FUNCTIONS FOR KLEIN GORDON EQUATION WITH YUKAWA POTENTIAL Melek Gökbulut, Elif Somuncu	263

07OP25	WEAK FIELD LIMIT OF INFINITE DERIVATIVE GRAVITY Ercan Kilicarslan	264
---------------	--	-----

MEDICAL PHYSICS

08OP1	AN ALTERNATIVE ELECTRO ENCEPHALOGRAPHY (EEG) SYSTEM: RADIO ENCEPHALOGRAPHY (REG) Ezgi Altunkaynak, Guldeniz Akkaya, Can Dokuyucu, Glnur Arslan, Ali Yaman	266
08OP2	ANALYSIS OF RADIOTHERAPY PROFILE MEASUREMENTS USING FILM DOSIMETER Ertugrul Ozkan, Murat Koylu, Hakan Eren, Metin Bilge	266
08OP3	BIOLOGICAL EFFECTS OF MAGNETIC RESONANCE IMAGING İbrahim Aslyuce	267
08OP4	COMPARATIVE QUALITY CONTROL TESTS OF DOSE CALIBRATORS USED IN NUCLEAR MEDICINE Merve Cinoğlu, Duygu Tunçman Genç, Hatice Kovan, Mehmet Mulazimoğlu	267
08OP5	COMPARING IMRT AND WMAT TECHNIQUES IN PROSTAT CANCER: HYBRID ARC N.Ozbek, N.Ozturk, E.Algül	268
08OP6	COMPARISON OF STANDARD UPTAKE VALUE - MAXIMUM (SUVMAX) VALUES IN HIGH, MEDIUM AND LOW ACTIVITY FOR TWO DIFFERENT PET / CT DEVICES Eda Mutlu, Bllal Kovan, Duygu Tuncman Genc, Bayram Demir, Cuneyt Turkmen, Ayse Mudun	268
08OP7	COMPARISON OF PARAMETRIC AND NONPARAMETRIC APPLICATIONS FOR SINGLE SUBJECT FMRI DATA Hacer Daşgın, Ali Yaman	269
08OP8	CSDA RANGE CALCULATION OF PROTON BEAM AND WATER EQUIVALENT RATIO (WER) VALUE OF LUCITE (C5O2H8) Rıza Dilek	269
08OP9	DOSIMETRIC COMPARISON OF SIB, PHASE1 + PHASE2 AND COMPOSITE PLANNING TECHNIQUES IN BREAST RADIOTHERAPY İsmail Faruk Durmuş, Ayşe Okumuş	270

08OP10	EFFECTS OF ANTIEPILEPTIC DRUGS ON THE SERUM TRACE ELEMENT LEVELS Fatma Ateş Alkan, Selim Gökdemir, Dilek Düzgün Ergün, Seher Naz Yeni	270
08OP11	EFFECTS OF DEHP AND DBP ON THE PROCESS OF FETAL DEVELOPMENT Leyla Türker Şener, Yunus Emre Halis, Müfide Ayoğan Ahabap, Yasin Çelikok, Celal Güven, Işıl Albeniz, <i>Nilüfer Toker</i>	271
08OP12	EFFECTS OF FEMTOSECOND LASER ABLATION ON TISSUE TO INVESTIGATE OF OPTIMUM PARAMETERS Yasemin Gündoğdu, Hamdi Şükür Kılıç	271
08OP13	EXPERT JUDGEMENT METHOD FOR FAULT TREE ANALYSIS IN RADIOTHERAPY Çağatay Recep Özbay, Türkan Alkan Özbay	272
08OP14	INVESTIGATION OF 2D ARRAY AND GAFCHROMIC FILM USAGE FOR QUALITY CONTROL OF VIRTUAL WEDGE FILTERS E.Algöl, N.Ozturk, N.Ozbek, M.Oktay, D.Karpat	272
08OP15	INVESTIGATION OF TRANSCOBALAMIN II GENE (RS1801198) IN VITAMIN B12 DEFICIENCY Cinemre F. B. , Ataman Kucuk B, Bahtıyar N, Sevinc L., Cinemre H, Karacaer C, Aydemir B.	273
08OP16	INVESTIGATIONS OF AN ANTICANCER DRUG CURCUMIN AND MODEL MEMBRANES INTERACTIONS BY USING DSC TECHNIQUES Nilay Civelek, Duygu Bilge	273
08OP17	MEDICAL IMAGE PREDICTION USING ARTIFICIAL NEURAL NETWORKS Dafina Xhako, Niko Hyka	274
08OP18	MEDICAL DATA ANALYSIS WITH MACHINE LEARNING METHODS Tolga Ensari, Leyla Türker Şener, Dila Naz Bozkaya, Batuhan Aşiroğlu	274
08OP19	MONTE CARLO EVALUATION OF EFFECTS OF TILOOP BRA MESH ON RADIOTHERAPY DOSE DISTRIBUTION Serap Çatlı Dinç	275
08OP20	RADIATION DOSES IN PEDIATRIC COMPUTED TOMOGRAPHY İbrahim Aslıyüce	275

08OP21	SELENIUM SUPPLEMENTATION IN EXPERIMENTAL HYPERTHYROIDISM: EFFECTS ON SELENOPROTEIN P AND SELENIUM LEVELS IN PLASMA AND LIVER TISSUE Yoldaş A., Bahtiyar N., Aydemir B., Toplan S.	276
08OP22	THE EFFECT OF BIOCOMPATIBLE AND BIODEGRADABLE COMPOSITES PRODUCED WITH ACTIVE COAL ON 3T3 CELL LINE Leyla Türker Şener, Erdi Buluş, Erdinç Doğanç, Merve Dandan Doğanç, Tahsin Ertaş, Işıl Albeniz, Ayşenur Akgün	276
08OP23	THE EFFECT OF EXTREMELY LOW FREQUENCY ELECTROMAGNETIC FIELD AND PACLITAXEL ON BREAST CANCER Yasin Polat, Esra M. Cüce, G. Ayşe İnhan Garip	277
08OP24	THE EFFECTS OF OXIDATIVE DAMAGE AND SELENIUM IN THE ETİOPATHOGENESIS OF HASHIMOTO THYROIDITIS Bahtiyar N., Cinemre F.B., Degirmencioğlu S., Cinemre H., Aydemir B.	277
08OP25	THE EFFECTS OF VITAMİN D AND MICROFRACTURE SURGERY TECHNIQUE ON PLASMA VISCOSITY Denizhan Karış ,Duygu Tarhan, Okan Tok, Alev Meltem Ercan	278
08OP26	THE EVALUATION OF POLYMORPHISM IN RS2762939 ALLELE OF THE CYP24A1 GENERATION RELATED TO VITAMIN D METABOLISM IN VITAMIN D DEFICIENCY/İNSUFFICIENCY Sevinç L., Cinemre F. B., Cinemre H., Altaş Erdoğan A, Karacaer C., Tamer A., Bahtiyar N., Aydemir B.	278
08OP27	THE OPTIMISATION OF TREATMENT TECHNIQUES USED AT PATIENTS WHO HAD BREAST CONSERVING SURGERY N.Ozturk, N.Ozbek, E.Algül	279

NUCLEAR PHYSICS

09OP1	A STUDY ON TL PROPERTIES OF NATURAL DOLOMITE MINERAL IRRADIATED WITH BETA PARTICLES Sibel Akça	281
09OP2	APPLICATION OF MONTE CARLO METHOD FOR SYSTEMS WITHOUT/WITH REFLECTOR Ghayad Sayegh, Okan ozer	281
09OP3	CALCULATION OF THE PHOTOMULTIPLIER OUTPUT VOLTAGE BY FLUKA MONTE CARLO PROGRAM E.E.Ermis, C.Celiktas	282
09OP4	COMPARISON OF GAMMA ANALYSIS IN MULTIPLE STATIC SEGMENT AND SLIDING WINDOW TECHNIQUES IN NASOPHARYNGEAL RADIOTHERAPY Gökçen İnan, Osman Vefa Gül, Güler Yavaş, Çağdaş Yavaş	282
09OP5	COMPARISON OF MULTIPLE STATIC SEGMENT AND SLIDING WINDOW TECHNIQUES IN PROSTATE RADIOTHERAPY Gökçen İnan, Osman Vefa Gül, Güler Yavaş, Çağdaş Yavaş	283
09OP6	DESIGN, CONSTRUCTION AND APPLICATIONS OF NEUTRON RADIOGRAPHY SYSTEM IN TRIGA MARK-II REACTOR İskender Atilla Reyhancan, M. Sahip Kızıltaş	283
09OP7	DETERMINATION OF 40K RADIOACTIVITY LEVELS AND 40K AMOUNT IN SOME FOODSTUFFS Aydan Altıkulaç, Hasan Gümüş	284
09OP8	DETERMINATION OF GAMMA RAY SHIELDING PARAMETERS FOR SOME SMART POLYMERS MIXED WITH STRONTIUM BORATE BASED GLASSES D.Y. Baysoy	284
09OP9	DETERMINATION OF RADIOACTIVITY LEVEL IN LOCAL FOOD PRODUCTS CONSUMED IN KARS Gülçin Bilgici Cengiz	285
09OP10	ELECTRIC DIPOLE (E1) STRENGTH IN 139LA NUCLEI BELOW THE NEUTRON-SEPARATION ENERGY E. Tabar, G. Hoşgör	285
09OP11	ENERGY RESOLUTION IMPROVEMENT USING TIMING METHOD	286

	E.E.Ermis, C.Celiktas	
09OP12	EXAMINATION OF EFFECTIVE ATOMIC NUMBER CHANGE IN S53P4 BIOACTIVE GLASS SYSTEMS DOPED WITH BORON OXIDE(B2O3) Hasipcan Aydın, Gülfem Süsoy Doğan, Hüseyin Ozan Tekin	286
09OP13	EXPERIMENTAL STUDY ON PHOTON ATTENUATION BEHAVIORS OF PYRITE MINERAL BASED CONCRETES O. Agar, G. Aktas, M.R. Kaçal, F. Akman, H. Polat, M.I. Sayyed, H.O. Tekin	287
09OP14	GAMMA RAY ANGULAR DISTRIBUTION ANALYSIS OF TRANSFER REACTION DATA FOR EXCITED STATES OF ²⁶ Na İlker Can Çelik	287
09OP15	INTERNAL BREMSSTRAHLUNG SPECTRUM OF (⁷⁴ 185)W FOR FORBIDDEN BETA TRANSITION Ekrem Almaz, Emrullah Tokgöz	288
09OP16	INVESTIGATING ATMOSPHERIC RADON IN TERMS OF SOME MINE PARAMETERS FOR THE CARBONIFEROUS OUTCROPS OF TURKEY Mehmet Ertan Kürkçüoğlu, Abbas Alpaslan Koçer, Havva Akgönül, Bülent Haner, Alaidin Yılmaz	288
09OP17	MEASUREMENT OF RADON ACTIVITY OF THE SPRING WATERS AROUND ORHANELİ THERMAL POWER PLANT IN BURSA, TURKEY Hakan Yakut, Yusuf Özer	289
09OP18	MONTE CARLO DETERMINATION OF DEAD LAYER EFFECT ON FEP EFFICIENCY OF GERMANIUM CRYSTALS Selim KAYA, Necati ÇELİK	289
09OP19	NUCLEAR FUEL TRANSMUTATION AND FISSION PRODUCTS RATES OF PWR REACTOR Akbar Abbasi, Fatemeh Mirekhtiary	290
09OP20	PREDICTION OF THEORETICAL MODELS FOR PSEUDO-MIRROR NUCLEI Bahadır SAYGI	290
09OP21	RADIOGENIC HEAT PRODUCTIONS CAUSED BY VOLCANIC TUFFS COLLECTED FROM QUARRIES IN TURKEY	291

	Onur Metin, Şeref Turhan, Aslı Kurnaz, Aybaba Hançerlioğulları	
09OP22	RADIOACTIVITY LEVELS IN THE BAUXITE MINES IN TURKEY Aydan ALTIKULAÇ	291
09OP23	RADON CONCENTRATION OF UNDERGROUND METRO AND MARMARAY STATIONS IN ISTANBUL Hatice Yılmaz Alan, Baki Akkuş, Lidya Susam Amon	292
09OP24	RADON EXHALATION RATE AND EFFECTIVE RADIUM CONTENT OF THE SOIL SAMPLES COLLECTED FROM ORHANELİ DISTRICT OF BURSA, TURKEY Hakan Yakut, Emre Tabar, Yunus Emre Yaşar	292
09OP25	SUSTAINABLE PRODUCTION OF NUCLEAR GRADE BORON CARBIDE (B4C) POWDERS AND ITS APPLICATION AS RADIATION SHIELDING Figen Kaya, Suna Avcıoğlu, Merve Buldu, Cem Bülent Üstündağ, Hayri Yılmaz Kaptan, Cengiz Kaya	293
09OP26	THE EFFECT OF MGO CHANGE WITH ZnO ON PHOTON TRANSMISSION FACTOR USING MCNP4C IN B2O3 GLASS-CERAMIC SYSTEMS Yusuf Cenk İltuş, Lidya Amon Susam, Hüseyin Ozan Tekin, Baki Akkuş, Gülfem Susoy Doğan, Fatma Çağla Öztürk	293
09OP27	THE EXCESS LIFETIME CANCER RISK CAUSED BY INGESTION OF SOME BOTTLED WATERS CONSUMED IN TURKEY Onur Metin, Şeref Turhan, Aslı Kurnaz, Aybaba Hançerlioğulları	294
09OP28	THE EXTENDED ENERGY REGIME OF ^{26}Na VIA TRANSFER REACTION IN INVERSE KINEMATICS I.C. Celik, W.N.Catford, A.Matta, G. L. Wilson.	294
09OP29	THE INVESTIGATION OF THE GIANT DIPOLE RESONANCE (GDR) CHARACTERISTICS FOR THE ^{141}Pr NUCLEUS H. YAKUT, E. TABAR, E. KEMAH	295
09OP30	THE IMPLEMENTATION OF THE NUCLEAR EXCITATION PROPERTIES IN THE OPTIMIZATION OF THE RELATIVISTIC ENERGY DENSITY FUNCTIONALS E. Yüksel, T. Marketin, N. Paar	295

09OP31	THEORETICAL INVESTIGATION OF TENTH VALUE THICKNESSES OF ALUMINIUM ABSORBERS Mürsel Şen, Abdullah Engin Çalık, Hüseyin Şirin	296
---------------	--	-----

PHYSICS EDUCATION AND PHILISOPHY

10OP1	COMPREHENSION LEVELS OF PROSPECTIVE TEACHERS RELATED TO THE HEAT AND TEMPERATURE CONCEPTS Senar Temel, Şenol Şen	298
10OP2	DEVELOPMENT OF EXPLICIT AND IMPLICIT EPISTEMOLOGICALLY ENHANCED INSTRUCTION TO IMPROVE STUDENTS' PHYSICS-RELATED PERSONAL EPISTEMOLOGY AND PHYSICS ACHIEVEMENT Kübra Özmen, Ömer Faruk Özdemir	298
10OP3	DEVELOPMENT OF TEACHER GUIDE MATERIALS BASED ON LOGGER PRO SENSORS FOR SIMPLE PENDULUM Ahmet Kumaş, Sabri Kan	299
10OP4	EVALUATION OF STEM COMPATIBLE LABORATORY APPLICATIONS BASED ON INNOVATIVE TECHNOLOGY FOR CONSTANT ACCELERATIVE MOVEMENT Ahmet Kumaş, Sabri Kan	299
10OP5	PRESERVICE TEACHERS' COGNITIVE STRUCTURES RELATED TO HEAT AND TEMPERATURE CONCEPTS Şenol Şen, Senar Temel	300
10OP6	STUDY SHEETS ACCORDİNG TO PRE-SERVICE PHYSICS TEACHERS Bezen, S., Aykutlu, I., Bayrak, C.	300
10OP7	THE ANALYSIS OF PROBLEM SOLVING PROCESS OF PRE-SERVICE PHYSICS TEACHERS BY HABERMAS' THEORY OF RATIONALITY Selin Urhan, Nazan Sezen Yüksel	301
10OP8	THE IMPACT OF TECHNICAL HIGH SCHOOLS IN ENGINEERING EDUCATION Yusuf İLME, Emine CAN	301

STATISTICAL PHYSICS

11OP1	CDS - STOCK MARKET CHAOTIC RELATIONSHIP - TURKISH STOCK MARKET CASE Melike Bildirici, Seyit Muharrem Gökmenoğlu, Bahri Sonüstün	303
11OP2	CHAOTIC CHARACTERISTIC OF INFLATION- UNEMPLOYMENT RELATION IN TURKEY Melike E. Bildirici, Fulya Ozaksoy Sonustun	303
11OP3	CHAOTIC STRUCTURE OF CDS' Melike Bildirici, Seyit Muharrem Gökmenoğlu, Bahri Sonüstün	304
11OP4	COLLECTIVELY ENHANCED THERMALIZATION VIA MULTIQUBIT COLLISIONS Barış Çakmak	304
11OP5	DETERMINATION THE Q-INDEX OF THE TSALLIS ENTROPY BY SCALE INDEX AND ITS APPLICATION IN THE HENON MAP Nazmi Yılmaz, Mahmut Akilli, K. Gediz Akdeniz,	305
11OP6	EFFECTIVE NETWORKS: PREDICTING NETWORK STRUCTURE AND CRITICAL TRANSITIONS FROM DATA Deniz Eroglu	305
11OP7	NEW CLUSTER APPROXIMATION FOR SPIN SYSTEMS Ümit Akıncı	306
11OP8	PHASE DIAGRAMS OF GENERALIZED SPIN-S MAGNETIC BINARY ALLOYS Gülşen Karakoyun, Ümit Akıncı	306
11OP9	RASHBA SPIN-ORBITAL INTERACTION IN QUANTUM WIRES AND THE ESSENCE OF ELECTRONS IN THE MAGNETIC FIELD. A.M.Babanlı, V.D.Sabyrov	307
11OP10	RESEARCH OF STOCHASTIC POPULATION MODELS UNDER ALLEE EFFECTS BY KOLMOGOROV- CHAPMAN EQUATION AND WKB APPROXIMATION Çağatay Eskin, Özgür Gültekin	307
11OP11	THERMODYNAMIC QUANTITIES OF 2D QUANTUM RING AND TRANSVERSE THERMOELECTRIC MOTIVE A.M.Babanlı, V.D.Sabyrov	308

The presentations are arranged in alphabetical order according to the conference topics and then the title of the abstracts.

Poster Presentations

APPLIED PHYSICS

01PP1	A DE-E TELESCOPE DETECTOR FOR DELTA ELECTRONS EMITTED IN HEAVY IONS COLLISIONS Madalina Cruceru	310
01PP2	AEROSOL-CVD GROWTH OF CNTS ON Si SUBSTRATE AND THEIR POSSIBLE APPLICATION Nahida Musayeva	310
01PP3	ANALYSIS AND EXPERIMENTS ON THE EFFECTS OF HIGH POWER LASER BEAM ON OPTICAL PERFORMANCE Eray Arpa, Aslı Uğur Katmış, Serkan Büyükköse, Yasser El Khalout, Emine Yasemen Kaya Çekin	311
01PP4	CHARACTERIZATION OF MoS ₂ THIN FILMS ON SiO ₂ /Si SUBSTRATES PREPARED BY SULFURIZATION OF DC-SPUTTERED MO PRECURSORS B. Erenlera, N. Akcaya, M. Tivanov, S. Ozcelika,	311
01PP5	EFFECT OF BULK TRAP IN GAN BARRIER LAYER ON THE ELECTROLUMINESCENCE SPECTRAL PROPERTIES OF InGaN/GaN MULTIPLE QUANTUM WELL LED DEVICE O. Özdemir, K. Bozkurt, N. Ayarcı Kuruoğlu, H. Baş, B. Alshehri, K. Dogheche, Q. Gaimard, A. Ramdane, E. Dogheche	312
01PP6	GUNSHOT RESIDUE İsa Mehdioglu, Volkan Kurt	312
01PP7	HYBRID SIM CARD SLOT DEVELOPMENT Ramiz Erdem Aykaç, Engin Başarslan	313
01PP8	HYDROTHERMALLY FABRICATED VANADIUM OXIDE NANOSTRUCTURES FOR SENSING APPLICATIONS Helin Temel, Alp Kılıç, Serkan Büyükköse, Zafer Ziya Öztürk	313
01PP9	INVESTIGATION OF THE ELECTRICAL PROPERTIES OF GRAPHENE IN DIFFERENT THICKNESS BY CVD METHOD Özlem Ünlü, Dilek Kafkas, Ahmet Demir, Aliye Kahyaoğlu	314
01PP10	INVESTIGATION OF THE EFFECT OF METALLIZATION ON CDTE BASED SOLAR CELL	314

	Erman Çokduygulular, Çağlar Çetinkaya, H. İbrahim Efkere, Yunus Özen, Barış Kınacı	
01PP11	ITO COATED CAPACITIVE ONE GLASS TOUCH SENSING PANEL Ugur M. Ulutanir, Mehmet Yakar, Yasemin Demirhan, Mehtap Ozdemir, Gulnur Aygun, Lutfi Ozyuzer	315
01PP12	MICROSTRUCTURAL AND OPTICAL PROPERTIES OF CU DOPED ZnO THIN FILMS PREPARED BY MAGNETIC SPIN COATING Sinan Temel, Elif Yaman, Fatma Özge Gökmen	315
01PP13	MONITORING OF KAHVELAB COMPUTING FARM Sina Aktaş, Emre Elibollar, Berare Göktürk	316
01PP14	NiZnO NANOCOMPOSITE THIN FILMS DEPOSITED BY A NOVEL TECHNIQUE: MAGNETIC SPIN COATING Sinan Temel, Elif Yaman, Fatma Özge Gökmen	316
01PP15	NOISE MAPPING ON GAZİANTEP UNIVERSITY CAMPUSE AREA Vural Emir Kafadar, Eser Olğar, Hodayfa Atasoy	317
01PP16	PHYSICS IN FORENSIC SCIENCE Aylin Yalçın Sarıbey	317
01PP17	STUDY THE OPTICAL PROPERTIES OF THE ELECTROSTATIC QUADRUPOLE-OCTUPOLE FOCUSING SYSTEM Oday Ali Hussein	318
01PP18	TRUE RANDOM NUMBER (TRN) POOL PROBLEM IN POOL-BASED EMBEDDED CRYPTOGRAPHIC SYSTEMS (PBECS) AND A SOFTWARE BASED SOLUTION APPROACH Kamil Kaya, Mustafa Toyran, Kadir Durak, Furkan Kırış, Serdar Erdem	318
01PP19	WAVEFRONT/IMAGE DETECTION AND CORRECTION WITH ADAPTIVE OPTICS SYSTEM Kadir Gürses, Necati Ecevit, Aslı Uğur	319
01PP20	WETTABILITY OF TI BASED NANOSTRUCTURED THIN FILMS OBTAINED BY VACUUM DEPOSITION Virginia Dinca, Rodica Vladiu, Aurelia Mandes	319

ASTROPHYSICS and COSMOLOGY

02PP1	AGE – METALLICITY RELATION IN SOLAR VICINITY FROM RGB STARS Sibel Döner	321
02PP2	AN INVESTIGATION FOR CENTRAL STARS OF PLANETARY NEBULAE Utkan Temiz, Nazım Aksaker	321
02PP3	EFFECT OF COSMIC RAYS ON THE TERRESTRIAL ATMOSPHERIC MEDIUM Rafik Sedrati, Dallel Bouchachi	322
02PP4	ORBITAL PERIOD CHANGE OF UU LEO C.Çiçek, A. Bulut, İ. Bulut	322
02PP5	SCATTERING OF FERMIONIC FIELDS BY BLACK HOLES WITH REISSNER-NORDSTRÖM TYPE GEOMETRY Ciprian A. Sporea	323
02PP6	SPECTRAL INVESTIGATIONS OF SOME PLANETARY NEBULAE AND PLANETARY NEBULA CANDIDATES Utkan Temiz, Nazım Aksaker	323
02PP7	THE LIGHT CURVE ANALYSIS OF THE HIGHLY ECCENTRIC ECLIPSING BINARY KIC 10296163 C. Çiçek, A. Bulut, İ. Bulut	324

ATOMIC AND MOLECULAR PHYSICS

03PP1	BASIC PHYSICAL PROPERTIES CALCULATIONS OF Ga _{1-x} Al _x Sb ALLOYS WITH METHODS BASED ON DENSITY FUNCTIONAL THEORY Özlem Bayal, M. Kemal Öztürk, Ali Gültekin	326
03PP2	COMBINED EXPERIMENTAL AND DFT STUDY ON MOLECULAR STRUCTURE OF 2,2'- BITHIOPHEN Feride Pınar Özturan, Ömer Dereli, Ebru Karakaş Sarıkaya, Semiha Bahçeli	326
03PP3	CONFORMATIONAL ANALYSIS AND VIBRATIONAL STUDY OF 1-(O-TOLYL) THIOUREA Feride Pınar Özturan, Ömer Dereli, Ebru Karakaş Sarıkaya, Semiha Bahçeli	327
03PP4	CONTROLLING ELECTRON LOCALIZATION IN THE DISSOCIATION OF H ₂ ⁺ AND HD ⁺ Muratcan Öner	327
03PP5	DFT SIMULATION, STRUCTURE AND SPECTROSCOPIC INVESTIGATIONS OF [AG(METHYL 3-PYRIDYL KETONE) ₂ NO ₃] COMPLEX Meryem Alp, Sibel Çelik, Şenay Yurdakul	328
03PP6	EFFECT OF CAP LAYERS ON MAGNETIC AND STRUCTURAL PROPERTIES OF FE THIN FILMS Fatih Can Kızıllulut, Züriye Çapku, Perihan Aksu	328
03PP7	EFFECT OF CROSSLINKING CONCENTRATION ON MECHANICAL PERFORMANCE OF POLYVİNYL ALCOHOL MEMBRANE CROSSLINKED WITH TARTARIC ACID Altan Bozdoğan, Baki Aksakal, Cenk Denктаş, Yavuz Salt	329
03PP8	EXPERIMENTAL AND THEORETICAL STUDY ON COBALT (II) AND MANGANESE (II) COMPLEXES OF SOME NITROISOQUINOLINE Merve Nurhan Güney, Şenay Yurdakul	329
03PP9	FINDING SILVER BINDING SITES IN PROTEINS USING QUANTUM-CHEMICAL CALCULATIONS Andrey A. Buglak	330
03PP10	FINE STRUCTURE PARAMETERS DETERMINATION OF THE CONFIGURATION 3d ⁶ 4p of Fe II Alev Er, Yasemin Şengül	330

03PP11	MOLECULAR DOCKING INVESTIGATION OF PIXANTRONE WITH B-DNA DODECAMER Aslan Saları, M. Can Kandemir, Bilge Bıçak, Serda Kecel Gündüz	331
03PP12	MOLECULAR DOCKING STUDIES OF PHENYTOIN, MEPHENYTOIN, AND ETHOTOIN WITH CYTOCHROME P450 3A4 M. Can Kandemir, Aslan Saları, Bilge Bıçak, Serda Kecel Gündüz	331
03PP13	STRUCTURE OPTIMIZATION AND HYPERFINE COUPLING CONSTANT OF SOME RADICAL ADDUCTS OF 2,3,5,6-TETRAMETHYLNITROSOBENZENE Sinem Gürkan Aydın	332

CONDENSED MATTER PHYSICS

04PP1	CDS SEMICONDUCTOR THIN FILMS AND CHARACTERIZATION Derya Peker, Salih Köse, Emine Alsat, Murat Nebi	334
04PP2	CHEMICAL STABILITY OF MXOY (M=Ti, Si, Zn, Al) COATED VO ₂ NANORODS AGAINST ATMOSPHERIC OXIDATION Mustafa Coşkun, Muhammed Cihad Küçükarslan, Özlem Duyar Coşkun	334
04PP3	COMPARISON OF UNDOPED AND AU DOPED SINGLE CRYSTAL AND GRAIN BOUNDRY CDTE STRUCTURE Aslı Öztoprak, Murat Çalışkan, Mehmet Yılmaz, Seçkin Günay, Çetin Taşseven	335
04PP4	CONDUCTANCE OF SILICENE AND GRAPHEN BASED SUPERLATTICES Ayoub Esmailpour	335
04PP5	DIELECTRIC CHARACTERIZATION OF SMA LIQUID CRYSTAL DEPEND ON TEMPERATURE Müge Erdoğan, N.Yılmaz Canlı	336
04PP6	DIELECTRIC SPECTROSCOPY OF OVALBUMIN UNDER DIFFERENT TEMPERATURES Merih Serin, Şahin Yakut, Murat Çalışkan, Hulusi Kemal Ulutaş, Deniz Bozoğlu, Deniz Değer Ulutaş, Mehmet Murat Özmen	336
04PP7	EFFECT OF CO DOPING ON SOME PHYSICAL PROPERTIES OF ZINC SULFIDE (ZnS) FILMS Barbaros Demirselçuk, Esra Kuş, Emrah Sarıca, Vildan Bilgin	337
04PP8	EFFECT OF HIGH TEMPERATURE SINTERING ON THE STRUCTURAL AND THE ELECTRICAL PROPERTIES B. Zor, B. Altan, A. Coşkun	337
04PP9	EFFECT OF PRE-STRETCHING FOLLOWING SHORT TERM STRESS-RELAXATION ON MECHANICAL PERFORMANCE OF POLYVINYL ALCOHOL MEMBRANE CROSSLINKED WITH TARTARIC ACID Baki Aksakal, Altan Bozdoğan, Cenk Denктаş, Yavuz Salt	338
04PP10	ELECTRICAL AND MORPHOLOGICAL PROPERTIES OF CUO: IN THIN FILMS Barbaros Demirselçuk, Vildan Bilgin	338

04PP11	ELECTRICAL CHARACTERISTICS OF MONOCLINIC GALLIUM OXIDE (B-Gs2O3) THIN FILMS DEPOSITED ON GAAS SUBSTRATES BY SOL-GEL TECHNIQUE H. Altuntas, Gamze Bakis Tiryaki.	339
04PP12	ELECTRICAL PROPERTIES OF OF (1-X)PR0.67PB0.33MNO3 + X.A (A; GD, ND.; X:0, 0.05, 0.10, 0.15) PEROVSKITE COMPOSITES D.Atak, B.Altan, A.Coşkun	339
04PP13	ENHANCEMENT OF HYDROGEN STORAGE CAPACITY OF CA-DECORATED B(666) BOROPHENE LAYER: A FIRST-PRINCIPLES INVESTIGATION Esra Eroğlu	340
04PP14	FEATURES OF THERMAL CONDUCTIVITY AND THERMOMAGNETIC EFFECTS OF SOLID SOLUTIONS (IN2TE3) 1-X (CD 0.9 ZN 0.1TE) X Hasanova M.Sh., Abilov Ch. I., Huseynova N.T.	340
04PP15	FRANZ - KELDYSH EFFECT IN THE TIGaSe2 LAYERED SEMICONDUCTORS IN THE CONDITION OF AN EXTERNAL UNIFORM ELECTRIC FIELD AND AFTER CRYSTAL POLING Esra Okumuş, Asuman Cengiz, Mir Hasan Yu. Seyidov	341
04PP16	GROWTH AND CHARACTERIZATION OF THE GLASS/ITO/TiO2 STRUCTURES Shikhamir. O. Eminov, Nahida N.Musayeva, Khuraman. D. Jalilova, Samira H.Abdullayeva, Suleyman Ozcelik	341
04PP17	IMPACT OF THE SUBSTITUTION OF La, Gd, Dy, Ho, Yb, AND Pr IN A-SITE OF A0.835K0.165MNO3 ON ITS STRUCTURAL AND ELECTRIC PROPERTIES G.Yılmaz, B.Altan, A.Coşkun	342
04PP18	INTERACTION POTENTIAL AND LOCAL STRUCTURE OF LIQUID MAGNESIUM NITRIDE VIA HYPERNETTED-CHAIN THEORY Y. Aydın, U. Akdere, S.D. Günay, Ç. Taşseven	342
04PP19	INVESTIGATION OF SINGLE PHASE LA0.87K0.13MNO3 PEROVSKITE MANGANITE Ali Ekber Irmak, Yavuz Selim Ak	343
04PP20	INVESTIGATION THE IMPACT OF MnO, NiO, SnO2, AND Fe2O3 PHASES ON THE STRUCTURAL, MORPHOLOGICAL, AND ELECTRICAL PROPERTIES	343

	OF $\text{La}_{0.67}\text{Pb}_{0.33}\text{CoO}_3$ AND $\text{La}_{0.67}\text{Pb}_{0.33}\text{MnO}_3$ PEROVSKITE COMPOUNDS E.N.Özgün, E.N.Bakay, B.Altan, A. Coşkun	
04PP21	MAGNETIZATION STUDY OF THE LOW-TEMPERATURE ANOMALY IN SOME TERBIUM-YTTRIUM IRON GARNETS Mahieddine Lahoubi	344
04PP22	METAL/INSULATING (POLY(VINYL ACETATE) LATEX WITH SILICON SURFACTANT)/Si MIS STRUCTURE Çalışkan M., Kuruoğlu F., Süngü Mısırhoğlu B., Serin M., Yılmaz M., Saraç A.	344
04PP23	MORPHOLOGICAL INVESTIGATIONS OF THE SURFACES OF MXBA1-XTiO_3 (M: CO, GD, MN, SR, ZR) (X=0 AND 0.5) THIN FILMS Colkesen, Pinar; Goktas, Abdullah; Ulug, Bulent; Mutlu, Ibrahim Halil	345
04PP24	OPTICAL ABSORPTION COEFFICIENTS FOR DIFFERENT BARRIER GEOMETRIES OF THE TRIPLE QUANTUM WELL UNDER THE EXTERNAL FIELDS Figen Karaca Boz, Şaban Aktaş, Şevket Erol Okan	345
04PP25	PRODUCING DOPED TiO_2 FILMS BY SOL-GEL SPIN COATING TECHNIC AND INVESTIGATION OF SOME PHYSICAL PROPERTIES Murat Nebi, Derya Peker	346
04PP26	PRODUCTION OF MgB_2 BY USING CARBON CAPSULATED BORON WITH CVD METHOD Haluk Koralay, Naki Kaya, Özgür Öztürk, Neslihan Turan, Şükrü Çavdar	346
04PP27	SILVER NANOCLUSTERS AS MRNA SENSORS Zakhar Reveguk, Marina Kapitonova, Alexei Kononov	347
04PP28	Sn_3O_4 THIN FILMS DEPOSITED BY PULSED LASER DEPOSITION Amina Houimi, Serap Yiğit Gezgin, Hamdi Şükür Kılıç.	347
04PP29	THE EFFECT OF ANNEALING ON PHYSICAL PROPERTIES OF Al-DOPED ZnO THIN FILMS Sema Kurtaran, Serhat Aldağ, Göksu Öfofoğlu	348
04PP30	THE EFFECT OF CRYSTALLINE PHASE ON THE ENERGETICS AND ELECTRONIC PROPERTIES OF TWO-DIMENSIONAL TRANSITION METAL	348

	DICHALCOGENIDES O. Omeroglu, I. Demiroglu, C. Sevik	
04PP31	THE ELECTRICAL CHARACTERISTICS OF SCHOTTKY DIODE FABRICATED WITH AND WITHOUT THE INTERFACE IN A WIDE FREQUENCY Mehmet Akif Şahinkaya, Ömer Sevgili, İkrâm Orak	349
04PP32	THE STRUCTURE, MORPHOLOGY AND ELECTRICAL TRANSPORT PROPERTIES 1-X (LA0.9SR0.1MNO3) + X (Bi1.6Pb0.4Sr2Ca2Cu3O10+X) COMPOSITE CERAMICS H.Sarioğlu, A.Coşkun	349
04PP33	THE THEORETICAL INVESTIGATIONS OF ANTIPEROVSKITE ANTI3 (A= AIL, In, Tl) COMPOUNDS WITH DFT CALCULATIONS İnanç Yılmaz, Ülkü Bayhan, Y. Ö. Çiftci	350
04PP34	THEORETICAL ANALYSIS OF STRUCTURAL, ELECTRONIC, OPTICAL AND DYNAMIC PROPERTIES OF AL1-X-YLNxGAYNAlLOYS Ali Gültekin, Ebru Sever, Mustafa Kemal Öztürk	350
04PP35	THERMOPHYSICAL PROPERTIES OF NANO-CRYSTALLITE MAGNESIUM NITRIDE VIA MOLECULAR DYNAMICS SIMULATION AT CONSTANT PRESSURE Y. Aydın, U. Akdere, S.D. Günay, Ç. Taşseven	351
04PP36	UNUSUAL THERMAL BEHAVIOR AND WEAK FERROMAGNETIC STATE IN NONSUPERCONDUCTING PRBCO CERAMICS AT LOW TEMPERATURES Mahieddine Lahoubi	351

ENERGY

05PP1	INVESTIGATION OF BIODIESEL PRODUCTION FROM SUNFLOWER OIL USING ASPEN PLUS Meryem Civil, Uğur Özveren	353
05PP2	MODELING OF SOLID OXIDE FUEL CELL STACK USING ARTIFICIAL NEURAL NETWORKS Afra Nur Atasoy, Uğur Özveren	353
05PP3	PREPARATION OF SUPERHYDROPHOBIC COATINGS BY SOL-GEL PROCESS Ş. İskender, S. İşmar, A. Evcin	354
05PP4	SCRATCH RESISTANCE HYBRID SOL-GEL SILANE COATING Ş. İskender, S. İşmar, A. Evcin	354
05PP5	THEORETICAL INVESTIGATION OF PEM FUEL CELL PERFORMANCE USING MATLAB SIMULINK SOFTWARE Sena Gök, Uğur Özveren	355

HIGH ENERGY PHYSICS and PLASMA PHYSICS

06PP1	BEAD-PULL MEASUREMENT FOR A 800MHZ PILLBOX CAVITY Sinan Öz, Muhammet Furkan Er	357
06PP2	DEMIRCI-PRO: A SINGLE SOFTWARE INTERFACE FOR RFQ ION SOURCE AND LEPT LINE DESIGN O. Cakir, E. Celebi, H. Cetinkaya, H. Kolenoglu, G. Turemen, Z. Uysal, G. Unel	357
06PP3	INVESTIGATING MAGNETIC PROPERTIES OF NiFe DOT/ANTIDOT STRUCTURE Zürbiye Çapku, Fikret Yıldız	358
06PP4	INVESTIGATING MAGNETIC PROPERTIES OF YIG FILMS GROWN ON Si SUBSTRATES Zürbiye Çapku, Fikret Yıldız	358
06PP5	KAHVELAB MDIS UPGRADE USING PERMANENT MAGNETS Sevim Açıksöz, Hakan Çetinkaya	359
06PP6	PRODUCTION OF FIRST GENERATION VECTOR LEPTOQUARKS AT FCC-EP Melek Demiral Korkmaz, Zerrin Kırca, Cem Salih Ün	359
06PP7	REVIEW OF THE NUCLEON TO DELTA TRANSITION AXIAL FORM FACTORS Ayşe Küçükarslan, Yasemin Ünal Şahin	360
06PP8	SIMULATIONS OF UPGRADED ATLAS MUON SPECTROMETER Havva Hasret Nur	360
06PP9	SOLENOID DESIGN AND MAGNETIC FIELD MEASUREMENT FOR LEPT AT KAHVELAB Duygu Halis Taşdemir, Alis Hamparsunoğlu, Aytül Adıgüzel, Hakan Çetinkaya, Sinan Öz, V. Erkcan Özcan, Aydın Özbey, Gökhan Ünel	361
06PP10	THE SIMULATION OF SIGNAL GENERATION PROCESS FOR THE SINGLE GAP RPC Nilgun Demir, Samet Taşkın	361
06PP11	VECTOR LEPTOQUARKS PRODUCTION AT FCC BASED TP COLLIDER Betül BAYRAKTAR, Zerrin KIRCA, Cem Salih ÜN	362

MATHEMATICAL PHYSICS

07PP1	EXACT SOLUTIONS OF DIRAC EQUATION IN 2-D GRAVITAIONAL FIELD Volkan Uncu	364
07PP2	ON THE QUANTUM COMPUTATION AND QUANTUM INFORMATION Necati Çelik, M. Nuri Ural, Selim Kaya	364

MEDICAL PHYSICS

08PP1	DETERMINATION OF AMBIENT DOSE MEASUREMENT USING TLD IN OBSERVED AREAS OF LINEAR ACCELERATORS Selağzı Pelin, Ateş Aytunç Kavas Yasemin	366
08PP2	EVALUATION OF PROSTATE CANCER KNOWLEDGE: A POPULATION-BASED QUESTIONNAIRE STUDY IN UNIVERSITY Handan Tanyıldızı, İrfan Aydın, Özlem Marancı Yıldırım	366
08PP3	EVALUATION OF SENSORINEURAL HEARING LOSS IN RADIOSURGERY Ahmet Murat Şenışık	367
08PP4	INVESTIGATION OF DIFFERENT 3-DIMENSIONAL PRINTER INTERFACES FOR MEDICAL PHANTOM CREATION Handan Tanyıldızı, Özlem Marancı Yıldırım, İrfan Aydın	367
08PP5	NEW METHOD TO CALCULATE THE TUMOR CONTROL PROBABILITY FOR PPIR Niko Hyka, Dafina Xhako	368

NUCLEAR PHYSICS

09PP1	A MATHEMATICAL MODEL OF Ni-63 SOURCE FOR BETAVOLTAIC APPLICATIONS K. Bozkurt, A. Belgachi, H.Moughli, O. Ozdemir, B. Amiri, A. Talhi	370
09PP2	CONSTRAINING THE NUCLEAR EQUATION OF STATE BY TIDAL DEFORMABILITY: CORRELATIONS BETWEEN THE EMPIRICAL PARAMETERS K. Bozkurt, H. Güven, E. Khan, J.Margueron	370
09PP3	CONSTRAINING THE NUCLEAR EQUATION OF STATE BY TIDAL DEFORMABILITY: EMPIRICAL PARAMETERS H. Guven, K. Bozkurt, E. Khan Ve J. Margueron	371
09PP4	DETERMINATION OF NATURAL AND ARTIFICIAL RADIONUCLIDE LEVELS IN SOILS OF ALANYA Arzu Kandemir, Sayeda Zarbal, Kübra Bayrak	371
09PP5	EVALUATION OF NUCLEON DENSITIES OF TUNGSTEN ISOTOPES BY WOODS-SAXON AND HARMONIC OSCILLATOR POTENTIALS Taner Tarık Aytas, İsmail Hakkı Sarpün, Eyyup Tel, Abdullah Aydın	372
09PP6	INVESTIGATION OF THE EFFECT OF CHANGING MgO-ZnO RATIO IN B2O3 GLASS-CERAMIC SYSTEMS ON ZEFF VALUE Yusuf Cenk İltuş, Lidya Amon Susam, Hüseyin Ozan Tekin, Baki Akkuş, Gülfem Susoy Doğan, Fatma Çağla Öztürk	372
09PP7	NATURAL RADIOACTIVITY LEVELS IN SURFACE SOIL SAMPLES FROM DWELLING AREAS OF NORTH CYPRUS A. Abbasi, A. Kurnaz, Ş. Turhan, F. Mirekhtiary, D. Rudolph	373
09PP8	NUCLEON DENSITIES OF CHROME ISOTOPES CALCULATED BY SKYRME INTERACTIONS Ferhan Akdeniz, İsmail Hakkı Sarpün, Taner Tarık Aytas, Eyyup Tel, Abdullah Aydın	373
09PP9	MONTE CARLO PREDICTION IN NUCLEAR PHYSICS A. Erol, G. S. Dogan, H. O. Tekin	374
09PP10	RELEVANCE BETWEEN RADIUM-226 CONCENTRATION AND GEOLOGICAL STRUCTURE IN GROUNDWATER SAMPLES	374

	Akbar Abbasi, Seyedeh Fatemeh Mirekhtiary	
09PP11	THE CALCULATION OF THE TRANSMISSION FACTOR THE S53P4 BIOACTIVE GLASS SYSTEMS, WITH THE ADDITION OF BORON OXIDE(B2O3) BY USING THE MCNP4C CODE Hasipcan Aydın, Gülfem Süsoy Doğan, Hüseyin Ozan Tekin	375
09PP12	THE GROUND STATE PROPERTIES OF MULTI- STRANGE HYPER NUCLEI WITHIN THE HARTREE- FOCK METHOD E.Akpınar, H.Güven, K.Bozkurt	375

PHYSICS EDUCATION AND PHILISOPHY

10PP1	NUCLEAR SANTRALS FROM STUDENTS' PERSPECTIVE Nilay Durmuş	377
10PP2	REALIZATION OF POLARIZATION AND MALUS'S LAW USING THE SMARTPHONES İldahan Özdeyiş Çolak, Mustafa Erol	377