TIP List Sorted By Numerical Order (as of August 2020)

2001 SIGNAL PROCESSING
2003 ANTENNAS AND PROPAGATION
2004 CIRCUITS AND SYSTEMS
2006 VEHICULAR TECHNOLOGY
2007 RELIABILITY
2008 CONSUMER ELECTRONICS
2009 INSTRUMENTATION AND MEASUREMENT
2010 AEROSPACE AND ELECTRONIC SYSTEMS
2011 NEURAL NETWORKS
2012 INFORMATION THEORY
2013 INDUSTRIAL ELECTRONICS
2014 TECHNOLOGY MANAGEMENT
2015 ELECTRON DEVICES
2016 COMPUTER
2017 MICROWAVE THEORY AND TECHNIQUES
2018 ENGINEERING IN MEDICINE AND BIOLOGY
2019 COMMUNICATIONS
2020 ULTRASONICS FERROELECTRICS AND FREQ. CONTROL
2021 COMPONENTS, PACKAGING, AND MANUFACTURING TECHNOLOGY
2022 OCEANIC ENGINEERING
2025 EDUCATION
2026 PROFESSIONAL COMMUNICATION
2027 ELECTROMAGNETIC COMPATIBILITY
2028 SYSTEMS, MAN,AND CYBERNETICS
2029 GEOSCIENCE AND REMOTE SENSING
2030 SOCIAL IMPLICATIONS OF TECHNOLOGY
2031 POWER & ENERGY
2032 DIELECTRICS AND ELECTRICAL INSULATION
2033 MAGNETICS
2034 INDUSTRY APPLICATIONS
2035 POWER ELECTRONICS
2037 SOLID-STATE CIRCUITS
2039 SENSORS
2041 ASC(APPLICATIONS OF SUPER CONDUCTIVITY)
2043 PRODUCT SAFETY ENGINEERING
2050 DATA ACQUISITION, TRANSMISSION AND PROCESS
2309 SENSORS, INSTRUMENTATION AND DATA ACQUISITION
3001 A.V. AND RF MEASUREMENTS AND TEST EQUIPMENT
3002 ADAPTIVE SYSTEMS
3004 ANALOG,DIGITAL AND MIXED MODE SIGNAL PROCESSING
3005 ANALYSIS & CONTROL OF POWER ELECTRONICS SYSTEMS
3007 APPLICATIONS
3008 ARRAYS
3009 ARTIFICIAL NEURAL NETWORKS
3010 ASICs AND PORTABLE ELECTRONICS
3011 ATE TEST AND MEASUREMENT SYSTEMS
3012 ATMOSPHERIC
3013 AUDIO AND ELECTROACOUSTICS
3014 AUTOMOTIVE ELECTRICAL TECHNOLOGY
3015 AUTOMOTIVE ELECTRONICS
3016 BIOLOGICAL AND MEDICAL
3017 BIOMEDICAL INSTRUMENTATION
3018 BIOMEDICAL SIGNAL PROCESSING
3019 BROADCAST TECHNOLOGY
3020 CABLE SYSTEMS

3021 CIRCUITS AND SYSTEMS THEORY, DESIGN AND IMPLEMENTATION
3022 COMMUNICATION AND DATA NETWORKS
3023 COMMUNICATION SYSTEMS INTEGRATION AND MODELING
3024 COMMUNICATIONS AND POLICIES
3025 COMMUNICATIONS SIGNAL PROCESSING
3026 COMMUNICATIONS SOFTWARE ARCHITECTURE AND IMPLEMENTATION
3027 COMMUNICATIONS SWITCHING AND ROUTING
3028 COMMUNICATIONS THEORY, MODULATIONS AND CODING
3030 COMPUTER AIDED NETWORKS AND SYSTEMS DESIGN
3031 COMPUTER AIDED CONTROL SYSTEMS DESIGN
3032 COMPUTER AIDED DESIGN-ANALYSIS,SYNTHESIS,VERIFICATION,PHYSICAL
3033 COMPUTER AND ROBOT VISION
3034 COMPUTER ARCHITECTURE
3035 COMPUTER COMMUNICATIONS
3036 COMPUTER COMMUNICATIONS, SYSTEMS AND PROTOCOLS
3037 COMPUTER CONTROL SOFTWARE, HARDWARE, AND INTERFACES
3038 COMPUTER ELEMENTS
3039 COMPUTER GRAPHICS
3040 COMPUTER LANGUAGES
3041 COMPUTER NETWORKS
3042 COMPUTERS IN MEDICINE
3044 CONTROL AND POWER CONVERSION
3045 CONTROL OF POWER SYSTEMS
3046 CONTROL SYSTEMS
3047 CONTROL THEORY
3048 CORONA
3049 CRYPTOGRAPHY
3051 DATA ENGINEERING
3052 DATA TRANSMISSIONS AND TERMINALS
3053 DC-TO-DC CONVERTERS & DC POWER SUPPLY SYSTEMS
3054 DESIGN AUTOMATION
3055 DETECTION, ESTIMATION AND IDENTIFICATION
3056 DIELECTRIC MATERIALS
3058 DIGITAL SIGNAL PROCESSING
3059 DIGITAL VIDEO GEN./STORAGE/DISPLAY
3060 DISTRIBUTED PROCESSING
3061 EARTH RESOURCES
3062 EDUCATIONAL AND PROFESSIONAL DEVELOPMENT
3063 EDUCATIONAL METHODS
3064 EDUCATIONAL TECHNOLOGY
3065 ELECTRIC CARS
3066 ELECTRIC MACHINERY
3067 ELECTRICAL SAFETY,INDUSTRY AND GENERAL
3069 ELECTROMAGNETIC INTERFERENCE CONTROL
3070 ELECTROMAGNETIC THEORY
3072 ELECTRONIC PACKAGING
3073 ELECTRONIC TRANSFORMERS
3074 ELECTROSTATIC DISCHARGE/LIGHTING
3075 EMBEDDED CONTROLLERS
3076 ENERGY
3077 ENERGY DEVELOPMENT AND POWER GENERATION
3078 ENGINEERING ETHICS
3081 ENVIRONMENTAL QUALITY
3082 EQUIP/SYS ANALYSIS
3083 ERROR CONTROL CODING
3084 EXPLORATION
3085 FACTORY AUTOMATION
3086 FAULT TOLERANT COMPUTING

3087 FERROELECTRICS
3088 FILTERS AND PASSIVE COMPONENTS
3089 FREQUENCY CONTROL
3090 FUSION TECHNOLOGY
3091 FUZZY SYSTEMS
3092 GAMES
3093 GENERAL WRITING AND EDITING TECHNIQUES
3094 GENETIC ALGORITHMS
3096 GOVERNMENT AND TECHNOLOGY
3097 HISTORY OF ELECTRICAL ENGINEERING AND COMPUTING
3098 HISTORY OF ELECTROTECHNOLOGY
3099 HOME AM AND FM SOUND RECEIVERS
3100 HOME RECORDER/PLAYBACK MEDIA
3101 HOME TV RECEIVERS
3102 HYBRID MICROELECTRONICS
3103 IMAGE AND MULTIDIMENSIONAL SIGNAL PROCESSING
3104 IMAGE PROCESSING
3105 INDUSTRIAL AND COMMERCIAL POWER SYSTEMS
3106 INDUSTRIAL APPLICATIONS OF SIGNAL PROCESSING AND CONTROL
3107 INDUSTRIAL AUTOMATION AND CONTROL
3109 INDUSTRIAL PROCESS CONTROL
3111 INFORMATION TECHNOLOGY/SYSTEMS
3113 INSTRUCTIONAL MATERIALS
3115 INTEGRATED AVIONICS
3116 INTEGRATED ELECTRONICS
3117 INTEGRATED OPTICS AND OPTOELECTRONICS
3118 INTELLIGENT CONTROL
3119 INTERACTION EFFECTS-AIR-SEA-SPACE-EARTH
3120 INTERDISCIPLINARY AND NEW ACTIVITIES
3121 INTERNET ARCHITECTURE, TECHNOLOGY APPLICATIONS
3122 INTERNET COMPUTING
3123 KINEMATICS, DYNAMICS, AND CONTROL
3124 PHOTONICS
3125 LEARNING THEORY
3126 MAGNETIC RECORDING
3128 MAINTAINABILITY
3129 MANAGEMENT
3130 MANAGEMENT DEVELOPMENT AND TRAINING
3131 MANAGEMENT POLICIES,METHODS,PROCEDURES
3132 MAN-MACHINE SYSTEMS
3133 MANUFACTURING AUTOMATION
3134 MANUFACTURING TECHNOLOGY
3135 MARINE COMMUNICATIONS,NAVIGATION AND POSITIONING
3136 MATERIALS AND PROCESSES
3137 MATERIALS FOR ELECTRONICS
3138 MATHEMATICAL FOUNDATIONS OF COMPUTING
3139 MEASURING TECHNOLOGY
3140 MEMORIES-SEMICONDUCTOR,MAGNETIC,OPTICAL
3141 METHODS OF MEASUREMENT
3142 MICRO PROCESSOR APPLICATION AND CONTROL
3143 MICRO/NANO ELECTRO-MECHANICAL SYSTEMS AND ROBOTS
3144 MICROPROCESSORS AND MICROCOMPUTERS
3145 MICROWAVE AND MILLIMETER WAVE SOLID STATE DEVICES
3146 MICROWAVE SYSTEMS
3148 MODELING, SIMULATION AND DATABASES
3149 MOTION AND PATH PLANNING
3150 MOTOR DRIVERS & MOTION CONTROL
3151 NEURAL NETWORK APPLICATION AND IMPLEMENTATION

3152 NEW SOLID-STATE DEVICE AND CIRCUIT APPLICATIONS
3153 NON-DESTRUCTIVE TESTING AND EVALUATION
3154 NONLINEAR OPTICS
3155 NUCLEAR AND PLASMA SCIENCES
3156 NUCLEAR INSTRUMENTS AND DETECTORS
3157 NUCLEAR MEDICAL AND IMAGING SCIENCES
3158 NUCLEAR SCIENCE
3159 NUMERICAL METHODS
3160 OBJECT ORIENTED COMPUTING
3162 OPERATING SYSTEMS
3163 OPTICAL COMMUNICATIONS AND NETWORKING
3164 OPTICAL FIBER AND PLANAR WAVEGUIDE TECHNOLOGY
3165 OPTOELECTRONIC DEVICES
3166 OPTOELECTRONICS AND IMAGING
3167 PARTICLE ACCELERATOR SCIENCE AND TECHNOLOGY
3168 PATTERN ANALYSIS AND MACHINE INTELLIGENCE
3169 PATTERN RECOGNITION
3170 PATTERN RECOGNITION AND LEARNING
3171 PAY TV TECHNOLOGY
3172 PERMANENT MAGNETS
3173 PETROLEUM AND CHEMICAL INDUSTRY
3174 PHYSICAL ACOUSTICS
3175 PHYSIOLOGICAL SYSTEMS MODELING
3176 PLASMA SCIENCE AND APPLICATIONS
3177 PLASMA SCIENCES
3178 POLLUTION
3179 PORTABLE COMMUNICATIONS
3181 POWER ELECTRONICS DEVICES,CIRCUITS AND SYSTEMS
3183 POWER QUALITY
3184 POWER SYSTEMS INSTRUMENTATION AND MEASUREMENT
3185 POWER SYSTEMS RELAYING
3187 PROFESSIONAL DEVELOP. AND MOTIVATION
3188 PROGRAM,PROJECT MANAGEMENT
3189 PROPAGATION
3190 QUALITY CONTROL TECHNIQUES
3191 QUANTUM ELECTRONICS
3192 RADAR
3193 RADIATION EFFECTS
3194 REACTOR INSTRUMENTATION AND CONTROLS
3195 REAL TIME CONTROL COMPUTING AND SIGNAL PROCESSING
3196 REAL TIME SYSTEMS
3197 RECTIFIERS & AC POWER SUPPLY SYSTEMS
3199 RELIABILITY PHYSICS
3200 ROBOTICS AND AUTOMATION
3201 SATELLITE AND SPACE COMMUNICATIONS
3202 SECURITY AND PRIVACY
3203 SEMICONDUCTOR DISCRETE DEVICES
3204 SEMICONDUCTOR LASERS
3205 SEMICONDUCTOR MANUFACTURING
3206 SEMICONDUCTOR PROCESS TECHNOLOGY
3207 SENSOR AND DATA FUSION AND INDUSTRIAL VISION
3208 SENSOR DESIGN,INTEGRATION, AND FUSION
3209 SENSORS,INSTRUMENTATION AND DATA ACQUISITION
3211 SIMULATION
3213 SOCIOECONOMICS
3214 SOFT MAGNETIC MATERIALS
3215 SOFTWARE
3216 SOFTWARE ENGINEERING

3217 SOLID EARTH
3218 SOLID STATE CIRCUIT AND SYSTEMS
3219 SOLID-STATE CIRCUIT DESIGN TECHNIQUES
3220 SOURCE CODING, DATA COMPRESSION AND QUANTIZATION
3221 SPACE SYSTEMS
3222 SPEECH PROCESSING
3223 SUBMILLIMETER-WAVE TECHNIQUES
3224 SUPERCONDUCTING MAGNETS AND MATERIALS
3225 SURFACE AND BULK ACOUSTIC WAVE DEVICES
3226 SWITCHGEAR
3227 SYSTEM DESIGN
3228 SYSTEM ENGINEERING
3229 SYSTEMS ANALYSIS AND DECISION ANALYSIS
3230 SYSTEMS MANAGEMENT
3231 SYSTEMS SCIENCE
3233 TECHNICAL PRESENTATIONS
3234 TECHNICAL PUBLICATION
3235 TECHNOLOGY FORECASTING AND ASSESSMENT
3236 TEST TECHNIQUES
3237 TEST TECHNOLOGY
3238 TRANSFORMERS
3239 TRANSMISSION AND DISTRIBUTION
3240 TRANSMISSION,ACCESS AND OPTICAL SYSTEMS
3241 TRANSMITTERS AND ANTENNAS
3242 TRANSPORTATION
3244 UNDERWATER ACOUSTICS
3245 VEHICLES AND SYSTEMS
3246 VEHICULAR COMMUNICATIONS
3248 VIDEO SIGNAL PROCESSING THEORY/TECHNOLOGY
3249 VIDEO SIGNAL TRANSMISSION
3250 VLSI
3251 VLSI CIRCUITS,SYSTEMS AND APPLICATIONS
3252 WIRELESS COMMUNICATIONS
3253 STORAGE SYSTEMS
3254 NETWORK SCIENCE
3255 INFORMATION ASSURANCE
3256 METROLOGY AND CALIBRATION
3257 COMPUTER INTELLIGENCE, LEARNING, AND FUZZY APPROACHES TO MEASUREMENT
4001 AEROSPACE AND VEHICLE CONTROLS
4003 APPLICATION AND IMPLEMENTATION OF COMPUTATIONAL INTELLIGENCE
4004 ARTIFICIAL INTELLIGENCE
4005 ATOMIC MANIPULATION
4008 BIOLOGICAL NEURAL NETWORKS
4009 BIOMAGNETISM
4010 CABLE-BASED DELIVERY AND ACCESS SYSTEMS
4011 CIRCUIT ANALYSIS AND SIMULATION
4012 CIRCUIT SYNTHESIS
4014 COMMUNICATIONS STANDARDS
4015 COMPONENT ASSEMBLY
4016 COMPUTATION
4017 COMPUTER AIDED DESIGN
4019 CONTROL EDUCATION
4020 CONTROL OF NETWORKS AND COMMUNICATION SYSTEMS
4023 DATA MINING
4024 DEFENSE AND MILITARY COMMUNICATIONS
4027 DISTRIBUTED SYSTEMS
4028 E-COMMERCE
4032 EMBEDDED SYSTEMS

4033 ENTERPRISE NETWORKING
4034 ENTERPRISE RESOURCE PLANNING
4035 ENVIRONMENTAL MEASUREMENTS AND MONITORING
4037 GIGABIT NETWORKING
4038 HARDWARE ENGINEERING/DEVELOPMENT
4039 HIGH PERFORMANCE CIRCUIT DESIGN
4042 INFORMATION INFRASTRUCTURE
4044 INTEGRAL AND INTEGRATED PASSAGES
4045 INTELLIGENT TRANSPORTATION SYSTEMS
4046 INTERCONNECTIONS IN HIGH SPEED DIGITAL SYSTEMS
4047 IT MANAGEMENT
4048 LAND TRANSPORTATION
4049 LOW POWER CIRCUIT DESIGN
4050 MAGNETORESISTANCE
4051 MANUFACTURING AUTOMATION AND ROBOT CONTROL
4052 MEMS/SENSOR/ACTUATOR/TRANSDUCER ELECTRONICS
4055 MOLECULAR ELECTRONICS
4057 MULTIMEDIA
4058 MULTIMEDIA COMMUNICATIONS AND DIGITAL MEDIA
4059 NANOBIO SENSORS
4060 NANOBIOLOGICAL TECHNOLOGY
4061 NANOCOMPOSITES
4062 NANOCRYSTAL MATERIALS
4063 NANOELECTRICO MECHANICAL SYSTEMS(NEMS)
4064 NANOELECTRONICS
4065 NANOMAGNETICS
4066 NANOMATERIALS
4067 NANOPHOTONICS
4068 NANOROBOTICS
4069 NANOTECHNOLOGY
4070 NANOTUBES
4071 NETWORK ENGINEERING
4072 NETWORK MANAGEMENT
4073 NETWORK OPERATIONS, MANAGEMENT AND CONTROL
4074 NETWORK RELIABILITY
4081 ORGANIZATION
4083 PRINTED WIRING
4084 PRODUCT SALES AND MARKETING
4085 PROGRAMMING LANGUAGES IN INDUSTRY
4086 PULSED POWER
4087 QUALITY ASSURANCE
4088 QUANTUM COMPUTING
4089 QUANTUM DEVICES
4090 RADIO COMMUNICATIONS
4092 RESOURCE MANAGEMENT
4093 SIGNAL PROCESSING,STORAGE AND COMMUNICATIONS ELECTRONICS
4094 SINGLE ELECTRON DEVICE
4095 SPIN ELECTRONICS/SPINTRONICS
4096 STANDARDS
4097 STANDARDS USE OR IMPLEMENTATION
4098 SUPERCONDUCTING ELECTRONIC
4099 SUPERCONDUCTING MICROWAVE COMPONENTS
4100 SUPERCONDUCTING WIRES AND CABLES
4103 TESTING
4104 SYSTEMS PACKAGING
4107 VERIFICATION AND VALIDATION
4108 VIRTUAL REALITY
4109 VISUALIZATION

4110 WAFER LEVEL PACKAGING
4111 WIRELESS APPLICATION DEVELOPMENT
4185 PROGRAMMING LANGUAGES
4201 CIRCUIT SYSTEM TEST
4202 DEVICE RELIABILITY
4203 DISPLAY DEVICES
4205 ELECTRON TUBES AND ELECTRON BEAM DEVICES
4206 HF-VHF-UHF TECHNOLOGY
4207 INTEGRATED CIRCUITS-DIGITAL
4208 INTEGRATED CIRCUITS-ANALOG-AND MIXED SIGNAL
4209 INTEGRATED CIRCUITS-COMMUNICATION AND RF
4210 MEDICAL ELECTRONICS
4211 NONIONIZING RADIATION
4212 PHOTOVOLTAIC
4215 SEMI-CUSTOM AND ASCI DESIGN
4216 SOLID STATE MICROWAVE ELECTRONICS
4217 SPECTRUM MANAGEMENT
4218 SUPERCONDUCTIVE DEVICES
4219 VACUUM DEVICES
4220 VLSI TECHNOLOGY
4221 COMPUTATIONAL INTELLIGENCE
4222 SIX SIGMA/DESIGN OF EXPERIMENTS
4223 SOFTWARE RELIABILITY
4224 SOFTWARE MAINTAINABILITY
4225 SYSTEM PROGNOSTICS (ON CONDITION MAINTENANCE) AND HEALTH MANAGEMENT (phm)
4226 SYSTEM SAFETY
4227 SYSTEM SECURITY
4228 FAILURE ANALYSIS
4229 TESTABILITY/DIAGNOSTICS
4231 SPECIALTY ENGINEERING COMPUTER AIDED ENGINEERING (CAE) APPLICATIONS
4232 RELIABILITY (Computer)
4233 CYBERNETICS
4234 COMPUTATIONAL LIFE SCIENCE
4235 EDUCATION TECHNOLOGY AND TRAINING
4236 INFORMATION ASSURANCE & INTELLIGENT MULTIMEDIA-MOBILE COMMUNICATIONS
4237 GRANULAR COMPUTING
4238 INTELLIGENT INTERNET SYSTEMS
4239 KNOWLEDGE ACQUISITION IN INTELLIGENT SYSTEMS
4240 MACHINE LEARNING
4241 MEDIA COMPUTING
4242 MEDICAL INFORMATICS
4243 SELF COMPUTING
4244 HUMAN-MACHINE SYSTEMS
4245 COGNITIVE COMPUTING
4246 COMPUTER SUPPORTED COOPERATIVE WORK IN DESIGN
4247 HUMAN CENTERED TRANSPORTATION SYSTEMS
4248 HUMAN-COMPUTER INTERACTION
4249 INFORMATION SYSTEMS FOR DESIGN AND MARKETING
4250 SYSTEMS SAFETY AND SECURITY
4251 SYSTEM SCIENCE AND ENGINEERING
4252 CONFLICT RESOLUTION
4253 ENTERPRISE INFORMATION SYSTEMS
4254 DISCRETE EVENT SYSTEMS
4255 DISTRIBUTED INTELLIGENT SYSTEMS
4256 GREY SYSTEMS
4257 HOMELAND SECURITY
4258 INDUSTRIAL APPLICATIONS
4259 INFRASTRUCTURE SYSTEM AND SERVICES

4260 INTELLIGENT GREEN PRODUCTION SYSTEMS
4261 MEDICAL MECHATRONICS
4262 ROBOTICS AND INTELLIGENT SENSING
4263 SELF-ORGANIZATION AND CYBERNETICS FOR INFORMATICS
4264 SERVICE SYSTEMS AND ORGANIZATION
4265 SYSTEM OF SYSTEMS
4266 ACOUSTIC SIGNAL PROCESSING
4267 ADAPTIVE SIGNAL PROCESSING
4268 AUTOMOTIVE SIGNAL PROCESSING
4269 BIOINFORMATICS
4270 BIOLOGICAL AND MEDICAL IMAGING
4271 BIOMETRICS
4272 COGNITIVE SIGNAL PROCESSING
4273 CO-OPTIMIZATION OF SIGNAL PROCESSING ALGORITHMS AND ARCHITECTURES
4274 EDUCATIONAL ASSESSMENT STRATEGIES
4275 FUNCTIONAL IMAGING
4276 INFORMATION FORENSICS
4277 K-12 EDUCATION
4278 MOBILE-BASED SIGNAL AND IMAGE PROCESSING APPLICATIONS
4279 MOLECULAR IMAGING
4280 MULTIMEDIA APPLICATIONS, INTERFACES AND COMPUTING
4281 MULTIMEDIA SECURITY
4282 MULTIMEDIA SIGNAL PROCESSING AND COMMUNICATIONS
4283 MULTIMEDIA SYSTEM ARCHITECTURES
4284 NETWORK OPTIMIZATION
4285 SENSOR ARRAY PROCESSING
4286 SENSORS NETWORK
4287 SIGNAL PROCESSING EDUCATION FOR NON-ENGINEERS AND NON-EES
4288 SOFTWARE BASED SIGNAL PROCESSING SYSTEMS
4289 SPECTRUM SENSING
4290 STATISTICAL SIGNAL PROCESSING
4291 VLSI AND FPGA BASED SIGNAL PROCESSING SYSTEMS
4292 GAME PLATFORMS
4293 LIDAR
4294 FIELD AND SERVICE ROBOTICS
4295 HUMAN-CENTERED AND LIFE-LIKE ROBOTICS
4296 INTELLIGENT SYSTEMS
4297 CONTROL
4298 SENSING AND PERCEPTION
4299 MANIPULATION
4300 MECHANICS, DESIGN AND CONTROL
4301 SIMULATION, INTERFACES AND VIRTUAL REALITY
4302 CLOUD COMPUTING
4303 BIOMEDICAL IMAGING AND IMAGE PROCESSING
4304 BIOINSTRUMENTATION, BIOSENSORS AND BIO-MICRO/NANO TECHNOLOGIES
4305 BIOINFORMATICS AND COMPUTATIONAL BIOLOGY, SYSTEMS BIOLOGY, AND MODELING METHODOL
4306 CARDIOVASCULAR AND RESPIRATORY SYSTEMS ENGINEERING
4307 NEURAL AND REHABILITATION ENGINEERING
4308 CELLULAR AND TISSUE ENGINEERING AND BIOMATERIALS
4309 BIOMECHANICS AND ROBOTICS
4310 THERAPEUTIC AND DIAGNOSTIC SYSTEMS, DEVICES AND TECHNOLOGIES, AND CLINICAL ENGINEE
4311 HEALTHCARE INFORMATION SYSTEMS AND TELEMEDICINE

4312 BIOMEDICAL ENGINEERING EDUCATION AND SOCIETY
4313 TRACKING SYSTEMS
4314 GUIDANCE SYSTEMS
4315 NAVIGATION SYSTEMS
4316 DIGITAL AVIONICS
4317 INERTIAL SENSORS
4318 5G (5G WIRELESS)
4319 IoT (INTERNET OF THINGS)
4320 5G PLUS (5G WIRELESS PLUS)
4321 GREEN ICT (GREEN INFORMATION COMMUNICATIONS TECHNOLOGY)
4322 SDN (SOFTWARE DEFINED NETWORK)
4323 AUTONOMOUS SYSTEMS
4324 DATA SCIENCE
4325 BIG DATA
4326 CYBERSECURITY
4327 FOG/EDGE COMPUTING
4328 BLOCKCHAIN
5040 ENVIRONMENT, HEALTH, SAFETY

OGIES

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