

IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS (TCAS)

Updated List of Editors Information Classification Scheme

EDICS

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ACS - Analog and Mixed Mode Circuits and Systems

ACS100 – Circuit theory
ACS110 – Discrete-time analog circuits and systems
ACS120 – Continuous-time analog circuits and systems
ACS130 – Analog circuits: amplifiers, comparators, oscillators, filters, references, regulators
ACS140 – Timing circuits and clock generators
ACS150 – HF and RF analog circuits and systems
ACS160 – PLLs and Synthesizers
ACS170 – Signal conditioning and interfacing
ACS180 – Analog registers and memories
ACS190 – Testing of analog and mixed mode circuits
ACS200 – Reconfigurable and field programmable analog circuits
ACS210 – Clock/data recovery circuits
ACS220 – Analog-to-digital converters
ACS230 – Digital-to-analog converters
ACS240 – Time-to-digital and digital-to-time converters
ACS250 – Voltage-to-Frequency and Frequency-to-Voltage converters
ACS260 – PWM, PDM, PPM modulators
ACS270 – Circuits and systems for biomedical, wearable/implantable (bio)electronics
ACS280 – Fractional circuits and systems
ACS290 – Circuits and systems for optoelectronics
ACS300 – Analog and mixed mode circuits with organic/molecular/nanodevices
ACS310 – Neuromorphic circuits and systems
ACS320 – Beyond-CMOS circuits: nanoelectronics, spintronics, quantum computing

CAD - Computer Aided Design and Electronic Design Automation

CAD100 – Computer aided design and synthesis
CAD110 – Computer aided verification
CAD120 – Computer aided testing and validation
CAD130 – Computer aided placement and routing
CAD140 – Computer aided design of clock and power/ground distribution networks
CAD150 – Computer aided interconnect analysis, modelling, optimization
CAD160 – Circuit simulation
CAD170 – Computer aided timing analysis
CAD180 – Computer aided power analysis
CAD190 – Computer aided reliability analysis
CAD200 – Design for manufacturing
CAD210 – Chip-package co-design
CAD220 – Assisted analog modeling, synthesis and optimization
CAD230 – Signal integrity in digital systems

CAD240 – FPGA design tools and applications
CAD250 – New, emerging or specialized design techniques
CAD260 – Network on chip
CAD270 – Behavioral modeling and multi-domain simulation

COMM - Circuits and Systems for Communications

COMM100 – Circuits and systems for coding in communication systems
COMM110 – Circuits and systems for modulation in communication systems
COMM120 – Optimal receiver design
COMM130 – Carrier and symbol synchronization
COMM140 – Circuits and systems for specific channels: band-limited, fading multipath, intersymbol interference
COMM150 – Multichannel digital and multicarrier circuits and systems
COMM160 – Multi-user communication systems
COMM170 – Wireless communication systems
COMM180 – Optical communication systems
COMM190 – Infrared-based Communication Systems
COMM200 – Networked control system
COMM210 – Direct sequence, frequency-hopping, spread-spectrum communication systems
COMM220 – Ultra-Wideband (UWB) communication systems
COMM230 – Circuits and systems for software-defined radio
COMM240 – Circuits and Systems for cognitive radio

CTRL - Control Theory topics in Circuits and Systems

CTRL100 – Circuits and systems for (adaptive, robust, fuzzy, neural, intelligent) control
CTRL110 – Networked control systems
CTRL120 – Hybrid dynamical systems
CTRL130 – Embedded control systems
CTRL140 – Emerging control technologies
CTRL150 – Control of nonlinear systems
CTRL160 – Control of complex systems
CTRL170 – System identification schemes
CTRL180 – Control of electrical networks
CTRL190 – Control of networked systems
CTRL200 – Control of biomedical systems

Digital Circuits and Systems (and VLSI)

DCS100 – Arithmetic circuits and systems
DCS110 – Digital ASICs
DCS120 – Digital circuits and systems for cryptography
DCS130 – Digital circuits techniques and building blocks
DCS140 – Embedded digital systems
DCS150 – Digital I/O circuits
DCS160 – Low power digital circuits and systems
DCS170 – Memory circuits and design
DCS180 – Processors
DCS190 – Reconfigurable and field programmable digital circuits (FPGAs)
DCS200 – Reliability in digital systems
DCS210 – Systems on chip
DCS220 – Testing of digital circuits and design for testability of digital systems
DCS230 – Digital VLSI circuits and systems
DCS240 – Digital design and architectures targeting specific technologies
DCS250 – Digital circuits and systems for Cryptography
DCS260 – Digital circuit modeling techniques
DCS270 – Digital filter design
DCS280 – Digital accelerators
DCS290 – Security hardware and implementation

NOLIN - Nonlinear Circuits and Systems

NOLIN100 – Analysis/modeling/simulation of nonlinear networks
NOLIN110 – Oscillators and PLL analysis
NOLIN120 – Externally linear internally nonlinear networks
NOLIN130 – Translinear circuits
NOLIN140 – Implementation of nonlinear primitives
NOLIN150 – Circuits and systems for nonlinear control
NOLIN160 – Circuits and systems for random number generators
NOLIN170 – Chaotic circuits and systems
NOLIN180 – Nonlinear circuits and systems for neural networks
NOLIN190 – Cellular neural networks and bio-inspired neural networks
NOLIN200 – Circuits and systems for fuzzy computing
NOLIN210 – Stability analysis of nonlinear circuits and systems
NOLIN220 – Bifurcation analysis of nonlinear circuits and systems
NOLIN230 – Biomorphic neural networks
NOLIN240 – Nonlinear circuits and systems for cyber-security
NOLIN250 – Synchronization and coordination of nonlinear circuits and systems
NOLIN260 – Circuits and systems for soft and analog computing
NOLIN270 – Memristive devices, circuits and systems

POW - Power Systems and Electronic Circuits

POW100 – Power electronic circuits
POW110 – DC-DC switching mode power supplies
POW120 – AC-DC, DC-AC converters and modeling
POW130 – Integrated power converters and charge pumps
POW140 – Snubber circuits
POW150 – Gate and base drive circuits
POW160 – Power analysis tools and techniques
POW170 – Power systems modeling, dynamics and control
POW180 – Voltage and power control
POW190 – Power system security
POW200 – Rectifiers
POW210 – Power converters
POW220 – LDO and resonant regulators
POW230 – Energy harvesting circuits and systems
POW240 – Power management circuits
POW250 – Drive Circuits
POW260 – Microgrid and multi-microgrid systems
POW270 – Power system control systems and design
POW280 – Power system dynamic modeling: components, circuits and systems
POW290 – Wireless power transfer circuits
POW300 – Multi-energy systems

SIPRO - Signal Processing

SIPRO100 – Adaptive signal processing
SIPRO110 – DSP systems, design and implementation
SIPRO120 – Multidimensional signal processing: algorithms, coding and applications
SIPRO130 – Beamforming circuits and systems
SIPRO140 – Equalization techniques, circuits and systems
SIPRO150 – Estimation and detection techniques, circuits and systems
SIPRO160 – MIMO systems
SIPRO170 – Multirate circuits and systems
SIPRO180 – Filter bank theory and design
SIPRO190 – Array signal processing structures
SIPRO200 – Adaptive filters: architectures, design and analysis
SIPRO210 – Wavelet: systems and applications
SIPRO220 – Sampling, extrapolation and interpolation systems
SIPRO230 – Algorithms and architectures for digital signal processing
SIPRO240 – Circuits and systems for compressed sensing
SIPRO250 – Circuits and systems for graph signal processing
SIPRO260 – Signal processing in IoT and big data
SIPRO270 – Multimedia signal processing: architectures and implementation