

Author Index

Abd-El-Hafiz, Salwa
Abdelhaleem, Sherif
Adamatzky, Andrew
Afantitis, Antreas
Aikawa, Naoyuki
Al Chawa, Mohamad Moner
Alimisis, Vassilis
Amanatiadis, Stamatios
Anagnostopoulos, Nikolaos Athanasios
Andonov, Stanimir
Antipov, Alexei
Antognini, Luca
Antoniou, George
Antoniou, Maria
Apostolidis, Anestis
Argyriou, Vasileios
Argyriou, Vasilis
Arul, Tolga
Ascoli, Alon
Asimopoulos, Dimitris
Aslan, Heba
Athanasiadou, Georgia
Aziz, Saba

Babas, Dimitrios
Banerjee, Shreyan
Barbruni, Gian Luca
Bashiri, Aishah
Batzos, Zisis
Bedau, Daniel
Beladam, Fatiha
Birbas, Alexios
Birbas, Michael
Bougas, Ioannis
Boursianis, Achilles
Boursianis, Achilles D.
Bousbahi, Khaled
Bush-Espinosa, Lydia

Calcagnile, Lucio
Calvo, Daniela
Caputo, Domenico
Caricato, Anna Paola
Carrara, Sandro

Catalano, Roberto
Cayo, Jose
Chatzichristodoulou, David
Chatzilabrou, Nikolaos
Chatzipoulidis, Aristeidis
Cheliotis, Konstantinos
Chen, Xun
Chiolerio, Alessandro
Christakis, Ioannis
Christopoulos, Nikos
Chua, Leon O.
Cirio, Roberto
Cirrone, Giuseppe Antonio Pablo
Colella, Riccardo
Constantinides, Andreas
Corinto, Fernando
Coutras, Constantine
Crocì, Tommaso
Cuttone, Giacomo

Das, Arka Dipta
de Benito, Carol
De Cesare, Gianpiero
De Remigis, Paolo
Delimaras, Vasileios
Demirkol, Ahmet Samil
Di Matteo, Stefano
Diamantoulakis, Panagiotis
Dunand, Sylvain

Efthymiou, Aristides
Eleftheriadis, Charis
Eleftheriadis, Stylianos
Eleftheriou, Nikolaos P.

Fabi, Michele
Feng, Peilong
Fischer, Sebastian
Fortulan, Raphael
Fountoukidis, Eleftherios
Fragulis, George
Frontini, Luca
Fujii, Kentaro

Garcia-Ortiz, Alberto
Geloczi, Emilia
George, Aleena Elsa
Georgiev, Stylian

Ghamnia, Mustapha
Gilli, Marco
Ginchev, Dimitar
Gogolou, Vasiliki
Golparvar, Ata
Goudos, Sotirios
Goudos, Sotirios K.
Gounaridis, Konstantinos
Grassi, Giuseppe
Grimani, Catia
Griva, Aikaterini
Grobis, Michael
Guarrera, Mariacristina

Hadjisofokli, Nicos
Haidar, Adnan
Han, Zhongbo
Hatzopoulos, Argyrios T.
He, Lenian
Hinov, Nikolay
Hosam, Mohamed
Huang, Dr Zekun
Hüssen, Lukas

Ignatov, Ventsislav
Iliadis, Lazaros Alexios
Intzes, Ioannis
Ioannidis, Dimosthenis
Ioannou, Nicos
Ionica, Maria

Jiang, Linxin
Jost, Carsten

Kaifas, Theodoros
Kalivas, Grigorios
Kampelopoulos, Dimitrios
Kantartzis, Nikolaos
Kaxheri, Keida
Karagiannidis, George
Karamitsou, Thomai
Karasavvidis, Konstantinos
Kasnesis, Panagiotis
Kassianides, Victoras
Katsoulis, Stylianos
Katzenbeisser, Stefan
Kawatsu, Yuka
Kheirabadi, Noushin Raeisi

Kirilov, Stoyan
Kocaleva Vitanova, Mirjana
Kokkinidis, Konstantinos-Iraklis
Kokkinidis, Kostas
Kokosis, Sotirios
Konstantakos, Vasileios
Koritsoglou, Kyriakos
Korompilis, Georgios
Koulouras, Grigorios
Koulouridis, Stavros
Kousiopoulos, Georgios-Panagiotis
Koutsioumpa, Vasiliki
Kouzinopoulos, Charalampos S.
Kritopoulou, Paraskevi
Kyriacou, Costas

Lagkas, Thomas
Large, Matthew
Laskaridis, Lazaros
Lazaridis, Pavlos
Lazzaz, Abdelaziz
Lenta, Francesca
Levina, Alla
Liatifis, Athanasios
Liberali, Valentino
Liontos, Anastasios
Lopes Pata, Adriano
Lovecchio, Nicola

Mafi, Alireza
Manoharan, K
Marantos, Charalampos
Margaritis, Georgios
Markides, Christos
Martino, Maurizio
Maruccio, Giuseppe
Mastorakis, Nikos
Mazza, Giovanni
Meimandi, Ali
Menichelli, Mauro
Messaris, Ioannis
Mexis, Nico
Mifsud, Andrea
Mintis, Dimitris
Mitilineos, Stelios
Mitilineos, Stelios A.
Mitsiou, Nikos
Mladenov, Valeri

Momani, Shaher
Monteduro, Anna Grazia
Morozzi, Arianna
Moscatelli, Francesco
Moscholios, Ioannis
Moscholios, Ioannis D.
Moysis, Lazaros
Mylonakis, Constantinos
Mylonas, Eleftherios

Nabenishi, Hisashi
Najafi, Amir
Nanos, Ioannis
Nascetti, Augusto
Nassibi, Amir
Natori, Takahiro
Negra, Renato
Nestoros, Marios
Nikisanlis, Nikolaos
Nikitopoulos, George
Nikolaidis, Spyridon
Nikolaou, Symeon
Noulis, Thomas
Ntinas, Vasileios

Pakrashi, Vikram
Paliodimos, Efstratios
Paliodimos, Efstratios N.
Pallotta, Stefania
Papadopoulos, Fotios
Papadopoulos, Fotios G.
Papadopoulou, Maria S.
Papakostas, Dimitrios
Papatheasiou, Andreas
Papatheodorou, Achilleas
Papatheodorou, Georgios
Papatsimouli, Maria
Papavasiliou, Mattheos
Papavassiliou, Christos
Passaretti, Daniele
Passeri, Daniele
Passoni, Marco
Patrikakis, Charalampos
Patrikakis, Charalampos Z.
Pavlidis, Vasilis
Payá Vayá, Guillermo
Pedio, Maddalena
Petasecca, Marco

Petringa, Giada
Peverini, Francesca
Pham, Viet-Thanh
Piccolo, Lorenzo
Picos, Rodrigo
Pionteck, Thilo
Piperakis, Stavros
Placidi, Pisana
Polycarpou, Anastasis C.
Priyadarshi, Rahul
Prousalis, Dimitrios
Psannis, Konstantinos
Psannis, Konstantinos E.
Psycharis, Ioannis Dimitrios

Quarta, Gianluca

Radwan, Ahmed
Ramirez, Vicente
Rathore, Dr Rajkumar Singh
Reiner, James W
Rizos, Ioannis
Rizzato, Silvia
Rosales Vargas, Sergio Alejandro
Rossi, Daniele
Rounak, Aasifa
Ryu, Heung-Gyoon

Sabbatini, Federico
Sabrigiraj, M
Sahalos, John
Sanvito, Stefano
Saponara, Sergio
Sarigiannidis, Panagiotis

Schmitt, Nicolas
Schroedter, Richard
Serrano, Fernando E.
Servoli, Leonello
Sharobim, Bishoy
Siakavara, Katherine
Siniosoglou, Ilias
Sklavos, Nicolas
Slavova, Angela
Snopok, Eugene
Sofianidis, Ioannis
Sotiriadis, Paul
Sotiriadis, Paul P.

Sotiroudis, Sotirios
Soudris, Dimitrios
Soumis, Dimitrios
Stabile, Alberto
Stavrev, Stefan
Stavrinides, Stavros
Stavrinides, Stavros G.
Stewart, Derek
Stouboulos, Ioannis
Strachan, John Paul
Stuckmann, Fabian

Talamonti, Cinzia
Tatas, Konstantinos
Tchema, Rodrigue Bogne
Tegos, Sotiris
Tenentes, Vasileios
Tetzlaff, Ronald
Thomet, Jonathan Emanuel
Tosti, Luca
Traversi, Gianluca
Tsampiras, Konstantinos
Tsantikidou, Kyriaki
Tselikas, Nikolaos
Tsenov, Georgi
Tsiakmakis, Kyriakos
Tsoulos, George
Tsoulos, Vassilios
Tsourtis, Vasileios
Tzanis, Nikolaos
Tzouvaras, Dimitrios
Tzschoppe, Max

Uzunidis, Dimitris

Vakis, Michail
Varsou, Dimitra-Danai
Vasilikou, Kalliniki
Vassios, Vassilios D.
Vassios, Vassilis
Velanas, Pantelis
Vergos, George
Vikram, Raj
Villani, Mattia
Volos, Christos
Vourkas, Ioannis
Vryonides, Photos

Wang, Yanlu
Wei, Muh-Dey
Wheadon, Richard James
Wilhelm, Martin
Witzens, Jeremy
Wyrsh, Nicolas

Xi, Jianxiong
Xie, Lijie

Yang, Dr Tiansheng

Zaharis, Zaharias
Zaharis, Zaharias D.
Zarbouti, Dimitra
Zazzi, Andrea
Zema, Nicola
Zibidi, Angeliki
Zlatev, Zoran
Zonios, Christos

2024 International Conference on Modern Circuits and Systems Technologies
(MOCASST)

Copyright ©2024 by IEEE.

All rights reserved.

Copyright and Reprint Permission:

Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923. For reprint or republication permission, email to IEEE Copyrights Manager at pubs-permissions@ieee.org.

Additional copies of this publication are available from

Curran Associates, Inc., 57 Morehouse Lane

Red Hook, NY 12571 USA

+1 845 758 0400

+1 845 758 2633

e-mail: curran@proceedings.com

**2024 International Conference Modern Circuits and Systems Technologies
(MOCASST), IEEE Conference Record #61 810**

is organized by



Technical University of Sofia (TUS)



IEEE Bulgaria Section



Chua Memristor Center



IEEE CAS Bulgaria Chapter

ISBN: 979-8-3503-8542-7

**2024 International Conference on Modern
Circuits and Systems Technologies
(MOCASST)**

PROCEEDINGS

of the 13th edition of the MOCASST Conference
IEEE Conference Record Number #61 810

26th – 28th June 2024
Bulgaria