

# Curriculum Vitae (6-page Format)

December 2025

## English

**SAWAN**

**Mohamad**

Canadian; Lebanese

Married

English, French, Arabic & Mandarin

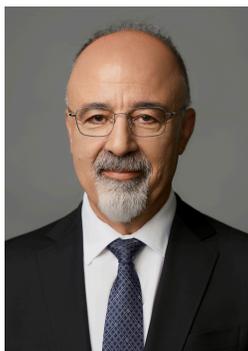
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## Mandarin

萨万

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## I. ACADEMIC BACKGROUND

<i>Degrees</i>	<i>Institution</i>	<i>Country</i>	<i>Month/Year</i>
Ph.D.	Université de Sherbrooke	Canada	09/1990
M.Sc.A.	Université de Sherbrooke	Canada	12/1986
B.Sc.	Université Laval	Canada	12/1983

## II. EMPLOYMENT HISTORY

<i>Position</i>	<i>Dates</i>	<i>Organisation</i>
Emeritus Professor	06-20/...	Electrical Engineering, Polytechnique Montreal
Chair Professor	01-19/...	School of Engineering, Westlake University
Professor	06-98/...	Electrical Engineering, Polytechnique Montreal
Director	06-99/19	ReSMiQ interuniversity research center, Quebec
Adjunct Professor	09-11/...	Electrical & Computer Engineering, Laval University
Advisory Professor	09-06/...	School of Microelectronics, Shanghai University
Adjunct Professor	09-17/...	School of Computer Sciences, Wuhan University
Canada Research Chair	04-01/06-15	Electrical Engineering, Polytechnique Montreal
Director	06-96/05-04	Electronic Division, École Polytechnique
Adjunct Professor	11-95/08-98	Electrical Engineering, McGill University
Associate Professor	06-94/05-98	Electrical & Computer Eng., École Polytechnique
Assistant Professor	09-91/05-94	Electrical & Computer Eng., École Polytechnique
Post-Doctoral Fellow	01-91/08-91	Biomedical Engineering, McGill University

## III. HONORS AND AWARDS

2025	Chen Tingzuo Immunology Science Award for contributions to superantigen role for immunology;
2025	Distinguished Fellow of the International Engineering and Technology Institute (IETI);
2025	Medal of merit of Lebanese Emigrants from the President of Lebanon for outstanding achievements;
2024	Fellow of the International Artificial Intelligence Industry Alliance (AIIA)
2022	Fellow of the Royal Society of Sciences of Canada (FRSC)
2022	Chinese Government Friendship Award;
2022	Hangzhou Outstanding Talent Award;
2021	Chinese Zhejiang Westlake Friendship Award
2019	Chinese Hangzhou Qianjiang Friendship Ambassador Award

- 2019 National High-level Talent Program Award
- 2018-... Elected Vice-President Publications of the IEEE Circuits and Systems Society;
- 2016 Recipient of one of the five awards of the Council of the Arab League Ambassadors;
- 2015 Recipient of the Shanghai City Award for International Collaboration;
- 2014 Recipient of the Polytechnique Montreal First Research and Innovation Award;
- 2013 Recipient of the Queen-Elizabeth II Diamond Jubilee Medal;
- 2013-... Member of the Board of Governors of the IEEE Circuits & Systems Society;
- 2012 Recipient of the ACFAS - Jacques-Rousseau Award for Multidisciplinarity Research contributions;
- 2012-... Advisory Professor at Shanghai JiaoTong University, Shanghai, China;
- 2012 Member of the international selection committee of the biomedical researcher of the year;
- 2012 President of the Analog Signal Processing Committee of the IEEE Circuits & Systems Society;
- 2011-12 Chair of the Distinguished Lecture Program of the IEEE Circuits and Systems Society;
- 2011-12 Distinguished Lecturer of the IEEE Solid-State Circuits Society;
- 2010 Recipient of the Desjardins intercultural office achievement Award;
- 2008 Elected Officer of the National Order of Quebec for outstanding contributions;
- 2008 Recipient of the Lebanese Embassy in Canada Achievements Award;
- 2007 Fellow of the Engineering Institute of Canada for contributions to Engineering practices;
- 2006 Recipient of the American University of Science and Technology Achievements Award;
- 2006-10 Honorary Professor at Shanghai JiaoTong University, China;
- 2005 Recipient of the J. A. Bombardier Award for Research innovation and technology transfer;
- 2005 Medal of Honor from the President of Lebanon for outstanding achievements;
- 2005-07 Elected President of the BiOCAS technical committee of the IEEE Circuits & Systems Society;
- 2004 Recipient of the Montreal Lebanese Islamic Center's Award for career achievement;
- 2004 Fellow of the IEEE for my contributions to implantable medical devices;
- 2004-06 Elected Distinguished Lecturer of the IEEE Circuits & Systems Society;
- 2004-... Invited Professor at Université de Metz, France;
- 2003 Recipient of the Barbara Turnbull Award from the Canadian Institutes of Health Research (CIHR);
- 2003 Scientific Achievement Award from the American Biographical Institute;
- 2002 Recipient of the Canadian Islamic Congress's Award for career achievements;
- 2001-03 Founder and President of Cortivision, a startup company;
- 2001 Fellow of the Canadian Academy of Engineering;
- 2001 One of my projects is among the top ten discoveries of the Year by Québec Science Magazine;
- 2000-... Awarded Canada Research Chair in Smart Medical Devices;
- 1999 Invited Professor at Université de Sfax, Tunisia.

#### **IV. OTHER AWARDS**

- 2025 First place, best student poster award from IEEE MIND Conference;
- 2025 First place, best Wicas paper award from IEEE ISCAS Conference;
- 2025 First place, best Biocas student paper award from IEEE ISCAS Conference;
- 2023 First place, best student paper award from IEEE AICAS Conference;
- 2020 Best Springer Scientific Reports' journal paper award by Canadian Epilepsy League;
- 2019 First place demonstration award from IEEE Sensors competition;
- 2014 Co-recipient of the 1<sup>st</sup> best paper award from IEEE-SBCCI 2014;
- 2014 Co-recipient of the 1<sup>st</sup> place award from MDETEQ State competition;
- 2013 Co-recipient of the best ReSMiQ Innovation Day Award;
- 2012 Co-recipient of the best poster presentation at the 11<sup>th</sup> MIOMD Conference;
- 2010 Co-recipient of the best Texpo project award from CMC Microsystems annual workshop;
- 2010 Co-recipient of the best student science and society award from ACFAS 2010;
- 2010 Co-recipient of the best poster presentation award from ReSMiQ-ACFAS 2010;
- 2008 Co-recipient of the Best IEEE Solid-State Society Chapter of the year;
- 2008 Co-recipient of the 1<sup>st</sup> best paper award from IEEE NEWCAS 2008;
- 2008 Co-recipient of the 3<sup>rd</sup> best paper award from IEEE NEWCAS 2008;
- 2006 Nominated one of best Electrical Engineering Professors of the year at Ecole Polytechnique;

- 2004 Co-recipient of Myril B. Reed Best Paper Award of the 46<sup>th</sup> IEEE-MWSCAS.
- 1997 Award for academic excellence awarded by École Polytechnique de Montréal;
- 1989 Medal of Merit for academic excellence by the Université de Sherbrooke during my Ph.D. studies.

#### **V. OTHER DISTINCTIONS AND ACHIEVEMENTS**

- 2025 General Co-Chair of the IEEE International Conference on Electronics, Circuits and Systems (ICECS);
- 2025 General Co-Chair of the IEEE International Conference Biomedical Circuits and Systems (BioCAS);
- 2023 General Chair of the IEEE International Conference on AI Circuits and Systems (AICAS);
- 2022-... General Co-Chair of the International Conference on Microelectronics (ICM);
- 2022-.... Honorary Chair of the International Conference on Biomedical Engineering and Applications (ICBEA);
- 2022 General Co-Chair of the IEEE International AI Circuits and Systems Conference (AICAS);
- 2021-... Honorary Chair of the IEEE International NEWCAS flagship Conference (NEWCAS);
- 2020 General Chair of the IEEE Engineering, Medicine and Biology Society Conference;
- 2018 General Chair of the IEEE International Life Sciences Conference;
- 2018-19 General Co-Chair of the IEEE-International AICAS, and ISOCC;
- 2016 General Chair of the IEEE International Symposium on Circuits and Systems;
- 2015-... Editor-in-chief of the IEEE Transactions on Biomedical Circuits and Systems Journal;
- 2015-... General Co-Chair of the IEEE-International SBB;
- 2013-... Associate Editor of the IEEE Transactions on Biomedical Engineering Journal;
- 2013-... Chair of the IEEE Biomedical Engineering Award committee;
- 2012-... General co-Chair of the annual IEEE NEWCAS Conference;
- 2012-... General co-Chair of the annual IEEE Int'l Conf. on Microelectronics;
- 2011-... Editorial Board, the IEEE Life Sciences Portal;
- 2011-... General Chair of the IEEE Int'l Conf. on Electronics, Circuits and Systems;
- 2011-... General co-Chair of the IEEE Int'l Conf. on Microelectronics;
- 2011-12 Guest Editor of the IEEE J. of Emerging and Selected Topics SI on Brain-Machine Interfaces;
- 2011 Member of the Quebec's technology mission to India;
- 2011 General Chair of the Brain-Computer Interface Workshop (CAS-FEST 2010);
- 2011 General Co-Chair of the ACFAS-ReSMiQ's Workshop;
- 2010 Member of the Quebec's technology mission to China;
- 2010-... Advisory Board, Int'l Symposium on Medical Information and Communication Technology;
- 2010-13 Deputy Editor-in-Chief of the IEEE Transactions on Circuits and Systems II (TCAS-II);
- 2010-... Advisor for Springer Publisher in the field of Analog and biomedical books;
- 2010-... General Chair of the ACFAS-ReSMiQ's Workshop;
- 2009-... Technical Program Co-Chair of the Int. Biomedical Circuits and Systems (BiOCAS2009);
- 2009-... Member of the International Editorial Board of the Journal of Healthcare Engineering;
- 2009 Elected Toronto, Madison and Stanford Who's Who;
- 2008-... Member of the Editorial Board of the International Journal of Circuit Theory and Applications;
- 2008-... Member of the NSERC scholarship committee;
- 2008 Member of the Quebec technology mission to Taiwan;
- 2007 Member of FRSQ-FQRNT new joint support for R&D medical technology committee;
- 2007-... Member of the Steering Committee of the IEEE Trans. on Biomedical Circuits and Systems Journal;
- 2007-14 Associate Editor of the IEEE Transactions on Biomedical Circuits and Systems Journal;
- 2007 Member of Canada Bio & nanotechnology mission to India;
- 2007-... Member of the International Advisory Board of the Emirates Journal of Engineering Research (EJER);
- 2007-... General Chair of the Int. Biomedical Circuits and Systems (BiOCAS2007);
- 2007-... General Chair of the Int. Midwest Symposium on Circuits and Systems (MWSCAS2007);
- 2007 Member of the scientific committee of Marseille IMNP institute;
- 2006-... Member of Prompt Scientific Coordination Committee;
- 2006 Technical program co-Chair of the Int. Midwest Symposium on CAS (MWSCAS2006);
- 2006-... General Chair of the IEEE International NEWCAS conference
- 2006 General Co-Chair of the IEEE Int. Conf. On Electronics, Circuits and Systems (ICECS2006);
- 2006 Co-Chair of the IEEE Int. Computer Architecture for Machine Perception and Sensors (CAMPS2006);

- 2005 Member of the Quebec technology mission to China.
- 2005-07 Member of the International Biotechnology council, IEEE CAS representative;
- 2005 General Chair of the Int. Functional Electrical Stimulation Society Conference (IFESS2005);
- 2004-07 Member of the Evaluation Committee of the Institut National de Recherche Scientifique;
- 2004 Editor of the Springer Mixed-signal letters for the Americas;
- 2004-... Member of the Editorial Board of the Journal of Applied Sciences;
- 2004-... Guest Editor of the Kluwer Analog integrated Circuits and Signal Processing Journal;
- 2004-... Member of the Canadian Arthritis Network (Canadian Network of Centre of Excellence);
- 2003-... Member of the Board of Directors of Montreal rehabilitation interdisciplinary research ctr. (CRIR);
- 2003-... Member/Chair of IEEE Technical Program Committee (ISCAS, MWSCAS, ICM, ICSICT, etc);
- 2003-... Investigator of a \$21M Pan-Canadian grant application from CFI to acquire an EDA Laboratory;
- 2003-05 Vice-President of the BiOCAS technical committee of IEEE Circuits & Systems Society;
- 2002-... Founder & general chair of the IEEE International NEWCAS Conference;
- 2002-06 Member of the Board of Directors of the Int. Functional Electrical Stimulation Society (IFESS);
- 2001-... Member of the scientific coordination committee of Victhom Human Bionic;
- 2001-05 Member of the scientific coordination committee of Prompt-Quebec;
- 2001-... Guest Editor of the Kluwer/Springer Analog integrated Circuits and Signal Processing Journal;
- 2000-... Interviews with news media: newspapers, magazines, TV, and radio (prestigious TV reports);
- 2000 Recipient of a major CFI grant (\$8.2M) to establish an advanced microelectronics assembly facility;
- 1999-... Founder and Chair of the IEEE Solid-State Circuits Society (SSCS) Montreal Chapter;
- 1999-... Scientific Advisor to several Canadian companies (Victhom Human Bionic, Scanview, etc);
- 1988-90 Ph.D. scholarship (12k\$/year), FRSQ (Fonds de la Recherche en Santé du Québec).
- 1995-... Co-Founder of the IEEE Int. Conf. on Electronics, Circuits and Systems (ICECS);
- 1994-... Founder and director of the Polystim Neurotechnologies Laboratory;
- 1991-... General Chair / Co-Chair of IEEE Int. Conferences (ICECS, ICM, NewCAS, etc.).

## VI. SUMMARY OF RESEARCH CONTRIBUTIONS

*Citations: 20350, H-Index: 68*

<b>Publications (Summary)</b>	<b>Last 6 years</b>	<b>Total</b>
Refereed <b>Journal publications</b> (published/accepted) .....	171	<b>417</b>
Refereed <b>conference papers</b> .....	120	<b>639</b>
Invited talks / <b>Keynote</b> speeches .....	133	<b>410</b>
<b>Patents</b> (Awarded and Pending) .....	51	<b>78</b>
<b>Books</b> and book chapters .....	13	<b>27</b>
Refereed abstracts and posters .....	23	<b>124</b>
Technical reports count and list are not included in this CV	125	<b>315</b>
<b>Total (Publications)</b>	<b>511</b>	<b>1695</b>

<b>Students and Other Personal Supervision (Appendix D)</b>	<b>Supervised</b>	<b>Completed</b>
Ph.D.	15	<b>73</b>
M.A.Sc.+M.Eng.	0	<b>132</b>
Postdoctoral Fellows, Research assistants and associates, Hosted faculties	19	<b>109</b>
Hosted Invited Faculties	0	<b>11</b>
Undergraduate training R&D projects	0	<b>366</b>
<b>Total (Students and Other Personal)</b>	<b>39</b>	<b>706</b>

<b>Note 1: Samples of recently published papers (see next 2 pages please)</b>
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## LIST OF RECENT PUBLICATIONS (December 2025)

(Refereed Journal Publications: Published and Accepted)

- [417] WANG F., CAO F., YANG J., ANNA, JIANG M., ZHENG S., WANG Y., XIANG M., CHAI C., CHEN Y., **SAWAN M.**, DISHA B., “Enhancing Individual Calibration Classification in SSVER Based BCI with Exactly Periodic Component Analysis”, Accepted to *the IEEE Transactions on Industrial Informatics*, **2025**.
- [416] WU H., TAN Z., LIU X., CHEN J., ZOU W., HOU Q., LIN S., MAO Y., YANG J., **SAWAN M.**, “Self-Adaptive Pseudo-Resistors Enabling Millisecond-Level Artifact Recovery and High-Linearity for Neural Recording Front-Ends”, *IEEE Transactions on Biomedical Circuits and Systems*, Online, **2025**.
- [415] ESKANDARI R., NAWITO M., KATEBI M., KRAUSHAAR U., RICHER H., ANDERS J., BUGHARTZ J., MIRBOZIRGI A., **SAWAN M.**, “Towards Closed-Loop Neuromodulation for Type 2 Diabetes with ex vivo Validation of Beta-Cell Activity and FOPP Detection”, *IEEE Transactions on Biomedical Circuits and Systems*, Online, **2025**.
- [414] FANG C., SHEN Z., LI T., ZHAO S., TIAN F., YANG J., **SAWAN M.**, “A 28nm Spiking Vision Transformer Accelerator with Dual-Path Sparse Compute Core and EMA-free Self-Attention Engine for Embodied Intelligence”, *IEEE Transactions on Circuits and Systems for Artificial Intelligence (TCASAI)*, Online, **2025**.
- [413] WU D., LI S., YANG J., **SAWAN M.**, “Neuro-BERT: Rethinking Masked Autoencoding for Self-Supervised Neurological Pretraining”, *IEEE Journal of Biomedical and Health Informatics*, Online, **2025**.
- [412] MACHADO M.B., LIU X., **SAWAN M.**, “Ultra-Low-Voltage Rectifiers”, *IEEE Access*, Vol. 13, **2025**, pp. 205366 - 205380.
- [411] TARKHAN M., WU H., ULLAH F., **SAWAN M.**, “A Flexible High-accuracy Memristor Model Using Varactors”, *IEEE Access*, Vol. 13, **2025**, pp. 217423 - 217436.
- [410] ZENG Z., CHEN Y.H., GAO X., ZHENG W., WU H., ZHU Z., YANG J., WANG C., ZHONG L., CHENG W., **SAWAN M.**, “Repetitive TMS-based Identification of Methamphetamine-Dependent Individuals Using EEG Spectra”, *IEEE Sensors Journal*, Vol. 25, No. 21, **2025**, pp. 40284-40296.
- [409] ZHAO S., WANG S., WANG Z., FANG C., TIAN F., CHEN J., FU C., YANG J., **SAWAN M.**, “BoostViT: Booth-Serial Skipping and Tunable Scaling for Vision Transformers”, *IEEE Transactions on Circuits and Systems - I*, Vol. 72, No. 11, **2025**, pp. 6541-6552.
- [408] LIU X., CHEN J., WU H., ZOU W., YANG J., **SAWAN M.**, “An On-Chip Reconfigurable Front-end for Ultra-Low-Power RF Energy Harvesting”, *IEEE Transactions on Circuits and Systems - II*, Vol. 72, No. 11, **2025**, pp. 1495-1499.
- [407] LI H., LI D., CHEN S., HOSSAIN N.M.L., XU X., FENG Y., LU H., TROCAN M., GALAYKO D., AMARA A., **SAWAN M.**, “CCSMRI: Circular Compressed Sensing MRI”, *Elsevier Biomedical Signal Processing and Control*, Vol. 111, **2025**, pp. 108355.
- [406] WANG J., LIAO Y., YANG J., **SAWAN M.**, “AI-driven and IC-enabled advanced closed-loop neuromodulation for practical clinical applications”, *ELSP, Neuroelectronics*, Vol. 2, No. 2, **2025**, pp. 1-34.
- [405] ZHANG H., HUANG N., BIAN S., **SAWAN M.**, “Brain organoids-on-chip for neural diseases modeling: History, challenges and trends”, *Journal of Pharmaceutical Analysis*, Vol. 15, No. 10, **2025**, pp. 101323.
- [404] ZHAO S., LI S., WU D., TIAN F., YANG J., **SAWAN M.**, “A Resource-Efficient Algorithm-Hardware Co-Design Towards Semi-Supervised Neurological Symptoms Prediction”, *IEEE Transactions on Instrumentation and Measurement*, Vol. 74, **2025**, pp. 1-12.
- [403] ZHANG H., ZHAO L., HUANG N., ZHANG X., XU T., BIAN S., **SAWAN M.**, “Magnetic nanoparticles for single-neuron manipulation to design a customized neural circuit”, *Bio-Design and Manufacturing*, Vol. 8, No. 4, **2025**, pp. 511-523.
- [402] ULLAH F., FREDJ Z., **SAWAN M.**, “Perovskite Quantum Dot-Based Memory Technologies: Insights from Emerging Trends”, *Physical Chemistry at Nanoscale, Nanomaterials Journal*, Vol. 15, No. 11, **2025**, pp. 873.
- [401] ESKANDARI, R., **SAWAN M.**, “78.8 pJ/b, 100 Mb/s Noncoherent IR-UWB Receiver for Multichannel Neurorecording Implants”, *IEEE Transactions on Biomedical Circuits and Systems*, Vol. 19, No. 3, **2025**, pp. 645-656.

- [400] FREDJ Z., MARVI F., ULLAH F., **SAWAN M.**, “A Wearable electrochemical aptasensor based MOF on MOF heterostructure for multi-neurotransmitters monitoring”, *Microchimica Acta*, Vol. 192, No. 6, **2025**, pp. 1-13.
- [399] DARVISHI H., MOHAMMADI A., MAGHAMI MH., SADEGHI M., **SAWAN M.**, “EEG-Driven Arm Movement Decoding: Combining Connectivity and Amplitude Features for Enhanced Brain-Computer Interface Performance”, *MDPI Bioengineering*, Vol. 12, No. 6, **2025**, pp. 614.
- [398] SHAO X., YANG J., **SAWAN M.**, CUI W., “Bridging Biology and Robotics: Advancing Submersible Technology from Robotic to Live-fish Models”, *Academia Engineering Journal*, Vol. 2, No. 2, **2025**.
- [397] REHMAN UR., LU S., BINHEYAT MB., IQBAL MS., PARVEEN S., BINHEYAT Ma., AKHTAR F., ASHRAF MA., KHAN O., POMARY D., **SAWAN M.**, “Internet of Things in Healthcare Research: Trends, Innovations, Security Considerations, Challenges, and Future Strategy”, *Wiley International Journal of Intelligent Systems*, Vol. 2025, No. 1, **2025**, pp. 8546245.
- [396] KATEBI M., ERFANIAN A., KARAMI M.A., **SAWAN M.**, “11.2V Supply, 0.21% Biphasic Stimuli Charge Balanced Neurostimulator with Switching Spike Suppression: An Application to Intraspinal Microstimulation for Restoring Motor function”, *IEEE Access*, Vol. 13, **2025**, pp. 82097-82110
- [395] BINHEYAT MB., ADHIKARI D., AKHTAR F., PARVEEN S., ZEESHAN HM., ULLAH H., CHEN YH., WANG L., **SAWAN M.**, “Intelligent Internet of Medical Things for Depression: Current Advancements, Challenges, and Trends”, *Wiley International Journal of Intelligent Systems*, Vol. 2025, No. 1, **2025**, pp. 6801530.
- [394] FENG, C., CAO L., WU D., ZHANG E., WANG T., JIANG X., CHEN J., WU H., LIN S., Hou Q., ZHU J., YANG J., **SAWAN M.**, ZHANG Y., “Acoustic Inspired Brain-to-Sentence Decoder for Logo Syllabic Language”, *Cyborg and Bionic Systems Journal*, Vol. 6, **2025**, pp. 257.
- [393] GAO X., CHEN Y.-H., ZENG Z., ZHENG W., CHAI C., WU H., ZHU Z., YANG J., ZHONG L., SHEN H., **SAWAN M.**, “Specific Endophenotypes in EEG Microstates for Methamphetamine Use Disorder”, *Frontiers in Psychiatry*, Vol. 15, **2025**, pp. 1513793.
- [392] MOOSAEI A., MAGHAMI M.H., NEJATI A., AMIRI P., **SAWAN M.**, “A Low-Power, Low-Noise Recycling Folded-Cascode Operational Transconductance Amplifier for Neural Recording Applications”, *MDPI Electronics*, Vol. 14, No. 8, **2025**, pp. 1543.
- [391] SHANG S., XU Y., JIN M., JIANG H., WANG X., WANG X., CHENG Y., WANG M., ZHANG S., JI B., YANG J., WANG G., **SAWAN M.**, “Biocompatible dipeptide coated on Pt/PEDOT: PSS modified silicon probes for tissues rejection alleviation”, *Sensors and Actuators B: Chemical*, Vol. 424, **2025**, pp. 136891.
- [390] FREDJ Z., RONG G., **SAWAN M.**, “Recent Advances In Enzymatic Biofuel Cells To Power Up Wearable And Implantable Biosensors”, *MDPI Biosensors*, Vol. 15, No. 4, **2025**, pp. 218.
- [389] ZHANG H., HUANG N., BIAN S., **SAWAN M.**, “Platinum Wire-embedded Culturing Device for Interior Recording from Lollipop-shaped Neural Spheroids”, *Cyborg and Bionic Systems Journal*, Vol. 6, **2025**, pp. 0220.
- [388] WAHEED Z., GUI J., BINHEYAT MB., PARVEEN S., BINHEYAT MA, IQBAL MS., AYA Z., NAWABI AK., **SAWAN M.**, “A Novel Lightweight Deep Learning Based Approaches for the Automatic Diagnosis of Gastrointestinal Disease using Image Processing and Knowledge Distillation Techniques”, *Elsevier Computer Methods and Programs in Biomedicine*, Vol. 260, **2025**, pp. 108579.
- [387] TIAN F., CHEN J., ZHENG J., WU H., HE J., WANG X., FANG C., YAO Y., YANG J., **SAWAN M.**, TSUI CY., CHENG KT., “BioPI: An Energy Efficient and Low-Latency Neuromorphic Pipelined System with Joint Design Optimizations of Sensor-Algorithm-Processor for Wearable Healthcare”, *IEEE Transactions on Circuits and Systems for Artificial Intelligence (TCASAI)*, Vol. 2, No. 1, **2025**, pp. 64-78.
- [386] HAYATI H., GHANEEI-AARANI S., KARIMI M., ESKANDARI R., **SAWAN M.**, GAGNON-TURCOTTE G., GOSSELIN B., “A 400-Mbps 1.05 pJ/bit IR-UWB Transmitter for High-Density Neural Recording Systems”, *IEEE Transactions on Circuits and Systems II: Express Briefs*, Vol. 72, No. 3, **2025**, pp. 484-488.
- [385] CHAI C., YANG X., ZHENG Y., BIN HEYAT MB., LI Y., YANG D., CHEN Y., **SAWAN M.**, “Multimodal Fusion of Magnetoencephalography and Photoacoustic Imaging Based on Optical Pump: Trends for Wearable and Noninvasive Brain-Computer”, *Biosensors and Bioelectronics*, Vol. 278, **2025**, pp. 117321.