



2026
JULY

SAPIENTIA

A Monthly Bulletin of Intellectual
Contribution of DTU

Presented by
DTU Central Library



<https://library.dtu.ac.in>



library@dtu.ac.in

DELHI TECHNOLOGICAL UNIVERSITY**SAPIENTIA DTU****JULY 2026****(A MONTHLY BULLETIN OF INTELLECTUAL
CONTRIBUTIONS OF DTU)****PREFACE**

SAPIENTIA DTU – JULY 2026 is a monthly bulletin that showcases the intellectual contributions and research achievements of the faculty members, researchers, and scholars of Delhi Technological University (DTU). This edition presents a curated collection of recently published research papers from diverse disciplines, highlighting the University's commitment to academic excellence, innovation, and impactful research.

The bulletin has been designed to provide readers with a concise overview of scholarly publications through thematic categorization and subject-wise presentation. By making research outputs more accessible, SAPIENTIA DTU aims to encourage interdisciplinary collaboration, promote knowledge dissemination, and strengthen the culture of research and innovation within the university community.

Readers who wish to explore previous editions of SAPIENTIA and access the complete repository JULY visit:

<http://14.139.251.106:8080/jspui/handle/repository/21425>

Click the link above or copy it to your browser to access the full SAPIENTIA collection

We hope this publication serves as a valuable resource for students, faculty members, researchers, and all those interested in the academic contributions of Delhi Technological University.

**Central Library
Delhi Technological University
JULY 2026**



(A MONTHLY BULLETIN OF INTELLECTUAL CONTRIBUTIONS OF DTU)

1. **A Comparative Study of Modern Object Detectors for Robust Apple Detection in Orchard Imagery**
[View Paper](#)
Asad, M.,
Gautam, A.K.,
Dhiman, P.,
Prajapati, R.R.
Proceedings of 7th International Conference on Intelligent Communication Technologies and Virtual Mobile Networks Iiciv 2026, pp. 1846-1853
2. **A Comprehensive Review on Nanoadditives in Diesel-Biodiesel Blends: Implications for Combustion and Emission Performance**
[View Paper](#)
Sharma, R.,
Ansari, N.A.,
Pal, A.
Lecture Notes in Electrical Engineering, 1452, pp. 497-524.
3. **A Contextual and Sequential Model for Biomedical Named Entity Recognition**
[View Paper](#)
Pandey, C.,
Katarya, R.
Lecture Notes in Computer Science, 16436 LNCS, pp. 426-438.
4. **A four MOSFETs based grounded memristor emulator**
[View Paper](#)
Kumar, N.,
Pandey, N.,
Kumar, M.,
Kumar, M.
Analog Integrated Circuits and Signal Processing, 127(3), art. no. 27.
5. **A GAN-Augmented and STO-Optimized CNN-LSTM Approach for IoT Intrusion Detection**
[View Paper](#)
Gupta, U.,
Ranga, V.
Lecture Notes in Computer Science, 16437 LNCS, pp. 257-265.
6. **A Hardware-Rooted Blockchain Security Framework for IoT With PUF-Based Authentication**
[View Paper](#)
Narayanapuram, B.,
Panda, J.
IEEE Access.

DELHI TECHNOLOGICAL UNIVERSITY



SAPIENTIA DTU

JULY 2026

(A MONTHLY BULLETIN OF INTELLECTUAL CONTRIBUTIONS OF DTU)

-
- | | | | |
|----|---|--|--|
| 7. | <u>A High-Gain Graphene Field Effect Transistor Cascode Low-Noise Amplifier for ISM Band Wireless Communication</u> | Kumawat, A.L.,
Pandey, A.,
Raghava, N.S. | Iranian Journal of Science and Technology
Transactions of Electrical Engineering. |
|----|---|--|--|
- [View Paper](#)
-
- | | | | |
|----|--|---|---|
| 8. | <u>Advanced Hybrid Fuzzy Approach to Automatic Generation Control (AGC) with Different Sources of Generation</u> | Verma, G.,
Bhushan, B.,
Nagarajan, S.T. | International Conference on Electrical and Electronics for Sustainable Innovations Iceesi 2026. |
|----|--|---|---|
- [View Paper](#)
-
- | | | | |
|----|--|------------------------------------|--|
| 9. | <u>Advancements in Brain-Robot Interfaces: Integrating Brainwave Signal Processing, AI Algorithms, and Robotic Control for Enhanced Human-System Interaction</u> | Choudhary, R., Rai, J.N., Arya, Y. | Lecture Notes in Networks and Systems, 1914 LNNS, pp. 160-173. |
|----|--|------------------------------------|--|
- [View Paper](#)
-
- | | | | |
|-----|---|--|-------------------------------------|
| 10. | <u>Advancing palladium PEDOT molecularly imprinted nanoelectrochemical sensing interface for selective dual detection of Helicobacter pylori BabA antigen and antibody</u>
Open Access | Chauhan, N.,
Saxena, K.,
Gaba, S., (...),
Malhotra, B.D.,
Jain, U. | Discover Nano, 21(1), art. no. 312. |
|-----|---|--|-------------------------------------|
- [View Paper](#)
-
- | | | | |
|-----|---|---|---|
| 11. | <u>Agro-aerogels: a sustainable paradigm for the adsorption and degradation of hydrophobic contaminants from wastewater</u> | Yadav, K.,
Santhiya, D.,
Sharma, J.G. | Separation and Purification Technology, 405, art. no. 138966. |
|-----|---|---|---|
- [View Paper](#)



- | | | | |
|-------|---|--|--|
| 12. | <u>Air quality management during the G20 summit: strategies for urban pollution reduction</u>
Open Access

View Paper | Rajagopal, K.,
Gupta, A.,
Gupta, A., (...),
Sharma, M.,
Mishra, R.K | Environmental
Monitoring and
Assessment, 198(7),
art. no. 795. |
| <hr/> | | | |
| 13. | <u>An Ensemble based Bert-BiLSTM Framework for Deception Detection: Review and Experimental Study</u>

View Paper | Singh, A.,
Sharma, A.A.,
Shikha | Proceedings of the 4th
International
Conference on
Inventive Computing
and Informatics Iccici
2026, pp. 703-709. |
| <hr/> | | | |
| 14. | <u>Analysis of Different Cyberattacks on PMSG-Based Wind Turbine Control Systems</u>

View Paper | Rana, N.,
Singh, A.,
Shatakshi | Proceedings of 2026 1st
International Conference
on Intelligent Computing
and Automation for
Sustainable Solutions
Iccass 2026. |
| <hr/> | | | |
| 15. | <u>Analysis of Semi-Exponential Bernstein Operators With Improved Order of Approximation</u>

View Paper | Kanita, Deo, N. | Mathematical
Methods in the
Applied Sciences |
| <hr/> | | | |
| 16. | <u>Application of Proteogenomic Approaches for Refinement of the Entamoeba histolytica Reference Genome Using High Resolution Mass-Spectrometry Data</u>

View Paper | Malshetty, M.B.,
Chowdhury, S.,
Pawar, S., (...),
Kumar, P., Pawar,
H. | Acta
Parasitologica,
71(4), art. no.
166. |



(A MONTHLY BULLETIN OF INTELLECTUAL CONTRIBUTIONS OF DTU)

- | | | | |
|----------------------------|---|---|---|
| 17. | <u>Artificial Intelligence in Orthopedics: Essential Knowledge, Applications, and Responsible Integration for Residents and Surgeons</u>
Open Access | Regmi, A.,
Jain, V.,
Plate, J.F.,
(...), Baral, S.,
Jain, V.K. | Indian Journal of
Orthopaedics. |
| View Paper | | | |
| 18. | <u>Artificial neural networks and multivariate approaches to identifying donor parents for yield and downy mildew tolerance in cucumber (Cucumis sativus L.)</u> | Das, S.,
Mohanta, R.,
Roy, S., (...),
Chattopadhyay, A.,
Pandit, M.K. | International
Journal of Vegetable
Science. |
| View Paper | | | |
| 19. | <u>Assessment of wet spell over Northwest India during the first week of March 2024</u>
Open Access | Kant, S.,
Mishra, K.,
Kumar, N.,
Jenamani, R.K.,
Kumar, V. | Mausam, 77(3),
pp. 745-762. |
| View Paper | | | |
| 20. | <u>Beyond the surface: Adversarial stress testing of multimodal fake news detection models with LLM-driven perturbations</u> | Jolly, A.,
Kumar, S. | Computers and
Electrical Engineering,
135, art. no. 111203 |
| View Paper | | | |
| 21. | <u>Bias-Corrected Picture Fuzzy C-Means with Spatial Regularization for Robust Brain MRI Segmentation</u> | Lohit, H.,
Kumar, D. | Lecture Notes in
Computer Science,
16436 LNCS, pp.
381-392 |
| View Paper | | | |



(A MONTHLY BULLETIN OF INTELLECTUAL CONTRIBUTIONS OF DTU)

-
- | | | | |
|-----|--|-------------------------|---------------------------------------|
| 22. | <u>Bi-extending coupled-inductor based high gain converter for integrated PV applications</u>
Open Access
View Paper | Arora, V.,
Verma, V. | IEICE Electronics
Express, 23(12). |
|-----|--|-------------------------|---------------------------------------|
-
- | | | | |
|-----|--|---------------------------|--|
| 23. | <u>CGD-FloodNet: A Robust Hybrid Model for Flood Probability Estimation Using Environmental Parameters</u>
View Paper | Dubey, V.,
Katarya, R. | Water Resources
Management,
40(9), art. no. 454. |
|-----|--|---------------------------|--|
-
- | | | | |
|-----|---|---|--|
| 24. | <u>Chemical Bonding in Covellite and Digenite: Studies By Raman Spectroscopy and XPS</u>
Open Access
View Paper | Rao, P.,
Kumar, S.,
Vinayak, S.,
Sharma, S.C | Defence Science
Journal, 76(4), pp.
589-595. |
|-----|---|---|--|
-
- | | | | |
|-----|---|--|--|
| 25. | <u>Comparative assessment of knowledge-based and machine learning models using Brihat Samhita insights for monsoon rainfall forecasting</u>
View Paper | Yadav, J.,
Tiwari, K.C.,
Mitra, A.K. | Journal of Earth
System Science,
135(3), art. no. 155. |
|-----|---|--|--|
-
- | | | | |
|-----|---|---------------------------|---|
| 26. | <u>Condition for the generation of the secret key in a BB84 like quantum key distribution protocol</u>
Open Access
View Paper | Jain, R.,
Adhikari, S. | European Physical
Journal D, 80(7),
art. no. 104. |
|-----|---|---------------------------|---|
-



- | | | | |
|----------------------------|---|---|---|
| 27. | <u>Corrigendum to “An adaptive PV reconfiguration for sustained energy harvesting in building mounted PV systems”(Solar Energy, (2026), 314, C, (114682), (S0038092X26003701), 10.1016/j.solener.2026.114682)</u> | Baranwal, K.,
Kumar, A.,
Nahata, A.,
(...), Ranjan, A.,
Yadav, V.K. | Solar Energy, 316, art.
no. 114853. |
| View Paper | | | |
| 28. | <u>Crowdsourcing and Value Co-creation in Human Resource Management</u> | Chauhan, R.,
Mishra, D.,
Maheshwari, N. | Crowdsourcing and
Value Co Creation in
Human Resource
Management, pp. 1-
298. |
| View Paper | | | |
| 29. | <u>DB-FFN: A Hybrid Convolution and Self-Attention Architecture for Pedestrian Intention Detection</u> | Sharma, S.,
Yadav, A. | International
Conference on
Connected
Intelligence for
Industrial Applications
Ci2a 2026 |
| View Paper | | | |
| 30. | <u>Deep Hybrid Architecture for Cybersecurity Threat Detection in IIOT Networks: CNN-BiGRU Approach</u> | Jindal, R.,
Daneesha, V. | Proceedings of 2026 1st
International Conference
on Intelligent Computing
and Automation for
Sustainable Solutions
Icass 2026. |
| View Paper | | | |
| 31. | <u>Design and computational analysis of black phosphorus-based D-shaped PCF-SPR refractive index sensor</u> | Yadav, N.,
Khamaru, A.,
Garg, D.,
Kumar, A. | Journal of
Computational
Electronics, 25(4),
art. no. 141. |
| View Paper | | | |



32. Design and development of a high performance PVDF based flexible composite piezoelectric energy harvesting device for wearable electronics
- Sharma, G.,
Kumar, A.,
Sangwan, S.,
Sharma, R.,
Meena, D.
- Surfaces and
Interfaces, 95, art.
no. 109748.

[View Paper](#)

33. Development and characterization of sugarcane dried leaves based bioplastic biofilm
- Patel, P.,
Shubhika, S.,
Sharma, J.G.
- Sustainable
Chemistry One
World, 11, art. no.
100255.

[View Paper](#)

34. Discrete-time quantum walks on musically structured graphs
- Nair, A.
- European Physical
Journal Special
Topics

[View Paper](#)

35. Does intimate partner violence experienced by mothers impact child health in South Asian countries? Evidence from mixed-effects logistic regression analysis
- Tayal, C.,
Sharma, R.,
Lata, K.
- Journal of
Gender Studies.

[View Paper](#)

36. Dual-layer secure block mapping: a hybrid approach to image tamper detection and high-fidelity recovery
- Tiwari, A.,
Kanojia, A.,
Gadi, A.,
Tanwar, L.
- Signal Image and
Video Processing,
20(9), art. no. 487.

[View Paper](#)



(A MONTHLY BULLETIN OF INTELLECTUAL
CONTRIBUTIONS OF DTU)

- | | | | |
|-----|--|--|--|
| 37. | <u>Effect of Ferrite Content, Cr/Ni
Equivalence Ratio on Residual Stress
and Microhardness of SS316L WAAM</u> | Jain, S.K.,
Chauhan,
N.R.,
Pradhan,
S.K. | Journal of Engineering
Materials and
Technology, 148(4), art.
no. 041010. |
| | View Paper | | |
| 38. | <u>E-GraphSAGE with
Explainability: Edge-Centric
Graph Neural Networks for IoT
Intrusion Detection across
Heterogeneous Datasets</u> | Nivash, A.V.,
Pahal, A.,
Singh, A.P. | 7th International
Conference on Inventive
Research in Computing
Applications Icirca 2026
Proceedings, pp. 2039-
2043. |
| | View Paper | | |
| 39. | <u>EMI-based monitoring of chloride-
induced deterioration in reinforced
concrete systems with HYSD 500,
epoxy-coated, and GFRP
reinforcements</u> | Morwal, T.,
Pal, S., Dev,
N. | Construction and Building
Materials, 539, art. no.
147414. |
| | View Paper | | |
| 40. | <u>Emotionally Adaptive
Conversational AI for
Personalized Learning</u> | Alduweib, E.,
Hezzam, E.,
Noman, M. | 2026 2nd International
Conference on
Computational
Intelligence Approaches
and Applications Icciaa
2026 Proceedings. |
| | View Paper | | |
| 41. | <u>Enhancement of Landfill
Leachate Attenuation in Sandy
Soil Using Compost Amendment:
A Soil Column Study</u> | Jyotirmay, Yadav,
A., Meena, J.,
Bharadwaj, S.,
Gupta, A.K. | Clean Soil Air
Water, 54(6),
art. no. e70233. |
| | View Paper | | |



42. **Environmental Burden of Diesel Engines: A Life-Cycle Assessment and the Imperative for Cleaner Alternatives**
Open Access
- Kumar, S.,
Ahmed, S.F.,
Pal, A., (...),
Do, H.D.,
Cao, D.N.
- Global Challenges,
10(7), art. no. e70130.

[View Paper](#)

43. **Environmental taxes and environmental policy stringency promote renewable energy consumption in India**
Open Access
- Bahl, P.,
Kumar, V.,
Tuteja, D.
- Discover
Sustainability,
7(1), art. no.
1006.

[View Paper](#)

44. **Explainable GCN-based ADHD Detection from Questionnaire Data via Patient Similarity Graphs**
- Agrawal, V.,
Dalal, A.,
Jain, M
- 7th International
Conference on
Inventive Research in
Computing Applications
Icirca 2026 Proceedings,
pp. 1551-1558

[View Paper](#)

45. **Explainable infant cry recognition using reinforcement-learned feature fusion and SHAP interpretation**
Open Access
- Singh, K.,
Jain, D.M.
- Signal Image and
Video Processing,
20(9), art. no. 478.

[View Paper](#)

46. **Exploring mem-element emulators: A review**
Open Access
- Gupta, R.K.,
Saxena, V.,
Choudhry, M.S.
- Memories Materials
Devices Circuits and
Systems, 14, art. no.
100146

[View Paper](#)



-
- | | | | |
|-----|---|---------------------------------------|--------------------------------|
| 47. | <u>Exploring thiazole conjugates as cholinesterase inhibitors for Alzheimer's disease treatment</u> | Dabas, A.,
Yadav, P.,
Singh, R. | Future Medicinal
Chemistry. |
| | View Paper | | |
-
- | | | | |
|-----|--|---|--|
| 48. | <u>GBFF: A Graph-Based Feature Fusion Framework for Malware Detection in Encrypted Network Flows</u> | Pathak, I.,
Indu, S.,
Walia, G.S. | Concurrency and
Computation Practice
and Experience, 38(14),
art. no. e70853. |
| | View Paper | | |
-
- | | | | |
|-----|---|--|--|
| 49. | <u>Generative AI for video-driven image animation: A survey</u> | Rai, G.,
Salhotra,
A., Sharma,
O. | Computers and
Graphics, 139, art.
no. 104680 |
| | View Paper | | |
-
- | | | | |
|-----|---|--|---|
| 50. | <u>High Bandwidth Frequency Compensated Three Stage Amplifier using Self Cascode and Flipped Voltage Follower</u> | Gupta, O.K.,
Pandey, N.,
Gupta, M. | Proceedings of 9th
International Conference
on Trends in Electronics
and Informatics Icoei
2026, pp. 229-233. |
| | View Paper | | |
-
- | | | | |
|-----|--|--|---|
| 51. | <u>High-performance temporal hypergraph neural network with multi-head attention for link prediction in dynamic networks</u> | Indu, K.,
Sisaudia, V.,
Sharma, K. | Expert Systems with
Applications, 332, art.
no. 133682. |
| | View Paper | | |



-
- | | | | |
|-----|--|--|--|
| 52. | <u>Hybrid Essay Assessment Framework: Integrating Neural Content Analysis with Reference-Based Similarity Evaluation</u>

View Paper | Alduweib, E.,
Hezzam, E.,
Noman, M.,
Alhammouri, A.K. | 2026 2nd International Conference on Computational Intelligence Approaches and Applications Icciaa 2026 Proceedings. |
|-----|--|--|--|
-
- | | | | |
|-----|---|---------------------------------|--|
| 53. | <u>Hybrid Quantum-Classical k-NN Model for Improved Accuracy</u>
Open Access

View Paper | Verma, P.,
Vishwakarma, D.K. | Defence Science Journal, 76(3), pp. 379-389. |
|-----|---|---------------------------------|--|
-
- | | | | |
|-----|--|--|---|
| 54. | <u>Hydrological modulation of heavy metal co-transport and natural attenuation in an industrial urban river(Mukuvisi)</u>
Open Access

View Paper | Barnete, L.,
Moyo, L.,
Verma, N.,
Singh, G.,
Mutadza, I. | Sustainable Environment, 12(1), art. no. 2694807. |
|-----|--|--|---|
-
- | | | | |
|-----|--|---|--|
| 55. | <u>Impact of HR Analytics on Organizational Performance in IT Industry: Mediating Role of Job Engagement</u>

View Paper | Trehan, K.,
Khera, S.N.,
Malhotra, D. | International Journal of Special Education, 41(8S), pp. 1078-1101. |
|-----|--|---|--|
-
- | | | | |
|-----|--|--|---|
| 56. | <u>Implementing Risk-Proportionate AI Governance in Banking: A Longitudinal Case Study of ISO 42001 and RBI FREE-AI Integration for Credit Risk Management</u>

View Paper | Tewari, A.,
Singh, K.,
Kumar, C.I. | Communications in Computer and Information Science, 2922 CCIS, pp. 419-436. |
|-----|--|--|---|



(A MONTHLY BULLETIN OF INTELLECTUAL
CONTRIBUTIONS OF DTU)

- | | | | |
|----------------------------|--|--|---|
| 57. | <u>Improved dung beetle optimized MPPT with novel FOTPIDn(1 + PD) control in grid connected PV for optimal power sharing</u>
Open Access | Dhir, R.,
Garg, R.,
Nangia, U. | Scientific Reports,
16(1), art. no.
19144. |
| View Paper | | | |
| 58. | <u>Influence of synoptic-scale systems on heavy rainfall during the 2025 Southwest monsoon advance over Eastern India</u> | Sharma, R.,
Kant, S.,
Kumar, V. | Journal of Earth System
Science, 135(3), art. no.
172. |
| View Paper | | | |
| 59. | <u>Innovative EAF slag-based eco-friendly mortars for fire-resistant infrastructure</u> | Mishra, A.,
Upadhyay, P.,
Diksha, Tyagi, G.,
Lahoti, M. | Clean Technologies and
Environmental Policy,
28(8), art. no. 201. |
| View Paper | | | |
| 60. | <u>Integrated heterotrophic bioleaching of E-waste: Omics-driven strain engineering, synthetic consortia, and biorefinery strategies for critical metal recovery</u> | Agarwal, M.,
Mehta, V.,
Yadav, A. | Cluster Computing, 29(5),
art. no. 287. |
| View Paper | | | |
| 61. | <u>Integrated machine-learning prediction of speed profiles and friction demand for enhanced curve safety advisory systems</u> | Kumar, R.S.,
Noori, H. | Innovative Infrastructure
Solutions, 11(7), art. no.
381. |
| View Paper | | | |



- | | | | |
|-----|--|--|---|
| 62. | <u>Inverted Plasmonic Hexa-Star Nanoantenna as SERS Substrate with High EM Enhancement</u> | Pandey, D.,
Sharma, Y. | 2026 International Conference on Recent Advancement in Electrical Computer and Communication Technologies Iecct 2026. |
| | View Paper | | |
| 63. | <u>Kernalized Elastic Fuzzy C Means with Spatial Neighborhood Information for Brain MRI Segmentation</u> | Tasawwur, A.,
Kumar, D. | Lecture Notes in Computer Science, 16436 LNCS, pp. 278-290. |
| | View Paper | | |
| 64. | <u>Luminescent properties and UV-blocking film application of carbon dots based on wasted pill</u> | Hong, W.T.,
Mula, J.,
Yang, H.K. | New Physics Sae Multi, 76(5), pp. 350-358. |
| | View Paper | | |
| 65. | <u>Multi-Objective Optimization of Cast Iron workpiece Finishing using Thermal Additive Centrifugal Abrasive Flow Machining</u> | Bharadwaj, A.,
Ali, P.,
Mangal, D.,
Walia, R.S.,
Murtaza, Q. | Journal of the Brazilian Society of Mechanical Sciences and Engineering, 48(7), art. no. 515. |
| | View Paper | | |
| 66. | <u>Multi-objective optimization of micro-pillar configurations for enhanced thermo-hydraulic and exergetic performance in convergent-divergent microchannel heat sinks</u> | Kumar, R.,
Zunaid, M.,
Mishra, R.S. | Applied Thermal Engineering, 302, art. no. 131738. |
| | View Paper | | |



 (A MONTHLY BULLETIN OF INTELLECTUAL
CONTRIBUTIONS OF DTU)

- | | | | |
|-------|--|---|--|
| 67. | <u>Nanoarchitectonics for sustainable supercapacitor electrodes via the upcycling of waste cardboard into graphitic porous carbon</u> | Verma, R.,
Yadav, R.,
Pani, J., (...),
Kumari, K.,
Borkar, H. | Solid State
Sciences, 180,
art. no. 108415. |
| | View Paper | | |
| <hr/> | | | |
| 68. | <u>Novel Algorithm for the Discrete Hartley Transform and its Recursive Structure with VLSI Implementation</u> | Kaushal, D.,
Singh, V.,
Jain, P. | Circuits Systems
and Signal
Processing. |
| | View Paper | | |
| <hr/> | | | |
| 69. | <u>Novel newton spline filter-based control strategy for solar PV-Grid-connected electric vehicle charging infrastructure with shunt active power compensation</u> | Kumar, A.,
Arora, A.,
Singh, M. | Electrical Engineering,
108(7), art. no. 329. |
| | View Paper | | |
| <hr/> | | | |
| 70. | <u>Overcoming PLL Delay Constraints in Virtual Inertia Control: A Smith Predictor Approach</u> | Sharma, R.,
Singh, M. | International
Journal of Circuit
Theory and
Applications. |
| | View Paper | | |
| <hr/> | | | |
| 71. | <u>Patch-Based Interpretability in Pediatric Pneumonia: An Evaluation of Proto-BagNet</u> | Mehra, P.,
Tiwari, P.,
Pathak, P.,
Jindal, R. | Learning and
Analytics in
Intelligent Systems,
63, pp. 435-444. |
| | View Paper | | |



- | | | | |
|-------|--|--|--|
| 72. | <u>Performance Analysis of a
Gridintegrated Wind Energy
Conversion System</u>

View Paper | Batra, J.,
Rishav, H.,
Garg, K.,
Singh, A. | 2026 International
Conference on Electrical
and Electronics for
Sustainable Innovations
Iccesi 2026. |
| <hr/> | | | |
| 73. | <u>Performance Analysis of
Quantum Arithmetic Circuits
on IBM Eagle Processor</u>
Open Access

View Paper | Singh, S.,
Vishwakarma,
D.K. | Defence Science
Journal, 76(2), pp.
233-241. |
| <hr/> | | | |
| 74. | <u>Photonic Spin Hall Effect
based Bio-Sensor through
Layered Structure</u>

View Paper | Baitha, M.N.,
Talukdar, D.,
Shankar, S., (...),
Jewaria, M., Sinha,
R.K. | IEEE Photonics
Technology Letters. |
| <hr/> | | | |
| 75. | <u>Probabilistic computing
forecasting approach for EV
charging load forecasting using
meta-learning enhanced
informer</u>

View Paper | Singh, A.,
Nangia, U.,
Rizwan, M. | Applied Soft
Computing, 202, art.
no. 115869 |
| <hr/> | | | |
| 76. | <u>Promotional Coverage-Based
Modeling for YouTube Videos
Incorporating Broadcasting
Mechanism and Optimal Model
Selection</u>

View Paper | Babbar, G.,
Aggrawal, D.,
Anand, A. | Journal of Social
Computing, 7(2),
pp. 130-144. |



(A MONTHLY BULLETIN OF INTELLECTUAL
CONTRIBUTIONS OF DTU)

- | | | | |
|-------|--|---|--|
| 77. | <u>Quantum Circuit Implementation of Schrödingerized Dual-Symmetric Maxwell Equations</u>

View Paper | Kashyap, D.,
Gradoni, G | 2026 26th International Microwave and Radar Conference MIKON 2026, pp. 346-349. |
| <hr/> | | | |
| 78. | <u>Quantum Computing in Smart Grids: Protocols, Challenges, and Research Directions</u>

View Paper | Maurya, M.,
Trivedi, P.,
Rajvanshi, N.,
Mehra, P.S. | Lecture Notes in Networks and Systems, 1970 LNNS, pp. 344-353. |
| <hr/> | | | |
| 79. | <u>Retraction note: An enzymatic BioBattery based on multicopper oxidases with reduced substrate diffusion constraints for sustainable energy harvesting (Scientific Reports, (2026), 16, 1, (18183), 10.1038/s41598-026-45212-x)</u>
Open Access

View Paper | Saxena, V.,
Kumar, N.,
Nangia, U.,
(...), Gupta, A., Kar, M.K. | Scientific Reports, 16(1), art. no. 21188. |
| <hr/> | | | |
| 80. | <u>Robust Control of Uncertain PV System for Improved Performance by Smith Predictor and H∞ Loop Shaping Controller</u>

View Paper | Saxena, S.,
Tayal, V.K.,
Singh, H.P.,
Yadav, V.K. | Advanced Control for Applications Engineering and Industrial Systems, 8(2), art. no. e70057. |
| <hr/> | | | |
| 81. | <u>Role of Macrolevel Water Harvesting in Achieving Sustainable Development Goal (SDG 6): A Critical Review</u>

View Paper | Babu, V.,
Singh, G.,
Ahmed, S. | Water and Environment Journal. |

DELHI TECHNOLOGICAL UNIVERSITY



SAPIENTIA DTU

JULY 2026

(A MONTHLY BULLETIN OF INTELLECTUAL
CONTRIBUTIONS OF DTU)

- | | | | |
|-------|--|---|---|
| 82. | <u>SegVCR-LISA: Commonsense Reasoning in VLMs Through Segment-Specific Instruction Tuning</u>

View Paper | Mishra, P.,
Verma, B. | Communications in
Computer and
Information Science,
2921 CCIS, pp. 305-318. |
| <hr/> | | | |
| 83. | <u>Statistical and experimental analysis of concrete using calcined lime sludge and calcined clay as cementitious substitutes</u>
Open Access

View Paper | Chouksey, A.,
Dev, N.,
KantaRao,
V.V.L. | Aip Advances, 16(7),
art. no. 075017. |
| <hr/> | | | |
| 84. | <u>Strategic bidding optimization for solar PV producers: A data-driven approach</u>

View Paper | Kumar, N.,
Aggarwal, A.,
Mishra, S.K.,
Gupta, A. | Sadhana Academy
Proceedings in
Engineering
Sciences, 51(3), art.
no. 167. |
| <hr/> | | | |
| 85. | <u>Temperature-dependent upconversion luminescence and non-invasive optical thermometry in Er³⁺-activated BaBi₄Ti₄O₁₅ Aurivillius ceramics</u>

View Paper | Singh, S.P.,
Singh, V.,
Verma, M.,
(...), Rai, V.K.,
Bokolia, R | Ceramics International. |
| <hr/> | | | |
| 86. | <u>The Class of Two-CFOA-Based Canonic Floating Immittance Simulators: 14 New Configurations</u>

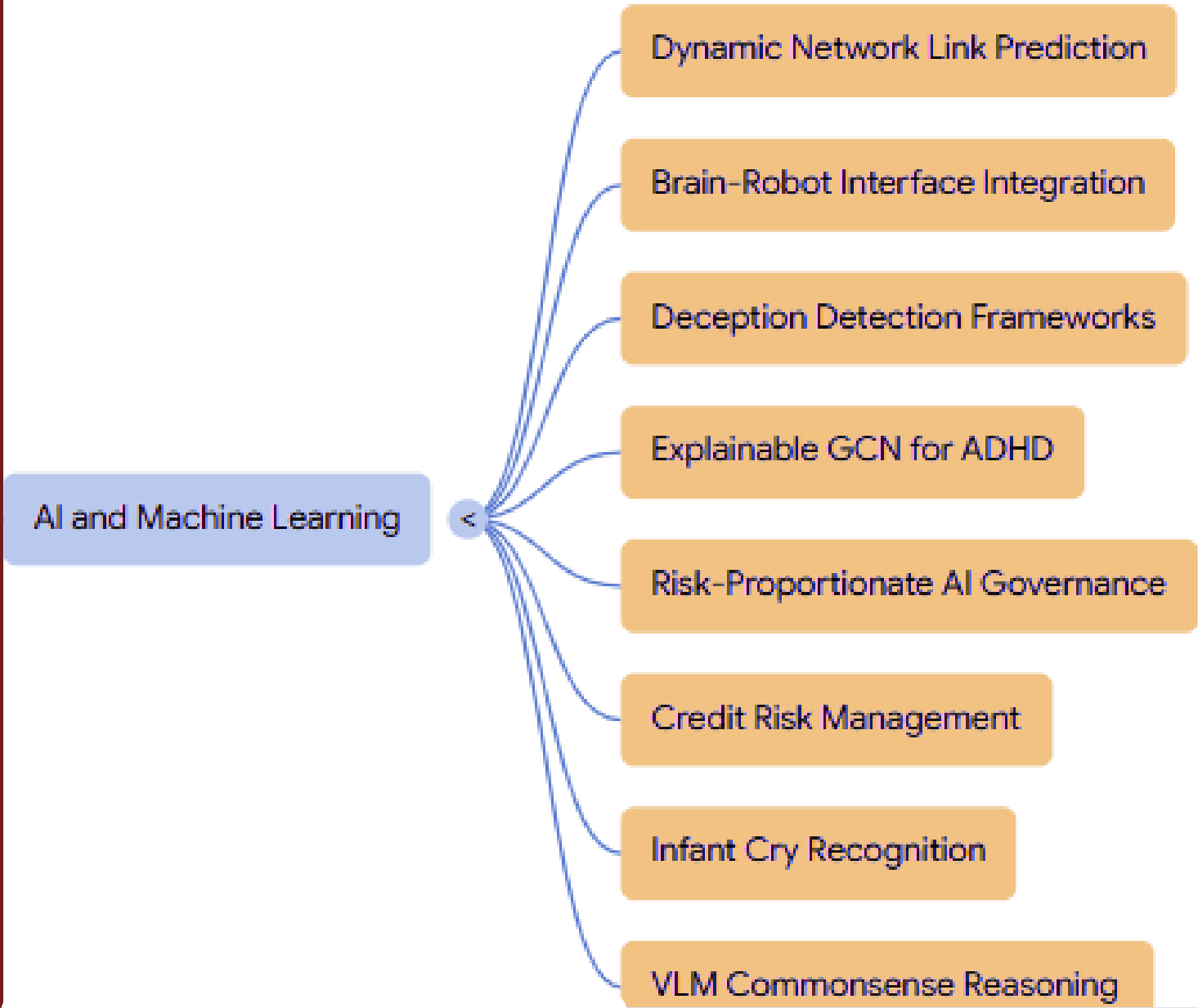
View Paper | Bhaskar,
D.R., Senani,
R., Raj, A. | International Journal of
Circuit Theory and
Applications. |



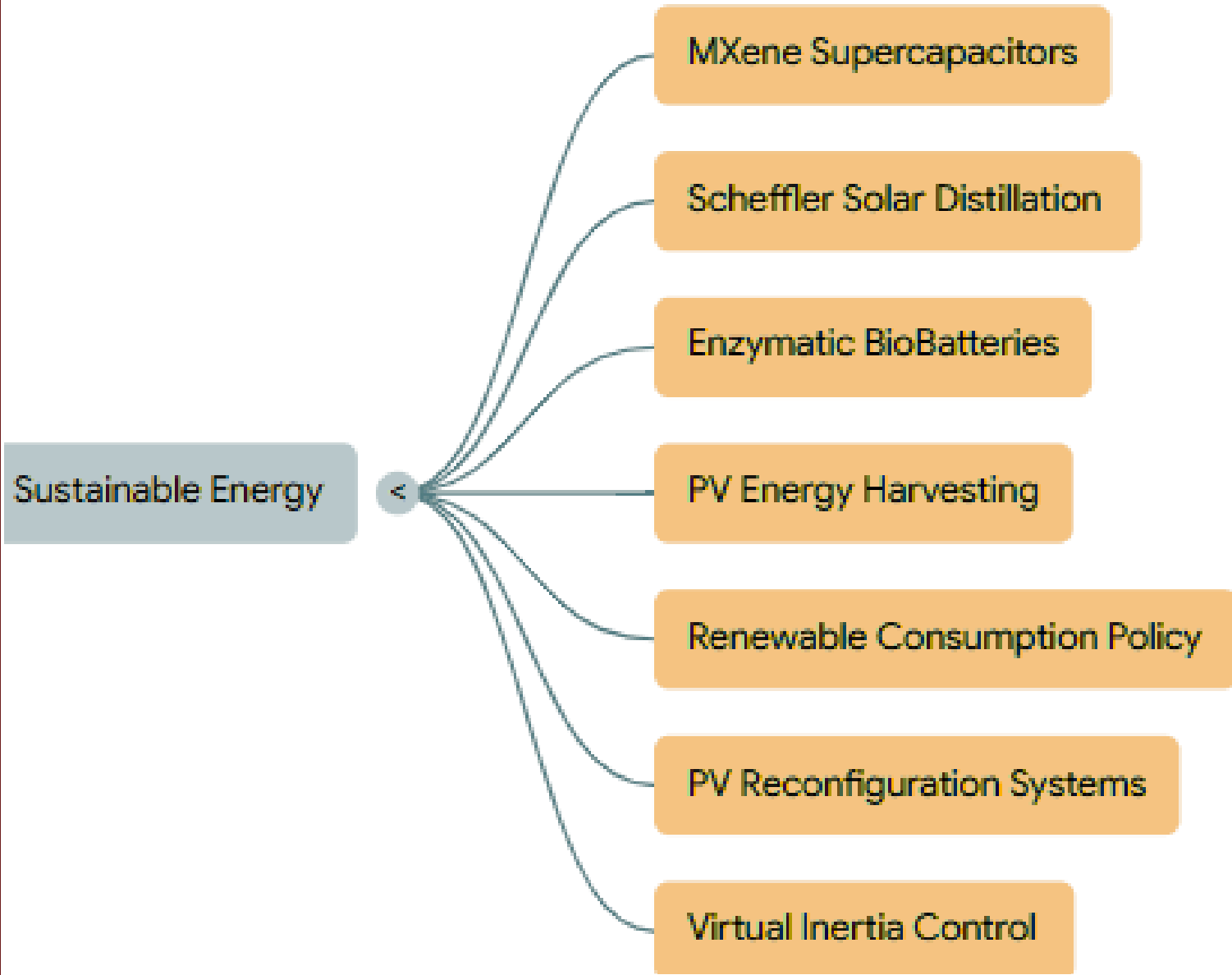
(A MONTHLY BULLETIN OF INTELLECTUAL
CONTRIBUTIONS OF DTU)

- | | | | |
|-----|--|---|--|
| 87. | <u>Thermally-induced free vibration behavior of curved laminated composite and sandwich beams using high-fidelity hybridized physics-informed neural network-support vector machine learning algorithm</u> | Ashish,
Anbukumar, S. | International Journal
of Material Forming,
19(3), art. no. 81. |
| | View Paper | | |
| 88. | <u>Thermo-exergetic simulation of a scheffler solar steam distillation system for peppermint essential oil</u> | Dhingra, G.,
Kumar, A. | Sustainable Chemistry
and Pharmacy, 52, art.
no. 102502. |
| | View Paper | | |
| 89. | <u>Tunable mid-infrared nonlinear optics in chalcogenide 1D As₂(SexTe1-x)₃ step quantum wells</u> | Gupta, S.,
Jain, N.,
Priyanka,
Sharma, R. | Micro and
Nanostructures,
218, art. no.
208818. |
| | View Paper | | |
| 90. | <u>Unlocking Barriers in Supply Chain Management in Rail Transport: An ISM Approach</u> | Kumar, M.,
Vipin,
Agarwal, A.,
(...), Keer, P.K.,
Ziara, S. | Aip Conference
Proceedings,
3419(1), art. no.
070002. |
| | View Paper | | |
| 91. | <u>Unveiling the synergistic architecture of Ti₃C₂T_x MXene/activated carbon hybrid to achieve superior surface accessibility for high performance supercapacitors</u> | Mural, S.,
Tanwar, S.,
Panwar,
A.K., Kumar,
V., Gaur, A. | Materials Research
Bulletin, 204, art.
no. 114335. |
| | View Paper | | |

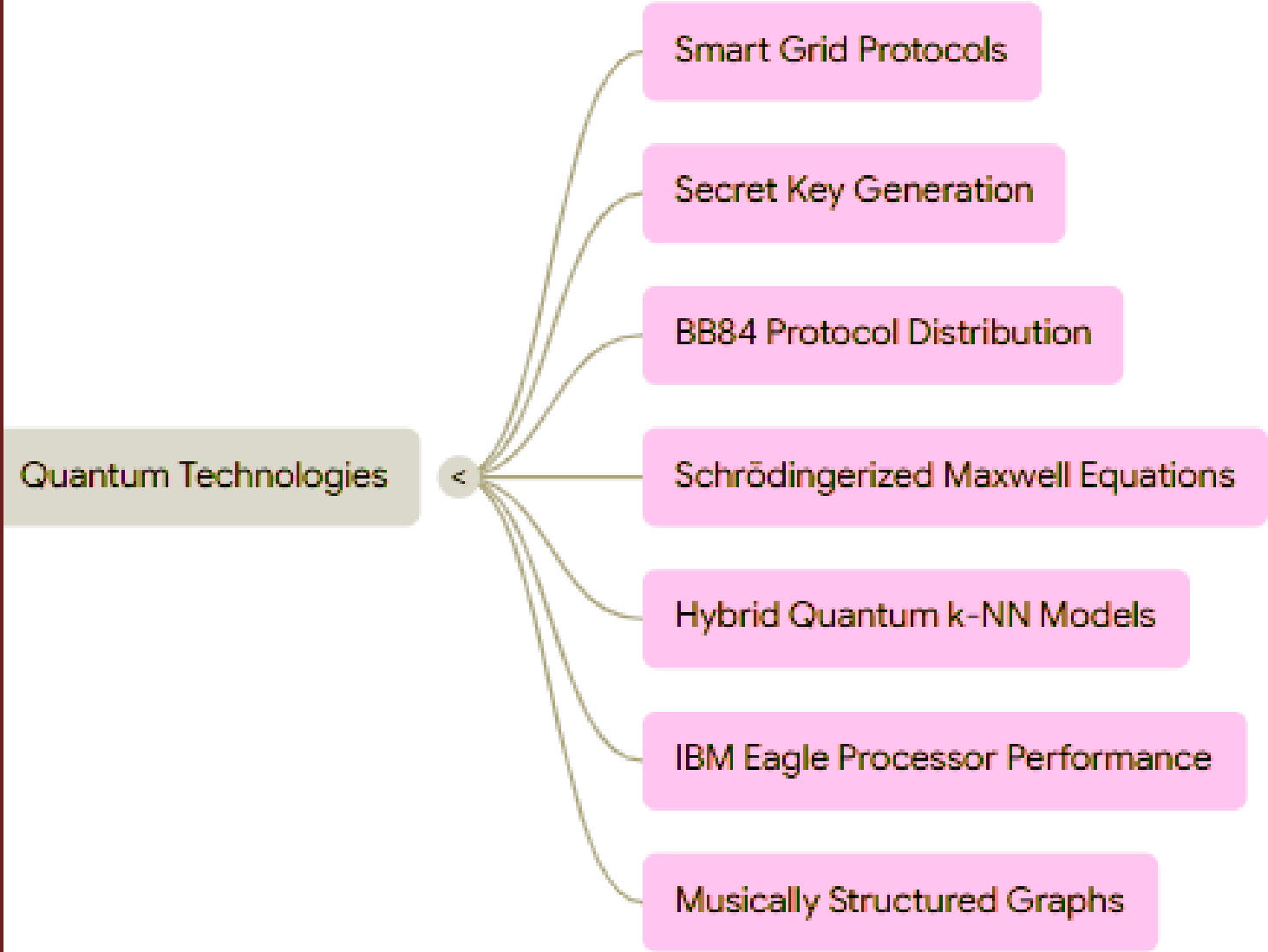
Subjects of Paper Titles in the Format of Mind Map



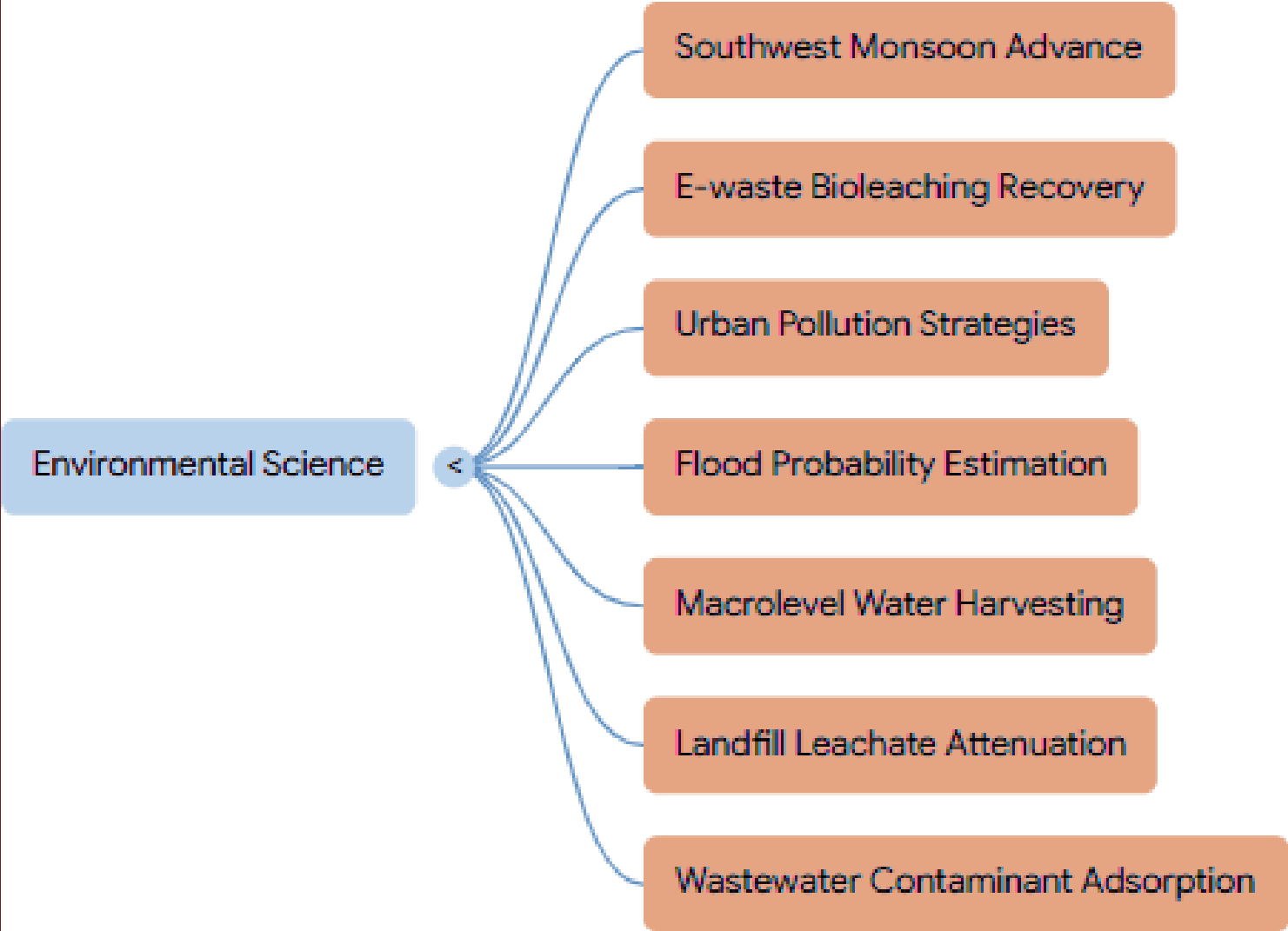
Subjects of Paper Titles in the Format of Mind Map



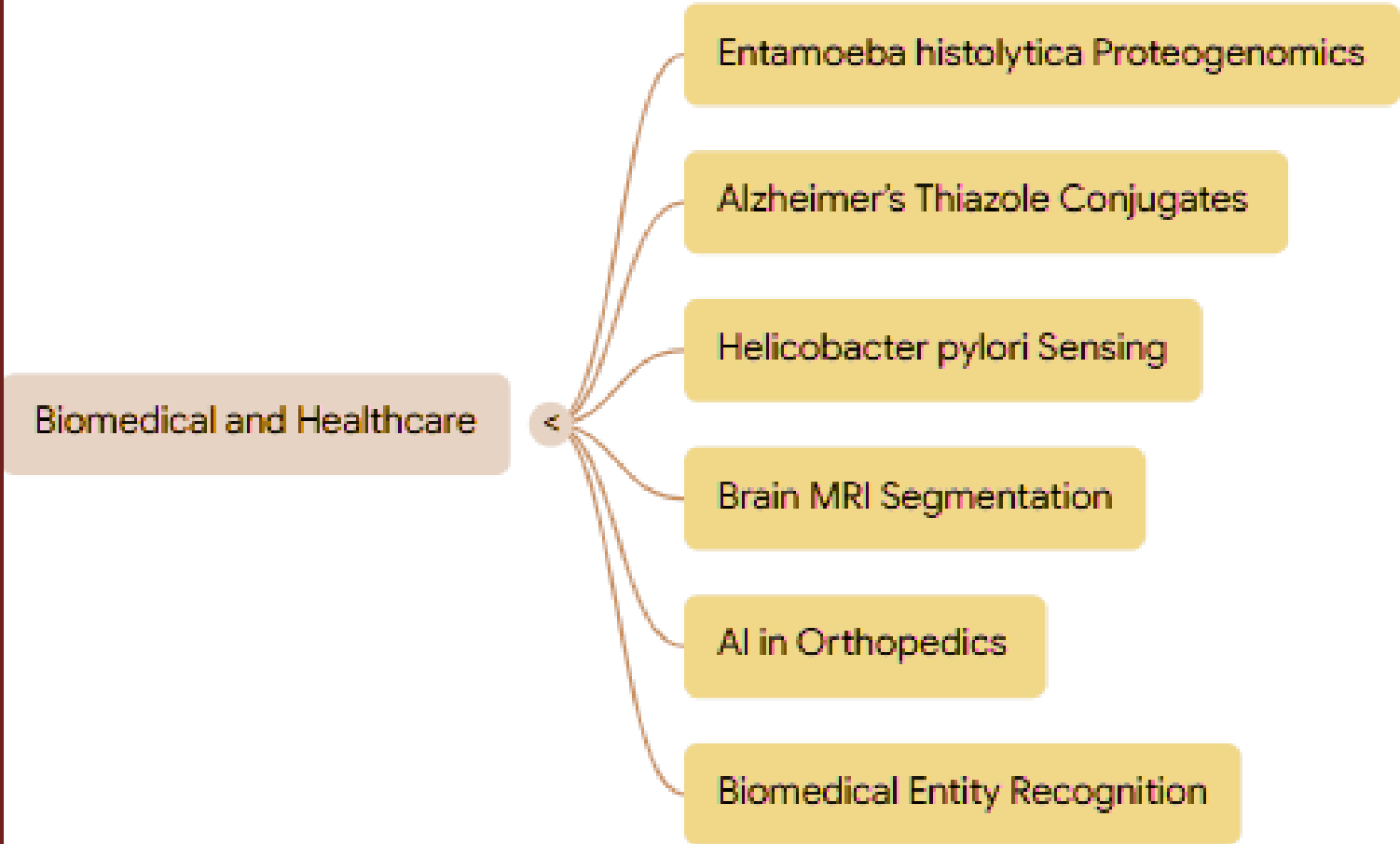
Subjects of Paper Titles in the Format of Mind Map



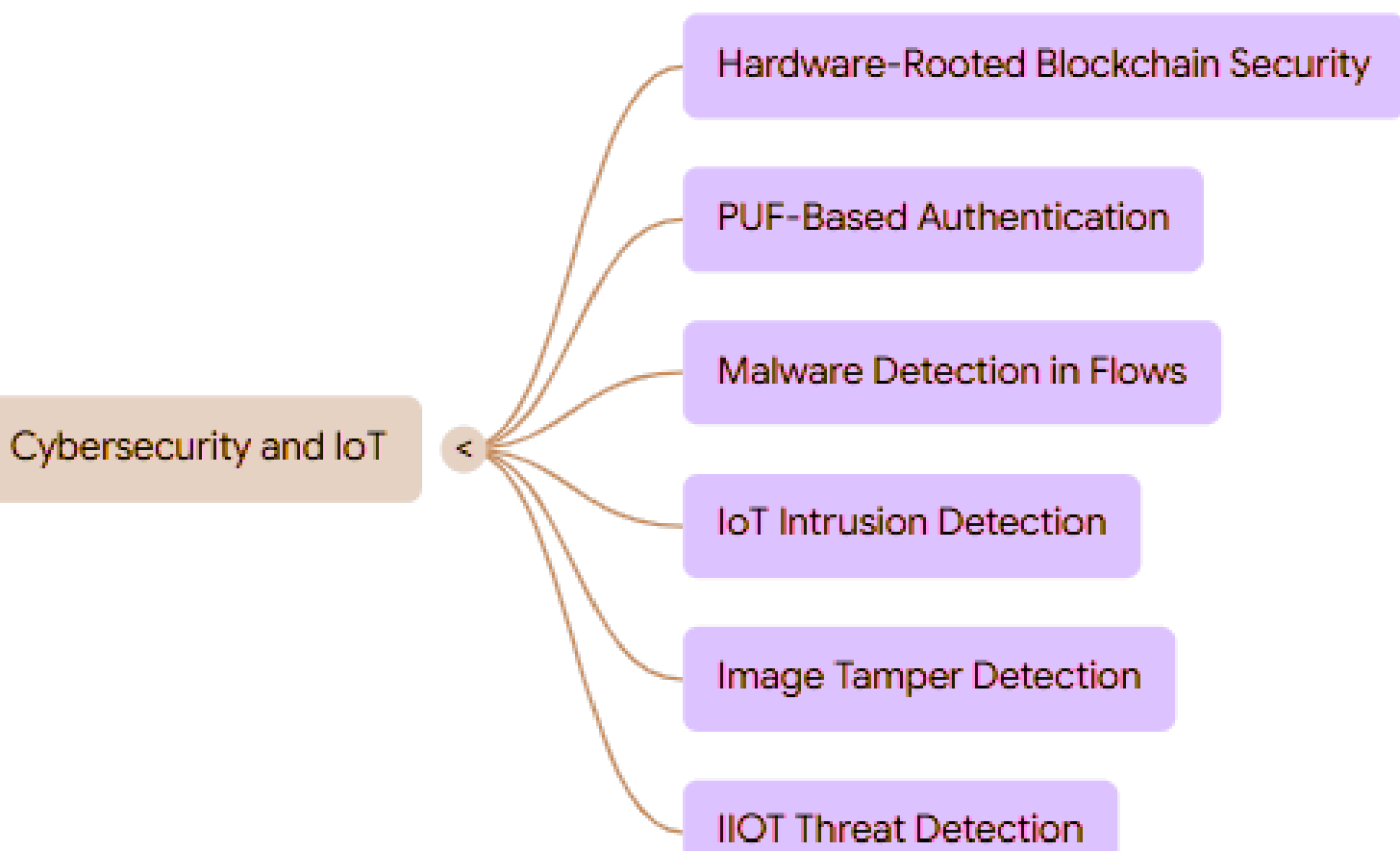
Subjects of Paper Titles in the Format of Mind Map



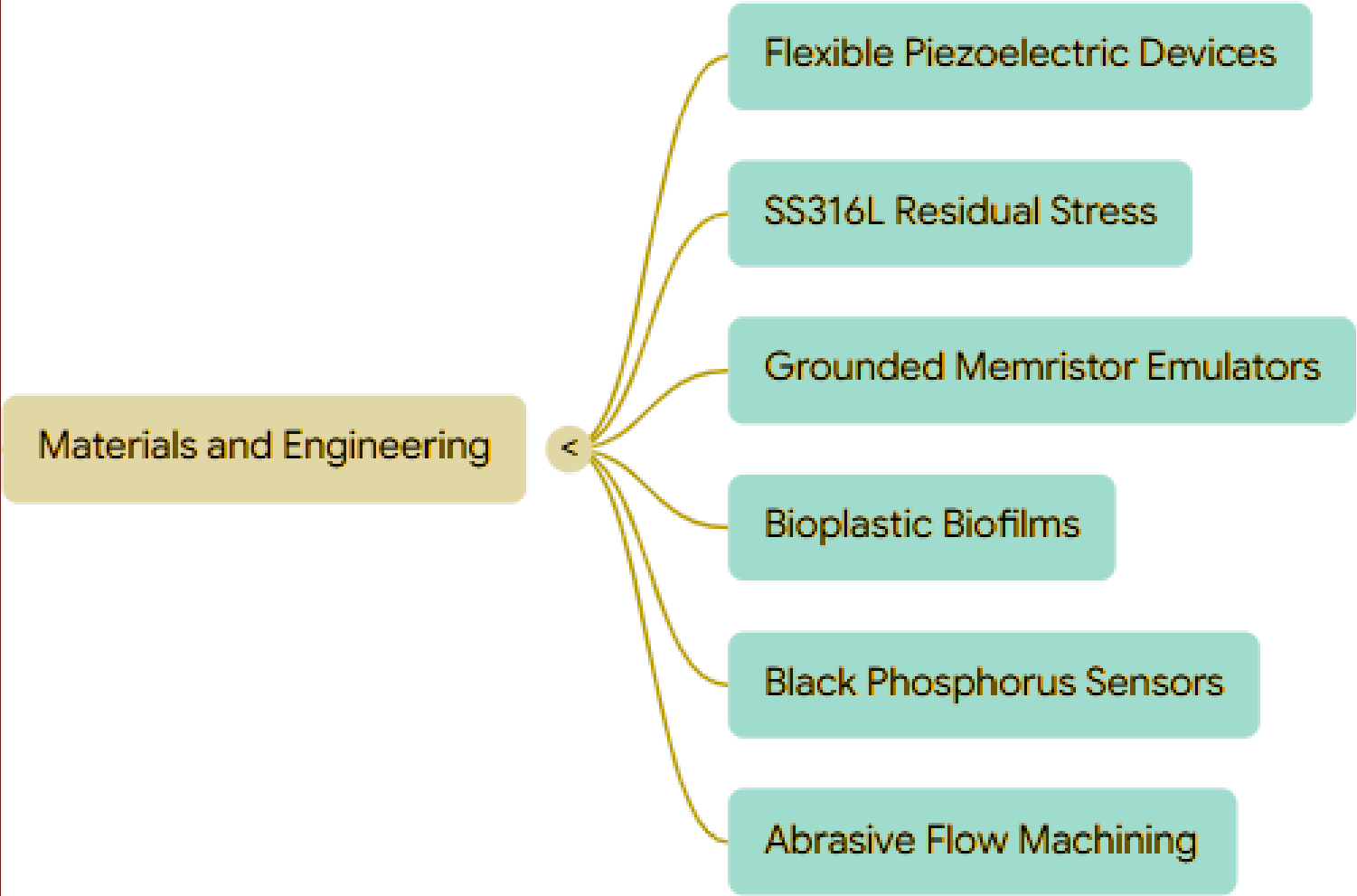
Subjects of Paper Titles in the Format of Mind Map



Subjects of Paper Titles in the Format of Mind Map



Subjects of Paper Titles in the Format of Mind Map



FOLLOW OUR OFFICIAL SOCIAL MEDIA PAGES FOR LIBRARY UPDATES, ANNOUNCEMENTS AND SERVICES

scan me



INSTAGRAM

scan me



LINKEDIN

scan me



YOUTUBE

scan me



FACEBOOK

scan me



DTU
REPOSITORY

scan me



OPAC

SAPIENTIA



SAPIENTIA DESIGNED AND COMPILED BY : ABHINAV UNIYAL (Counter Assistant)
& KANISHKA MERDWAL (LIBRARY APPRENTICE)

EMAIL ID : abhinav_counterassistant@dtu.ac.in , uniyalabhinav96@gmail.com,
kanishka@dtu.ac.in

PUBLISHER : DTU CENTRAL LIBRARY, DELHI TECHNOLOGICAL UNIVERSITY