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PUBLICATIONS AND CONFERENCES

Publication Related to the Thesis:

1. **Md Arzoo Jamal,** Rakesh Kumar, Santwana Mukhopadhyay and Subir Das. "Fixed-time stability of dynamical systems with impulsive effects." ***Journal of the Franklin Institute*** 359(7), 3164-3182 (2022). Elsevier (SCIE, IF: 4.1).

2. **Md Arzoo Jamal,** Rakesh Kumar, Santwana Mukhopadhyay and Oh-Min Kwon. "Fixed-time stability of Cohen-Grossberg BAM neural networks with impulsive perturbation." ***Neurocomputing*** 550, 126501 (2023). Elsevier (SCIE, IF: 6).

3. **Md Arzoo Jamal,** Arnab Mapui, Subir Das and Santwana Mukhopadhyay. "Further results on fixed-time synchronization of the memristor neural networks with impulsive effects." ***Communication in Nonlinear Science and Numerical Simulations*** 118, 107038 (2023). Elsevier (SCIE, IF: 3.9).

4. **Md Arzoo Jamal,** Subir Das and Santwana Mukhopadhyay. "Fixed-time synchronization of delayed inertial Cohen-Grossberg neural networks with desynchronizing impulses." ***Communication in Nonlinear Science and Numerical Simulations*** 130, 107772 (2023). Elsevier (SCIE, IF: 3.9).

5. **Md Arzoo Jamal,** Rakesh Kumar, Santwana Mukhopadhyay. "Fixed-time synchronization of complex-valued inertial neural networks with time delays and impulsive effects." (Under review in an International Journal).

6. **Md Arzoo Jamal,** Rakesh Kumar and Santwana Mukhopadhyay. "Effect of delayed impulses on finite-time stability of nonlinear systems." (Under review in an International Journal).

7. **Md Arzoo Jamal,** Subir Das and Santwana Mukhopadhyay. "Fixed-time pinning impulsive synchronization of coupled neural networks with mixed-delay." (Under review in an International Journal).

Publications Apart from Thesis:

1. Arnab Mapui, **Md Arzoo Jamal,** and Santwana Mukhopadhyay. "Predefined-time stability and its application using non-singular sliding mode control." (Under review in an International Journal).

2. Arnab Mapui**, Md Arzoo Jamal** and Santwana Mukhopadhyay. "On optimal upper bound for the settling time of fixed-time stable systems and its application in secure communication." (Under review in an International Journal).

3. Arnab Mapui, **Md Arzoo Jamal** and Santwana Mukhopadhyay. "Fixed/Predefined-time stability and designing of terminal sliding mode control of impulsive dynamical systems." (Under review in an International Journal).

Conferences and Workshops:

1. Participated in **International Conference on Applied Mathematics and Mechanics** held at IIT Indore during October 18-20, 2023 and presented a work with the title "Fixed-time stability of nonlinear systems with destabilizing impulsive effects and its application to neural networks: a novel and economical control."

2. Participated in **67th International Congress of the ISTAM** held at IIT Mandi during December 14-16, 2022 and presented a work with the title "Fixed-time stability of nonlinear impulsive dynamical systems and its application to memristor neural networks.

3. Participated in ATM workshop on "**Control Theory for Differential Equations**" held at IISER Kolkata during November 28 to December 10, 2022.

4. Participated in I**nternational Conference on Dynamical Systems, Control and Their Applications** held (Online) at IIT Roorkee during July 01-03, 2022 and presented a work with the title "Improved fixed-time stability of Cohen-Grossberg BAM neural networks with impulsive effects."

5. Participated in **International Conference on Dynamical Systems and Numerical Methods** held (Online) at Jamia Millia Islamia during May 20-21, 2022 and presented a work with the title "Fixed-time stability of nonlinear impulsive systems and its application into general neural networks."

6. Attended a workshop on "**Recent Development in Mathematical Modelling in Engineering Sciences**" held (Online) at NIT Uttarakhand during December 27-31, 2021.

7. Participated in **Nonlinear Applied Analysis and Optimization** held (Online) at IIT (BHU), Varanasi during December 21-23, 2021 and presented a work with the title "Fixed-time stability of dynamical systems with impulsive effects."

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