

# Juan Luis Mata-Machuca

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

39  
papers

240  
citations

10  
h-index

15  
g-index

44  
ext. papers

285  
ext. citations

1.6  
avg, IF

3.25  
L-index

#	Paper	IF	Citations
39	A chaotic system in synchronization and secure communications. <i>Communications in Nonlinear Science and Numerical Simulation</i> , <b>2012</b> , 17, 1706-1713	3.7	58
38	Fractional generalized synchronization in a class of nonlinear fractional order systems. <i>Nonlinear Dynamics</i> , <b>2014</b> , 77, 1237-1244	5	34
37	Fault diagnosis viewed as a left invertibility problem. <i>ISA Transactions</i> , <b>2013</b> , 52, 652-61	5.5	17
36	Synchronization of chaotic Liouvillian systems: An application to Chua's oscillator. <i>Applied Mathematics and Computation</i> , <b>2013</b> , 219, 10934-10944	2.7	16
35	Fault Detection and Diagnosis in Nonlinear Systems. <i>Understanding Complex Systems</i> , <b>2014</b> ,	0.4	15
34	An exponential polynomial observer for synchronization of chaotic systems. <i>Communications in Nonlinear Science and Numerical Simulation</i> , <b>2010</b> , 15, 4114-4130	3.7	15
33	Synchronization and parameter estimations of an uncertain Rikitake system. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , <b>2010</b> , 374, 3625-3628	2.3	13
32	Synchronization of nonlinear fractional order systems. <i>Applied Mathematics and Computation</i> , <b>2011</b> , 218, 3338-3347	2.7	12
31	Monitoring in a predator-prey systems via a class of high order observer design. <i>BioSystems</i> , <b>2010</b> , 100, 65-9	1.9	11
30	Asymptotic synchronization of the Colpitts oscillator. <i>Computers and Mathematics With Applications</i> , <b>2012</b> , 63, 1072-1078	2.7	10
29	Adaptative synchronization in multi-output fractional-order complex dynamical networks and secure communications. <i>European Physical Journal Plus</i> , <b>2018</b> , 133, 1	3.1	7
28	Generalized synchronization via the differential primitive element. <i>Applied Mathematics and Computation</i> , <b>2014</b> , 232, 848-857	2.7	6
27	Nonlinear estimation in a class of gene transcription process. <i>Applied Mathematics and Computation</i> , <b>2014</b> , 226, 131-144	2.7	4
26	Uniformly Bounded Error Estimator for Bioprocess with Unstructured Cell Growth Models. <i>Chemical Product and Process Modeling</i> , <b>2009</b> , 4,	1.1	4
25	On the Observability for a Class of Nonlinear (Bio)chemical Systems. <i>International Journal of Chemical Reactor Engineering</i> , <b>2010</b> , 8,	1.2	3
24	A new observer for nonlinear fractional order systems <b>2011</b> ,		3
23	Design of a Mechatronic System for Fault Detection in a Rotor under Misalignment and Unbalance. <i>IEEE Latin America Transactions</i> , <b>2015</b> , 13, 1899-1906	0.7	2

22	An observer for the synchronization of chaotic Liouvillian systems: A real-time application to Chua's oscillator <b>2012</b> ,		2
21	A New Finite-Time Observer for Nonlinear Systems: Applications to Synchronization of Lorenz-Like Systems. <i>Scientific World Journal, The</i> , <b>2016</b> , 2016, 8342089	2.2	2
20	Finite Time Estimation for Switched Nonlinear Systems: Application to Stirred Tank Bioreactor. <i>International Journal of Chemical Reactor Engineering</i> , <b>2017</b> , 15,	1.2	1
19	Generalized synchronization between Colpitts and Chua circuits <b>2013</b> ,		1
18	Chaotic Synchronization and Its Applications in Secure Communications. <i>Understanding Complex Systems</i> , <b>2011</b> , 231-271	0.4	1
17	A TITO Control Strategy to Increase Productivity in Uncertain Exothermic Continuous Chemical Reactors. <i>Processes</i> , <b>2021</b> , 9, 873	2.9	1
16	Synchronization of Multiple Mechanical Oscillators Under Noisy Measurements Signals and Mismatch Parameters. <i>International Journal of Nonlinear Sciences and Numerical Simulation</i> , <b>2018</b> , 19, 699-707	1.8	1
15	Multisynchronization of chaotic oscillators via nonlinear observer approach. <i>Scientific World Journal, The</i> , <b>2014</b> , 2014, 935163	2.2	0
14	Diagnosis for a class of non-differentially flat and Liouvillian systems. <i>Understanding Complex Systems</i> , <b>2014</b> , 101-112	0.4	0
13	Experimental Verification of the Leader-Follower Formation Control of Two Wheeled Mobile Robots with Obstacle Avoidance. <i>IEEE Latin America Transactions</i> , <b>2021</b> , 19, 1417-1424	0.7	0
12	A Synchronization Scheme for Partially Known Nonlinear Fractional Order Systems. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>2012</b> , 45, 149-153		
11	Fault estimation using a polynomial observer: A real-time application. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>2012</b> , 45, 552-557		
10	On nonlinear system diagnosis via high-gain observers: a case study. <i>Understanding Complex Systems</i> , <b>2014</b> , 55-65	0.4	
9	Fault diagnosis viewed as a left invertibility problem. <i>Understanding Complex Systems</i> , <b>2014</b> , 75-93	0.4	
8	Fault detection in a belt-drive system. <i>Understanding Complex Systems</i> , <b>2014</b> , 67-74	0.4	
7	Fault Detection in CSTR Using Nonlinear Observers. <i>Understanding Complex Systems</i> , <b>2014</b> , 21-32	0.4	
6	Fault estimation using a polynomial observer: A real-time application. <i>Understanding Complex Systems</i> , <b>2014</b> , 113-126	0.4	
5	The fault detection problem in nonlinear systems using residual generators. <i>Understanding Complex Systems</i> , <b>2014</b> , 1-19	0.4	

- 4 Fault estimation using sliding mode observers. *Understanding Complex Systems*, **2014**, 95-100 0.4
- 3 Diagnosis of nonlinear systems using the concept of differential transcendence degree. *Understanding Complex Systems*, **2014**, 33-54 0.4
- 2 Synchronization in a Class of Fractional-order Chaotic Systems via Feedback Controllers: A Comparative Study. *Advances in Science, Technology and Engineering Systems*, **2021**, 6, 146-154 0.3
- 1 Minimum time controller in a class of chemical reactors based on Lagrangian approach. *International Journal of Chemical Reactor Engineering*, **2021**, 19, 105-114 1.2