Maria Serra

List of Publications by Year
in descending order

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Version: 2024-02-01

42	2,205	304743	330143
papers	citations	22 h-index	37 g-index

42	42	42	2339
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Efficient Derivation of Purified Lung and Thyroid Progenitors from Embryonic Stem Cells. Cell Stem Cell, 2012, 10, 398-411.	11.1	358
2	Efficient Derivation of Functional Human Airway Epithelium from Pluripotent Stem Cells via Temporal Regulation of Wnt Signaling. Cell Stem Cell, 2017, 20, 844-857.e6.	11.1	334
3	Performance and degradation of Proton Exchange Membrane Fuel Cells: State of the art in modeling from atomistic to system scale. Journal of Power Sources, 2016, 304, 207-233.	7.8	180
4	Regeneration of Thyroid Function by Transplantation of Differentiated Pluripotent Stem Cells. Cell Stem Cell, 2015, 17, 527-542.	11.1	170
5	Energy Management Strategies based on efficiency map for Fuel Cell Hybrid Vehicles. Journal of Power Sources, 2009, 190, 387-401.	7.8	149
6	Model-based fault diagnosis in PEM fuel cell systems. Journal of Power Sources, 2009, 192, 216-223.	7.8	113
7	Control and optimization of the divided wall column. Chemical Engineering and Processing: Process Intensification, 1999, 38, 549-562.	3.6	82
8	Design and Analysis of Fuel-Cell Hybrid Systems Oriented to Automotive Applications. IEEE Transactions on Vehicular Technology, 2009, 58, 4720-4729.	6.3	79
9	Pluripotent stem cell differentiation reveals distinct developmental pathways regulating lung versus thyroid lineage specification. Development (Cambridge), 2017, 144, 3879-3893.	2.5	73
10	Controllability of Different Multicomponent Distillation Arrangements. Industrial & Engineering Chemistry Research, 2003, 42, 1773-1782.	3.7	66
11	Performance improvement of a PEMFC system controlling the cathode outlet air flow. Journal of Power Sources, 2007, 169, 205-212.	7.8	50
12	Description of gasket failure in a 7 cell PEMFC stack. Journal of Power Sources, 2007, 169, 85-91.	7.8	50
13	Study of the divided wall column controllability: influence of design and operation. Computers and Chemical Engineering, 2000, 24, 901-907.	3.8	44
14	Enhancing the Efficiency and Lifetime of a Proton Exchange Membrane Fuel Cell Using Nonlinear Model-Predictive Control With Nonlinear Observation. IEEE Transactions on Industrial Electronics, 2017, 64, 6649-6659.	7.9	44
15	Analysis of different control possibilities for the divided wall column: feedback diagonal and dynamic matrix control. Computers and Chemical Engineering, 2001, 25, 859-866.	3.8	43
16	Controllability analysis of decentralised linear controllers for polymeric fuel cells. Journal of Power Sources, 2005, 151, 93-102.	7.8	40
17	Nonlinear predictive control for durability enhancement and efficiency improvement in a fuel cell power system. Journal of Power Sources, 2016, 328, 250-261.	7.8	38
18	Development and experimental validation of a dynamic thermal and water distribution model of an open cathode proton exchange membrane fuel cell. Journal of Power Sources, 2011, 196, 4251-4263.	7.8	32

#	Article	IF	Citations
19	Dynamic modeling and controllability analysis of an ethanol reformer for fuel cell application. International Journal of Hydrogen Energy, 2010, 35, 9768-9775.	7.1	27
20	Model predictive control for ethanol steam reformers with membrane separation. International Journal of Hydrogen Energy, 2017, 42, 1949-1961.	7.1	25
21	Nonlinear observation in fuel cell systems: A comparison between disturbance estimation and High-Order Sliding-Mode techniques. International Journal of Hydrogen Energy, 2016, 41, 19737-19748.	7.1	23
22	Analysis of the control structures for an integrated ethanol processor for proton exchange membrane fuel cell systems. Journal of Power Sources, 2009, 192, 107-113.	7.8	22
23	Dynamic modeling of a three-stage low-temperature ethanol reformer for fuel cell application. Journal of Power Sources, 2009, 192, 208-215.	7.8	21
24	Nonlinear distributed parameter observer design for fuel cell systems. International Journal of Hydrogen Energy, 2015, 40, 11322-11332.	7.1	21
25	Nonlinear adaptive observation of the liquid water saturation in polymer electrolyte membrane fuel cells. Journal of Power Sources, 2021, 492, 229641.	7.8	21
26	Nonlinear predictive control for the concentrations profile regulation under unknown reaction disturbances in a fuel cell anode gas channel. Journal of Power Sources, 2015, 282, 129-139.	7.8	17
27	Controller design for polymer electrolyte membrane fuel cell systems for automotive applications. International Journal of Hydrogen Energy, 2021, 46, 23263-23278.	7.1	13
28	Design of linear controllers applied to an ethanol steam reformer for PEM fuel cell applications. International Journal of Hydrogen Energy, 2013, 38, 7640-7646.	7.1	10
29	Distributed parameter model simulation tool for PEM fuel cells. International Journal of Hydrogen Energy, 2014, 39, 4044-4052.	7.1	10
30	Controllability study of an ethanol steam reforming process for hydrogen production. Journal of Power Sources, 2011, 196, 4411-4417.	7.8	9
31	Fault-Tolerant MPC Control of PEM Fuel Cells. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 11112-11117.	0.4	8
32	Distributed parameter model-based control of water activity and concentration of reactants in a polymer electrolyte membrane fuel cell. International Journal of Hydrogen Energy, 2017, 42, 26389-26407.	7.1	7
33	Performance of diagonal control structures at different operating conditions for polymer electrolyte membrane fuel cells. Journal of Power Sources, 2006, 158, 1317-1323.	7.8	5
34	Fast Model Predictive Control for hydrogen outflow regulation in Ethanol Steam Reformers. , 2016, , .		5
35	PEMFC state and parameter estimation through a high-gain based adaptive observer. IFAC-PapersOnLine, 2020, 53, 5895-5900.	0.9	5
36	Advances in HOSM Control Design and Implementation for PEM Fuel Cell Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 709-716.	0.4	4

#	Article	IF	Citations
37	Observation of the Electrochemically active Surface Area in a Proton Exchange Membrane Fuel Cell. , 2016, , .		3
38	Analyses of energy management strategies for a PEMFC/UC electric vehicle. , 2012, , .		2
39	Analysis of different control possibilities for the divided wall column: feedback diagnoal and dynamic matrix control. Computer Aided Chemical Engineering, 2000, 8, 283-288.	0.5	1
40	Numerical model for polymer electrolyte membrane fuel cells with experimental application and validation. Asia-Pacific Journal of Chemical Engineering, 2009, 4, 55-67.	1.5	1
41	Experimental model for a DMC-based control applied to a PEM fuel cell. , 2012, , .		0
42	Nonlinear predictive control for the concentrations profile regulation in a PEM Fuel Cell anode gas channel. , 2014, , .		0