

ANEXOS

ANEXO 1: LISTADO DE ARTÍCULOS DE INVESTIGACIÓN DE CONTROL NO LINEAL Y CONTROL ADAPTATIVO DEL PROCESO DE BUSQUEDA PRIMARIA Y SECUNDARIA

Tabla Anexo 1-1 Población Métodos o Algoritmos de Control No lineal y Adaptativo estudiado

ID	Fault tolerant	Adaptive	Robust	nonlinear	Robust H [∞]	Allocation robust	Nussbaum gain method adaptive	Model Reference Adaptive Control Adaptive	Fuzzy Adaptive	Neural Adaptive	immersion and invariance (I&I) adaptive	backstep non linear	Sliding non linear	dynamic inversion non linear	Asymptotic Tracking Position nonlinear	high gain observer nonlinear	lyapunov nonlinear	feedback linearization nonlinear	Dynamic Surface Control nonlinear	Active Disturbance Rejection nonlinear	MIMO Non linear	Título del Documento	Year	Citado
1		Adaptive	Robust	nonlinear								backstep non linear										Rapid turning maneuver flight control for a high agility UAV using robust adaptive augmented backstepping	2015	
2		Adaptive	Robust	nonlinear								backstep non linear	Sliding non linear	dynamic inversion non linear								Robust adaptive approximate backstepping control design for a flexible air-breathing hypersonic vehicle	2015	
3		Adaptive		nonlinear						Neural Adaptive		backstep non linear										Neural Network-Based Adaptive Backstepping Control for Hypersonic Flight Vehicles with Prescribed Tracking Performance	2015	
4			Robust	nonlinear						Neural Adaptive		backstep non linear										Adaptive nonlinear robust control of a novel unconventional unmanned aerial vehicle	2015	
5		Adaptive		nonlinear						Neural Adaptive							lyapunov nonlinear	feedback linearization nonlinear				On the neuro-adaptive feedback linearising control of underactuated autonomous underwater vehicles in three-dimensional space	2015	
6		Adaptive	Robust	nonlinear					Fuzzy Adaptive	Neural Adaptive			Sliding non linear									Self-Constructing Adaptive Robust Fuzzy Neural Tracking Control of Surface Vehicles with Uncertainties and Unknown Disturbances	2015	
7		Adaptive	Robust	nonlinear						Neural Adaptive						high gain observer nonlinea						Neural robust adaptive hypersonic flight control without back-stepping	2015	
8		Adaptive	Robust	nonlinear							immersion and invariance (I&I) adaptive				Asymptotic Tracking Position nonlinear		lyapunov nonlinear					Nonlinear Robust Adaptive Tracking Control of a Quadrotor UAV Via Immersion and Invariance Methodology	2015	
9		Adaptive		nonlinear				Model Reference Adaptive Control Adaptive		Neural Adaptive				dynamic inversion non linear								Adaptive flight-control design using neural-network-aided optimal nonlinear dynamic inversion	2014	
10		Adaptive	Robust	nonlinear										dynamic inversion non linear	Asymptotic Tracking Position nonlinear		lyapunov nonlinear					A robust adaptive tracking controller for an aircraft with uncertain dynamical terms	2014	
11		Adaptive		nonlinear					Fuzzy Adaptive												MIMO Non linear	Two-level robust adaptive fuzzy control of aircraft	2014	
12		Adaptive	Robust			allocation robust						backstep non linear										Robust control allocation with adaptive backstepping flight control	2014	
13		Adaptive							Fuzzy Adaptive			backstep non linear										Adaptive fuzzy backstepping control for trajectory tracking of unmanned aerial quadrotor	2014	
14		Adaptive								Neural Adaptive												Noncertainty-Equivalent adaptive wing-rock control via chebyshev neural network	2014	
15		Adaptive							Fuzzy Adaptive													Direct-adaptive fuzzy path following control for an autonomous airship	2014	
16		Adaptive	Robust									backstep non linear		dynamic inversion non linear			lyapunov nonlinear					Robust adaptive approximate backstepping control of a flexible air-breathing hypersonic vehicle with input con	2014	
17	fault tolerant			nonlinear					Fuzzy Adaptive			backstep non linear							Dynamic Surface Control Nonlinear			Prescribed performance fuzzy adaptive fault-tolerant control of non-linear systems with actuator faults	2014	1
18										Neural Adaptive		backstep non linear										A singularly perturbed system approach to adaptive neural back-stepping control design of hypersonic vehicles	2014	4
19		Adaptive	Robust							Neural Adaptive									Dynamic Surface Control Nonlinear			Robust adaptive dynamic surface control design for a flexible air-breathing hypersonic vehicle with input constraints and uncertainty	2014	2
20																	lyapunov nonlinear	feedback linearization nonlinear				A study on output redefinition robust adaptive control method for hypersonic vehicle	2014	
21		Adaptive		nonlinear					Fuzzy Adaptive								lyapunov nonlinear					Fuzzy adaptive tracking control within the full envelope for an unmanned aerial vehicle	2014	1
22		Adaptive	Robust	nonlinear																		Robust adaptive tracking control for air-breathing hypersonic vehicles	2014	
23		Adaptive								Neural Adaptive												Adaptive neural control of a hypersonic vehicle in discrete time	2014	8
24		Adaptive		nonlinear						Neural Adaptive							lyapunov nonlinear					Adaptive neural network control of small unmanned aerial rotorcraft	2014	
25		Adaptive	Robust																			Attitude-guided robust adaptive path following control for ducted fan UAV	2014	
26	fault tolerant	Adaptive	Robust	nonlinear			Nussbaum gain method adaptive			Neural Adaptive		backstep non linear										Adaptive robust actuator fault accommodation for a class of uncertain nonlinear systems with unknown control gains	2014	
27		Adaptive	Robust																			Performance and robustness metrics for adaptive flight control - Available approaches	2013	
28		Adaptive								Neural Adaptive		backstep non linear										Adaptive neural control design for hypersonic aircraft using time scale separation	2013	1
29		Adaptive			Robust H [∞]										Asymptotic Tracking Position nonlinear		lyapunov nonlinear					Robust H [∞] and adaptive tracking control against actuator faults with a linearised aircraft application	2013	7
30		Adaptive								Neural Adaptive												Chebyshev neural noncertainty-equivalent adaptive control of wing rock of slender delta wings	2013	
31		Adaptive		nonlinear						Neural Adaptive				dynamic inversion non linear								Adaptive flight control design for quadrotor UAV based on dynamic inversion and neural networks	2013	1
32												backstep non linear					lyapunov nonlinear					Non-linear flight control for unmanned aerial vehicles using adaptive backstepping based on invariant manifolds	2013	3
33	fault tolerant	Adaptive												dynamic inversion non linear								Hardware-in-the-Loop simulation of an extended non-linear dynamic inversion augmented with an immunity-based adaptive control system	2013	1
34		Adaptive	Robust	nonlinear																Active Disturbance Rejection nonlinear		Wave following control based on robust adaptive method and ADRC for a flying boat	2013	1
35		Adaptive		nonlinear						Neural Adaptive							lyapunov nonlinear					Application of neural networks for the design of flight control algorithms. II Adaptive tuning of neural network control law	2013	
36		Adaptive	Robust																			Application of a robust adaptive control architecture to a spacecraft with flexible dynamics	2013	
37		Adaptive	Robust						Fuzzy Adaptive													The indirect adaptive fuzzy predictive control of hypersonic vehicle	2013	
38		Adaptive	Robust	nonlinear	Robust H [∞]										Asymptotic Tracking Position nonlinear		lyapunov nonlinear					Robust adaptive control for a class of cascaded nonlinear systems with applications to space interception	2013	
39		Adaptive	Robust	nonlinear								backstep non linear					lyapunov nonlinear					Adaptive backstepping-based robust tracking control of unmanned helicopters with disturbances	2013	3

Tabla Anexo 1-2 Población Métodos o Algoritmos de Control No lineal y Adaptativo estudiado

ID	Fault tolerant	Adaptive	Robust	nonlinear	Robust H ∞	allocation robust	Nussbaum gain method adaptive	Model Reference Adaptive Control Adaptive	Fuzzy Adaptive	Neural Adaptive	Immersion and invariance (I&I) adaptive	backstep non linear	Sliding non linear	dynamic inversion non linear	Asymptotic Tracking Position nonlinear	high gain observer nonlinear	lyapunov nonlinear	feedback linearization nonlinear	Dynamic Surface Control nonlinear	Active Disturbance Rejection nonlinear	MIMO Non linear	Título del Documento	Year	Citado	
40		Adaptive	Robust		Robust H ∞				Fuzzy Adaptive								lyapunov nonlinear					Direct adaptive type-2 fuzzy logic control of a generic hypersonic flight vehicle	2013	2	
41		Adaptive	Robust	nonlinear						Neural Adaptive									Dynamic Surface Control Nonlinear	Active Disturbance Rejection nonlinear			Design of flight control law based on simplified robust adaptive dynamic surface control	2013	1
42		Adaptive		nonlinear					Fuzzy Adaptive					dynamic inversion non linear					Dynamic Surface Control Nonlinear				Adaptive fuzzy DSC control based on SpS for hypersonic vehicle	2013	
43		Adaptive	Robust						Fuzzy Adaptive	Neural Adaptive													Robust adaptive control for near space vehicles based on wavelet neural network	2013	
44		Adaptive	Robust					Model Reference Adaptive Control Adaptive															Reference model modification for robust performance conservation of model reference adaptive controllers	2013	
45		Adaptive	Robust	nonlinear					Fuzzy Adaptive			backstep non linear	Sliding non linear				lyapunov nonlinear						Backstepping-based adaptive fuzzy sliding mode control for autopilot design	2013	
46		Adaptive		nonlinear			Nussbaum gain method adaptive		Fuzzy Adaptive					dynamic inversion non linear					Dynamic Surface Control Nonlinear				Fuzzy adaptive nonlinear control based on dynamic surface control for hypersonic vehicle	2013	
47		Adaptive	Robust														lyapunov nonlinear						Robust adaptive control for spacecraft cooperative rendezvous and docking	2013	1
48		Adaptive		nonlinear					Fuzzy Adaptive	Neural Adaptive				dynamic inversion non linear									Design of UAV's formation flight controller based on neural network adaptive inversion	2013	1
49		Adaptive							Fuzzy Adaptive	Neural Adaptive													An adaptive neuro PID for controlling the altitude of quadcopter robot	2013	
50		Adaptive																					Augmenting L1 adaptive control of piecewise constant type to a fighter aircraft. Performance and robustness evaluation for rapid maneuvering	2012	1
51		Adaptive	Robust	nonlinear						Neural Adaptive		backstep non linear		dynamic inversion non linear			lyapunov nonlinear						Robust adaptive backstepping design for unmanned aerial vehicle formation guidance and control	2012	1
52	fault tolerant	Adaptive												dynamic inversion non linear									UAV adaptive control laws using non-linear dynamic inversion augmented with an immunity-based mechanism	2012	2
53		Adaptive	Robust																				Optimal control modification for robust adaptive control with large adaptive gain	2012	12
54	fault tolerant	Adaptive	Robust										Sliding non linear										Robust adaptive integral-sliding-mode fault-tolerant control for air-breathing hypersonic vehicles	2012	18
55		Adaptive	Robust									backstep non linear											Robust, practical adaptive control for launch vehicles	2012	
56		Adaptive	Robust			allocation robust						backstep non linear					lyapunov nonlinear						Dynamic control allocation based-on robust adaptive backstepping control for attitude maneuver of spacecraft with redundant reaction wheels	2012	3
57		Adaptive	Robust	nonlinear						Neural Adaptive							lyapunov nonlinear						Robust adaptive control for a class of uncertain switched nonlinear systems with application to near space vehicle	2012	
58		Adaptive	Robust																				Robust adaptive control based on specified region pole assignment for flexible hypersonic vehicle	2012	1
59		Adaptive	Robust		Robust H ∞																		Mixed H2/H ∞ robust adaptive control of hypersonic vehicles based on the characteristic model	2012	
60		Adaptive	Robust	nonlinear					Fuzzy Adaptive				Sliding non linear										The adaptive fuzzy sliding mode control of hypersonic vehicle	2012	
61		Adaptive							Fuzzy Adaptive														The adaptive fuzzy feedback control for hypersonic vehicle	2012	
62		Adaptive	Robust	nonlinear																			A robust adaptive control architecture for disturbance rejection and uncertainty suppression with L ∞ transient and steady-state performance guarantees	2012	10
63			Robust	nonlinear											Asymptotic Tracking Position nonlinear		lyapunov nonlinear						Asymptotic tracking control for air breathing hypersonic vehicles via a nonlinear robust adaptive methodology	2012	
64		Adaptive		nonlinear						Neural Adaptive												MIMO Non linear	Real time adaptive nonlinear model inversion control of a twin rotor MIMO system using neural networks	2012	15
65		Adaptive		nonlinear					Fuzzy Adaptive								lyapunov nonlinear						Fuzzy adaptive H ∞ control for time-varying delayed uncertain systems	2012	
66		Adaptive	Robust						Fuzzy Adaptive				Sliding non linear				lyapunov nonlinear						Trajectory tracking for an autonomous airship using fuzzy adaptive sliding mode control	2012	12
67		Adaptive	Robust						Fuzzy Adaptive					dynamic inversion non linear			lyapunov nonlinear						Adaptive fuzzy attitude tracking control of spacecraft with input magnitude and rate constraints	2012	2
68		Adaptive		nonlinear					Fuzzy Adaptive	Neural Adaptive												MIMO Non linear	Adaptive robust control based on T-S fuzzy-neural systems for a hypersonic vehicle	2011	
69	fault tolerant	Adaptive	Robust	nonlinear																			Output feedback based adaptive robust fault-tolerant control for a class of uncertain nonlinear systems	2011	9
70		Adaptive	Robust							Neural Adaptive												MIMO Non linear	Performance-oriented adaptive neural augmentation of an existing flight control system	2011	3
71		Adaptive		nonlinear				Model Reference Adaptive Control Adaptive		Neural Adaptive							lyapunov nonlinear						Arbitrary reference model-following adaptive control based on neural network	2011	2
72		Adaptive								Neural Adaptive							lyapunov nonlinear						Design of an effective neural network (NN) adaptive flight control based on unmatched uncertain system	2011	1
73		Adaptive		nonlinear						Neural Adaptive				dynamic inversion non linear									New non-linear adaptive command system for the aircrafts' attitude control	2011	1
74	fault tolerant	Adaptive	Robust	nonlinear																			Adaptive robust actuator fault-tolerant control in presence of input saturation	2011	5
75		Adaptive	Robust																				Robust and adaptive control of X-45A J-UCAS: A design trade study	2011	2
76	fault tolerant	Adaptive	Robust					Model Reference Adaptive Control Adaptive					Sliding non linear										Accommodation of unknown actuator faults using output feedback-based adaptive robust control	2011	9
77		Adaptive	Robust							Neural Adaptive				dynamic inversion non linear	Asymptotic Tracking Position nonlinear		lyapunov nonlinear						Robust adaptive control based on wavelet neural network for a hypersonic vehicle	2011	
78		Adaptive		nonlinear					Fuzzy Adaptive				Sliding non linear				lyapunov nonlinear	feedback linearization nonlinear					Integrated flight/propulsion fuzzy adaptive generalized predictive control for near-space vehicle	2011	1
79		Adaptive	Robust	nonlinear								backstep non linear					lyapunov nonlinear						Robust adaptive control of hypersonic vehicles via Backstepping method	2011	13
80		Adaptive	Robust	nonlinear		allocation robust				Neural Adaptive		backstep non linear											Backstepping adaptive high maneuvers flight control based on neural network	2011	
81		Adaptive	Robust	nonlinear																			Robust adaptive control of a quadrotor helicopter	2011	56
82		Adaptive																					Robust iterative learning control: L1 adaptive feedback control in an ILC framework	2011	7
83		Adaptive		nonlinear						Neural Adaptive													L1 neural network adaptive control for systems with matched and unmatched uncertainties	2011	
84		Adaptive	Robust							Neural Adaptive													Integrated design of a linear/neuro-adaptive controller in the presence of norm-bounded uncertainties	2011	4
85		Adaptive						Model Reference Adaptive Control Adaptive		Neural Adaptive													Robust adaptive control of a structurally damaged aircraft	2010	
86		Adaptive	Robust	nonlinear										dynamic inversion non linear									Robust adaptive control of a general aviation aircraft	2010	1
87		Adaptive	Robust																				Robustness analysis of an L1 adaptive controller	2010	
88		Adaptive								Neural Adaptive				dynamic inversion non linear									Neural network based adaptive control with Hierarchy-Structured Dynamic Inversion applied to nonlinear aircraft model	2010	
89		Adaptive	Robust	nonlinear		allocation robust				Neural Adaptive				dynamic inversion non linear									Robust control of a reusable launch vehicle in reentry phase using model following neuro-adaptive design	2010	3
90		Adaptive	Robust							Neural Adaptive			Sliding non linear										Adaptive flight control for unmanned aircraft using a stable neural network observer	2010	
91		Adaptive		nonlinear						Neural Adaptive				dynamic inversion non linear									Suppression of wing rock with adaptive neural control	2010	1
92	fault tolerant	Adaptive	Robust	nonlinear									Sliding non linear										An output feedback based adaptive robust fault tolerant control scheme for a class of nonlinear systems	2010	
93		Adaptive	Robust							Neural Adaptive							lyapunov nonlinear		Dynamic Surface Control Nonlinear				Robust flight control system using neural networks: Adaptive dynamic surface design approach	2010	
94		Adaptive		nonlinear			Nussbaum gain method adaptive			Neural Adaptive							lyapunov nonlinear						Neural network-based adaptive attitude tracking control for flexible spacecraft with unknown high-frequency gain	2010	3
95		Adaptive		nonlinear						Neural Adaptive									Dynamic Surface Control Nonlinear				Neural network-based adaptive dynamic surface control for an airbreathing hypersonic vehicle	2010	2
96	fault tolerant	Adaptive	Robust										Sliding non linear										Robust adaptive sliding-mode fault-tolerant control with L2-gain performance for flexible spacecraft using redundant reaction wheels	2010	36
97	fault tolerant	Adaptive	Robust	nonlinear																			Robust adaptive output-feedback control for a class of nonlinear systems with time-varying actuator faults	2010	13
98		Adaptive				allocation robust											lyapunov nonlinear						Adaptive control allocation for non-linear systems with internal dynamics	2010	5
99		Adaptive		nonlinear						Neural Adaptive													Nonlinear adaptive aggressive control using recurrent neural networks for a small scale helicopter	2010	9

Tabla Anexo 1-3 Población Métodos o Algoritmos de Control No lineal y Adaptativo estudiado

ID	Fault tolerant	Adaptive	Robust	nonlinear	Robust H∞	allocation robust	Nussebaum gain method adaptive	Model Reference Adaptive Control Adaptive	Fuzzy Adaptive	Neural Adaptive	Immersion and invariance (I&I) adaptive	backstep non linear	Sliding non linear	dynamic inversion non linear	Asymptotic Tracking Position nonlinear	high gain observer nonlinear	lyapunov nonlinear	feedback linearization nonlinear	Dynamic Surface Control nonlinear	Active Disturbance Rejection nonlinear	MIMO Non linear	Título del Documento	Year	Citado	
100		Adaptive	Robust							Neural Adaptive												LMI-based design of a neuro-adaptive augmentation controller for an unmanned aerial vehicle	2010		
101		Adaptive	Robust							Neural Adaptive													Enhancements to a neural adaptive flight control system for a modified F-15 aircraft	2008	
102		Adaptive		nonlinear						Neural Adaptive				dynamic inversion non linear			lyapunov nonlinear						Neuroadaptive model following controller design for non-affine non-square aircraft system	2009	4
103		Adaptive								Neural Adaptive							lyapunov nonlinear						Calculation of bounding sets for neural network based adaptive control systems	2008	
104		Adaptive	Robust							Neural Adaptive													Adaptive output feedback control based on neural networks: Application to flexible aircraft control	2009	
105	fault tolerant	Adaptive	Robust																				Robust adaptive fault-tolerant control of the F-14 aircraft under sensor failures	2008	
106		Adaptive	Robust																				Robust optimal adaptive control method with large adaptive gain	2009	
107	fault tolerant	Adaptive		nonlinear						Neural Adaptive													Adaptive fault-tolerant flight control system design using neural networks	2008	
108	fault tolerant	Adaptive	Robust			allocation robust																	Study on robust reconfigurable flight control law based on simple adaptive control	2009	
109		Adaptive	Robust	nonlinear										dynamic inversion non linear									Robust adaptive reconfigurable control for a hypersonic cruise vehicle	2009	
110		Adaptive							Fuzzy Adaptive			backstep non linear		dynamic inversion non linear			lyapunov nonlinear						Fuzzy adaptive control for hypersonic vehicle via Backstepping method	2008	59
111		Adaptive	Robust																				Robust adaptive multiple model controller design for an airbreathing hypersonic vehicle model	2008	4
112		Adaptive							Fuzzy Adaptive														Indirect adaptive fuzzy control of unmanned aerial vehicle	2008	
113		Adaptive	Robust	nonlinear					Fuzzy Adaptive				Sliding non linear				lyapunov nonlinear						Networked flexible spacecraft attitude maneuver based on adaptive fuzzy sliding mode control	2009	36
114		Adaptive						Model Reference Adaptive Control Adaptive		Neural Adaptive													Flight test validation of a Neural Network based Long Term Learning Adaptive Flight Controller	2009	
115		Adaptive	Robust																				A process to obtain robustness metrics for adaptive flight controllers	2009	
116		Adaptive								Neural Adaptive													On the level of center of gravity modeling error in neural network based adaptive controller design	2008	
117		Adaptive	Robust																				Robust adaptive optimal control modification with large adaptive gain	2009	6
118		Adaptive	Robust							Neural Adaptive													Neuro robust adaptive descending control of space vehicles	2008	
119		Adaptive								Neural Adaptive													Applications of adaptive neural network control to an unmanned airship	2009	10
120		Adaptive								Neural Adaptive													A comparison of a new neuroadaptive controller architecture with the σ- And e- modification architectures	2009	
121		Adaptive						Model Reference Adaptive Control Adaptive		Neural Adaptive													Comparison of RBF and SHL neural network based adaptive control	2009	5
122		Adaptive							Fuzzy Adaptive	Neural Adaptive													Adaptive neuro-fuzzy controllers for an open loop morphing wing system	2009	
123		Adaptive		nonlinear											Asymptotic Tracking Position nonlinear								Transient performance and asymptotic tracking with filtering robust adaptive control	2009	
124	fault tolerant	Adaptive								Neural Adaptive				dynamic inversion non linear									Fault tolerance through direct adaptive control using neural networks	2006	
125	fault tolerant	Adaptive	Robust										Sliding non linear				lyapunov nonlinear						Adaptive sliding mode control robust to actuator faults	2007	2
126		Adaptive								Neural Adaptive													Neural network based adaptive flight control using feedback error learning	2006	
127	fault tolerant	Adaptive		nonlinear						Neural Adaptive													Intelligent adaptive nonlinear flight control for a high performance aircraft with neural networks	2006	31
128		Adaptive		nonlinear						Neural Adaptive							lyapunov nonlinear						Model-following neuro-adaptive control design for non-square, non-affine nonlinear systems	2007	22
129		Adaptive	Robust												Asymptotic Tracking Position nonlinear								Robust adaptive attitude control of Crew Exploration Vehicles (CEVs) with guaranteed performance	2007	1
130		Adaptive	Robust	nonlinear										dynamic inversion non linear									Nonlinear robust/adaptive controller design for an air-breathing hypersonic vehicle model	2007	2
131		Adaptive	Robust																				Robust and adaptive autoland control strategies for Crew Exploration Vehicles (CEVs)	2007	
132										Neural Adaptive													Adaptive neural network control and wireless sensor network-based localization for UAV formation	2006	
133		Adaptive	Robust	nonlinear					Fuzzy Adaptive				Sliding non linear										An adaptive fuzzy sliding mode control for networked control systems	2007	3
134		Adaptive								Neural Adaptive													∞1 adaptive neural network controller for autonomous aerial refueling with guaranteed transient performance	2006	
135		Adaptive	Robust	nonlinear					Fuzzy Adaptive	Neural Adaptive													Adaptive Approximation Based Control: Unifying Neural, Fuzzy and Traditional Adaptive Approximation Approaches	2006	258
136		Adaptive																					Adaptive non-linear model inversion control of a twin rotor multi-input multi-output system using artificial intelligence	2007	9
137		Adaptive								Neural Adaptive													Neural adaptive flight controllers for helicopters	2006	
138		Adaptive	Robust																				Issues, progress and new results in robust adaptive control	2006	120
139		Adaptive								Neural Adaptive													Neural network-based adaptive control for nonlinear flight regimes	2003	
140		Adaptive	Robust	nonlinear									Sliding non linear	dynamic inversion non linear									Adaptive robust control of an F-15 aircraft	2004	2
141		Adaptive	Robust	nonlinear						Neural Adaptive											MIMO Non linear		Robust neural adaptive control of a hypersonic aircraft	2003	39
142		Adaptive								Neural Adaptive				dynamic inversion non linear			lyapunov nonlinear						Nonlinear adaptive internal model control using neural networks for tilt rotor aircraft platform	2005	3
143		Adaptive		nonlinear						Neural Adaptive							lyapunov nonlinear						Robust nonlinear adaptive flight control for consistent handling qualities	2005	47
144		Adaptive		nonlinear						Neural Adaptive							lyapunov nonlinear						Model following robust neuro-adaptive control design for non-square, non-affine systems	2004	
145		Adaptive								Neural Adaptive													A comparison study of classical and neural network based adaptive control of wing rock	2004	
146		Adaptive								Neural Adaptive							lyapunov nonlinear						Adaptive vortex seeking formation flight neurocontrol	2003	
147		Adaptive								Neural Adaptive													Adaptive verification for an on-line learning neural-based flight control system	2005	
148		Adaptive	Robust							Neural Adaptive													Verification and validation of real-time adaptive neural networks using ANCT tools and methodologies, an application to intelligent flight control systems F-15 project	2005	
149		Adaptive	Robust	nonlinear						Neural Adaptive													Integration of online parameter identification and neural network for in-flight adaptive control	2003	
150		Adaptive								Neural Adaptive													Statistical and adaptive approach for verification of a neural-based flight control system	2004	2
151		Adaptive	Robust	nonlinear						Neural Adaptive			Sliding non linear										Robust adaptive control of uncertain nonlinear systems based on RBF neural network	2002	2
152		Adaptive																feedback linearization nonlinear					Adaptive nonlinear control system design for helicopter robust command augmentation	2005	35
153		Adaptive		nonlinear						Neural Adaptive		backstep non linear											Adaptive backstepping control for a class of nonlinear systems via multilayered neural networks	2002	11
154		Adaptive	Robust										Sliding non linear										Robust adaptive tracking control of delta wing vortex-coupled roll dynamics subject to delay	2005	
155		Adaptive		nonlinear						Neural Adaptive													Adaptive neural control of deep-space formation flying	2002	20
156		Adaptive	Robust	nonlinear										dynamic inversion non linear									Robustness Study of the Dynamic Inversion Based Indirect Adaptive Control of Flight Vehicles with Uncertain Model Data	2003	3
157		Adaptive	Robust																				Orthogonal transformation based robust adaptive close formation control of multi-UAVs	2005	11
158		Adaptive	Robust																				Robust adaptive control scheme for discrete-time system with actuator failures	2005	2
159		Adaptive								Neural Adaptive							lyapunov nonlinear						Adaptive output feedback control of a class of multi-input multi-output systems using neural networks	2004	42
160		Adaptive	Robust							Neural Adaptive		backstep non linear											Flight-path angle control via neuro-adaptive backstepping	2002	8
161		Adaptive		nonlinear						Neural Adaptive							lyapunov nonlinear						Adaptive output feedback control of uncertain nonlinear systems using single-hidden-layer neural networks	2002	208
162		Adaptive								Neural Adaptive													A direct adaptive neural command controller design for an unstable helicopter	2005	
163		Adaptive	Robust							Neural Adaptive													Proposed real time performance evaluation of two types of adaptive neural network controllers	2004	
164		Adaptive	Robust	nonlinear						Neural Adaptive													Adaptive neurocontroller for a nonlinear combat aircraft model	2001	14
165		Adaptive		nonlinear						Neural Adaptive							lyapunov nonlinear						Nonlinear adaptive control of tiltrotor aircraft using neural networks	1997	
166		Adaptive								Neural Adaptive													Reusable launch vehicle adaptive guidance and control using neural networks	2001	3
167		Adaptive		nonlinear					Fuzzy Adaptive														Use of fuzzy logic in adaptive flight control systems	2000	4
168		Adaptive								Neural Adaptive													Neural network adaptive control of systems with input saturation	2001	45
169		Adaptive	Robust	nonlinear																	MIMO Non linear		Robust adaptive sliding control for a class of MIMO nonlinear systems	2001	6
170		Adaptive	Robust	nonlinear						Neural Adaptive													Robust adaptive nonlinear control using single hidden layer neural networks	2000	5
171		Adaptive								Neural Adaptive													Nonlinear adaptive flight control using neural networks	1998	210
172		Adaptive		nonlinear						Neural Adaptive													Analysis of adaptive neural networks for helicopter flight control	1997	107
173		Adaptive	Robust	nonlinear						Neural Adaptive							lyapunov nonlinear						Robust adaptive critic based neurocontrollers for helicopter with unmodeled uncertainties	2001	5