

1. Record Nr.	UNINA9910458750503321
Autore	To James Jiann Hua
Titolo	Qiaowu : extra-territorial policies for the overseas Chinese / / by James Jiann Hua To
Pubbl/distr/stampa	Leiden, Netherlands : , : Brill, , 2014 ©2014
ISBN	90-04-27228-3
Descrizione fisica	1 online resource (372 p.)
Collana	Chinese Overseas, , 1876-3847 ; ; Volume 8
Disciplina	305.895/1
Soggetti	Chinese - Foreign countries - Government policy - China Chinese - Foreign countries - Government policy - Taiwan Chinese diaspora - Political aspects - China Chinese diaspora - Political aspects - Taiwan Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Preliminary Material -- 1 Introduction -- 2 Mobilizing the OC in the Twenty-First Century -- 3 Unveiling Qiaowu -- 4 Targets and Subjects of Qiaowu -- 5 Cultural Work: Reconstructing 'Chineseness' -- 6 Cultural Work: Reconnection -- 7 External Work: Threats and Challenges -- 8 External Work: Diplomatic Assistance -- 9 The Future of Qiaowu -- 10 Conclusion -- 11 Bibliography -- Index.
Sommario/riassunto	For over 150 years, China's interactions with its diaspora have evolved according to the domestic and international geopolitical environment. This relationship (broadly described as qiaowu) is most visible in the form of cultural and economic activities; however, its main purpose is to cultivate, influence, and manage ethnic Chinese as part of a global transnational project to rally support for its proponents. Qiaowu: Extra-Territorial Policies for the Overseas Chinese compares the rival policies and practices of the Chinese Communist Party with the Nationalist Kuomintang and Democratic Progressive Party governments of Taiwan. Political scientist James Jiann Hua To analyzes the role that qiaowu plays in harnessing the power of strategic overseas communities, and highlights the implications for China's foreign relations.

2. Record Nr.	UNINA9910815011103321
Autore	Yang Shiping <1987->
Titolo	Iterative learning control for multi-agent systems coordination // by Shiping Yang, Jian-Xin Xu, Xuefang Li, Dong Shen
Pubbl/distr/stampa	Singapore : , : John Wiley & Sons, Inc., , 2017 [Piscataway, New Jersey] : , : IEEE Xplore, , [2017]
ISBN	1-119-18905-5 1-119-18907-1 1-119-18906-3
Descrizione fisica	1 online resource (259 pages)
Collana	Wiley - IEEE
Classificazione	TEC037000
Disciplina	629.8/9
Soggetti	Intelligent control systems Multiagent systems Machine learning Iterative methods (Mathematics)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	-- Preface ix -- 1 Introduction 1 -- 1.1 Introduction to Iterative Learning Control 1 -- 1.1.1 Contraction-Mapping Approach 3 -- 1.1.2 Composite Energy Function Approach 4 -- 1.2 Introduction to MAS Coordination 5 -- 1.3 Motivation and Overview 7 -- 1.4 Common Notations in This Book 9 -- 2 Optimal Iterative Learning Control for Multi-agent Consensus Tracking 11 -- 2.1 Introduction 11 -- 2.2 Preliminaries and Problem Description 12 -- 2.2.1 Preliminaries 12 -- 2.2.2 Problem Description 13 -- 2.3 Main Results 15 -- 2.3.1 Controller Design for Homogeneous Agents 15 -- 2.3.2 Controller Design for Heterogeneous Agents 20 -- 2.4 Optimal Learning Gain Design 21 -- 2.5 Illustrative Example 23 -- 2.6 Conclusion 26 -- 3 Iterative Learning Control for Multi-agent Coordination Under Iteration-Varying Graph 27 -- 3.1 Introduction 27 -- 3.2 Problem Description 28 -- 3.3 Main Results 29 -- 3.3.1 Fixed Strongly Connected Graph 29 -- 3.3.2 Iteration-Varying Strongly Connected Graph 32 -- 3.3.3 Uniformly Strongly Connected Graph 37 -- 3.4 Illustrative Example 38 -- 3.5 Conclusion 40 -- 4 Iterative Learning Control for Multi-agent

Coordination with Initial State Error	41
4.1 Introduction	41
4.2 Problem Description	42
4.3 Main Results	43
4.3.1 Distributed D-type Updating Rule	43
4.3.2 Distributed PD-type Updating Rule	48
4.4 Illustrative Examples	49
4.5 Conclusion	50
5 Multi-agent Consensus Tracking with Input Sharing by Iterative Learning Control	53
5.1 Introduction	53
5.2 Problem Formulation	54
5.3 Controller Design and Convergence Analysis	54
5.3.1 Controller Design Without Leader's Input Sharing	55
5.3.2 Optimal Design Without Leader's Input Sharing	58
5.3.3 Controller Design with Leader's Input Sharing	59
5.4 Extension to Iteration-Varying Graph	60
5.4.1 Iteration-Varying Graph with Spanning Trees	60
5.4.2 Iteration-Varying Strongly Connected Graph	60
5.4.3 Uniformly Strongly Connected Graph	62
5.5 Illustrative Examples	63
5.5.1 Example 1: Iteration-Invariant Communication Graph	63
5.5.2 Example 2: Iteration-Varying Communication Graph	64
5.5.3 Example 3: Uniformly Strongly Connected Graph	66
5.6 Conclusion	68
6 A HOIM-Based Iterative Learning Control Scheme for Multi-agent Formation	69
6.1 Introduction	69
6.2 Kinematic Model Formulation	70
6.3 HOIM-Based ILC for Multi-agent Formation	71
6.3.1 Control Law for Agent 1	72
6.3.2 Control Law for Agent 2	74
6.3.3 Control Law for Agent 3	75
6.3.4 Switching Between Two Structures	78
6.4 Illustrative Example	78
6.5 Conclusion	80
7 P-type Iterative Learning for Non-parameterized Systems with Uncertain Local Lipschitz Terms	81
7.1 Introduction	81
7.2 Motivation and Problem Description	82
7.2.1 Motivation	82
7.2.2 Problem Description	83
7.3 Convergence Properties with Lyapunov Stability Conditions	84
7.3.1 Preliminary Results	84
7.3.2 Lyapunov Stable Systems	86
7.3.3 Systems with Stable Local Lipschitz Terms but Unstable Global Lipschitz Factors	90
7.4 Convergence Properties in the Presence of Bounding Conditions	92
7.4.1 Systems with Bounded Drift Term	92
7.4.2 Systems with Bounded Control Input	94
7.5 Application of P-type Rule in MAS with Local Lipschitz Uncertainties	97
7.6 Conclusion	99
8 Synchronization for Nonlinear Multi-agent Systems by Adaptive Iterative Learning Control	101
8.1 Introduction	101
8.2 Preliminaries and Problem Description	102
8.2.1 Preliminaries	102
8.2.2 Problem Description for First-Order Systems	102
8.3 Controller Design for First-Order Multi-agent Systems	105
8.3.1 Main Results	105
8.3.2 Extension to Alignment Condition	107
8.4 Extension to High-Order Systems	108
8.5 Illustrative Example	113
8.5.1 First-Order Agents	114
8.5.2 High-Order Agents	115
8.6 Conclusion	118
9 Distributed Adaptive Iterative Learning Control for Nonlinear Multi-agent Systems with State Constraints	123
9.1 Introduction	123
9.2 Problem Formulation	124
9.3 Main Results	127
9.3.1 Original Algorithms	127
9.3.2 Projection Based Algorithms	135
9.3.3 Smooth Function Based Algorithms	138
9.3.4 Alternative Smooth Function Based Algorithms	141
9.3.5 Practical Dead-Zone Based Algorithms	156
9.4 Illustrative Example	163
9.5 Conclusion	171
10 Synchronization for Networked Lagrangian Systems under Directed Graphs	173
10.1 Introduction	173
10.2 Problem Description	174
10.3 Controller Design and Performance Analysis	175
10.4 Extension to Alignment Condition	181
10.5 Illustrative Example	182
10.6 Conclusion	186
11 Generalized Iterative Learning for Economic Dispatch Problem in a Smart Grid	187
11.1 Introduction	187
11.2 Preliminaries	188
11.2.1 In-Neighbor and Out-Neighbor	188
11.2.2 Discrete-Time Consensus Algorithm	189
11.2.3 Analytic Solution to EDP with Loss Calculation	190
11.3	

Main Results 191 -- 11.3.1 Upper Level: Estimating the Power Loss 192 -- 11.3.2 Lower Level: Solving Economic Dispatch Distributively 192 -- 11.3.3 Generalization to the Constrained Case 195 -- 11.4 Learning Gain Design 196 -- 11.5 Application Examples 198 -- 11.5.1 Case Study 1: Convergence Test 199 -- 11.5.2 Case Study 2: Robustness of Command Node Connections 200 -- 11.5.3 Case Study 3: Plug and Play Test 201 -- 11.5.4 Case Study 4: Time-Varying Demand 203 -- 11.5.5 Case Study 5: Application in Large Networks 205 -- 11.5.6 Case Study 6: Relation Between Convergence Speed and Learning Gain 205 -- 11.6 Conclusion 206 -- 12 Summary and Future Research Directions 207 -- 12.1 Summary 207 -- 12.2 Future Research Directions 208 -- 12.2.1 Open Issues in MAS Control 208 -- 12.2.2 Applications 212 -- Appendix A Graph Theory Revisit 221 -- Appendix B Detailed Proofs 223 -- B.1 HOIM Constraints Derivation 223 -- B.2 Proof of Proposition 2.1 224 -- B.3 Proof of Lemma 2.1 225 -- B.4 Proof of Theorem 8.1 227 -- B.5 Proof of Corollary 8.1 228 -- Bibliography 231 -- Index 000.

Sommario/riassunto

"This book gives a comprehensive overview of the intersection between ILC and MAS, the range of topics include basic to advanced theories, rigorous mathematics to engineering practice, and linear to nonlinear systems. It addresses the crucial multi-agent coordination and control challenges that can be solved by ILC methods. Through systematic discussion of network theory and intelligent control, the authors explore future research possibilities, develop new tools, and provide numerous applications such as the power grid, communication and sensor networks, intelligent transportation system, and formation control. Readers will gain a roadmap to the latest advances in the fields and use their newfound knowledge to design their own algorithms"--