



SDI Review Form 1.6

Journal Name:	British Journal of Mathematics & Computer Science
Manuscript Number:	2014_BJMCS_14446
Title of the Manuscript:	LQ Optimal Control-Based Variable Gain Controllers for Linear Systems with Structured Uncertainties and Its Performance Analysis
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<u>Compulsory</u> REVISION comments		We authors greatly appreciate your helpful comments to our paper (ID : 2014/BJMCS/14446), which help us improve the correctness and readability of our paper. On the basis of the referee's comments we add and modify some points to make our main contribution and vague points clearer.
<u>Minor</u> REVISION comments	1. How can Eq.(3.6) be transformed from (3.1) and (3.5)? There may be some mistake. 2. What is meaning of the parameter δ in (41.)? Please express it. 3. There seems to be a false model in the given uncertain linear system (5.1). 4. How to adjust the parameter δ to guarantee the transient performance? The paper should give some adjustment guideline.	1. As you mentioned, there are some mistake. (3.6) has been modified. 2. Following the referee's comment, Remark 1 in the revised version has been included. In Remark 1, the important role of the design parameter δ has been described. 3. (5.1) has been corrected. 4. Note that the on-line adjustment for the design parameter δ so as to achieve both good transient performance and avoiding excessive control input is one of future research subjects. For the on-line adjustment for the design parameter δ some comments are included in "6 Conclusions".
<u>Optional/General</u> comments	This paper presents a new algorithm for designing a variable gain controller for a linear system with structured uncertainties problem. The mathematical method is more or less innovative. The simulation shows the effectiveness of the proposed method.	