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Building SU-8 Microstructure Suitable for PDMS CGG from Bottom up

Qiming CHEN[1], Renxuan FU[1], Xianwen SONG[1]
[1]*School of Mechanical and Electrical Engineering, Guangdong Polytechnic of Industry and Commerce,,*
*Corresponding Author's Email: chqmpku@gdgm.edu.cn.

Introduction

DMD system for lithography

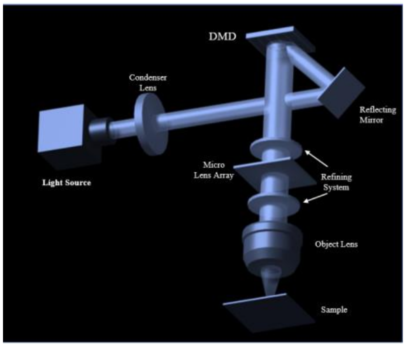

Figure 1. Sketch of maskless DMD lithography system

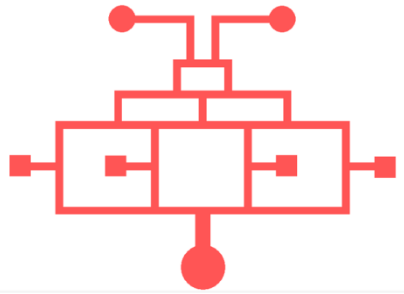

Figure 2. Virtual mask sketch

3-Level CGGs

Method

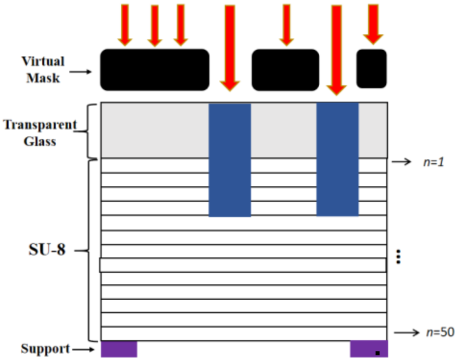

Figure 3.dose-modulated exposure technique from bottom up

The photoresist is SU-8

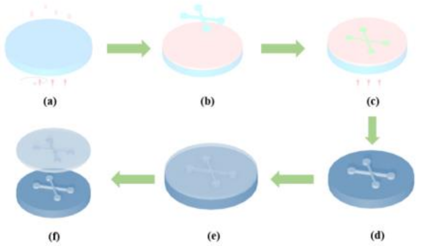

Figure 4.Processing flow diagram of PDMS CGG

Results

45 µm in height

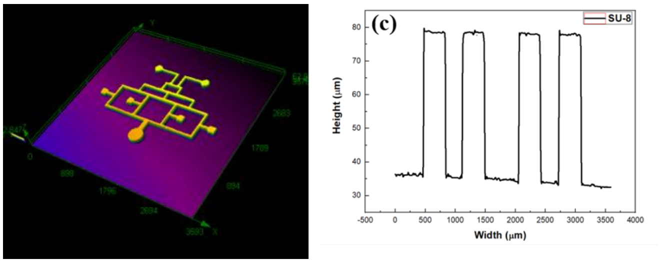

Figure 5. LSCM results of SU-8 microstructure

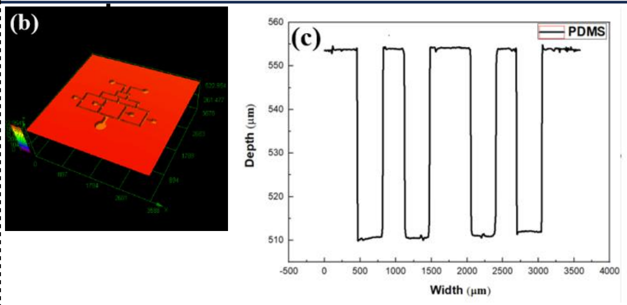

Figure 6. LSCM results of PDMS CGG

Conclusions

1.The SU-8 CGG was fabricated using dose-modulated expose technique from bottom up.
2.The single channel's depth of PDMS CGG is 45 µm.

Acknowledgements

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