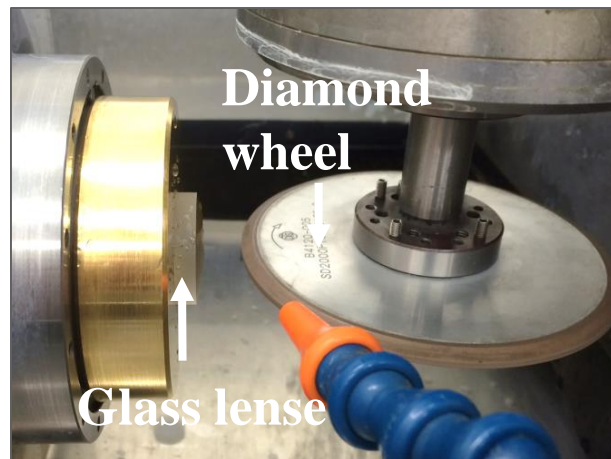


Highly efficient ultra-precision grinding of optical glass lenses

Research purpose

4K・8K対応の非球面光学ガラスの高効率な延性モード超精密加工の実現

Methodology & Results



Experimental setup

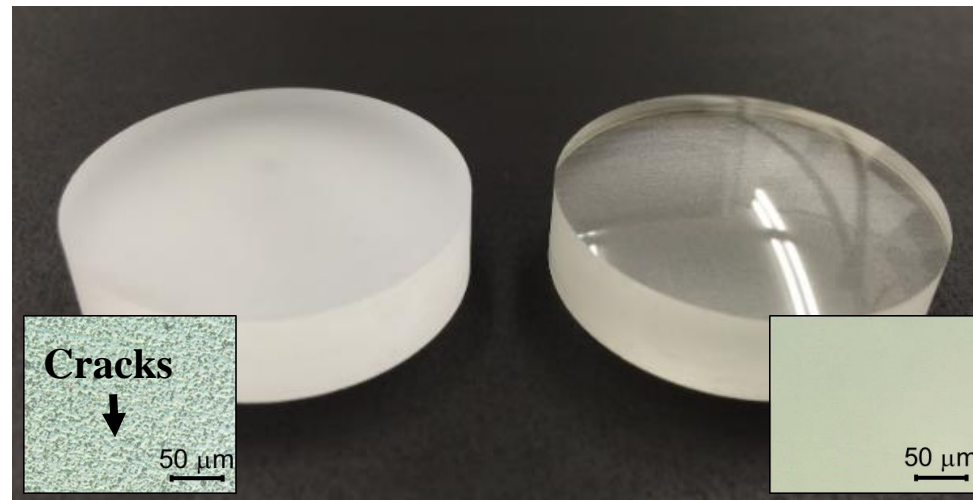


Butadiene rubber



Chloroprene rubber

工具材質の変更



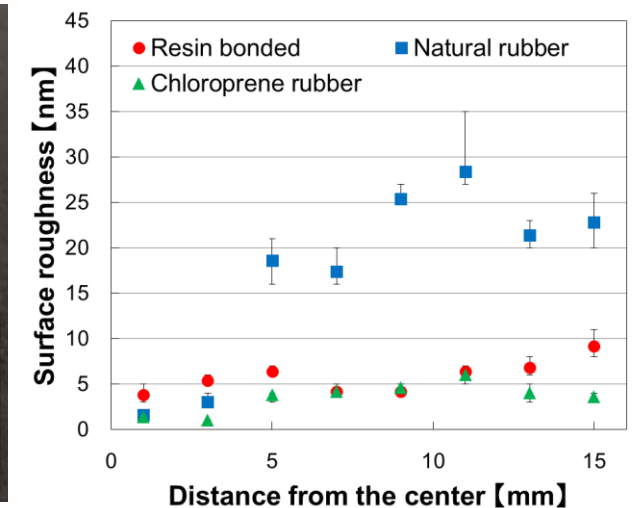
The optical glass BK7

- 送り-周速制御
- 工具材質
- 化学作用援用
- プロセス監視



- 最小限の研磨工程
→ 形状精向上
- 総製造時間の飛躍的短縮
→ コスト大幅削減・競争力強化

砥粒加工学会熊谷賞(2016), FA財団論文賞受賞(2017)



Reference: Y. Kawana, R. Sekiguchi, Y. Mizumoto, Y. Kakinuma, K. Tanaka, M. Fukuta, "Basic Study on ductile-mode grinding of optical glass lenses with rubber bonded diamond wheels" ISAAT 2016, Stockholm, Sweden (2016-10)