Retinal stray light originating from intraocular lenses and its effect on visual performance

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Propositions PhD thesis

"Retinal stray light originating from intraocular lenses and its effect on visual performance"

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1. In a cataractous eye lens, protein aggregates cause retinal stray light.
   (Benedek GB, Theory of the transparency of the eye, Applied Optics 10,459-473,1971)

2. Retinal stray light originating from intraocular lenses is a clinically relevant factor determining the effectiveness of an uneventful cataract surgery.
   (*van den Berg TJTP et al. Straylight effects with aging and lens extraction. Am J Ophthalmol 2007;144:358–363)*

3. The influence of retinal stray light reduces when visual performance is assessed binocularly.
   (thesis, chapter 3)

4. The amount of retinal stray light induced by intraocular lenses should form part of the intraocular lens specification.
   (thesis, chapter 7, 8 and 9)

5. Earlier cataract surgery reduces older driver motor vehicle collisions.
   (Mennemeyer ST, Owsley C, McGwin G Jr. Reducing older driver motor vehicle collisions via earlier cataract surgery, Accid Anal Prev. 2013 December ; 61)

6. To further enhance healthy aging, a quick, reliable, understandable and objective measure of the influence of retinal stray light is needed.
   (thesis, chapter 9)