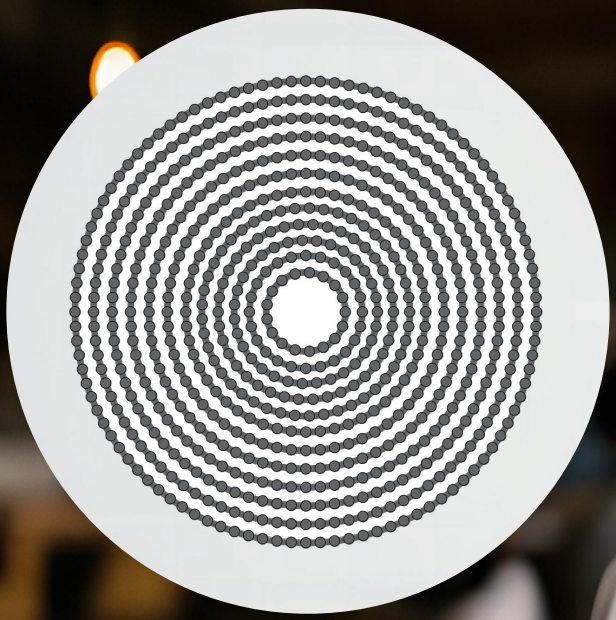
SMO 苏大明世®



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HOA-Blended Lens

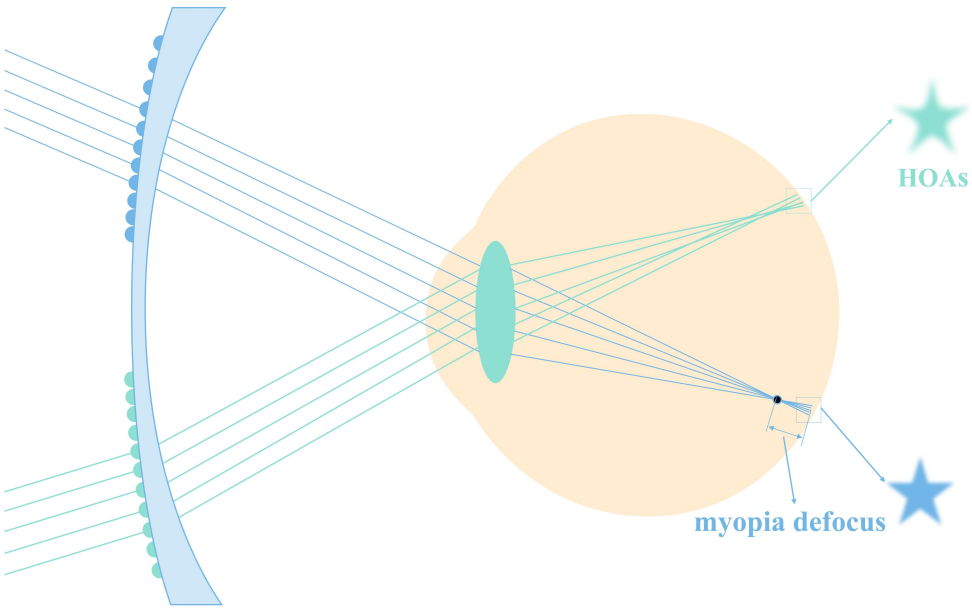
Product Advantages

- Multiple stimulus signals technology, myopia defocusing and higher-order aberrations jointly suppress axial growth.
- Using freeform surface quantization to introduce high-order aberrations and accurately control the amount of stimulation signal.
- The coexistence of dual mechanisms not only solves the early adaptability problem of simple high-order aberrations, but also avoids the decrease in control energy efficiency in the later stage of simple myopia defocusing.

Most Suitable Wearers

- Children and adolescents with progressive myopia
- Children and adolescents with insufficient reserve of farsightedness

Fundamental Hypothesis

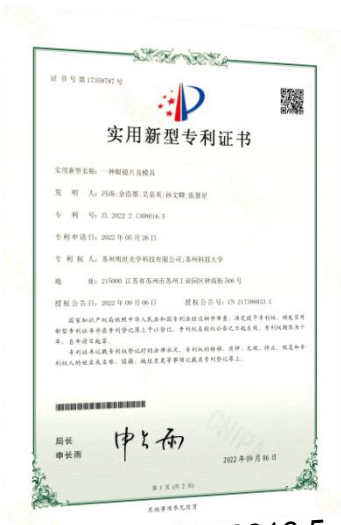


Using a positive lens to introduce myopic defocusing signals and project the imaging in front of the retina, while quantifying high-order aberration signals with a free ring surface to further perturb the visual imaging signal and intervene in the progression of myopia.

Dynamic Aberration Modulation Technology

Quantifying high-order aberrations to regulate stimulus signal quantity: By analyzing the changes in Zernike coefficients with variations in the parameters of the free ring surface, a relationship formula between the two is established, and the parameters of the free ring surface are designed based on the demand for stimulus signals.

Patents Provide Technical Protection



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Clinical Trials Provide Scientific Support

Clinical location:

Tianjin Eye Hospital
Optometry Center

Control rate of DIMS at 12 months

	Advanced version	Basic version	DIMS
SE growth rate(D)	-0.19±0.43	-0.30±0.43	-0.45±0.35
Difference to DIMS(D)	0.26	0.15	/
SE control improvement rate(%)	57.8%	33.3%	/
AL growth rate(mm)	0.10±0.16	0.13±0.18	0.22±0.13
Difference to DIMS(mm)	0.12	0.09	/
AL control improvement rate(%)	54.5%	40.9%	/

12-month Clinical outcome:

Advanced version: AL has an average annual growth rate of 0.10mm, and an effective control rate 54.5% higher than DIMS. SER has an average annual growth rate of -0.19D, and the effective control rate is 57.8% higher than DIMS.

Basic version: AL has an average annual growth rate of 0.13mm, and an effective control rate 40.9% higher than DIMS.SER has an average annual growth rate of -0.30D, and the effective control rate is33.3% higher than DIMS.

Stimulus intensity evaluation---DPME

DPME is used to evaluate the performance of lenslet lens based on defocus amount, filling rate, diameter, surface shape, and optical zone diameter of the lens.

product	DIMS	HAL	CAREA	CAREB	Advanced version	Basic version
DPME	8.124	11.140	4.553	7.604	12.283	17.713

Production Information

refractive index	1.59（PC）	Lens diameter: • SE less than -8.00D, 70mm • SE is -8.25D~-9.50D, 65mm • SE is -9.75D~11.00D, 60mm
DS	-11.00D~+2.00D	
DC	-4.00D~0.00D	
SE	-11.00D	
coating	green film, super water film, anti blue light film	