EXAMPLE 5

Six (6) groups of polypropylene haptics without anchor loops were treated by exposure to an oxygen plasma for 15 minutes at 80 watts power and a pressure of 0.1 torr. Each group included ten (10) haptics. At various times after completion of the plasma treatment, as indicated below, each of the treated haptics was bonded into a silicone polymer-based optic-like element as described in Example 1. Following such bonding, the haptics were pulled from the optic-like element by a Instron Model 1122 tensile tester and the pull force required to achieve this separation was recorded.

Results of these tests were as follows:

	Time from Plasma Treatment to Bonding	Mean Pull Force (gm)
Group 1	Immediate	85.3 ± 41.0
Group 2	3 Hours	106.0 ± 49.4
Group 3	8 Hours	87.2 ± 39.4
Group 4	24 Hours	82.7 ± 37.9
Group 5	48 Hours	64.6 ± 38.3
Group 6	7 Days	13.6 ± 19.7

These data indicate the existence of a relationship between the elapsed time from plasma treatment to bonding within the optic in terms of the strength of the haptic-optic bond. The haptic-optic bond is preferably affected within about 48 hours, more preferably within about 24 hours and still more preferably at about three (3) hours, following plasma treatment.

EXAMPLE 6

The lens bonding regions of ten (10) polypropylene haptics without anchor loops were exposed to an oxygen plasma at 80 watts power and a pressure of 0.1 torr for a duration of approximately 30 minutes. Within three (3) hours following plasma treatment, each plasma-exposed lens bonding region was coated by dipping the plasma-exposed lens bonding region into a mixture of the silicone polymer precursor described in Example 1. The coating was allowed to cure. After approximately 24 hours total elapsed time from plasma treatment, the coated region of each of the haptics was molded into a silicone polymer-based optic-like element having the same composition as the coating. Using an Instron Model 1122 tensile tester, the haptics were pulled from the optic-like element and the mean pull force required to achieve this separation was determined to be 104±22 grams.

As a control, ten (10) polypropylene haptics without anchor loops were exposed to an oxygen plasma under the same conditions, and were bonded into silicone polymer-based optic-like element having the same composition within a total elapsed time of 3 hours following plasma treatment. The mean pull force required to achieve separation of the haptics from the optics was 122±34 grams.

These data indicate that the provision of a coating in accordance with the present invention enables a superior strength haptic-optic bond to be formed beyond the time that an equivalent strength bond can be formed using uncoated, plasma-exposed haptics.

While this invention has been described with respect to various specific examples and embodiments, it is to be understood that the invention is not limited thereto and that it can be variously practiced within the scope of the following claims.

What is claimed is:

1. An intraocular lens comprising:

an optic; and

at least one haptic including a lens bonding region bonded to said optic, wherein said lens bonding region is exposed to plasma prior to being bonded to said optic, and the bond strength between said haptic and said optic is increased as a result of said exposure relative to a substantially identical intraocular lens including a haptic the lens bonding region of which is not subjected to said exposure.

2. The intraocular lens of claim **1** wherein said haptic comprises a material selected from a group consisting of polypropylene, polymethylmethacrylate, polycarbonates, polyamides, polyimides, polyacrylates, 2-hydroxymethylmethacrylate, poly(vinylidene fluoride), polytetrafluoroethylene, metals and mixtures thereof, and said optic comprises a material selected from the group consisting of silicone polymers, polyacrylates, polyphosphazenes, polyurethanes, hydrogel-forming polymers and mixtures thereof.

3. The intraocular lens of claim **1** wherein said haptic comprises polypropylene, and said optic material comprises a material selected from the group consisting of silicone polymers and mixtures thereof.

4. The intraocular lens of claim **1** wherein said lens bonding region is free of anchor structures designed to mechanically lock said haptic to said optic.

5. The intraocular lens of claim **4** wherein said haptic comprises a material selected from a group consisting of polypropylene, polymethylmethacrylate, polycarbonates, polyamides, polyimides, polyacrylates, 2-hydroxymethylmethacrylate, poly(vinylidene fluoride),-polytetrafluoroethylene, metals and mixtures thereof, and said optic comprises a material selected from the group consisting of silicone polymers, polyacrylates, polyphosphazenes, polyurethanes, hydrogel-forming polymers and mixtures thereof.

6. The intraocular lens of claim **1** wherein said lens bonding region has a substantially uniform cross-section throughout.

7. The intraocular lens of claim **1** wherein said lens bonding region is exposed to said plasma at a sub-atmospheric pressure of at least about 0.01 torr and at an output power in the range of about 30 watts to about 120 watts.

8. An intraocular lens comprising:

an optic; and

at least one haptic including a lens bonding region bonded to said optic, wherein said lens bonding region is exposed, prior to being bonded to said optic, to an activated gas plasma formed from a gas selected from the group consisting of oxygen, nitrogen, argon, and mixtures thereof, the bond strength between said haptic and said optic is increased as a result of said exposure relative to a substantially identical intraocular lens including a haptic the lens bonding region of which is not subjected to said exposure.

9. The intraocular lens of claim **8** wherein said haptic comprises polypropylene, said optic comprises a material selected from the group consisting of silicone polymers and mixtures thereof, said lens bonding region is exposed to said activated gas plasma for a period of time in the range of about 1 minute to about 60 minutes, at a pressure in the range of about 0.05 torr to about 0.3 torr and an output pressure in the range of about 5.0 watts to about 100 watts, and said gas is oxygen.