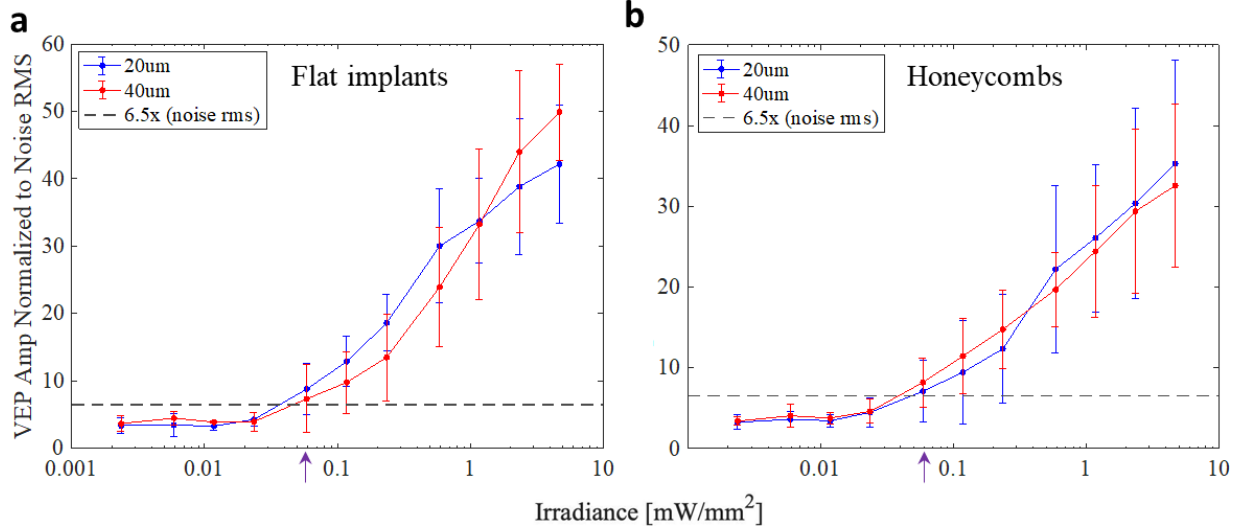
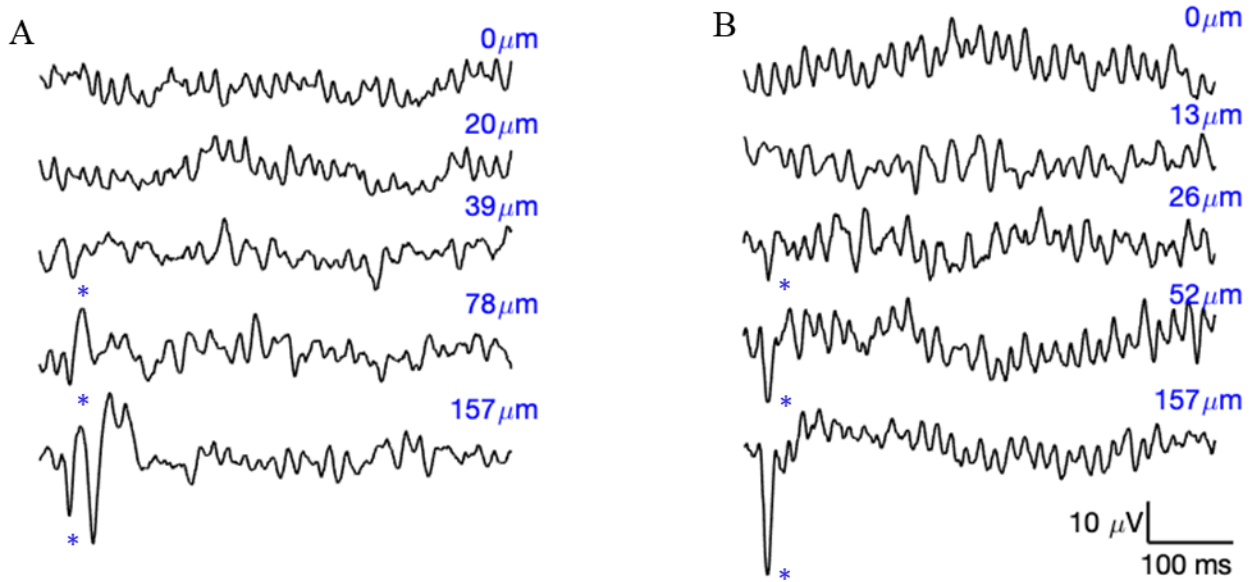


Supplementary information



**S1.** (a) The normalized VEP amplitude as a function of stimulus irradiance for the planar photovoltaic devices with 20 and 40  $\mu\text{m}$  pixels. The black dashed line indicates the average noise level. The average threshold is  $0.057 \pm 0.029 \text{ mW}/\text{mm}^2$  (b) The normalized VEP amplitude as a function of stimulus irradiance for 3D devices with polymer walls. The stimulation threshold is  $0.064 \pm 0.034 \text{ mW}/\text{mm}^2$ , similar to flat implants (arrows).

S2



**S2.** Example VEP traces in response to alternating grating of various stripe widths, in rats with (a) 40 μm and (b) 20 μm honeycombs.

Cellular migration into a subretinal honeycomb-shaped prosthesis for high-resolution prosthetic vision

<b>Primary antibodies</b>		
<b>Cell type</b>	<b>Host/Antibody</b>	<b>Supplier/Catalogue number</b>
Rod bipolar	Mouse/PKC $\alpha$	SCBT/sc-8393
Cone bipolar	Rabbit/Secretagoin	Cellsignaling/ 14037
Horizontal cell	Mouse/Calbindin	Swant/ CB300
Amacrine subset	Sheep/Choline acetyltransferase (CHAT)	Millipore/ AB1582
Blood vessels	Rabbit/Collagen IV (Col IV)	Abcam/ ab6586
Muller cells	Mouse/Glutamine synthase (GS)	Novus/NBP2-43646
Muller cell nuclei	Rabbit/Sox 9	Abcam/ ab185966
Muller cell activation and astrocytes	Goat/Glial Fibrillary Acidic Protein (GFAP)	SCBT/SC-6170
Microglia	Rabbit/IBA 1	WAKO/ 019-19741
<b>Secondary antibodies</b>		
<b>Host/Reactivity</b>	<b>Fluorophore</b>	<b>Supplier/Catalogue number</b>
Donkey/Rabbit	AF488	Thermofisher/ A-21206
Donkey/Mouse	CY3	Jackson lab/ 715-165-150
Donkey/Goat	AF594	Thermofisher/ A-11058
Donkey/Sheep	AF647	Thermofisher/ A-21448

**Supplementary Table 1.** Primary and secondary antibodies used for immunohistochemistry