

New Research in Journal Of Neuroscience

Congratulations to [Concetta](#) , whose latest paper has just been accepted for publication in JN.

Selective tuning for contrast in macaque area V4

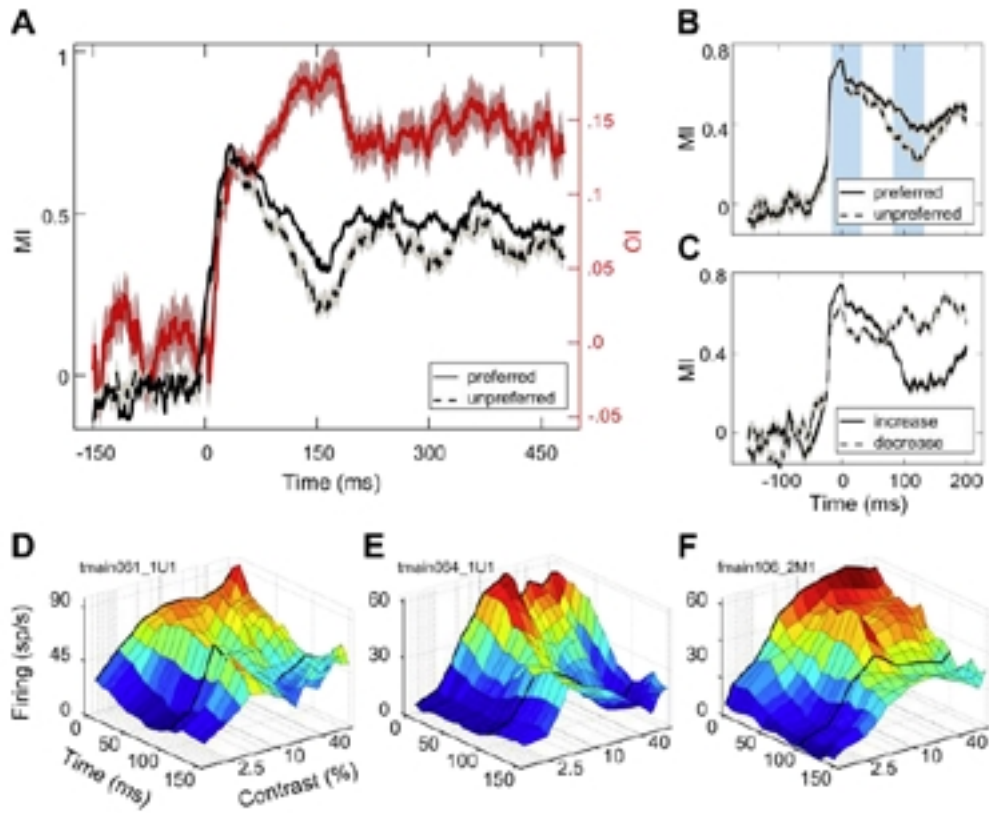
Ilaria Sani, Elisa Santandrea, Ashkan Golzar, [Maria Concetta Morrone](#) and Leonardo Chelazzi

Visually responsive neurons typically exhibit a monotonic-saturating increase of firing with luminance contrast of the stimulus, and are able to adapt to the current spatiotemporal context by shifting their selectivity, being therefore perfectly suited for optimal contrast encoding and discrimination. Here we report the first evidence of the existence of neurons showing selective tuning for contrast in area V4d of the behaving macaque (*Macaca mulatta*), i.e. narrow band-pass filter neurons with peak activity encompassing the whole range of visible contrasts and pronounced attenuation at contrasts higher than the peak. Crucially, we found that contrast tuning emerges after a considerable delay from stimulus onset, likely reflecting the contribution of inhibitory mechanisms. Selective tuning for luminance contrast might support multiple functions, including contrast identification and the attentive selection of low contrast stimuli.

JN_Selective tuning for contrast in macaque area V4

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