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> [Nocturnal Light: Exploring the Perceptual Experience of Bioluminescence](#)

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# Nocturnal Light: Exploring the Perceptual Experience of Bioluminescence

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<a href="#">Takeuchi_Jason_Spring 2012.pdf</a>	11.19 MB	Adobe PDF	<a href="#">View/Open</a>

## Item Summary

Title: Nocturnal Light: Exploring the Perceptual Experience of Bioluminescence

Authors: [Takeuchi, Jason](#)

Advisor: [Palagi, Kris](#)

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Abstract: At night, light has a remarkable impact on our visual perception. While modern lighting applications have fascinating effects in environments at night, the living light of bioluminescence has

abilities that produce unique effects in these environments. By designing with bioluminescent light, we take advantage of a natural and regenerative light source to support new perceptions of nocturnal environments. In determining the design capacity of bioluminescence, experimentation confirms three unique abilities of luminous algae that contrast the abilities of artificial lighting: (1) Reactive; blue light emitted as a response to physical movement (2) Nocturnal; light produced at night due to natural circadian rhythm (3) Organic; living and self-contained light with a prospect for future prominence. Image renderings visualize these abilities by introducing bioluminescence in existing nocturnal environments; as a result, bioluminescent light evokes curiosity and engagement, building an interactive experience between man, nature and light.

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