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Research outputs

The challenges of assessing lighting preference: An exploratory qualitative approach with semi-structured interviews
Mentens, A., Geys, F., Van Den Bossche, P. & Jacobs, V. A., 12 Oct 2026, In: Journal of Environmental Psychology. 115, 10 p.

Preferred correlated color temperature changes when the stimulus range differs
Mentens, A., Van Den Bossche, P. & Jacobs, V. A., 3 Apr 2026, In: LEUKOS. 16 p.

Psychophysical testing of safety aspects for daytime running lamps
Liang, Y., Bayhi, A., Mens, N., Bouchaara, N., Mentens, A., Dotreppe, G., Vandamme, D. M. V., Li, R. & Jacobs, V. A., 22 Sept 2025, *Proceedings of the 16th International Symposium on Automotive Lighting.* Technical University Darmstadt, p. 736-745 9 p.

Effect of wall illuminance and correlated colour temperature on scene preference in low light conditions
Mentens, A., Dotreppe, G. M., Scheir, G. H., Van den Bossche, P. & Jacobs, V. A., 15 Jun 2025, In: Building and Environment. 278, p. 1-8 8 p., 112917.

Stan4SWAP: towards efficient standards for Light Electric Vehicle Battery Swap
Van Den Bossche, P., Dotreppe, G., Mentens, A. & Jacobs, V. A., 15 Jun 2025, In: World Electric Vehicle Journal. 8 p.

Shedding Light on Vehicular Communication: A Review of the Latest Vehicular Visible Light Communication Channel Models
Dotreppe, G., Mentens, A., Coosemans, J., Van Den Bossche, P. & Jacobs, V. A., 3 Jun 2025, In: IEEE Communications Surveys & Tutorials. 28, p. 3165-3194 30 p.

Recommendations for lighting studies on insects: methodological considerations and best practices
Mentens, A., 11 Nov 2024. 1 p.

The preferred placement of the external Human Machine Interface for the safety communication between automated vehicles and vulnerable road users
Li, R., Ainoo, N. K., Watson, D., Mentens, A., Dotreppe, G., Pissens, I. & Jacobs, V. A., 17 Oct 2024, *12th International Forum of Automotive Lighting.* Insitute for Electric Light Sources, Fudan University, p. 104-110 6 p.

Recommendations for lighting studies on insects: methodological considerations and best practices
Mentens, A., De Causmaecker, L. M. S., Van Den Bossche, P., Vanschoenwinkel, B. & Jacobs, V. A., 4 Sept 2024, (In preparation) *IEEE Sustainable Smart Lighting.* Eindhoven, The Netherlands: IEEE Xplore

Vehicular Visible Light Communication Channel Models: A systematic review
Dotreppe, G., Coosemans, J., Mentens, A., Van Den Bossche, P. & Jacobs, V. A., 26 Apr 2024.

Road lighting - the trade-off between safety perception and light pollution
Mentens, A., Dotreppe, G., Van Den Bossche, P. & Jacobs, V. A., 23 Apr 2024, *EVS37—International Electric Vehicle Symposium and Exhibition (Seoul, KOR).* 37 ed. Seoul, Korea: Electric Vehicle Symposium and Exhibition, 9 p. (World Electric Vehicle Journal).

Road lighting - the trade-off between safety perception and light pollution
Mentens, A., 23 Apr 2024.

Vehicular Visible Light Communication Channel Models: A systematic review
Dotreppe, G., Coosemans, J., Mentens, A., Van Den Bossche, P. & Jacobs, V. A., 23 Apr 2024, *EVS37—International Electric Vehicle Symposium and Exhibition (Seoul, KOR).* 37 ed. Seoul, Korea: Electric Vehicle Symposium and Exhibition , 12 p. (World Electric Vehicle Journal).

Impact of colour temperature and illumination level on safety perception for parking garage lighting
Mentens, A., Dotreppe, G., Van Den Bossche, P., Scheir, G. H. & Jacobs, V. A., 29 Dec 2023, *Proceedings of CIE Quadrennial Meeting.* Vienna: Commission Internationale de L'Eclairage (CIE), p. 90-96 8 p.

Towards public LED lighting with minimal impact on insect movement
De Causmaecker, L. M. S., Mentens, A., Segers, L., Van Den Bossche, P., Vanschoenwinkel, B. & Jacobs, V. A., 29 Dec 2023, *Proceedings of the 30th CIE SESSION.* Vienna: Commission Internationale de L'Eclairage (CIE), p. 291-300 10 p.

The Private Charger — local charging station management from different perspectives
Van Den Bossche, P., Mentens, A. & Dotreppe, G., 11 Jun 2023, *Proceedings of the 36th Electric Vehicle Symposium and Exhibition.* MDPI, 6 p.

How can we influence safety perception in the VUB parking garages?
Mentens, A., 5 May 2023, (Unpublished).

Development of a control system to evaluate the impact of artificial light modulation on insects
De Causmaecker, L. M. S., Mentens, A., Aerts, S., Vanschoenwinkel, B., Moortgat, R., Van Den Bossche, P. & Jacobs, V. A., 1 Oct 2022, *Proceedings of the Symposium on Advances in Measurement of Temporal Light Modulation.* Commission Internationale de L'Eclairage (CIE), p. 31-39 9 p.

Electrical safety as key issue in EV charging infrastructure
Van Den Bossche, P., Mentens, A. & Dotreppe, G., 11 Jun 2022, *Proceedings of the 35th International Electric Vehicle Symposium and Exhibition (EVS35).* EVS35, 7 p.

Data-driven transfer function modelling of building dynamics using a frequency domain approach
Bernard, S., Belmans, B., Descamps, F., Mentens, A., Jacobs, V. A. & Lataire, J., 2022, In: Building Simulation Conference proceedings. p. 1810-1817 8 p.

Impact of advanced inverter functions on low-voltage power grids
Mentens, A., Chamorro, H. R., Jacobs, V. A., Topolánek, D., Drapéla, J. & Martinez, W., Dec 2021, In: IET Energy Systems Integration. 3, 4, p. 426-436 11 p.

Daylight Glare Probability prediction for an office room
Mentens, A., Martin, S., Descamps, F., Lataire, J. & Jacobs, V. A., 29 Sept 2021, *Proceedings of CIE Midterm Meeting.* 2021 ed. Commission Internationale de L'Eclairage (CIE), p. 176-181 6 p.

Optimizing camera placement for a luminance-based shading control system
Mentens, A., Scheir, G., Ghysel, Y., Descamps, F., Lataire, J. & Jacobs, V. A., 29 Sept 2021, *Proceedings of CIE Midterm Meeting.* 2021 ed. Commission Internationale de L'Eclairage (CIE), p. 1-7 7 p.

Optimizing camera placement for a luminance-based shading control system
Mentens, A., 28 Sept 2021, (Unpublished).

Elektriciteit-1: Uitgewerkte oefencursus ter ondersteuning van WPO's
Mentens, A. & Dotreppe, G., 1 Sept 2021, Brussel: VUB Press. 90 p.

Elektriciteit-2: Uitgewerkte oefencursus ter ondersteuning van WPO's
Mentens, A. & Dotreppe, G., 1 Sept 2021, Brussel: VUB Press. 36 p.

Elektrotechniek: Uitgewerkte oefencursus ter ondersteuning van WPO's
Mentens, A. & Dotreppe, G., 1 Sept 2021, Brussel: VUB Press. 29 p.