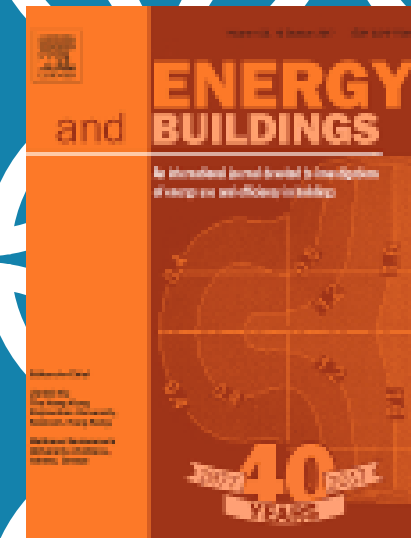


10th International Symposium on Heating, Ventilation, and Air Conditioning (ISHVAC 2017), Jinan, 19 Oct. 2017



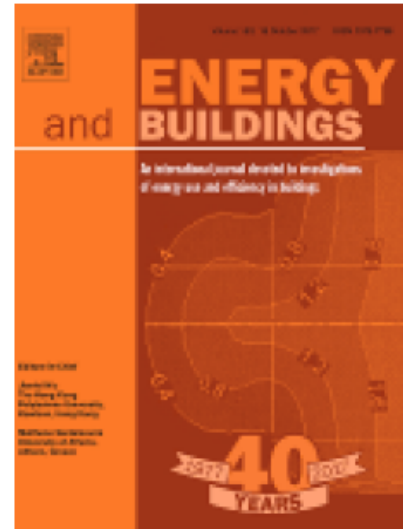
40TH ANNIVERSARY OF ENERGY AND BUILDINGS(ENB) - THE SPIRIT OF PEER REVIEW

Jianlei Niu

Editor-in-chief, Energy and Buildings
Conjoint Professor of School of Architecture, Design and Planning, and School of Civil Engineering,
The University of Sydney, Australia

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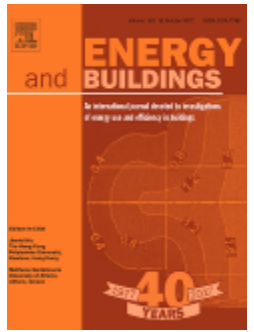
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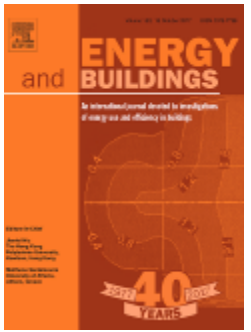
DESCRIPTION

Energy and Buildings is an international journal publishing articles **with explicit links to energy use in buildings**. The aim is to present new research results, and new proven practice aimed at reducing the energy needs of a building and improving indoor environment quality.



TOP 3 IN SCI JOURNAL CITATION REPORTS

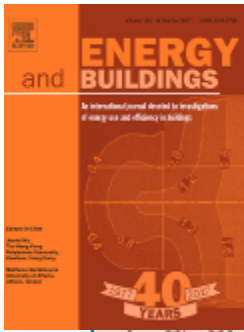
	Full Journal Title	Total Cites	Journal Impact Factor 	Eigenfactor Score
1	JOURNAL OF HAZARDOUS MATERIALS	84,058	6.065	0.08183
2	COMPUTER-AIDED CIVIL AND INFRASTRUCTURE ENGINEERING	2,444	5.786	0.00476
3	ENERGY AND BUILDINGS	25,822	4.067	0.03238
4	BUILDING AND ENVIRONMENT	17,359	4.053	0.01942
5	TRANSPORTATION RESEARCH PART B-METHODOLOGICAL	8,518	3.769	0.01210



RECENT DEVELOPMENTS

METRICS

YEAR	I.F.	CONSTRUCTION & BUILDING TECHNOLOGY	ENERGY & FUELS	ENGINEERING, CIVIL
2016	4.067	5/61	20/92	3/125
2015		6/60	31/88	6/126
2014		5/59	30/88	6/124
2013		6/58	36/82	9/124
2012		4/57	26/81	7/122



ENB AS IT IS TODAY

SCImago Journal Rank in Building and Construction Category

Title	Type	↓ SJR	H index	Total Docs. (2016)	Total Docs. (3years)	Total Refs.	Total Cites (3years)	Citable Docs. (3years)	Cites / Doc. (2years)	Re D
1 Cement and Concrete Research	journal	3.460 Q1	144	213	512	9304	2614	505	5.02	43.
2 Cement and Concrete Composites	journal	2.758 Q1	99	180	468	7487	2303	460	4.63	41.
3 Energy and Buildings	journal	2.093 Q1	123	962	2233	36500	10215	2200	4.42	37.
4 Building and Environment	journal	2.015 Q1	102	389	1059	18729	4747	1045	4.31	48.
5 Tunnelling and Underground Space	journal	1.789	63	211	489	6619	1403	477	2.61	31.

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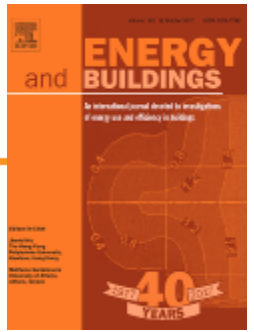
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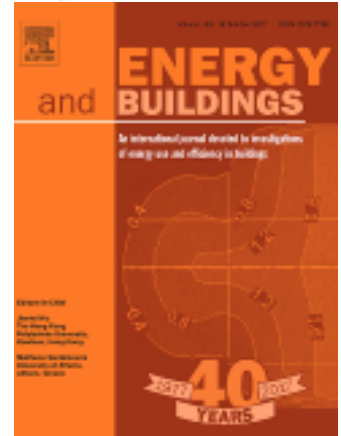
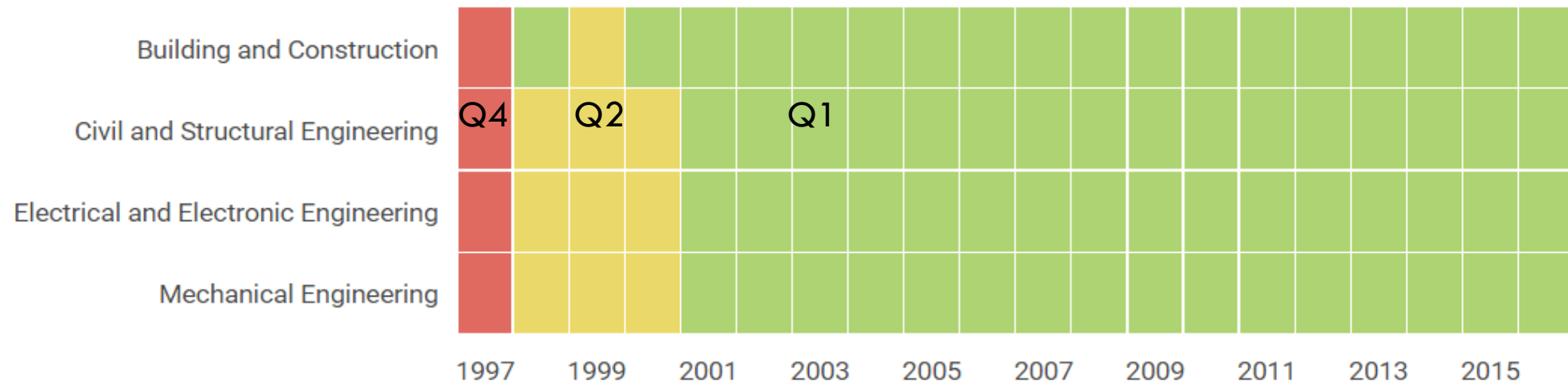
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A. Meier, Lawrence Berkeley National Laboratory, Berkeley, California, USA

S. Selkowitz, Lawrence Berkeley National Laboratory, Berkeley, California, USA



DEVELOPMENTS IN THE PAST TWO DECADES



European editor 1988

Editor-in-Chief till 2015

REHVA president, Vice-President IIR in 1989. author of over 200 papers, 15 books. awarded with REHVAs' golden medal in 2005, is a Fellow of ASHRAE, Member of Russian Academy of Civil & Architectural Sciences, ...

PROVIDING TUTORING TO YOUNG AUTHORS

不拒之恩

致远

十一年前，正值隆冬季节，江淮大地早已白雪皑皑。的积雪，一路小跑，咯吱咯吱，便在身后留下一串长长浅浅。到了邮局，急切而又忐忑不安地将第一篇英文稿期刊《建筑与能源》编辑部。次月收到主编Todorovic教

次以英文撰写科研论文，稿件不仅出现很多文法错误，表达方式也欠完善。主编并未因此拒绝该文的出版，而改的机会。他耐心地逐一指出错误，如watt应使用复数等，还附上一段简洁而措辞委婉的评语。十多年过去了直出现在我的脑海，温暖如春。

“Technically, your paper is okay, but English is not. Although my English is also not good, I can see the mistake you made.”
稿件技术上可行，但英文写作欠佳。虽然我的英文也不太好，但你的文法错误轻易地被发现。

近日于师姐朋友圈欣闻该教授近况。耄耋之年，白发苍苍，依然神情矍铄，活跃于学界。总觉得应该写点什么，感谢十一年前他的不拒之恩。今作文记之，丙申年冬月初六



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Energy and Buildings 38 (2006) 1380–1387

ENERGY
and BUILDINGS

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Effect of fluid flow and packing factor on energy performance of a wall-mounted hybrid photovoltaic/water-heating collector system

Jie Ji^{a,*}, Jun Han^a, Tin-tai Chow^b, Hua Yi^a, Jianping Lu^a, Wei He^{a,b}, Wei Sun^a

^a Department of Thermal Science and Energy Engineering, University of Science and Technology of China, Hefei 230027, China

^b Division of Building Science & Technology, City University of Hong Kong, Hong Kong SAR, China

Received 26 July 2005; received in revised form 17 February 2006; accepted 27 February 2006

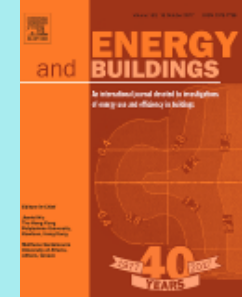
Abstract

Façade-integrated photovoltaic/thermal (BiPV/T) technology is a relatively new concept in improving the overall energy performance of PV installations in buildings. With the use of wall-mounted water-type PV/T collectors, the system not only generates electricity and hot water simultaneously, but also improves the thermal insulation of the building envelope. A numerical model of this hybrid system was developed by modifying the Hottel–Whillier model, which was originally for the thermal analysis of flat-plate solar thermal collectors. Computer simulation was performed to analyze the system performance. The combined effects of the solar cell packing factor and the water mass flow rate on the thermal and electrical efficiencies were investigated. The simulation results indicated that an optimum water mass flow rate existed in the system through which the desirable integrated energy performance can be achieved.

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Keywords: Hybrid photovoltaic/thermal collector; Façade integration; Optimum operation; Electrical and thermal performance

Courtesy: Dr Cui Ping



In appreciation and recognition of his outstanding editorial contribution to the development and success of the journal, Elsevier has prepared a special award to:

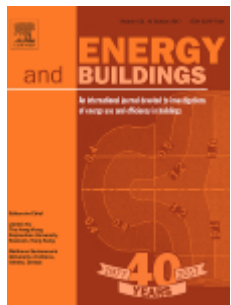
Professor Branislav (Branko) Todorovic

Editor, 1988 - 2016

Honorary editor-in-chief, University of Belgrade, Serbia







SPECIAL ISSUE TO HONOR BRANKO TODOROVIC

<http://www.sciencedirect.com/science/journal/03787788/vsi/101Q10QQ8T6?sdc=1>.

Special Issue to honor Branko Todorovich

Edited By Mattheos Santamouris and Jianlei Niu

Contains articles from 01 September 2016 to 01 December 2016

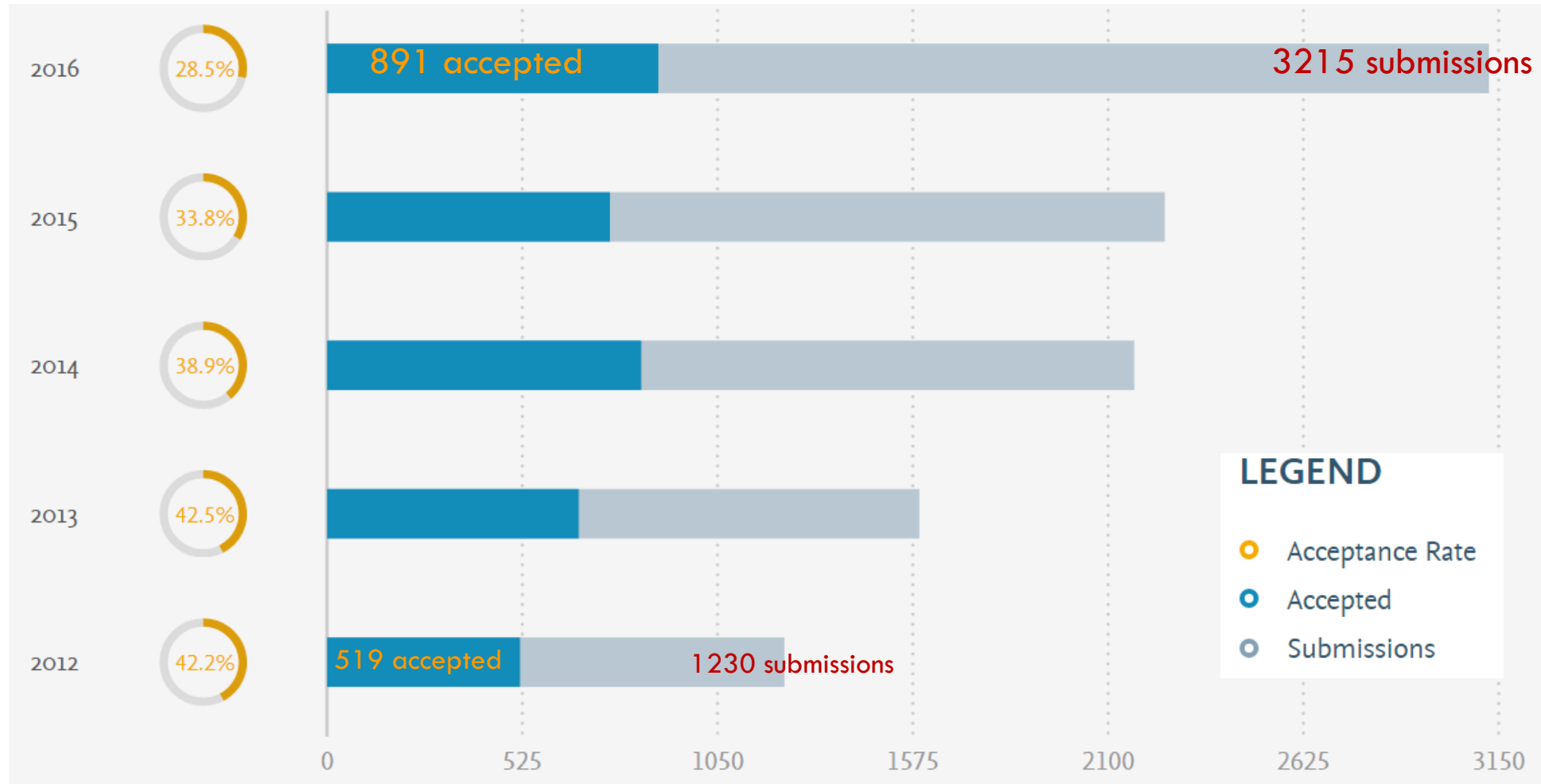
Articles 1 - 8

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- [Forty years of regulations on the thermal performance of the building envelope in Europe: Achievements, perspectives and challenges](#) Original Research Article 
Volume 127, 1 September 2016, Pages 942-952
Agis M. Papadopoulos
[Abstract](#) |  [PDF \(1108 K\)](#)
- [Advances in building simulation and computational techniques: A review between 1987 and 2014](#) Original Research Article 
Volume 128, 15 September 2016, Pages 319-335
Haidong Wang, Zhiqiang (John) Zhai
[Abstract](#) |  [PDF \(2586 K\)](#)
- [Building energy-consumption status worldwide and the state-of-the-art technologies for zero-energy buildings during the past decade](#) Original Research Article 
Volume 128, 15 September 2016, Pages 198-213
Xiaodong Cao, Xilei Dai, Junjie Liu
[Abstract](#) |  [PDF \(2045 K\)](#)

ARE WE GETTING TOUGH?



REVIEW SPEED

YEAR	SUBMISSION TO FIRST DECISION	SUBMISSION TO FINAL DECISION
2016	5.8	11.7
2015	6.3	10.9
2014	7.9	13.4
2013	10.5	17.4
2012	9.1	15.1

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[Energy and Buildings welcomes two new editors](#)

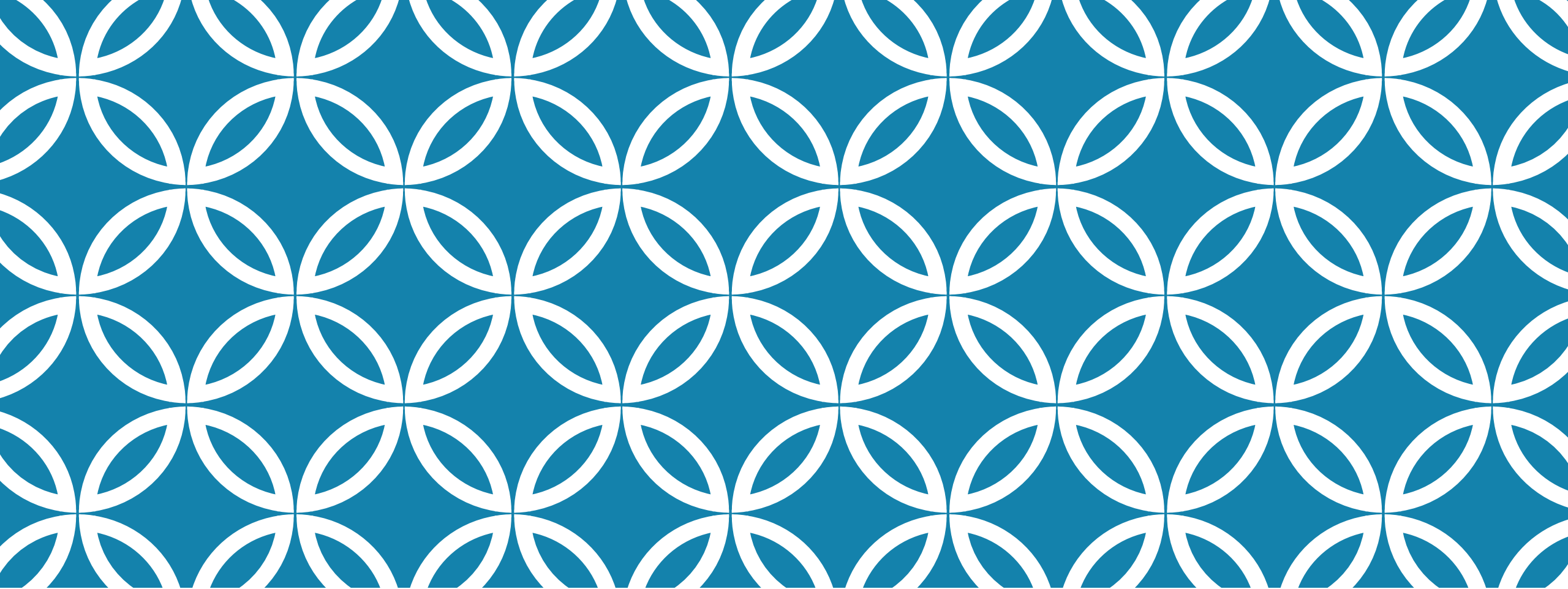
Energy and Buildings is extremely pleased to welcome two new Editors to the Team as from 1 October 2017. Prof. Dionysia (Denia) Kolokotsa joins us from Technical University of Crete, Chania, Greece and Prof. Li-Zhi Zhang is from South China University of Technology, Guangzhou, China.

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Reviewers play an essential role for the journal to validate the research submitted and to give constructive feedback to the authors, their colleagues in the field. Therefore, we always welcome people interested in becoming a reviewer for the journal.

SPECIAL ISSUES: THEME-BASED

- ❑ ENB stops publishing conference based special issues since 2015;
- ❑ Proposals for Theme-based Special issue are encouraged
 - Interested researchers may come up with an idea of a meaningful theme;
 - After preliminary discussion with the editors, a formal questionnaire for evaluation needs to be completed; a SI manager will assist this process
 - The proposed SI will be evaluated on the merit and significance, potential numbers of papers(invited + open call), the credential of the guest editors in publishing, reviewing and editing.
 - Elsevier will assist with the submission and review process, using the EVISE platform, while the approved Guest Editor will take charge the whole peer review process



**FORMULA OF SUCCESS TO YOUNG
AUTHORS?** |

AN EFFECTIVE ABSTRACT

- ❑ An abstract is a summary: BOMReC structure
 - ❑ **B**ackground of your research or statement of the problem(why you do this research)
 - ❑ **O**bjectives of your (for what purpose, related to the background but something more specific)
 - ❑ **M**ethodology (how did you do it)
 - ❑ **R**esults: You use as many sentences as possible within the word limits.
 - ❑ **C**onclusions (one or two sentences)
 - ❑ **I**mplications (one or two sentences, and some journals provide separate entry for this)

KEY ELEMENTS OF AN EFFECTIVE ABSTRACT (1)

Combining measured thermal parameters and simulated wind velocity to predict outdoor thermal comfort



Jianlin Liu, Jianlei Niu*, Qian Xia

Department of Building Services Engineering, The Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong

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Available online 28 May 2016

Keywords:

CFD simulation
DDES (Delayed DES turbulence model)
Elevated design
Outdoor thermal comfort
Physiological equivalent temperature (PET)

ABSTRACT

Taking into account outdoor thermal comfort in the urban design stage can potentially enhance the livability of a city. This study aims to demonstrate an outdoor thermal comfort prediction method using measured thermal parameters and simulated wind velocities. This is done by first comparing the CFD simulation results of wind velocities around a single building with and without elevated design with those obtained from a wind tunnel experiment, and two turbulence models, the Delayed Detached Eddy Simulation (DDES) and the RNG $k-\epsilon$ model, were assessed. The mean velocity field obtained using DDES model has better agreement with the wind tunnel measurements, especially in the wake region and at the open space beneath the elevated building. It is shown that the building elevation modified the mean flow pattern around a building. Then the potential impact on pedestrian thermal comfort was assessed using a simplified method by combining the predicted wind velocity and the on-site monitored radiant and air temperatures and air humidity on two summer days. It is revealed that the elevated design improves the thermal comfort only in the limited neighboring area, but that the open space underneath the elevated building provides much better thermal comfort in the summer conditions. The work demonstrates that CFD simulation of wind conditions can be used to assess outdoor thermal comfort in the planning stage without being coupled with thermal simulation.

Background

Objective

Methods

Results/findings

Conclusions/
implications

KEY ELEMENTS OF AN EFFECTIVE ABSTRACT (2)

On-site measurement of tracer gas transmission between horizontal adjacent flats in residential building and cross-infection risk assessment



Yan Wu, Thomas C.W. Tung, Jian-lei Niu*

Department of Building Services Engineering, The Hong Kong Polytechnic University, Hunghom, Kowloon, Hong Kong

ARTICLE INFO

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Keywords:

Airborne transmission

Infection risk

On-site measurement

Tracer gas

Air infiltration

Residential building

ABSTRACT

Airborne transmission is a main spread mode of respiratory infectious diseases, whose frequent epidemic has brought serious social burden. Identifying possible routes of the airborne transmission and predicting the potential infection risk are meaningful for infectious disease control. In the present study, an internal spread route between horizontal adjacent flats induced by air infiltration was investigated. On-site measurements were conducted, and tracer gas technique was employed. Two measurement scenarios, closed window mode and open window mode, were compared. Using the calculated air change rate and mass fraction, the cross-infection risk was estimated using the Wells–Riley model. It found that tracer gas concentrations in receptor rooms are one order lower than the source room, and the infection risks are also one order lower. Opening windows results in larger air change rate on the one hand, but higher mass fraction on the other hand. Higher mass fraction not necessarily results in higher infection risk as the pathogen concentration in the source room is reduced by the higher air change rate. In the present study, opening windows could significantly reduce the infection risk of the index room but slightly reduce the risks in receptor rooms. The mass fraction of air originated from the index room to the receptor units could be 0.28 and the relative cross-infection risk through the internal transmission route could be 9%, which are higher than the external spread through single-sided window flush. The study implicates that the horizontal transmission route induced by air infiltration should not be underestimated.

Background

Objective

Methods

Results/findings

Conclusions/
implications

A GOOD CONCISE CONCLUSION

- Emphasizing what's new, coming out of your study
- State if the objectives have been achieved, partially or fully?
- hypothesis is confirmed?
- The advantage of a new design methodology is demonstrated?

THANK YOU FOR YOUR ATTENDANCE!

Wish you

A pleasant stay at Ji-nan

And

A fruitful academic exchange at ISHVAC 2017!

