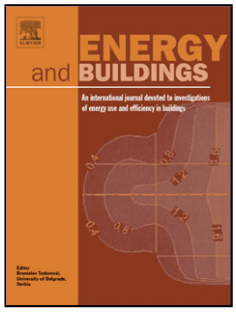

Title: Simulation-based model predictive control by the multi-objective optimization of building energy performance and thermal comfort

Authors: Fabrizio Ascione Dr., Ph.D., Researcher Nicola Bianco Ph.D., Prof., Associate Professor Claudio De Stasio Ph.D., Dr., Research fellow Gerardo Maria Mauro Dr., Ph.D., Research fellow Giuseppe Peter Vanoli Prof., Ph.D., Associate Professor

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A novel simulation-based model predictive control procedure is proposed.

The multi-objective optimization of energy cost and thermal comfort is achieved.

The outcome is the optimal strategy for the daily HVAC system control.

The minimum run period is used in energy simulations to cut the computational time.

High benefits are proved for a multi-zone residential building in Naples (Italy).

Simulation-based model predictive control by the multi-objective optimization of building energy performance and thermal comfort

Fabrizio Ascione, Dr., Ph.D., Researcher[a]fabrizio.ascione@unina.it, Nicola Bianco, Ph.D., Prof., Associate Professor[b]nicola.bianco@unina.it, Claudio De Stasio, Ph.D., Dr., Research fellow[c]claudio.destasio@unina.it, Gerardo Maria Mauro, Dr., Ph.D., Research fellow[d*]gerardomaria.mauro@unina.it, gerar.mauro@gmail.com, Giuseppe Peter Vanoli, Prof., Ph.D., Associate Professor[e]vanoli@unisannio.it

[a]University of Naples Federico II, DII - Department of Industrial Engineering, Piazzale Tecchio, 80, 80125 Napoli, Italy

[b]University of Naples Federico II, DII - Department of Industrial Engineering, Piazzale Tecchio, 80, 80125 Napoli – Italy

[c]University of Naples Federico II, DII - Department of Industrial Engineering, Piazzale Tecchio, 80, 80125 Napoli, Italy

[d]University of Naples Federico II, DII - Department of Industrial Engineering, Piazzale Tecchio, 80, 80125 Napoli, Italy

[e]University of Sannio, DING - Department of Engineering, Piazza Roma, 21, 82100 Benevento, Italy

Tel.: +39 081 7682645, fax: +39 081 2390364