

Award-winning papers for free download

On 14 October 2022 ICE president Ed McCann will present awards to the following papers published in the various ICE Proceedings journals in 2021. Journal editorial panels nominated their best papers and an awards committee, chaired by Tim Broyd, allocated the awards. These award-winning papers can be downloaded for free from the ICE Virtual Library's 'ICE Publishing Awards 2022' page at <https://www.icevirtuallibrary.com/page/authors/awards-2022>.

PAPER AND AUTHORS	ISSUE IN 2021	AWARD
Bridge Engineering New design rules for plate girders curved in plan, by Chris R. Hendy, Minjie Cai, João Pedro Martins, Filip Ljubinković and Luís Simões da Silva	June	John Henry Garrood King Medal
Civil Engineering Vehicle-based cryogenic rail cleaning: an alternative solution to 'leaves on the line', by Peter Krier, Ben T. White, Paul Ferriday, Mike Watson, Luke Buckley-Johnstone, Roger Lewis and Joseph L. Lanigan	November	Coopers Hill War Memorial Prize
Construction Materials Kinetics of sorption in bio-based materials: theory and simulation of a demonstrator wall, by Nicolas Reuge, Florence Collet, Sylvie Pretot, Sophie Moissette, Marjorie Bart and Christophe Lanos	June	Thomas Howard Medal
Energy Effect of non-thermal plasma on carbon dioxide reforming of methane to hydrogen, by Hongxia Liu, Dingmeng Guo, Xin Ma, Ya Wang and Jinzhuo Xie	May	James Watt Medal
Engineering and Computational Mechanics Focused wave interactions with floating structures: a blind comparative study, by Edward J. Ransley, Scott A. Brown, Martyn Hann, Deborah M. Greaves, Christian Windt, John Ringwood, Josh Davidson, Pal Schmitt, Shiqiang Yan, Junxian X. Wang, Jinghua H. Wang, Qingwei Ma, Zhihua Xie, Giuseppe Giorgi, Jack Hughes, Alison Williams, Ian Masters, Zaibin Lin, Hao Chen, Ling Qian, Zhihua Ma, Qiang Chen, Haoyu Ding, Jun Zang, Jennifer van Rij, Yi-Hsiang Yu, Zhaobin Li, Benjamin Bouscasse, Guillaume Ducrozet and Harry Bingham	March	Benjamin Baker Medal
Engineering History and Heritage Numerical modelling of three-dimensional masonry arch bridge structures, by Stanislav Grosman, Alejandro Barrero Bilbao, Lorenzo Macorini and Bassam A. Izzuddin	June	Thomas Telford Premium Prize
Engineering History and Heritage Strengthening the 1960s UK Commonwealth Institute hyperbolic paraboloid roof, by Sebastian Kaminski, Richard Henley, Nigel Ciuffetelli, Tijl Uijtenhaak, Ian Feltham and David Tall	August	Telford Gold Medal
Engineering History and Heritage Pre-deflecting a steel platform to support a new organ at Manchester Cathedral, UK, by Emma Cochrane and Charles Blackett-Ord	November	Thomas Telford Premium Prize
Engineering Sustainability Towards sustainable informal settlements: a toolkit for community-led upgrading in Durban, by Maria Christina Georgiadou, Claudia Loggia, Iwona Bisaga and Priti Parikh	April	Richard Trevithick Prize
Forensic Engineering Best practice in the management and protection of concrete assets, by Peter Robery	February	Thomas Telford Premium Prize
Forensic Engineering Wildfire risk management in the District of Vila Real (Portugal), by André Rodrigues, Jorge Raposo, Johnny Reis, Miguel Sousa, Daniel Graça and Carlos Hermenegildo	August	Manby Prize
Forensic Engineering Condition assessment and analysis of a reinforced concrete building in India: a case study, by N. Anand, Diana Andrushia, Daniel Paul and Prince Arulraj	November	Mokshagundam Visvesvaraya Prize
Geotechnical Engineering Mathematical modelling of cumulative erosion ratio for suffusion in soils, by Zhenhao Xu, Peng Lin, Huilin Xing and Jing Wang	June	Russell Crampton Prize
Ground Improvement Liquefaction induced by deep vertical vibratory compaction, by K. Rainer Massarsch, Carl Wersäll and Bengt H. Fellenius	August	Thomas Telford Premium Prize
Management, Procurement and Law Creating strategic alignment during the development of procurement instruments, by Henrico Plantinga, Hans Voordijk and André Dorée	February	Parkman Medal
Maritime Engineering Bottom-supported tension leg towers with inclined tethers for offshore wind turbines, by Mohammed Ishtiyak, Arunjyoti Sarkar, Tiago Fazeris-Ferradosa, Paulo Rosa-Santos and Francisco Taveira-Pinto	December	Halcrow Prize
Municipal Engineer Predicting demand for a bike-sharing system with station activity based on random forest, by Young-Hyun Seo, Sangwon Yoon, Dong-Kyu Kim, Seung-Young Kho and Jaemin Hwang	June	James Hill Prize
Smart Infrastructure and Construction Review on the construction development and control technology of the shaking table, by Chunhua Gao, Jieqiong Wang, Xiaobo Yuan, Yonghe Zhang, Yanping Yang and Mengyuan Qin	March	Thomas Telford Premium Prize
Structures and Buildings Modelling the influence of steel structure compartment geometry on travelling fires, by Marion Charlier, Antonio Gamba, Xu Dai, Stephen Welch, Olivier Vassart and Jean-Marc Franssen	September	Frederick Palmer Prize
Transport A mechanistic approach to predict built-in temperature in concrete pavements, by Tetsya Sok and Seung Woo Lee	July	Rees Jeffreys Award
Transport Extending Cityringen – the challenges involved, by Russell Saltmarsh and Neil Martini	August	Francis William Webb Prize
Urban Design and Planning Sustainable neighbourhoods: applicable indicators through principal component analysis, by Marcele Salles Martins, Rosa Maria Locatelli Kalil and Francisco Dalla Rosa	February	Reed and Mallik Medal
Waste and Resource Management A waste heat recovery strategy and its deployment: an integrated steelworks case study, by Anthony Giles, Chris Williams, Daniel Pugh, Phil Bowen, Richard Marsh and Tim O'Doherty	February	Thomas Telford Premium Prize
Water Management A machine learning approach for forecasting and visualising flood inundation information, by Syed Kabir, Sandhya Patidar and Gareth Pender	February	Robert Alfred Carr Prize