

## REF 2014: Research outputs (REF2) (sorted by title)

### 16 – Architecture, Built Environment and Planning

[A comparative study of the effects of chemical additives on the suppression efficiency of water mist.](#) Fire Safety Journal, 58 . pp. 221-225. [Journal article]

[A comparison of heat transfer enhancement in a medium temperature thermal energy storage heat exchanger using fins.](#) solar energy, 83 (9). 1509-1520 . [Journal article]

[A novel soot model for fires: validation in a laminar non-premixed flame.](#) Combustion and Flame, 158 (2). pp. 281-290. [Journal article]

[A system that works for the sea? Exploring Stakeholder Engagement in Marine Spatial Planning.](#) Journal of Environmental Planning and Management, 53 (6). pp. 701-723. [Journal article]

[A technical and economic analysis of three large scale biomass combustion plants in the UK.](#) Applied Energy, 112 . pp. 396-404. [Journal article]

[A techno-economic analysis of biomass gasifiers integrated with high and intermediate temperature solid oxide fuel cells.](#) International Journal of Energy Research, 35 (12). pp. 1037-1047. [Journal article]

[A techno-economic assessment of biomass fuelled trigeneration system integrated with organic Rankine cycle.](#) Applied Thermal Engineering, 53 (2). pp. 325-331. [Journal article]

[A Techno-economic assessment of the reduction of carbon dioxide emissions through the use of biomass co-combustion.](#) Fuel, 90 (1). pp. 11-18. [Journal article]

[A Theoretical and Experimental Study of Resonance in a High Performance Engine Intake System: Part 2 SAE 2007-01-1399.](#) SAE Transactions, 116 (3). pp. 905-914. [Journal article]

[An empirical analysis of simplified valuation approaches for residential property tax purposes.](#) Property Management, 30 (3). pp. 232-254. [Journal article]

[An evaluation of risk factors impacting construction cash flow forecast.](#) Journal of Financial Management of Property and Construction, 13 (1). pp. 5-17. [Journal article]

[An evaluative model for city competitiveness: Application to UK cities.](#) Land Use Policy, 30 (1). pp. 214-222. [Journal article]

[An intercomparison of CFD models to predict lean and non-uniform hydrogen mixture explosions.](#) International Journal of Hydrogen Energy, 35 (11). pp. 5754-5762. [Journal article]

[An investigation into the circumstances surrounding fatal dwelling fires involving very young children.](#) Fire Safety Journal, 61 . pp. 72-82. [Journal article]

[Analysis of Composite Floor Cellular Steel Beams in Fire..](#) Journal of Structural Fire Engineering, 1 (3). pp. 161-175. [Journal article]

[Area-Based Banding for Property Tax Assessment in Transitional Countries: An Empirical Investigation.](#) Journal of Real Estate Literature, 16 (2). pp. 201-215. [Journal article]

[Battery powered electric vehicles developed for light agricultural duties in remote areas in the southern Mediterranean region.](#) International Journal of Ambient Energy, 31 (3). pp. 115-132. [Journal article]

[Belfast's iron\(ic\) curtain: "Peace walls" and their impact on house prices in the Belfast housing market.](#) Journal of European Real Estate Research, 6 (3). pp. 333-358. [Journal article]

[Big Pylons: Mixed signals for transmission. Spatial planning for energy distribution.](#) Energy Policy, 63 . pp. 311-320. [Journal article]

[BIOMASS FUELLED TRIGENERATION SYSTEM IN SELECTED BUILDINGS.](#) Energy Conversion and Management , 52 (6). pp. 2448-2454. [Journal article]

[Building design innovation: Expansion of classification linkages through case study analysis.](#) Journal of Engineering, Design and Technology, 6 (2). pp. 99-111. [Journal article]

[Business Improvement Districts and the Discourse of Contractualism.](#) European Planning Studies, 17 (3). pp. 401-422. [Journal article]

[Characteristics of chemically modified and nanocomposite polymers as novel fuels for hybrid rocket propulsion.](#) International Journal of Energetic Materials and Chemical Propulsion, 11 (6). pp. 549-566. [Journal article]

[Characterization of cellulosic wastes and gasification products from chicken farms.](#) Waste Management, 32 (4). pp. 701-709. [Journal article]

[Combustion behavior of single particles from three different coal ranks and from sugar cane bagasse in O<sub>2</sub>/N<sub>2</sub> and O<sub>2</sub>/CO<sub>2</sub> atmospheres.](#) Combustion and Flame, 159 (3). pp. 1253-1271. [Journal article]

[Combustion behaviours of chemically modified polyacrylonitrile polymers containing phosphorylamino groups.](#) Polymer Degradation and Stability, 97 (12). pp. 2531-2535. [Journal article]

[Commercial mortgage backed securities: resurgence or demise?](#) Journal of Property Investment & Finance, 28 (6). pp. 398-419. [Journal article]

[Comparative analysis of energy storage options in connection with coal fired Integrated Gasification Combined Cycles for an optimised part load operation.](#) Fuel, 101 . pp. 154-160. [Journal article]

[Comparative assessment of coal fired IGCC systems with CO<sub>2</sub> capture using physical absorption, membrane reactors and chemical looping.](#) Fuel, 88 (12). pp. 2463-2472. [Journal article]

[Comparison of vacuum glazing thermal performance predicted using two- and three-dimensional models and their experimental validation.](#) Solar Energy Materials and Solar Cells, 93 (9). pp. 1492-1498. [Journal article]

[Corporate Real Estate Strategies and Financial Performance of Companies.](#) Journal of Property Research, 25 (3). pp. 241-267. [Journal article]

[Critical Conditions for Conjugate Thermal Explosion.](#) Combustion Theory and Modelling, 12 (3). pp. 433-449. [Journal article]

[Cyclical reverse thermosiphon.](#) Archives of Thermodynamics, 31 (1). pp. 3-32. [Journal article]

[Defrost cycle performance for a circular shape evaporator air source heat pump.](#) International Journal of Refrigeration, 31 (3). pp. 444-452. [Journal article]

[Detecting and validating residential housing submarkets: A geostatistical approach for use in mass appraisal.](#) International Journal of Housing Markets and Analysis, 4 (3). pp. 290-318. [Journal article]

[Determination of soot formation rate from laminar smoke point measurements.](#) Combustion Science and Technology, 180 (5). pp. 927-940. [Journal article]

[Devolution, community planning and institutional de-congestion?](#) Local Government Studies , 34 (4). pp. 437- 451. [Journal article]

[Devolution, institutions and organisations: changing models of regional development agencies.](#) Environment and Planning C: Government and Policy, 30 (1). pp. 78-94. [Journal article]

[Do Asian real estate companies add value to investment portfolio?](#) Journal of Property Investment & Finance, 27 (1). pp. 42-64. [Journal article]

[Domestic energy use and householders' energy behaviour.](#) Energy Policy, 41 . pp. 654-665. [Journal article]

[Economics of development strategies utilising option and portfolio analytics.](#) Journal of European Real Estate Research, 3 (2). pp. 117-137. [Journal article]

[Effects of nanoclay and fire retardants on fire retardancy of a polymer blend of EVA and LDPE.](#) FIRE SAFETY JOURNAL, 44 (4). pp. 504-513. [Journal article]

[Equities or Real Estate? An International Evaluation of Listed Property Markets.](#) Journal of European Real Estate Research, 6 (2). pp. 139-162. [Journal article]

[E-readiness of construction contract forms and e-tendering software.](#) International Journal of Procurement Management, 5 (1). pp. 1-26. [Journal article]

[Evaluation of ACI 440 Deflection Model for Fiber-Reinforced Polymer Reinforced Concrete Beams and Suggested Modification.](#) ACI STRUCTURAL JOURNAL, 106 (6). pp. 762-771. [Journal article]

[Evaluation of phase change materials for thermal regulation enhancement of building integrated photovoltaics.](#) J. Solar Energy, 84 (9). pp. 1601-1612. [Journal article]

[Experimental and numerical investigation of premixed flame propagation with distorted tulip shape in a closed duct.](#) Combustion and Flame, 159 . pp. 1523-1538. [Journal article]

[Experimental and Numerical Modelling of Cellular Beams with Circular and Elongated Web Openings at Elevated Temperatures.](#) Structural Fire Engineering, 2 (4). pp. 289-300. [Journal article]

[Experimental and numerical study of the effects of nanoparticles on pyrolysis of a polyamide 6 \(PA6\) nanocomposite in the cone calorimeter.](#) Combustion and Flame, 156 (11). pp. 2056-2062. [Journal article]

[Experimental characterisation of a novel heat exchanger for a solar hot water application under indoor and outdoor conditions.](#) Renewable Energy , 36 . pp. 1766-1779. [Journal article]

[Experimental investigation of natural convection heat exchange within a physical model of the manifold chamber of a thermosyphon heat-pipe evacuated tube solar water heater.](#) Solar Energy, 83 (7). pp. 988-997. [Journal article]

[Experimental performance evaluation of a novel heat exchanger for a solar hot water storage system.](#) Applied Energy, 86 (9). pp. 1492-1505. [Journal article]

[Experimental study on performance of elliptical section steel columns, under hydrocarbon fire.](#) Journal of Constructional Steel Research, 67 (6). pp. 986-991. [Journal article]

[Explosive spalling of normal strength concrete slabs subjected to severe fire.](#) Materials and Structures, 44 (5). pp. 943-956. [Journal article]

[Finite Element Modeling of Carbon Fiber-Reinforced Polymer Reinforced Concrete Beams under Elevated Temperatures.](#) ACI STRUCTURAL JOURNAL, 105 (6). pp. 701-710. [Journal article]

[Finite element numerical evaluation of elliptical hollow section steel columns in fire.](#) Thin-Walled Structures, 55 . pp. 22-36. [Journal article]

[Fire Tests of Hybrid and Carbon Fiber-Reinforced Polymer Bar Reinforced Concrete Beams.](#) ACI Materials Journal, 108 (3). pp. 252-260. [Journal article]

[Flammability assessment of fire-retarded Nordic Spruce wood using thermogravimetric analyses and cone calorimetry.](#) Fire Safety Journal, 44 (8). pp. 1053-1066. [Journal article]

[Full-scale fire test on a composite floor slab incorporating long span cellular steel beams.](#) The Structural Engineer, 89 (21). pp. 18-25. [Journal article]

[Functionalism and Representationalism in contemporary urban agendas: a Scottish perspective on city region branding.](#) Urban Research & Practice, 1 (1). pp. 36-53. [Journal article]

[Heat fluxes on opposite building wall by flames emerging from an enclosure.](#) PROCEEDINGS OF THE COMBUSTION INSTITUTE, 32 (Part 2). pp. 2551-2558. [Journal article]

[Heat pumps and energy storage – The challenges of implementation.](#) Applied Energy, 89 . pp. 37-44. [Journal article]

[Heat retaining integrated collector storage solar water heater with asymmetric CPC reflector.](#) Solar Energy, 85 (10). pp. 2474-2487. [Journal article]

[Hedonic modelling of high street retail properties: a quality design perspective.](#) Journal of Property Investment & Finance, 31 (2). pp. 160-178. [Journal article]

[Hybrid coal-fired power plants with CO<sub>2</sub> capture: A technical and economic evaluation based on computational simulations.](#) Fuel, 101 . pp. 244-253. [Journal article]

[Hydrogen and fuel cell stationary applications: Key findings of modelling and experimental work in the HYPER project.](#) International Journal of Hydrogen Energy, 36 (3). pp. 2711-2720. [Journal article]

[Hydrogen jet flames.](#) International Journal of Hydrogen Energy, 38 (19). pp. 8141-8158. [Journal article]

[Implicit House Prices: Variation over Time and Space in Spain.](#) Urban Studies, 50 (10). pp. 2024-2043. [Journal article]

[Improving the quality of demand forecasts through cross nested logit: a stated choice case study of airport, airline and access mode choice.](#) Transportmetrica A: Transport Science, 9 (4). pp. 358-384. [Journal article]

[Industrial Land and Property Markets: Market Processes, Market Institutions and Market Outcomes: The Dutch Case.](#) European Planning Studies, 19 (12). pp. 2127-2146. [Journal article]

[Institutional Benchmarks for International Real Estate Investment.](#) Journal of Real Estate Portfolio Management, 14 (2). pp. 93-104. [Journal article]

[Integrated assessment of bioelectricity technology options.](#) Energy Policy, 37 (3). pp. 890-903. [Journal article]

[Interaction of a phosphorus-based FR, a nanoclay and PA6. Part 2 interaction of the complete PA6 polymer nanocomposites.](#) FIRE AND MATERIALS, 34 (2). pp. 77-93. [Journal article]

[Introduction of AHP Satisfaction Index for workplace environments.](#) Journal of Corporate Real Estate, 14 (2). pp. 80-93. [Journal article]

[Investigation of critical equivalence ratio and chemical speciation in flames of ethylbenzene-ethanol blends.](#) Combustion and Flame, 157 (2). pp. 296-213. [Journal article]

[Journeys to health services in Great Britain: An analysis of changing travel patterns 1985-2006.](#) Health and Place, 18 (2). pp. 274-285. [Journal article]

[Land readjustment for value capturing: A new planning tool for urban redevelopment.](#) Town Planning Review, 79 (6). pp. 651-672. [Journal article]

[Large Eddy Simulation of Sprinkler Interaction with a Fire Ceiling Jet.](#) Combustion Science and Technology, 181 (7). pp. 984-1006. [Journal article]

[Lattice Boltzmann Modeling of Thermal Explosion in Natural Convection Conditions.](#) Numerical Heat Transfer, Part A: Applications: An International Journal of Computation and Methodology, 63 (11). pp. 824-839. [Journal article]

[LES model of large scale hydrogen-air planar detonations: Verification by the ZND theory.](#) INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, 33 (18). pp. 4884-4892. [Journal article]

[LES of high pressure hydrogen jet fire.](#) Journal of Loss Prevention in the Process Industries, 22 (3). pp. 353-359. [Journal article]

[LES of hydrogen-air deflagrations in a 78.5-m tunnel.](#) COMBUSTION SCIENCE AND TECHNOLOGY, 180 (5). pp. 796-808. [Journal article]

[List price and sales prices of residential properties during booms and busts.](#) Journal of Housing Economics, 22 . pp. 1-10. [Journal article]

[Microencapsulated phase change slurries for thermal energy storage in a residential solar energy system.](#) Renewable Energy, 36 (11). pp. 2932-2939. [Journal article]

[Moving Towards Integrated Communities in Northern Ireland: New Approaches to Mixed Housing.](#) European Journal of Housing Policy, 9 (3). pp. 337-353. [Journal article]

[Multilevel modelling of Demand Responsive Transport \(DRT\) trips in Greater Manchester based on area-wide socio-economic data.](#) Transportation, 41 . pp. 589-610. [Journal article]

[Natural convection in an internally finned phase change material heat sink for the thermal management of photovoltaics.](#) Solar Energy Materials and Solar Cells, 95 (7). pp. 1598-1603. [Journal article]

[Negotiating land and property development: a game theoretical approach to value capturing.](#) Journal of European Real Estate Research, 5 (1). pp. 48-65. [Journal article]

[Nonlinear dynamical model of compartment fire flashover.](#) Journal of Engineering Mathematics, 67 (4). pp. 387-400. [Journal article]

[Numerical and experimental investigation of the behavior of high strength concrete columns in fire.](#) Engineering Structures, 32 (5). pp. 1236-1243. [Journal article]

[Numerical simulations of large-scale detonation tests in the RUT facility by the LES model.](#) Journal of Hazardous Materials, 181 (1-3). pp. 949-956. [Journal article]

[Optimising the economic viability of grid-connected photovoltaic systems.](#) Applied Energy, 86 . pp. 985-999. [Journal article]

[Optimum configuration of compound parabolic concentrator \(CPC\) solar water heater types for dwellings situated in the northern maritime climate.](#) International Journal of Ambient Energy, 31 (1). pp. 47-52. [Journal article]

[Participation index: a measure to identify rural transport disadvantage?](#) Journal of Transport Geography, 19 (4). pp. 822-899. [Journal article]

[Performance in fire of long-span composite truss systems.](#) Engineering Structures, 30 (3). pp. 683-694. [Journal article]

[Physics of spontaneous ignition of high-pressure hydrogen release and transition to jet fire.](#) International Journal of Hydrogen Energy, 36 (3). pp. 2589-2596. [Journal article]

[Piloted ignition and extinction for solid fuels.](#) Proceedings of Combustion Institute, 34 (2). pp. 2487-2495. [Journal article]

[Plane hydrogen jets.](#) International Journal of Hydrogen Energy, 38 (19). pp. 8068-8083. [Journal article]

[Predicted thermal performance of triple vacuum glazing.](#) Solar Energy, 84 (12). pp. 2132-2139. [Journal article]

[Prediction accuracy in mass appraisal: a comparison of modern approaches.](#) Journal of Property Research, 30 (4). pp. 239-265. [Journal article]

[Pricing and Time on the Market for Residential Properties in a Major UK City.](#) Journal of Real Estate Research, 31 (2). pp. 209-233. [Journal article]

[Prime versus Secondary Real Estate: When to Buy and Sell.](#) Journal of Property Investment & Finance, 31 (3). pp. 254-266. [Journal article]

[Probability distribution fitting of schedule overruns in construction projects.](#) Journal of the Operational Research Society, 64 . pp. 1231-1247. [Journal article]

[Product-cost modelling approach for the development of a decision support system for optimal roofing material selection.](#) Expert Systems with Applications, 39 . pp. 6857-6871. [Journal article]

[Property tax reform in Vietnam: Options, direction and evaluation.](#) Land Use Policy, 30 (1). pp. 276-285. [Journal article]

[Real-life energy use in the UK: How occupancy and dwelling characteristics affect domestic electricity use.](#) Energy and Buildings, 40 . pp. 1053-1059. [Journal article]

[Refuge areas and vertical evacuation of multistorey buildings: the end users' perspectives.](#) Fire and Materials, John Wiley & Sons, Ltd, 11 pp, DOI: [10.1002/fam.2205](#) [Internet publication]

[Regime shifts in ex post UK commercial property risk premiums.](#) Journal of Property Research, 29 (3). pp. 247-269. [Journal article]

[Regression modelling of risk impacts on construction cost flow forecast.](#) Journal of Financial Management of Property and Construction, 17 (3). pp. 203-221. [Journal article]

[Retail Development in The Netherlands: Evaluating the Effects of Radical Changes in Planning Policy.](#) European Planning Studies, 17 (7). pp. 1029-1048. [Journal article]

[Safety assessment of unignited hydrogen discharge from onboard storage in garages with low levels of natural ventilation.](#) International Journal of Hydrogen Energy, 38 . pp. 8159-8166. [Journal article]

[Scenario-based approach to office occupancy analysis.](#) Property Management, 30 (4). pp. 333-350. [Journal article]

[Self-proxy agreement and weekly school travel behaviour in a sectarian divided society.](#) Journal of Transport Geography, 23 . pp. 74-85. [Journal article]

[Simulation algorithm and validation of a photovoltaic water pumping system model using long-term field data.](#) J. Power and Energy, 224 (5). pp. 641-656. [Journal article]

[Simulation procedure for the co-optimization of photovoltaic water pumping systems.](#) J. Power and Energy, 224 (5). pp. 629-640. [Journal article]

[Single-coal-particle combustion in O<sub>2</sub>/N<sub>2</sub> and O<sub>2</sub>/CO<sub>2</sub> environments.](#) Combustion and Flame, 153 (1-2). pp. 270-287. [Journal article]

[Spatial variation as a determinant of house price: Incorporating a geographically weighted regression approach within the Belfast housing market.](#) Journal of Financial Management of Property and Construction, 17 (1). pp. 49-72. [Journal article]

[State of the Irish housing stock—Modelling the heat losses of Ireland's existing detached rural housing stock & estimating the benefit of thermal retrofit measures on this stock.](#) Energy Policy, 55 . pp. 139-151. [Journal article]

[Synthesis of carbon nanotubes by sequential pyrolysis and combustion of polyethylene.](#) Carbon, 48 (14). pp. 4024-2034. [Journal article]

[Systematic Risk Pricing and Investment Performance of UK and US Property Markets.](#) Journal of European Real Estate Research, 5 (1). pp. 66-87. [Journal article]

[Techno-economic evaluation of advanced IGCC lignite coal fuelled power plants with CO<sub>2</sub> capture.](#) Fuel, 88 (12). pp. 2495-2506. [Journal article]

[Techno-economic study of CO<sub>2</sub> capture and storage in coal fired oxygen fed entrained flow IGCC power plants.](#) Fuel Processing Technology, 89 (9). pp. 916-925. [Journal article]

[Temperature on structural steelworks insulated by inorganic intumescent coating.](#) Steel and Composite Structures, 15 (1). pp. 1-14. [Journal article]

[The design, fabrication and indoor experimental characterisation of an isolated cell photovoltaic module.](#) Solar Energy, 88 . pp. 1-12. [Journal article]

[The development of a finned phase change material \(PCM\) storage system to take advantage of off-peak electricity tariff for improvement in cost of heat pump operation.](#) Energy and Buildings, 42 (9). pp. 1552-1560. [Journal article]

[The effect of using two PCMs on the thermal regulation performance of BIPV systems.](#) Solar Energy Materials and Solar Cells, 95 . pp. 957-963. [Journal article]

[The experimental analysis of the effect of ambient factors on the defrosting of economised vapour injection compressor air source heat pump in marine climates.](#) International Journal of Refrigeration, 36 (3). pp. 820-827. [Journal article]

[The Impact of Covenant Strength on Property Pricing.](#) Journal of Property Research, 28 (2). pp. 167-188. [Journal article]

[The Implications of Mortgage Finance on Housing Market Affordability.](#) International Journal of Housing Markets and Analysis, 4 (4). pp. 394-417. [Journal article]

[The influence of comonomers on the degradation and flammability of polyacrylonitrile: Design input for a new generation of flame retardants.](#) Polymer Degradation and Stability, 95 (12). 2260 -2268. [Journal article]

[The performance of UK regeneration property within a mixed asset portfolio.](#) Journal of Property Research, 28 (1). pp. 75-95. [Journal article]

[The Potential of Artificial Neural Networks in Mass Appraisal: The Case Revisited.](#) Journal of Financial Management of Property and Construction, 17 (3). pp. 274-292. [Journal article]

[The Private Rented Sectors in Northern Ireland and the Republic of Ireland: A Case Study in Convergence Analysis.](#) International Journal of Housing Policy, 10 (4). pp. 421-441. [Journal article]

[The relationship between air travel behaviour and the key life stages of having children and entering retirement.](#) Journal of Transport Geography, 26 . pp. 78-86. [Journal article]

[The risk free rate of return in UK property pricing.](#) Journal of European Real Estate Research, 4 (3). pp. 165-184. [Journal article]

[The UK 9/11 evacuation study: Analysis of survivors' recognition and response phase in WTC1.](#) Fire Safety Journal, 45 (1). pp. 21-34. [Journal article]

[Theoretical and experimental analysis of the vacuum pressure in a vacuum glazing after extreme thermal cycling.](#) Solar Energy, 83 (9). pp. 1723-1730. [Journal article]

[Thermal behavior of covalently bonded phosphonate flame-retarded poly\(methyl methacrylate\) systems.](#) Polymers for Advanced Technologies, 19 (6). pp. 710-723. [Journal article]

[Thermal performance analysis of an electrochromic vacuum glazing with low emittance coatings.](#) Solar Energy, 84 (4). pp. 516-525. [Journal article]

[Trigeneration running with raw jatropha oil.](#) Fuel Processing Technology, 91 (3). pp. 348-353. [Journal article]

[Unlisted Property Fund Investment in Urban Renewal/Regeneration Property in the U.K.: The Impact of Investment Style on Decision Making.](#) Journal of Real Estate Portfolio Management, 14 (3). pp. 185-193. [Journal article]

[Using AHP to measure the perception gap between current and potential users of bus services.](#) Transportation Planning and Technology, 36 (1). pp. 4-23. [Journal article]

[Using Geographically Weighted Regression to Detect Housing Submarkets: Modeling Large-Scale Spatial Variations in Value.](#) Journal of Property Tax Assessment and Administration, 5 (1). pp. 21-51. [Journal article]

[Valuing air transportation and sustainability from a public perspective: Evidence from the United Kingdom and the United States.](#) Research in Transportation Business & Management, 7 . pp. 114-119. [Journal article]