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### **PUBLICATION DETAILS**

Steady and unsteady forced convective heat transfer analysis in 180 degree bend

C Koushik, KA Prakash  
Heat Transfer Engineering 41 (22), 1901-1920

Effect of cylinder arrangement on fluid flow and heat transfer characteristics past four elliptic cylinders

V Puliyeri, S Vengadesan, K Arul Prakash  
Heat Transfer Engineering, 1-22

CFD modelling of buoyancy driven flows in enclosures with relevance to nuclear reactor safety

GV Kumar, M Kampili, S Kelm, KA Prakash, HJ Allelein  
Nuclear Engineering and Design 365, 110682

Steady and unsteady numerical investigations of laminar fluid flow and heat transfer in a 180° bend with bypass

C Koushik, KA Prakash  
International Journal of Heat and Mass Transfer 151, 119357

### Comparison of fractional flow reserve value of patient-specific left anterior descending artery using 1D and 3D CFD analysis

S Saha, T Purushotham, KA Prakash

International Journal of Advances in Engineering Sciences and Applied ...

### Numerical study on pressure drop and filtration efficiency of gas–solid flow through axial cyclone separators

B Gopalakrishnan, KA Prakash

International Journal of Advances in Engineering Sciences and Applied ...

### Study of Momentum and Thermal Wakes Due to Elliptic Cylinders of Various Axes Ratios Using the Immersed Boundary Method

I Paul, V Pulletikurthi, KA Prakash, S Vengadesan

Immersed Boundary Method, 317-333

### Enhanced drag-reduction over superhydrophobic surfaces with sinusoidal textures: A DNS study

PA Fuaad, KA Prakash

Computers & Fluids 181, 208-223

### On the development of low frequency structures in near and far laminar wakes

V Pulletikurthi, I Paul, KA Prakash, B Prasad

Physics of Fluids 31 (2), 023604

## ESTIMATION OF VISCOUS DISSIPATION LOAD DUE TO MIXING OF HIGHLY VISCOUS FLUID IN A VERTICAL MIXER

AS Tomar, KG Harish, KA Prakash

Proceedings of the 25th National and 3rd International ISHMT-ASTFE Heat and ...

## Numerical analysis of multiphase flow through axial vortex tube cyclone separators

B Gopalakrishnan

E3S Web of Conferences 128, 06010

## Numerical estimation of thermal load in a three blade vertically agitated mixer

AS Tomar, KG Harish, KA Prakash

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## Numerical and experimental investigations of Fractional Flow Reserve (FFR) in a stenosed coronary artery

S Saha, T Purushotham, KA Prakash

E3S Web of Conferences 128, 02006

## A surrogate model-based method to obtain optimal design in spiral casing of Francis turbine

PR Nakkina, KA Prakash, GS Kumar

International Journal of Mathematical Modelling and Numerical Optimisation 9 ...

## Linear shear flow past a rotating elliptic cylinder

SN Naik, S Vengadesan, K Arul Prakash

Journal of Fluids Engineering 140 (12)

**Spectral analysis of flow and scalar primitive variables in near and far laminar wake of an elliptic cylinder**

V Pulletikurthi, I Paul, KA Prakash, B Prasad  
arXiv preprint arXiv:1807.03417

**Numerical investigation of forced convective heat transfer characteristics of a porous channel filled with-water nanofluid in the presence of heaters and coolers**

SS Vadri, AP Karaiyan, A Pattamatta  
Heat Transfer Engineering 39 (11), 985-997

**Slip effects on turbulent heat transport over post and ridge structured superhydrophobic surfaces**

PA Fuaad, KA Prakash  
International Journal of Heat and Mass Transfer 122, 31-44

**Three-dimensional study of multiple-jet cross flow cooling system with single array of heat sources**

SR Mahapatro, K Arul Prakash  
Heat Transfer Engineering 39 (3), 252-267

**NUMERICAL INVESTIGATION OF NATURAL-CONVECTION HEAT TRANSFER CHARACTERISTICS OF  $\text{Al}_2\text{O}_3$ -WATER NANOFLUID FLOW THROUGH ...**

SS Vadri, KA Prakash, A Pattamatta  
Heat Transfer Research 49 (8)

Fluid flow and heat transfer characteristics past two tandem elliptic cylinders: a numerical study

S Sunakraneni, V Puliyeri, KA Prakash  
Journal of Enhanced Heat Transfer 25 (4-5)

CFD MODELLING OF BUOYANCY DRIVEN FLOWS IN ENCLOSURES: RELEVANCE TO NUCLEAR REACTOR SAFETY

S Kelm, KA Prakash, HJ Allelein

POD analysis of laminar flow in a two-dimensional 180-degree sharp bend with bypass

K Chandramouli, K Arul Prakash  
APS, G23. 004

FFR analysis of blood flow through a stenosed Left Anterior Descending Artery

J Pasupathi, K Arul Prakash  
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Effect of splitter plate on passive control and drag reduction for fluid flow past an elliptic cylinder

S Soumya, KA Prakash  
Ocean Engineering 141, 351-374

Effect of magnetic field on natural convection and entropy generation in Al<sub>2</sub>O<sub>3</sub>/water nanofluid-filled enclosure with twin protruding heat sources

P Anand Kumar Lam, K Arul Prakash  
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### A numerical investigation and design optimization of impingement cooling system with an array of air jets

PAK Lam, KA Prakash

International Journal of Heat and Mass Transfer 108, 880-900

### Effect of splitter plate on fluid flow characteristics past a triangular cylinder

S Soumya, KA Prakash

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### Influence of texture on thermal transport in streamwise-aligned superhydrophobic turbulent channels

PA Fuaad, KA Prakash

International Journal of Thermal Sciences 114, 72-85

### Thermal and Thermodynamic analyses of impingement cooling system with turbulent jet arrays

PAK Lam, KA Prakash

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### NUMERICAL STUDIES ON FLUID FLOW AND HEAT TRANSFER CHARACTERISTICS FOR FLOW PAST TWO TANDEM ELLIPTIC CYLINDERS

S Sunakraneni, V Puliyeri, KA Prakash

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### Numerical study of fluid flow past a rotating elliptic cylinder

SN Naik, S Vengadesan, KA Prakash

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### Utilization of wind shear for powering unmanned aerial vehicles in surveillance application: A numerical optimization study

H Kaushik, R Mohan, KA Prakash

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### Analysis and characterisation of momentum and thermal wakes of elliptic cylinders

I Paul, KA Prakash, S Vengadesan, V Pulletikurthi

Journal of Fluid Mechanics 807, 303-323

### Numerical investigation on fluid flow past transversely oscillating vertical rectangular cylinder

J Kannan, KA Prakash

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### Thermodynamic investigation and multi-objective optimization for jet impingement cooling system with Al<sub>2</sub>O<sub>3</sub>/water nanofluid

PAK Lam, KA Prakash

Energy Conversion and Management 111, 38-56

### Flow past rotating low axis ratio elliptic cylinder

SN Naik, S Vengadesan, K Arul

46th AIAA Fluid Dynamics Conference, 4348

**Numerical studies on fluid flow characteristics through different configurations of spiral casing**

PR Nakkina, K Arul Prakash, G Saravana Kumar

Engineering Applications of Computational Fluid Mechanics 10 (1), 296-310

**Proper orthogonal decomposition analysis of turbulent jet impingement on rib-roughened surface**

PAK Lam, AP Karaiyan

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**The effect of splitter plate on fluid flow and heat transfer characteristics past various bluff-body configurations**

S Soumya, KA Prakash

APS, A15. 002

**Enhanced cooling of electronic components using fluid flow under high adverse pressure gradient**

S Ravishankar, K Arul Prakash

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**A new approach for polymer-free coating with paclitaxel microparticles on fully-bioabsorbable poly (L-lactic acid) stent and studies of drug release behavior**

HG Yamada, M Kinoshita, S Yagi, C Matsubara, K Igaki, H Yamane

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### Robust design of savonius wind turbine

V Dhamotharan, R Meena, P Jadhav, P Ramu, KA Prakash  
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### A numerical investigation of heat transfer and entropy generation during jet impingement cooling of protruding heat sources without and with porous medium

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