

## Recent Relevant Publications

Dogan H., Popov V. (2016) Numerical simulation of the nonlinear ultrasonic pressure wave propagation in a cavitating bubbly liquid inside a sonochemical reactor. *Ultrasonics Sonochemistry* **30**, 87–97.

Paderin, G.V, Galybin, A.N. and Izvekov, O.Ya. 2015. Modelling of the multistage hydraulic fracture growth by the SIE method. *Oil Industry (Nefljanoe Hozjajstvo)*, April N4, pp. 77-79, JIF= 0.187

Gospavic R., Knoll P., Mirzaei S., Popov V. (2016) Physiologically Based Pharmacokinetic (PBPK) Model for Biodistribution of Radiolabeled Peptides in Patients with Neuroendocrine Tumours. *Asia Oceania Journal of Nuclear Medicine & Biology* **4**, 90-97.

Aizikovich, S.M. Galybin, A.N. and L.I. Krenev 2015. Semi-analytical solution for mode I penny-shaped crack in a soft inhomogeneous layer. *Int Journal of Solids and Structures*, **53**. pp.129-137. (doi: 10.1016/j.ijsolstr.2014.10.010), JIF=2.035

Dogan H., Popov V., Ooi E.H. (2015) Dispersion analysis of the meshless local boundary integral equation and radial basis integral equation methods for the Helmholtz equation, *Eng. Analysis with Boundary Elements*, **50**, 360–371 (<http://www.sciencedirect.com/science/article/pii/S0955799714002331>).

Andreev, A. A., Galybin A. N. and O. Y. Izvekov. 2015. Application of complex SIE method for the prediction of hydrofracture path. *Engineering Analysis with Boundary Elements*. Vol. **50** : pp. 133-140 (doi: 10.1016/j.enganabound.2014.08.004)

Al-Awadi L.T., Popov V., Khan A.R. (2015) Seasonal effects of major primary pollutants in Ali Sabah Al-Salem residential area in Kuwait. *International Journal of Environmental Technology and Management*, **18**/1, 54-82.

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SK Hall, EH Ooi, SJ Payne, Cell death, perfusion and electrical parameters are critical in models of hepatic radiofrequency ablation. *International Journal of Hyperthermia*, 2015 **31**(5): 538–550.

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Galybin, A.N., Goldstein, R.V. and Ustinov, K.B. 2014. Fracture development on a weak interface near a wedge. *Journal Mechanics of Materials and Structures [in Special issue in memory of Huy Duong Bui]*, in print, JIF= 0.696

Galybin , A.N., Sh.A. Mukhamediev, 2014. Fracture development on a weak interface ahead of a fluid-driven crack. *Engineering Fracture Mechanics*. Vol. **129** pp. 90-101 (doi: 10.1016/j.engfracmech.2014.08.005)

Galybin, A.N., Goldstein, R.V. and Ustinov, K.B. 2014. Equilibrium of mixed-mode interface cracks under cleavage of an elastic plane caused by an edge dislocation. *Procedia Materials Science* **3** (2014), pp. 1742–1747. doi: 10.1016/j.mspro.2014.06.281

Paderin, G.V, Galybin, A.N. and Izvekov, O.Ya. 2014. Multi-stage hydro-fracture trajectories: modelling by the SIE method. *Procedia Materials Science* **3** (2014), pp 1798–1803. doi: 10.1016/j.mspro.2014.06.290

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Ooi E.H. and Popov V. (2013). Transformation thermodynamics for heat flux management based on segmented thermal cloaks. *The European Physical Journal Applied Physics*, **63**/1, 10903-10912 (<https://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=8960165&fulltextType=RA&fileId=S1286004213401507>).

Ooi E.H., Popov V. (2013) Meshless solution of two-dimensional incompressible flow problems using the Radial Basis Integral Equation Method, *Applied Mathematical Modelling*, **37**, 8985-8998 (<http://www.sciencedirect.com/science/article/pii/S0307904X13002886>).

Ooi E.H., Popov V. (2013) Meshless solution of axisymmetric convection-diffusion equation: A comparison between two alternative RBIE implementations, *Engineering Analysis with Boundary Elements*, **37**, 719-727 (<http://www.sciencedirect.com/science/article/pii/S095579971300026X>).

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