

27. Numerical investigation of Marangoni convection caused by the presence of a bubble on a uniformly heated surface (Seamus O'Shaughnessy and Tony Robinson).

28. Computational and Ground Based Experimental Investigations of the Effects of Specified and Unspecified (Free) Pressure Conditions at Condenser Exit for Condensing Flows in Terrestrial and Micro-Gravity Environments (Amitabh Narain, Shantanu Kulkarni, Soumya Mitra, Jorge H. Kurita, and Michael T. Kivisalu).

29. Thermal marangoni instability and magnetic pressure for a thin ferrofluid layer (M. Hennenberg, S. Slavtchev, and B. Weysow).

Part VIII: Phase Transitions.

30. Metastable mesoscopic phases in concentrated protein solutions (Peter G. Vekilov).

31. Pure and doped TGS crystals: growth and characterization (H.V. Alexandru).

32. Structure, dynamic properties and phase transitions of tethered membranes: A Monte Carlo simulation study (Hristina Popova and Andrey Milchev).

33. XRD investigation of binary alloys solidification (R. Montanari and F. Gauzzi).

34. Calculation of the T-X phase diagrams for binary mixtures of cholestanyl myristate - cholesteryl myristate and cholestanyl myristate -cholesteryl oleate (Hamit Yurtseven and Sema Sen).

35. Growth and characterization of high-quality protein crystals for X-ray crystallography (Vivian Stojanoff, A. Moreno, B. Quiroz-Garcia, E. Dimasi, F. Yokaichiya, J. Jakoncic).

Part IX: Electrostatic and Electromagnetic Phenomena.

36. Synthesis of high performance magnetostrictive $Tb_{0.3}Dy_{0.7}Fe_2$ by unidirectional solidification in microgravity (Takeshi Okutani, Hideaki Nagai, and Mikito Mamiya).

37. Electrohydrodynamic convective heat transfer in a square duct (Walter Grassi, Daniele Testi, and Tommaso Bagnoli).

38. Force Characterization of Dielectrophoresis in Droplet Transport (Patrick Young and Kamran Mohseni).

Part X: Transport Phenomena and Properties of Nanoparticles and Aerosols.

39. Dispersion and surface characteristics of nano-oxide and nanotube suspensions (Denitsa Milanova and Ranganathan Kumar).

40. Transport properties of small spherical particles - how does a molecule become a 'particle'? (Hai Wang).

41. Gravitational effects on carbon nano-materials synthesized by arc in water (Osamu Kawanami and Noriaki Sano).

42. Direct hydrothermal synthesis of ternary Li-Mn-O oxide ion-sieve: Qin-Hui Zhang, Shu-Yin Sun, Shao-Peng Li, Xian-Sheng Yin, Jian-Guo Yu).

Part XI: Transport Processes in Materials Technology.