

## Subject Index of Volume 74

- Adsorbate passage  
Characterizing adsorbate passage in molecular sieve pores, 25
- Adsorbate  
Molecular dynamics under the confinement by the host lattice in zeolitic adsorbate–adsorbent systems, 15
- Adsorbent  
Molecular dynamics under the confinement by the host lattice in zeolitic adsorbate–adsorbent systems, 15
- Adsorption  
Effect of heat of adsorption on the adsorptive drying of solvents at equilibrium in a packed bed of zeolite, 197
- Alkanes  
Rheology, dynamics, and structure of hydrocarbon blends: a molecular dynamics study of *n*-hexane/*n*-hexadecane mixtures, 129
- Anisotropic zeolite membranes  
Modeling tracer counter-permeation through anisotropic zeolite membranes: from mean field theory to single-file diffusion, 43
- Asymmetric  
Fully developed turbulent flow in ducts with symmetric and asymmetric rough walls, 147
- Carbon membranes  
Nonequilibrium molecular dynamics simulation of a model carbon membrane separation of CH<sub>4</sub>/H<sub>2</sub> mixtures, 85
- Complete fluidization velocity  
Influence of the particle size distribution of powders on the velocities of minimum and complete fluidization, 181
- Computer simulation  
Molecular modeling of polymers at surfaces, 109
- Concentration  
Experimental study of solid–liquid two-phase flow in a hydrocyclone, 211
- Confined fluid  
Structural and rheological properties of *n*-decane confined between graphite surfaces, 117
- Counter-permeation  
Modeling tracer counter-permeation through anisotropic zeolite membranes: from mean field theory to single-file diffusion, 43
- Critical temperature  
A new temperature–thermal conductivity relationship for predicting saturated liquid thermal conductivity, 161
- Density functional theory  
Molecular modeling of polymers at surfaces, 109
- Drying  
Effect of heat of adsorption on the adsorptive drying of solvents at equilibrium in a packed bed of zeolite, 197
- Dusty-gas model  
Dynamics of pressure build-up accompanying multicomponent gas transport in porous solids: adsorbable gases, 171
- Dynamic transport  
Dynamics of pressure build-up accompanying multicomponent gas transport in porous solids: adsorbable gases, 171
- Flow field  
Numerical prediction of the liquid flow within a hydrocyclone, 217
- Furter equation  
Isothermal vapour–liquid equilibria of 1-propanol–water–salt mixtures, 205
- Gas-solid fluidization  
Influence of the particle size distribution of powders on the velocities of minimum and complete fluidization, 181
- Grand canonical Monte Carlo  
Monte Carlo lattice dynamics studies of binary adsorption in silicalite, 57
- Heat effects  
Effect of heat of adsorption on the adsorptive drying of solvents at equilibrium in a packed bed of zeolite, 197
- Hydrocyclone  
Experimental study of solid–liquid two-phase flow in a hydrocyclone, 211  
Numerical prediction of the liquid flow within a hydrocyclone, 217
- Integral equation theory  
Molecular modeling of polymers at surfaces, 109
- Intrinsic defect diffusion  
An order(*N*) tight-binding molecular dynamics study of intrinsic defect diffusion in silicon, 67
- Kinetic Monte-Carlo  
Modeling tracer counter-permeation through anisotropic zeolite membranes: from mean field theory to single-file diffusion, 43
- Liquid phase  
Effect of heat of adsorption on the adsorptive drying of solvents at equilibrium in a packed bed of zeolite, 197
- Lubricants  
Rheology, dynamics, and structure of hydrocarbon blends: a molecular dynamics study of *n*-hexane/*n*-hexadecane mixtures, 129
- Mass transfer rates  
Molecular modeling of fluid separations using membranes: effect of molecular forces on mass transfer rates, 99
- Mean field theory  
Modeling tracer counter-permeation through anisotropic zeolite membranes: from mean field theory to single-file diffusion, 43
- Mean transport pore model  
Dynamics of pressure build-up accompanying multicomponent gas transport in porous solids: adsorbable gases, 171
- Method of calculation  
A new temperature–thermal conductivity relationship for predicting saturated liquid thermal conductivity, 161
- Minimum fluidization velocity  
Influence of the particle size distribution of powders on the velocities of minimum and complete fluidization, 181

- Mixture  
Rheology, dynamics, and structure of hydrocarbon blends: a molecular dynamics study of *n*-hexane/*n*-hexadecane mixtures, 129
- Molecular dynamics  
Molecular dynamics under the confinement by the host lattice in zeolitic adsorbate–adsorbent systems, 15  
Molecular modeling of fluid separations using membranes: effect of molecular forces on mass transfer rates, 99  
Monte Carlo lattice dynamics studies of binary adsorption in silicalite, 57  
Rheology, dynamics, and structure of hydrocarbon blends: a molecular dynamics study of *n*-hexane/*n*-hexadecane mixtures, 129  
Structural and rheological properties of *n*-decane confined between graphite surfaces, 117
- Molecular sieve pores  
Characterizing adsorbate passage in molecular sieve pores, 25
- Molecular-dynamic (MD) simulation  
Accelerated molecular dynamics of infrequent events, 77
- Monte Carlo (MC) simulation  
Accelerated molecular dynamics of infrequent events, 77
- Monte Carlo lattice dynamics  
Monte Carlo lattice dynamics studies of binary adsorption in silicalite, 57
- Multicomponent  
Dynamics of pressure build-up accompanying multicomponent gas transport in porous solids: adsorbable gases, 171
- Nanopores  
The temperature dependence of single-file separation mechanisms in one-dimensional nanoporous materials, 33
- Nonequilibrium molecular dynamics  
Nonequilibrium molecular dynamics simulation of a model carbon membrane separation of CH<sub>4</sub>/H<sub>2</sub> mixtures, 85
- Normal boiling point  
A new temperature–thermal conductivity relationship for predicting saturated liquid thermal conductivity, 161
- Numerical simulation  
Numerical prediction of the liquid flow within a hydrocyclone, 217
- One-dimensional  
The temperature dependence of single-file separation mechanisms in one-dimensional nanoporous materials, 33
- Organic liquids  
A new temperature–thermal conductivity relationship for predicting saturated liquid thermal conductivity, 161
- Particle size distribution  
Influence of the particle size distribution of powders on the velocities of minimum and complete fluidization, 181
- Particle size  
Experimental study of solid–liquid two-phase flow in a hydrocyclone, 211
- Particle-particle interaction  
Influence of the particle size distribution of powders on the velocities of minimum and complete fluidization, 181
- Permeation  
Nonequilibrium molecular dynamics simulation of a model carbon membrane separation of CH<sub>4</sub>/H<sub>2</sub> mixtures, 85
- Potential-energy surface  
Accelerated molecular dynamics of infrequent events, 77
- Rheology  
Rheology, dynamics, and structure of hydrocarbon blends: a molecular dynamics study of *n*-hexane/*n*-hexadecane mixtures, 129  
Structural and rheological properties of *n*-decane confined between graphite surfaces, 117
- Rough walls  
Fully developed turbulent flow in ducts with symmetric and asymmetric rough walls, 147
- Semi-permeable membranes  
Molecular modeling of fluid separations using membranes: effect of molecular forces on mass transfer rates, 99
- Silicon  
An order(*N*) tight-binding molecular dynamics study of intrinsic defect diffusion in silicon, 67
- Simulation  
Prospects for principles of size and shape selective separations using zeolites, 1
- Single-file diffusion  
Modeling tracer counter-permeation through anisotropic zeolite membranes: from mean field theory to single-file diffusion, 43
- Size and shape selective separations  
Prospects for principles of size and shape selective separations using zeolites, 1
- Solvents  
Effect of heat of adsorption on the adsorptive drying of solvents at equilibrium in a packed bed of zeolite, 197
- Symmetric  
Fully developed turbulent flow in ducts with symmetric and asymmetric rough walls, 147
- Temperature dependence  
The temperature dependence of single-file separation mechanisms in one-dimensional nanoporous materials, 33
- Thermal conductivity  
A new temperature–thermal conductivity relationship for predicting saturated liquid thermal conductivity, 161
- Tight-binding molecular dynamics  
An order(*N*) tight-binding molecular dynamics study of intrinsic defect diffusion in silicon, 67
- Tracer diffusion  
Characterizing adsorbate passage in molecular sieve pores, 25
- Transition-state theory (TST)  
Accelerated molecular dynamics of infrequent events, 77
- Transport parameters  
Dynamics of pressure build-up accompanying multicomponent gas transport in porous solids: adsorbable gases, 171
- Turbulence  
Numerical prediction of the liquid flow within a hydrocyclone, 217
- Turbulent flow  
Fully developed turbulent flow in ducts with symmetric and asymmetric rough walls, 147
- Two-phase flow  
Experimental study of solid–liquid two-phase flow in a hydrocyclone, 211
- Vapour-liquid equilibrium  
Isothermal vapour–liquid equilibria of 1-propanol–water–salt mixtures, 205
- Velocity  
Experimental study of solid–liquid two-phase flow in a hydrocyclone, 211
- Viscoelasticity  
Rheology, dynamics, and structure of hydrocarbon blends: a molecular dynamics study of *n*-hexane/*n*-hexadecane mixtures, 129
- Zeolite  
Effect of heat of adsorption on the adsorptive drying of solvents at equilibrium in a packed bed of zeolite, 197
- Zeolites  
Prospects for principles of size and shape selective separations using zeolites, 1