Thijs J H Vlugt

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

288 11,626 56 95 h-index g-index citations papers 6.65 296 4.8 13,149 avg, IF L-index ext. papers ext. citations

| # | Paper | IF | Citations |
|-----|---|-----------------|-----------|
| 288 | Electro-osmotic Drag and Thermodynamic Properties of Water in Hydrated Nafion Membranes from Molecular Dynamics <i>Journal of Physical Chemistry C</i> , 2022 , 126, 8121-8133 | 3.8 | O |
| 287 | Reactive Grand-Canonical Monte Carlo Simulations for Modeling Hydration of MgCl <i>ACS Omega</i> , 2021 , 6, 32475-32484 | 3.9 | 0 |
| 286 | Electroreduction of CO/CO to C Products: Process Modeling, Downstream Separation, System Integration, and Economic Analysis <i>Industrial & Engineering Chemistry Research</i> , 2021 , 60, 17862-1 | 7880 | 3 |
| 285 | Interfacial Properties of Hydrophobic Deep Eutectic Solvents with Water. <i>Journal of Physical Chemistry B</i> , 2021 , 125, 12303-12314 | 3.4 | 2 |
| 284 | Solubility of Carbon Dioxide, Hydrogen Sulfide, Methane, and Nitrogen in Monoethylene Glycol; Experiments and Molecular Simulation. <i>Journal of Chemical & Experiments and Molecular Simulation</i> . <i>Journal of Chemical & Data</i> , 2021, 66, 524-534 | 2.8 | 5 |
| 283 | Liquid-Liquid Extraction of Formic Acid with 2-Methyltetrahydrofuran: Experiments, Process Modeling, and Economics. <i>Industrial & Economics Chemistry Research</i> , 2021 , 60, 5588-5599 | 3.9 | 5 |
| 282 | Effect of Water Content on Thermodynamic Properties of Compressed Hydrogen. <i>Journal of Chemical & Engineering Data</i> , 2021 , 66, 2071-2087 | 2.8 | 4 |
| 281 | Thermodynamic, transport, and structural properties of hydrophobic deep eutectic solvents composed of tetraalkylammonium chloride and decanoic acid. <i>Journal of Chemical Physics</i> , 2021 , 154, 144502 | 3.9 | 6 |
| 280 | How sensitive are physical properties of choline chloride-urea mixtures to composition changes: Molecular dynamics simulations and Kirkwood-Buff theory. <i>Journal of Chemical Physics</i> , 2021 , 154, 1845 | 92 ⁹ | 5 |
| 279 | Adsorption of n-alkanes in ZIF-8: Influence of crystal size and framework dynamics. <i>Microporous and Mesoporous Materials</i> , 2021 , 312, 110730 | 5.3 | 2 |
| 278 | Diffusivity of -, -, -cyclodextrin and the inclusion complex of -cyclodextrin: Ibuprofen in aqueous solutions; A molecular dynamics simulation study. <i>Fluid Phase Equilibria</i> , 2021 , 528, 112842 | 2.5 | 11 |
| 277 | Gibbs Ensemble Monte Carlo for Reactive Force Fields to Determine the Vapor-Liquid Equilibrium of CO and HO. <i>Journal of Chemical Theory and Computation</i> , 2021 , 17, 322-329 | 6.4 | 5 |
| 276 | Recent advances in the continuous fractional component Monte Carlo methodology. <i>Molecular Simulation</i> , 2021 , 47, 804-823 | 2 | 14 |
| 275 | Finite-size effects of diffusion coefficients computed from molecular dynamics: a review of what we have learned so far. <i>Molecular Simulation</i> , 2021 , 47, 831-845 | 2 | 27 |
| 274 | A multiscale modelling approach to elucidate the mechanism of the oxygen evolution reaction at the hematite-water interface. <i>Faraday Discussions</i> , 2021 , 229, 89-107 | 3.6 | 8 |
| 273 | In Silico Screening of Zeolites for High-Pressure Hydrogen Drying. <i>ACS Applied Materials & Amp; Interfaces</i> , 2021 , 13, 8383-8394 | 9.5 | 1 |
| 272 | Competitive Adsorption of Xylenes at Chemical Equilibrium in Zeolites. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 4155-4174 | 3.8 | 1 |

| 271 | New Features of the Open Source Monte Carlo Software Brick-CFCMC: Thermodynamic Integration and Hybrid Trial Moves. <i>Journal of Chemical Information and Modeling</i> , 2021 , 61, 3752-3757 | 6.1 | 2 |
|-----|--|-------|----|
| 270 | Reversible Hydrogen Storage in Metal-Decorated Honeycomb Borophene Oxide. <i>ACS Applied Materials & Acs Applied &</i> | 9.5 | 6 |
| 269 | Vapor pressures and vapor phase compositions of choline chloride urea and choline chloride ethylene glycol deep eutectic solvents from molecular simulation. <i>Journal of Chemical Physics</i> , 2021 , 155, 114504 | 3.9 | 1 |
| 268 | Recovery of rare earths from glass polishing waste for the production of aluminium-rare earth alloys. <i>Resources, Conservation and Recycling</i> , 2021 , 174, 105766 | 11.9 | 1 |
| 267 | Mechanical Response of Nanocrystalline Ice-Contained Methane Hydrates: Key Role of Water Ice. <i>ACS Applied Materials & amp; Interfaces</i> , 2020 , 12, 14016-14028 | 9.5 | 17 |
| 266 | Gibbs Ensemble Monte Carlo Simulation of Fluids in Confinement: Relation between the Differential and Integral Pressures. <i>Nanomaterials</i> , 2020 , 10, | 5.4 | 5 |
| 265 | Inclusion Complexation of Organic Micropollutants with ECyclodextrin. <i>Journal of Physical Chemistry B</i> , 2020 , 124, 1218-1228 | 3.4 | 10 |
| 264 | Multiple Free Energy Calculations from Single State Point Continuous Fractional Component Monte Carlo Simulation Using Umbrella Sampling. <i>Journal of Chemical Theory and Computation</i> , 2020 , 16, 1757 | -1767 | 6 |
| 263 | Brick-CFCMC: Open Source Software for Monte Carlo Simulations of Phase and Reaction Equilibria Using the Continuous Fractional Component Method. <i>Journal of Chemical Information and Modeling</i> , 2020 , 60, 2678-2682 | 6.1 | 14 |
| 262 | Kirkwood-Buff Integrals Using Molecular Simulation: Estimation of Surface Effects. <i>Nanomaterials</i> , 2020 , 10, | 5.4 | 12 |
| 261 | Generalized Form for Finite-Size Corrections in Mutual Diffusion Coefficients of Multicomponent Mixtures Obtained from Equilibrium Molecular Dynamics Simulation. <i>Journal of Chemical Theory and Computation</i> , 2020 , 16, 3799-3806 | 6.4 | 18 |
| 260 | The adsorption mechanisms of organic micropollutants on high-silica zeolites causing S-shaped adsorption isotherms: An experimental and Monte Carlo simulation study. <i>Chemical Engineering Journal</i> , 2020 , 389, 123968 | 14.7 | 22 |
| 259 | On the validity of the Stokes Einstein relation for various water force fields. <i>Molecular Physics</i> , 2020 , 118, e1702729 | 1.7 | 13 |
| 258 | Effects of Framework Flexibility on the Adsorption and Diffusion of Aromatics in MFI-Type Zeolites. Journal of Physical Chemistry C, 2020 , 124, 24488-24499 | 3.8 | 10 |
| 257 | Computation of gas solubilities in choline chloride urea and choline chloride ethylene glycol deep eutectic solvents using Monte Carlo simulations. <i>Journal of Molecular Liquids</i> , 2020 , 316, 113729 | 6 | 14 |
| 256 | Artificial intelligence and thermodynamics help solving arson cases. <i>Scientific Reports</i> , 2020 , 10, 20502 | 4.9 | 1 |
| 255 | Influence of Nanoscale Intimacy and Zeolite Micropore Size on the Performance of Bifunctional Catalysts for -Heptane Hydroisomerization. <i>ACS Catalysis</i> , 2020 , 10, 14245-14257 | 13.1 | 14 |
| 254 | Multiple linear regression and thermodynamic fluctuations are equivalent for computing thermodynamic derivatives from molecular simulation. <i>Fluid Phase Equilibria</i> , 2020 , 523, 112785 | 2.5 | 10 |

| 253 | Isobaric Vapor Liquid Equilibrium Data of Binary Systems Containing 2-Ethoxyethanol, 2-Ethoxyethyl Acetate, and Toluene. <i>Journal of Chemical & Chemical &</i> | 2.8 | 3 |
|-----|--|-----|----|
| 252 | Adsorption of Aromatics in MFI-Type Zeolites: Experiments and Framework Flexibility in Monte Carlo Simulations. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 21782-21797 | 3.8 | 5 |
| 251 | Direct Water Injection in Catholyte-Free Zero-Gap Carbon Dioxide Electrolyzers. <i>ChemElectroChem</i> , 2020 , 7, 3839-3843 | 4.3 | 20 |
| 250 | Two-Phase Equilibrium Conditions in Nanopores. <i>Nanomaterials</i> , 2020 , 10, | 5.4 | 9 |
| 249 | Solubility of Water in Hydrogen at High Pressures: A Molecular Simulation Study. <i>Journal of Chemical & Chemic</i> | 2.8 | 16 |
| 248 | The dynamic behavior of gas hydrate dissociation by heating in tight sandy reservoirs: A molecular dynamics simulation study. <i>Fuel</i> , 2019 , 258, 116106 | 7.1 | 12 |
| 247 | Improving the accuracy of computing chemical potentials in CFCMC simulations. <i>Molecular Physics</i> , 2019 , 117, 3493-3508 | 1.7 | 10 |
| 246 | Computing solubility parameters of deep eutectic solvents from Molecular Dynamics simulations. <i>Fluid Phase Equilibria</i> , 2019 , 497, 10-18 | 2.5 | 33 |
| 245 | In-situ experimental investigation on the growth of aerosols along the absorption column in post combustion carbon capture. <i>International Journal of Greenhouse Gas Control</i> , 2019 , 85, 86-99 | 4.2 | 8 |
| 244 | Enhancing the Water Capacity in Zr-Based Metal®rganic Framework for Heat Pump and Atmospheric Water Generator Applications. <i>ACS Applied Nano Materials</i> , 2019 , 2, 3050-3059 | 5.6 | 10 |
| 243 | Characterization and Feasibility Studies on Complete Recovery of Rare Earths from Glass Polishing Waste. <i>Metals</i> , 2019 , 9, 278 | 2.3 | 2 |
| 242 | Highlights of (bio-)chemical tools and visualization software for computational science. <i>Current Opinion in Chemical Engineering</i> , 2019 , 23, 1-13 | 5.4 | 3 |
| 241 | Modeling the Electrochemical Conversion of Carbon Dioxide to Formic Acid or Formate at Elevated Pressures. <i>Journal of the Electrochemical Society</i> , 2019 , 166, E77-E86 | 3.9 | 15 |
| 240 | Rayleigh-Brillouin light scattering spectra of CO2 from molecular dynamics. <i>Journal of Chemical Physics</i> , 2019 , 151, 064201 | 3.9 | 1 |
| 239 | Design, Parameterization, and Implementation of Atomic Force Fields for Adsorption in Nanoporous Materials. <i>Advanced Theory and Simulations</i> , 2019 , 2, 1900135 | 3.5 | 27 |
| 238 | Solving vapor-liquid flash problems using artificial neural networks. <i>Fluid Phase Equilibria</i> , 2019 , 490, 39-47 | 2.5 | 14 |
| 237 | OCTP: A Tool for On-the-Fly Calculation of Transport Properties of Fluids with the Order- n Algorithm in LAMMPS. <i>Journal of Chemical Information and Modeling</i> , 2019 , 59, 1290-1294 | 6.1 | 32 |
| 236 | High-Pressure Electrochemical Reduction of CO2 to Formic Acid/Formate: Effect of pH on the Downstream Separation Process and Economics. <i>Industrial & Engineering Chemistry Research</i> , 2019 , 58, 22718-22740 | 3.9 | 36 |

(2018-2019)

| 235 | Structural, Thermodynamic, and Transport Properties of Aqueous Reline and Ethaline Solutions from Molecular Dynamics Simulations. <i>Journal of Physical Chemistry B</i> , 2019 , 123, 11014-11025 | 3.4 | 41 | |
|-----|--|-----|----|--|
| 234 | Effect of truncating electrostatic interactions on predicting thermodynamic properties of waterfhethanol systems. <i>Molecular Simulation</i> , 2019 , 45, 336-350 | 2 | 10 | |
| 233 | High Pressure Electrochemical Reduction of CO to Formic Acid/Formate: A Comparison between Bipolar Membranes and Cation Exchange Membranes. <i>Industrial & Discourse Chemistry Research</i> , 2019 , 58, 1834-1847 | 3.9 | 66 | |
| 232 | Prediction of adsorption isotherms from breakthrough curves. <i>Microporous and Mesoporous Materials</i> , 2019 , 277, 237-244 | 5.3 | 19 | |
| 231 | Modeling the phase equilibria of asymmetric hydrocarbon mixtures using molecular simulation and equations of state. <i>AICHE Journal</i> , 2019 , 65, 792-803 | 3.6 | 10 | |
| 230 | Molecular simulation of the vapor-liquid equilibria of xylene mixtures: Force field performance, and Wolf vs. Ewald for electrostatic interactions. <i>Fluid Phase Equilibria</i> , 2019 , 485, 239-247 | 2.5 | 6 | |
| 229 | Improving Olefin Purification Using Metal Organic Frameworks with Open Metal Sites. <i>ACS Applied Materials & Amp; Interfaces</i> , 2018 , 10, 16911-16917 | 9.5 | 20 | |
| 228 | Kirkwood B uff integrals of finite systems: shape effects. <i>Molecular Physics</i> , 2018 , 116, 1573-1580 | 1.7 | 17 | |
| 227 | iRASPA: GPU-accelerated visualization software for materials scientists. <i>Molecular Simulation</i> , 2018 , 44, 653-676 | 2 | 61 | |
| 226 | Molecular Simulation of Vapor-Liquid Equilibria Using the Wolf Method for Electrostatic Interactions. <i>Journal of Chemical & Engineering Data</i> , 2018 , 63, 1096-1102 | 2.8 | 15 | |
| 225 | Finite-size effects of Kirkwood B uff integrals from molecular simulations. <i>Molecular Simulation</i> , 2018 , 44, 599-612 | 2 | 35 | |
| 224 | Adsorption equilibrium of nitrogen dioxide in porous materials. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 4189-4199 | 3.6 | 17 | |
| 223 | Development of efficient formulation for the removal of iron sulphide scale in sour production wells. <i>Canadian Journal of Chemical Engineering</i> , 2018 , 96, 2526-2533 | 2.3 | 24 | |
| 222 | Finite-Size Effects of Binary Mutual Diffusion Coefficients from Molecular Dynamics. <i>Journal of Chemical Theory and Computation</i> , 2018 , 14, 2667-2677 | 6.4 | 68 | |
| 221 | Absorption Refrigeration Cycles with Ammonia-Ionic Liquid Working Pairs Studied by Molecular Simulation. <i>Industrial & Engineering Chemistry Research</i> , 2018 , 57, 5442-5452 | 3.9 | 28 | |
| 220 | CO2 stripping from ionic liquid at elevated pressures in gas-liquid membrane contactor. <i>International Journal of Greenhouse Gas Control</i> , 2018 , 71, 293-302 | 4.2 | 17 | |
| 219 | In Silico Screening of Metal-Organic Frameworks for Adsorption-Driven Heat Pumps and Chillers. <i>ACS Applied Materials & Discrete Samp; Interfaces</i> , 2018 , 10, 27074-27087 | 9.5 | 25 | |
| 218 | Combined Steam Reforming of Methane and Formic Acid To Produce Syngas with an Adjustable H:CO Ratio. <i>Industrial & Description of Methane and Formic Acid To Produce Syngas with an Adjustable H:CO Ratio. Industrial & Description of Methane and Formic Acid To Produce Syngas with an Adjustable H:CO Ratio. Industrial & Description of Methane and Formic Acid To Produce Syngas with an Adjustable H:CO Ratio. Industrial & Description of Methane and Formic Acid To Produce Syngas with an Adjustable H:CO Ratio. Industrial & Description of Methane and Formic Acid To Produce Syngas with an Adjustable H:CO Ratio. Industrial & Description of Methane and Formic Acid To Produce Syngas with an Adjustable H:CO Ratio. Industrial & Description of Methane and Formic Acid To Produce Syngas with an Adjustable H:CO Ratio. Industrial & Description of Methane and Formic Acid To Produce Syngas with an Adjustable H:CO Ratio. Industrial & Description of Methane Industrial & Descrip</i> | 3.9 | 20 | |

| 217 | Computation of partial molar properties using continuous fractional component Monte Carlo. <i>Molecular Physics</i> , 2018 , 116, 3331-3344 | 1.7 | 19 |
|-----|--|---------------------|------------------|
| 216 | Gibbs ensemble Monte Carlo simulations of multicomponent natural gas mixtures. <i>Molecular Simulation</i> , 2018 , 44, 377-383 | 2 | 8 |
| 215 | Chemical potentials of water, methanol, carbon dioxide and hydrogen sulphide at low temperatures using continuous fractional component Gibbs ensemble Monte Carlo. <i>Molecular Simulation</i> , 2018 , 44, 405-414 | 2 | 13 |
| 214 | CO2 solubility in small carboxylic acids: Monte Carlo simulations and PC-SAFT modeling. <i>Fluid Phase Equilibria</i> , 2018 , 458, 1-8 | 2.5 | 7 |
| 213 | Recovery of Cerium from Glass Polishing Waste: A Critical Review. <i>Metals</i> , 2018 , 8, 801 | 2.3 | 22 |
| 212 | Potential of polarizable force fields for predicting the separation performance of small hydrocarbons in M-MOF-74. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 28848-28859 | 3.6 | 11 |
| 211 | Theoretical study on cation codoped SrTiO3 photocatalysts for water splitting. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 24342-24349 | 13 | 13 |
| 210 | Optimizing Nonbonded Interactions of the OPLS Force Field for Aqueous Solutions of Carbohydrates: How to Capture Both Thermodynamics and Dynamics. <i>Journal of Chemical Theory and Computation</i> , 2018 , 14, 6690-6700 | 6.4 | 10 |
| 209 | Mechanical properties of bi- and poly-crystalline ice. AIP Advances, 2018, 8, 125108 | 1.5 | 11 |
| 208 | Prediction of Composition-Dependent Self-Diffusion Coefficients in Binary Liquid Mixtures: The Missing Link for Darken-Based Models. <i>Industrial & Engineering Chemistry Research</i> , 2018 , 57, 1478. | 4 ³ 1479 | 14 ¹⁵ |
| 207 | Polarizable Force Field for CO in M-MOF-74 Derived from Quantum Mechanics. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 24488-24498 | 3.8 | 16 |
| 206 | Shear Viscosity Computed from the Finite-Size Effects of Self-Diffusivity in Equilibrium Molecular Dynamics. <i>Journal of Chemical Theory and Computation</i> , 2018 , 14, 5959-5968 | 6.4 | 24 |
| 205 | Ammonia/ionic liquid based double-effect vapor absorption refrigeration cycles driven by waste heat for cooling in fishing vessels. <i>Energy Conversion and Management</i> , 2018 , 174, 824-843 | 10.6 | 28 |
| 204 | Size and shape dependence of finite-volume Kirkwood-Buff integrals. <i>Physical Review E</i> , 2018 , 97, 0513 | 01.4 | 33 |
| 203 | Identifying Zeolite Topologies for Storage and Release of Hydrogen. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 12485-12493 | 3.8 | 7 |
| 202 | Polarizable Force Fields for CO and CH Adsorption in M-MOF-74. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 4659-4673 | 3.8 | 62 |
| 201 | Effective Model for Olefin/Paraffin Separation using (Co, Fe, Mn, Ni)-MOF-74. <i>ChemistrySelect</i> , 2017 , 2, 665-672 | 1.8 | 14 |
| 200 | Behavior of the Enthalpy of Adsorption in Nanoporous Materials Close to Saturation Conditions. Journal of Chemical Theory and Computation, 2017 , 13, 3326-3339 | 6.4 | 25 |

| 199 | Atomistic Understanding of Zeolite Nanosheets for Water Desalination. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 11273-11280 | 3.8 | 41 |
|-----|---|------|----|
| 198 | Computation of thermodynamic properties in the continuous fractional component Monte Carlo Gibbs ensemble. <i>Molecular Simulation</i> , 2017 , 43, 189-195 | 2 | 17 |
| 197 | Modeling Thermodynamic Properties of Propane or Tetrahydrofuran Mixed with Carbon Dioxide or Methane in Structure-II Clathrate Hydrates. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 23911-23925 | 3.8 | 5 |
| 196 | Product shape selectivity of MFI-type, MEL-type, and BEA-type zeolites in the catalytic hydroconversion of heptane. <i>Journal of Catalysis</i> , 2017 , 353, 54-62 | 7.3 | 30 |
| 195 | Efficient Application of Continuous Fractional Component Monte Carlo in the Reaction Ensemble. <i>Journal of Chemical Theory and Computation</i> , 2017 , 13, 4452-4466 | 6.4 | 23 |
| 194 | Thermodynamic and Transport Properties of Crown-Ethers: Force Field Development and Molecular Simulations. <i>Journal of Physical Chemistry B</i> , 2017 , 121, 8367-8376 | 3.4 | 10 |
| 193 | Hydride Transfer versus Deprotonation Kinetics in the Isobutane-Propene Alkylation Reaction: A Computational Study. <i>ACS Catalysis</i> , 2017 , 7, 8613-8627 | 13.1 | 30 |
| 192 | Phase Diagram of Methane and Carbon Dioxide Hydrates Computed by Monte Carlo Simulations. <i>Journal of Physical Chemistry B</i> , 2017 , 121, 7336-7350 | 3.4 | 27 |
| 191 | Solubility of sulfur compounds in commercial physical solvents and an ionic liquid from Monte Carlo simulations. <i>Fluid Phase Equilibria</i> , 2017 , 433, 50-55 | 2.5 | 26 |
| 190 | Solubilities of CO2, CH4, C2H6, and SO2 in ionic liquids and Selexol from Monte Carlo simulations. <i>Journal of Computational Science</i> , 2016 , 15, 74-80 | 3.4 | 24 |
| 189 | Electron microscopy investigations of cation exchange in colloidal PbSe/CdSe nanocrystals 2016, 37-38 | | |
| 188 | Assessing the Surface Area of Porous Solids: Limitations, Probe Molecules, and Methods. <i>Langmuir</i> , 2016 , 32, 12664-12675 | 4 | 24 |
| 187 | Computing equation of state parameters of gases from Monte Carlo simulations. <i>Fluid Phase Equilibria</i> , 2016 , 428, 174-181 | 2.5 | 7 |
| 186 | Computation of the Heat and Entropy of Adsorption in Proximity of Inflection Points. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 1727-1738 | 3.8 | 19 |
| 185 | Liquid-crystal phase equilibria of Lennard-Jones chains. <i>Molecular Physics</i> , 2016 , 114, 895-908 | 1.7 | 7 |
| 184 | Comparison of Raman, NIR, and ATR FTIR spectroscopy as analytical tools for in-line monitoring of CO 2 concentration in an amine gas treating process. <i>International Journal of Greenhouse Gas Control</i> , 2016 , 47, 17-24 | 4.2 | 16 |
| 183 | Direct Free Energy Calculation in the Continuous Fractional Component Gibbs Ensemble. <i>Journal of Chemical Theory and Computation</i> , 2016 , 12, 1481-90 | 6.4 | 35 |
| 182 | Computing bubble-points of CO2/CH4 gas mixtures in ionic liquids from Monte Carlo simulations. <i>Fluid Phase Equilibria</i> , 2016 , 418, 100-107 | 2.5 | 8 |

| 181 | Atomistic understanding of cation exchange in PbS nanocrystals using simulations with pseudoligands. <i>Nature Communications</i> , 2016 , 7, 11503 | 17.4 | 41 |
|--------------------------|---|--------------------------|--------------------------|
| 180 | In-Line Monitoring of the CO2, MDEA, and PZ Concentrations in the Liquid Phase during High Pressure CO2 Absorption. <i>Industrial & Engineering Chemistry Research</i> , 2016 , 55, 3804-3812 | 3.9 | 4 |
| 179 | Investigating polarization effects of CO2 adsorption in MgMOF-74. <i>Journal of Computational Science</i> , 2016 , 15, 86-94 | 3.4 | 15 |
| 178 | Optimization of Particle Transfers in the Gibbs Ensemble for Systems with Strong and Directional Interactions Using CBMC, CFCMC, and CB/CFCMC. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 9148-9159 | 3.8 | 15 |
| 177 | Phase Behavior of Binary Mixtures of a Liquid Crystal and Methane. <i>Journal of Chemical & Engineering Data</i> , 2015 , 60, 2167-2171 | 2.8 | 3 |
| 176 | Diffusion of Heat and Mass in a Chemically Reacting Mixture away from Equilibrium. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 12838-12847 | 3.8 | 5 |
| 175 | Real-Time Process Monitoring of CO2 Capture by Aqueous AMP-PZ Using Chemometrics: Pilot Plant Demonstration. <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 5769-5776 | 3.9 | 14 |
| 174 | Online Corrosion Monitoring in a Postcombustion CO2 Capture Pilot Plant and its Relation to Solvent Degradation and Ammonia Emissions. <i>Industrial & Emp; Engineering Chemistry Research</i> , 2015 , 54, 5336-5344 | 3.9 | 15 |
| 173 | Economic assessment of novel amine based CO2 capture technologies integrated in power plants based on European Benchmarking Task Force methodology. <i>Applied Energy</i> , 2015 , 138, 546-558 | 10.7 | 76 |
| | | | |
| 172 | Adsorption-Driven Heat Pumps: The Potential of Metal-Organic Frameworks. <i>Chemical Reviews</i> , 2015 , 115, 12205-50 | 68.1 | 294 |
| 172 171 | | 68.1 3.9 | 294 |
| | 2015, 115, 12205-50 Isotropic-nematic phase equilibria of hard-sphere chain fluids-Pure components and binary | | |
| 171 | 2015, 115, 12205-50 Isotropic-nematic phase equilibria of hard-sphere chain fluids-Pure components and binary mixtures. <i>Journal of Chemical Physics</i> , 2015, 142, 064903 On the vapor-liquid equilibrium of attractive chain fluids with variable degree of molecular | 3.9 | 7 |
| 171 170 | Isotropic-nematic phase equilibria of hard-sphere chain fluids-Pure components and binary mixtures. <i>Journal of Chemical Physics</i> , 2015 , 142, 064903 On the vapor-liquid equilibrium of attractive chain fluids with variable degree of molecular flexibility. <i>Journal of Chemical Physics</i> , 2015 , 142, 224504 Solubility of Natural Gas Species in Ionic Liquids and Commercial Solvents: Experiments and Monte | 3.9 3.9 2.8 | 7 |
| 171 170 169 | Isotropic-nematic phase equilibria of hard-sphere chain fluids-Pure components and binary mixtures. <i>Journal of Chemical Physics</i> , 2015 , 142, 064903 On the vapor-liquid equilibrium of attractive chain fluids with variable degree of molecular flexibility. <i>Journal of Chemical Physics</i> , 2015 , 142, 224504 Solubility of Natural Gas Species in Ionic Liquids and Commercial Solvents: Experiments and Monte Carlo Simulations. <i>Journal of Chemical & Data</i> , 2015 , 60, 3039-3045 An analytical equation of state for describing isotropic-nematic phase equilibria of Lennard-Jones | 3.9 3.9 2.8 | 7 4 22 |
| 171 170 169 168 | Isotropic-nematic phase equilibria of hard-sphere chain fluids-Pure components and binary mixtures. <i>Journal of Chemical Physics</i> , 2015 , 142, 064903 On the vapor-liquid equilibrium of attractive chain fluids with variable degree of molecular flexibility. <i>Journal of Chemical Physics</i> , 2015 , 142, 224504 Solubility of Natural Gas Species in Ionic Liquids and Commercial Solvents: Experiments and Monte Carlo Simulations. <i>Journal of Chemical & Data</i> , 2015 , 60, 3039-3045 An analytical equation of state for describing isotropic-nematic phase equilibria of Lennard-Jones chain fluids with variable degree of molecular flexibility. <i>Journal of Chemical Physics</i> , 2015 , 142, 244903 Mechanical instability of monocrystalline and polycrystalline methane hydrates. <i>Nature</i> | 3.9 3.9 2.8 3.9 | 7 4 22 11 |
| 171 170 169 168 | Isotropic-nematic phase equilibria of hard-sphere chain fluids-Pure components and binary mixtures. <i>Journal of Chemical Physics</i> , 2015 , 142, 064903 On the vapor-liquid equilibrium of attractive chain fluids with variable degree of molecular flexibility. <i>Journal of Chemical Physics</i> , 2015 , 142, 224504 Solubility of Natural Gas Species in Ionic Liquids and Commercial Solvents: Experiments and Monte Carlo Simulations. <i>Journal of Chemical & Data</i> , 2015 , 60, 3039-3045 An analytical equation of state for describing isotropic-nematic phase equilibria of Lennard-Jones chain fluids with variable degree of molecular flexibility. <i>Journal of Chemical Physics</i> , 2015 , 142, 244903 Mechanical instability of monocrystalline and polycrystalline methane hydrates. <i>Nature Communications</i> , 2015 , 6, 8743 Metal-Organic Frameworks in Adsorption-Driven Heat Pumps: The Potential of Alcohols as Working | 3.9 3.9 2.8 3.9 | 7 4 22 11 57 |

(2014-2015)

| 163 | Crystal structure, stability, and electronic properties of hydrated metal sulfates MSO4(H2O)n (M=Ni, Mg; n=6, 7) and their mixed phases: A first principles study. <i>Chemical Engineering Science</i> , 2015 , 121, 77-86 | 4.4 | 13 |
|-----|--|---------------------|----|
| 162 | Evaluating adsorbed-phase activity coefficient models using a 2D-lattice model. <i>Molecular Simulation</i> , 2015 , 41, 1234-1244 | 2 | 2 |
| 161 | Binary and ternary mixtures of liquid crystals with CO2. AICHE Journal, 2015, 61, 2977-2984 | 3.6 | 6 |
| 160 | Heat-induced transformation of CdSe-CdS-ZnS core-multishell quantum dots by Zn diffusion into inner layers. <i>Chemical Communications</i> , 2015 , 51, 3320-3 | 5.8 | 17 |
| 159 | Simulating the reactions of CO2 in aqueous monoethanolamine solution by reaction ensemble Monte Carlo using the continuous fractional component method. <i>Journal of Chemical Theory and Computation</i> , 2015 , 11, 2661-9 | 6.4 | 26 |
| 158 | Study of glassy polymers fractional accessible volume (FAV) by extended method of hydrostatic weighing: Effect of porous structure on liquid transport. <i>Reactive and Functional Polymers</i> , 2015 , 86, 269 | 9 -2 281 | 51 |
| 157 | Manufacture of dense CAU-10-H coatings for application in adsorption driven heat pumps: optimization and characterization. <i>CrystEngComm</i> , 2015 , 17, 5911-5920 | 3.3 | 32 |
| 156 | COSMO-3D: Incorporating Three-Dimensional Contact Information into the COSMO-SAC Model. <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 2214-2226 | 3.9 | 5 |
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| 154 | Understanding aerosol based emissions in a Post Combustion CO2 Capture process: Parameter testing and mechanisms. <i>International Journal of Greenhouse Gas Control</i> , 2015 , 34, 63-74 | 4.2 | 40 |
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