

VERY RECENT PUBS (NOS. 450

- 450.*"Vitrification of a monatomic metallic liquid," H. Bhat, V. Molinero, V. Solomon, E. Soignard, S. Sastry, J. L. Yarger, and C.A. Angell (Nature, 448(Aug.16), 787-790, (2007)
- 451."Reversible folding-unfolding, aggregation protection, multi-year stabilization in high concentration protein solutions," N. Byrne, L. Wang, J.P. Belieres, and C.A. Angell, Chem Commun. 2714-2716, (2007) DOI: 10.1039/b618943a
452. "Glass transition dynamics in water and other tetrahedral liquids: "order-disorder" transitions vs. "normal" glass transitions," C.A. Angell, J. Phys.: Condens. Matter 19, 205112 (2007).
453. "An electrospray technique for hyperquenched glass calorimetry studies: propylene glycol and dibutyl-phthallate," L. Wang and C.A. Angell, J. Non-Cryst. Solids 353, 3829-3837 (2007).
454. "Glassformers and viscous liquid slowdown since David Turnbull: Enduring puzzles and new twists," C.A. Angell, (text of Turnbull lecture, MRS, 2006) MRS Bulletin, 33(5), 545-555, May 2008.
455. "Highs and Lows in the density of water," C.A. Angell, Nature Nano (News & Views) 2, 1-4, (2007).
456. "Prediction of macroscopic properties of protic ionic liquids by ab initio calculations," H. Markusson, J.P. Belieres, P. Johanson, C.A. Angell and P. Jacobsson. J. Phys. Chem 111, 8717-8723 (2007).
- 457."Parallel developments in inorganic, aprotic, and protic ionic liquids: physical chemistry and applications," C.A. Angell, N. Byrne" and J.P. Belieres, Accounts of Chemical Research (special issue), 40, 1228-1236, (2007).
458. "Directed destabilization of lysozyme in protic ionic liquids reveals a new low energy reversibly unfolding (pre-fibril) state," N. Byrne, J.P. Belieres, C.A. Angell, arXiv.org.abs/0710.3807.
459. "Protein unfolding, and the "tuning in" of reversible intermediate states, in protic ionic liquid media," N. Byrne and C.A. Angell, J. Molecular Biology 378, 707-714, (2008)
460. "Insights into Phases of Liquid Water from Study of Its Unusual Glass-Forming Properties," C.A. Angell, Science 319, 582, (2008)
- 461."Glass formation and glass transition in supercooled liquids, with insights from study of related phenomena in crystals," (based on opening talk ICNAS, Brazil 2007) C.A. Angell, J. Non-Cryst. Solids 354 (2008) 4703-4712. (<http://dx.doi.org/10.1016/j.jnoncrysol.2008.05.054>)
462. "Landscape thermodynamics and dynamics of a monatomic glassformer- the modified Stillinger-Weber model," V. Kapko, D. Matyushov and C.A. Angell. J. Chem. Phys. 128, 144505 (2008).
463. "A Fluorinated Ionic Liquid as a High-Performance Fuel Cell Electrolyte," J. Thomson, P. Dunn, L. Holmes, J.P. Belieres, C.A. Angell, and D. Gervasio, ECS Trans. 13 (28), 21 (2008).
464. "Model monatomic system with a liquid-liquid critical point and two distinct glassy states," L. Xu, S.V. Buldyrev, N. Giovambattista, C.A. Angell and H.E. Stanley, J. Chem. Phys., **130**, 054505 (2009).
465. "Electron free energy levels in oxidic solutions: relating oxidation potentials in aqueous and non-aqueous systems," C.A. Angell, J. Solid State Electrochem (Bockris Festschrift), **13**, 981 (2009). DOI: **10.1007/s10008-008-0775-0** (published online)(2009).

466. "Formation, and dissolution, of hen egg white lysozyme amyloid fibrils in protic ionic liquids," N. Byrne and C.A. Angell, *Chem. Commun.* 1046-1048 (2009), DOI:10.1039/B817590J.
467. "The "refoldability" of selected proteins in ionic liquids as a stabilization criterion, leading to a conjecture on biogenesis," N. Byrne, J.P. Belieres and C.A. Angell, *Aust. J. Chem.* **62**(4), 328–333 (2009). <http://www.publish.csiro.au/nid/51/paper/CH08441.htm>
468. "Protein folding in the protic ionic liquid milieu: from native conformation to fibril," N. Byrne and C.A. Angell, *Chimica Oggi-Chemistry Today*, **27**, 51-53, (2009) (Jan-Feb).
469. "Composition dependence of the solid state transitions in NaNO₃/KNO₃ mixtures," P. Wen, P. Harrowell, N. Byrne, and C.A. Angell. *Thermochimica Acta* **486** 27-31 (2009).
470. "Hydrogen Redox in Protic Ionic Liquids and a Direct Measurement of Proton Thermodynamics", J.A. Bautista-Martinez, L. Tang, J.P. Belieres, R. Zeller, C.A. Angell, *J. Phys. Chem.* (in press).
471. "Response to "Comment on "Dynamic aspects of the liquid-liquid phase transformation in silicon," [J. Chem. Phys. **129**, 104503 (2008)]. N. Jakse, S. Sastry and C.A. Angell, *J. Chem. Phys.* **130**, 247103 (2009).
472. "Doped Sulfone electrolytes for high voltage Li-ion cell applications," X. Sun and C.A. Angell" *Electrochemistry Commun.* **11** (2009) 1418–142.
473. "Structure-energy relations in hen egg white lysozyme observed during refolding from a quenched unfolded state," T. Y. Cho, N. Byrne, D.J. Moore, B.A. Pethica, C.A. Angell and P.G. Debenedetti. *Chem. Commun.* 4441-4443, (2009).
474. "Unusual phase behavior of one component systems with two-scale isotropic interactions," S.V. Buldyrev et al., *J. Chem. Phys.* **121**, 504106, (2009).
475. "Soft is Strong," C.A. Angell and K. Ueno, *Nature*, (News and views) **462**, 45-46, (Nov. 2009).
476. "The Solubility of Hen Lysozyme in Ethylammonium Nitrate/H₂O Mixtures and a Novel Approach to Protein Crystallization," N. Byrne and C.A. Angell, *Molecules* **2010**, *15*, 793-803; doi:10.3390/molecules15020793
477. "Guest-free monolayer clathrate and its coexistence with two-dimensional high-density ice," J. Bai†, C.A. Angell‡, X.C. Zeng, *PNAS*, **107**, 5718–5722 (2010) (NSF ackn. OK).
478. "Glass transition and fragility in the simple molecular glassformer CS₂ from CS₂-S₂Cl₂ solution studies," Z. Zhao, R. Richert and C.A. Angell, *J. Chem. Phys.* **132**, 154505 (2010).
479. "Relaxation dynamics and ionic conductivity in a fragile plastic crystal," T. Bauer, M. Köhler, P. Lunkenheimer, A. Loidl, and C.A. Angell, *J. Chem. Phys.* **133**, 144509 (2010).
480. "Glass transition with decreasing correlation length during cooling of Fe₅₀Co₅₀ superlattice and strong liquids," S. Wei, I. Gallino, R. Busch & C.A. Angell, *Nature Physics*, **7**, 178-182 (2011) online Nov. 28 DOI:10.1038/NPHYS1823 (2010).
481. "Heat capacity and entropy functions in strong and fragile glassformers, relative to those of disordering crystalline materials," C. A. Angell, Chapter in *Hot Topics in Thermal Analysis and Calorimetry*, Ed. Y. Sestak, Springer 2010.
482. "From Slags to Molten salts to Ionic liquids- a 50 year Joyride," C.A. Angell, (ECS Bredig Award article). *Electrochemical Soc. Transactions*, **33** (7) 3-18 (2010).
483. "Molecular Engineering of the Glass Transition: Glass Forming Ability across a Homologous Series of Cyclic Stilbenes," P. Wen, D. Paraska, R. Baker, P. Harrowell and C.A. Angell. *J. Phys. Chem.* (2010).
484. "Fast and slow components in the crystallization of a model multicomponent system, NaKCa(NO₃): the role of composition fluctuations," P. Wen, P. Harrowell and C.A. Angell, *J. Phys. Chem.* (under revision).
485. "On the decoupling of relaxation modes in a molecular liquid caused by isothermal introduction of 2nm structural inhomogeneities," K. Ueno and C. A. Angell, *J. Phys. Chem.* (published online).
486. "The glass transition temperature of the P₂O₅-H₂O system revisited, and support for Mishima's conjecture on solvent water at low temperature," H.R. Corti*, F.J. Nores-Pondal, C.A. Angell, *Phys. Chem. Chem. Phys.* (special issue on Water).
487. "Prigogine and Defay say Relax," C.A. Angell and I.S. Klein, *Nature Physics* (News and Views) Vol. **7**, 750-751, (2011).
488. "High conductivity, and "dry" proton motion, in guanidinium salt melts and binary

- solutions,” Z. Zhao, K. Ueno and C.A. Angell, J. Phys. Chem (online).
489. “Potential-tuning molecular dynamics studies of fusion, and the question of ideal glassformers: (I) The Gay-Berne model,” V. Kapko, D.V. Matyushov, and C.A. Angell, arxiv.cond-mat.soft physics.chem-phys.
490. “Protic Ionic Liquids Based on Decahydroisoquinoline: Lost Superfragility and Ionicity-Fragility Correlation,” K. Ueno,[†] Z. Zhao,[‡] M. Watanabe,[‡] C.A. Angell* (accepted).
491. “Ionic liquids as oxidic media for electron transfer studies,” K. Ueno and C.A. Angell, J. Chem. Phys. (submitted).
492. “Ionic Liquids: Past, Present and future,” C.A. Angell, Y. Ansari, and Z. Zhao, Faraday Discussion 154, 1-20, (2011) (in press).
493. “Anharmonicity of quasilattice modes in glass and superfragile liquid states of decahydroisoquinoline,” M. Plazenet, H. Schober and C.A. Angell. (submitted to J. Chem. Phys.).