

Fabio Librizzi, publications on ISI Journals

1. G. Adamo, D. Fierli, D.P. Romancino, S. Picciotto, M.E. Barone, A. Aranyos, D. Bozic, S. Morsbach, S. Raccosta, C. Stanly, C. Paganini, M. Gai, A. Cusimano, V. Martorana, R. Noto, R. Carrotta, F. Librizzi, L. Randazzo, R. Parkes, U. Capasso Palmiero, E. Rao, A. Paterna, P. Santonicola, A. Igllic, L. Corcuera, A. Kisslinger, E. Di Schiavi, G.L. Liguori, K. Landfester, V. Kralj-Igllic, P. Arosio, G. Pocsfalvi, N. Touzet, M. Manno, A. Bongiovanni. Nanoalgorithms: introducing extracellular vesicles produced by microalgae. *J. Extracell. Vesicles* **10**: e12081 (2021).
2. V. Guarrasi, G.C. Rappa, M.A. Costa, F. Librizzi, M. Raimondo, V. Di Stefano, M.A. Germanà, S. Vilasi. Valorization of apple peels through the study of the effects on the amyloid aggregation process of k-casein. *Molecules* **26**: 2371 (2021).
3. G. Di Prima, F. Librizzi, R. Carrotta. Light scattering as an easy tool to measure vesicles weight concentration. *Membranes* **10**: 222 (2020).
- A. Fricano, F. Librizzi, E. Rao, C. Alfano, V. Vetri. Blue autofluorescence in protein aggregates “lighted on” by UV induced oxidation. *BBA Proteins Proteom.* **1867**: 150258 (2019).
4. S. Vilasi, R. Carrotta, C. Ricci, G.C. Rappa, F. Librizzi, V. Martorana, M.G. Ortore, M.R. Mangione. Inhibition of A-beta(1-42) fibrillation by chaperonins: Human HSP60 is a stronger inhibitor than its bacterial homologue GroEL. *ACS Chem. Neurosci.* **10**: 3565-3574 (2019).
5. C. Ricci, M. Maccarini, P. Falus, F. Librizzi, M.R. Mangione, O. Moran, M.G. Ortore, R. Schweins, S. Vilasi, R. Carrotta. Amyloid beta-peptide interactions with membranes: can chaperones change the fate? *J. Phys. Chem. B* **123**: 631-638 (2019).
6. F. Librizzi, A. Calì, A. Cupane. Dynamical properties of myoglobin in an ultraviscous water-glycerol solvent investigated with elastic neutron scattering and FTIR spectroscopy. *J. Mol. Liq.* **268**: 242-248 (2018).
7. F. Librizzi, R. Carrotta, J. Peters, A. Cupane. The effects of pressure on the energy landscape of proteins. *Sci. Rep.* **8**: 2037 (2018).
8. C. Ricci, R. Carrotta, G.C., Rappa, M.R. Mangione, F. Librizzi, P.L. San Biagio, H. Amenitsch, M.G. Ortore, S. Vilasi. Investigation on different chemical stability of mitochondrial HSP60 and its precursor. *Biophys. Chem.* **229**: 31-38 (2017).
9. P. Picone, S. Vilasi, F. Librizzi, M. Contardi, D. Nuzzo, L. Caruana, S. Baldassano, A. Amato, F. Mulè, P.L. San Biagio, D. Giacomazza, M. Di Carlo. Biological and biophysics aspects of metformin-induced effects: cortex mitochondrial dysfunction and promotion of toxic amyloid pre-fibrillar aggregates. *Aging* **8**: 1718-1734 (2016).
10. M.R. Mangione, S. Vilasi, C. Marino, F. Librizzi, C. Canale, D. Spigolon, F. Bucchieri, A. Fucarino, R. Passantino, F. Cappello, D. Bulone, P.L. San Biagio. Hsp60, amateur chaperone in amyloid-beta fibrillogenesis. *Biochim. Biophys. Acta* **1860**: 2474-2483 (2016).
11. M.C. Nicastro, D. Spigolon, F. Librizzi, O. Moran, M.G. Ortore, D. Bulone, P.L. San Biagio, R. Carrotta. Amyloid β -peptide insertion in liposomes containing GM1-cholesterol domains. *Biophys. Chem.*, **208**: 9-16 (2016).
12. C. Ricci, M.G. Ortore, S. Vilasi, R. Carrotta, M.R. Mangione, D. Bulone, F. Librizzi, F. Spinozzi, G. Burgio, H. Amenitsch, P.L. San Biagio. Stability and disassembly properties of human naive Hsp60 and bacterial GroEL chaperonins. *Biophys. Chem.*, **208**: 68-75 (2016).

13. F. Librizzi, R. Carrotta, D. Spigolon, D. Bulone, P.L. San Biagio. α -casein inhibits insulin amyloid formation by preventing the onset of secondary nucleation processes. *J. Phys. Chem. Lett.* **5**: 3043-3048 (2014).
14. S. Vilasi, R. Carrotta, M.R. Mangione, C. Campanella, F. Librizzi, L. Randazzo, V. Martorana, A. Marino Gammazza, M.G. Ortore, A. Vilasi, G. Pocsfalvi, G. Burgio, D. Corona, A. Palumbo Piccionello, G. Zummo, D. Bulone, E. Conway de Macario, A.J.L. Macario, P.L. San Biagio, F. Cappello. Human Hsp60 with its mitochondrial import signal occurs in solution as heptamers and tetradecamers remarkably stable over a wide range of concentrations. *PLOS One*, **9**: e97657 (2014).
15. R. Carrotta, S. Vilasi, F. Librizzi, V. Martorana, D. Bulone, P.L. San Biagio. Alpha-casein inhibition mechanism in Concanavalin A aggregation. *J. Phys. Chem. B*, **116**: 14700-14707 (2012).
16. R. Carrotta, V. Vetri, F. Librizzi, V. Martorana, V. Militello, M. Leone. Amyloid fibrils formation of Concanavalin A at basic pH. *J. Phys. Chem. B* **115**: 2691-2698 (2011).
17. V. Foderà, S. Cataldo, F. Librizzi, B. Pignataro, P. Spiccia, M. Leone. Self-organization pathways and spatial heterogeneity in insulin amyloid fibril formation. *J Phys. Chem. B* **113**:10830-10837 (2009).
18. G. Navarra, D. Giacomazza, M. Leone, F. Librizzi, V. Militello, P.L. San Biagio. Thermal aggregation and ion-induced cold-gelation of bovine serum albumin. *Eur. Biophys. J.* **38**: 437-446 (2009).
19. V. Foderà, M. Gronning, V. Vetri, F. Librizzi, S. Spagnolo, C. Cornett, L. Olsen, M. van de Weert, M. Leone. Thioflavin T hydroxylation at basic pH and its effect on amyloid fibril detection. *J. Phys. Chem. B* **112**: 15174-15181 (2008).
20. V. Foderà, F. Librizzi, M. Gronning, M. van de Weert, M. Leone. Secondary nucleation and accessible surface in insulin amyloid fibril formation. *J. Phys. Chem. B.* **112**: 3853-3858 (2008).
21. F. Librizzi, E. Vitrano, A. Paciaroni, L. Cordone. Elastic neutron scattering of dry and rehydrated trehalose-coated carboxy-myoglobin. *Chem. Phys.* **345**: 283-288 (2008).
22. L. Cordone, G. Cottone, S. Giuffrida, F. Librizzi. Thermal evolution of the CO stretching band in carboxy-myoglobin in the light of neutron scattering and molecular dynamics simulations. *Chem. Phys.* **345**: 275-282 (2008).
23. V. Vetri, F. Librizzi, M. Leone, V. Militello. Thermal aggregation of bovine serum albumin at different pH: comparison with human serum albumin. *Eur. Biophys. J.* **36**: 717-725 (2007).
24. V. Vetri, F. Librizzi, V. Militello, M. Leone. Effects of succinylation on thermally induced amyloid formation in concanavalin A. *Eur Biophys. J.* **36**: 733-741 (2007).
25. F. Librizzi, V. Foderà, V. Vetri, C. Lo Presti, M. Leone. Effects of confinement on insulin amyloid fibrils formation. *Eur. Biophys. J.* **36**: 711-715 (2007).
26. C. Dispenza, M. Leone, C. Lo Presti, F. Librizzi, V. Vetri, G. Spadaro. Smart hydrogels for novel optical functions. *Macromol. Symp.* **247**: 303-310 (2007).
27. V. Vetri, C. Canale, A. Relini, F. Librizzi, V. Militello, A. Gliozzi, M. Leone. Amyloid fibrils formation and amorphous aggregation in Concanavalin A. *Biophys. Chem.* **125**: 184-190 (2007).
28. C. Dispenza, M. Leone, C. Lo Presti, F. Librizzi, G. Spadaro, V. Vetri. Optical properties of biocompatible polyaniline nano-composites. *J. Non-Crys. sol.* **352**: 3835-3840 (2006).

29. F. Librizzi, C. Rischel. The kinetic behavior of insulin fibrillation is determined by heterogeneous nucleation pathways. *Protein Sci.* **14**: 3129-3134 (2005).
30. R. Schmauder, F. Librizzi, G.W. Canters, T. Schmidt, T.J. Aartsma. The oxidation state of a protein observed molecule-by-molecule. *ChemPhysChem* **6**: 1381-1386 (2005).
31. S. Giuffrida, G. Cottone, F. Librizzi, L. Cordone. Coupling between the thermal evolution of the heme pocket and the external matrix structure in trehalose coated carboxymyoglobin. *J. Phys. Chem. B.* **107**: 13211-13217 (2003).
32. F. Librizzi, C. Viappiani, S. Abbruzzetti, L. Cordone. Residual water modulates the dynamics of the protein and of the external matrix in “trehalose coated” MbCO: an infrared and flash-photolysis study. *J. Chem. Phys.* **116**: 1193-1200 (2002).
33. F. Librizzi, E. Vitrano, L. Cordone. Dehydration and crystallization of Trehalose and Sucrose Glasses Containing Carbonmonoxy-Myoglobin. *Biophys. J.* **76**: 2727-2734 (1999).