

Publications of Szabolcs Osváth

Peer reviewed papers:

Osváth S (2018)

[Physica A 491, 764-770](#) Is thermodynamic irreversibility a consequence of the expansion of the Universe?

Szigeti K, Máthé D, Osváth S (2014)

[IEEE Transactions on Medical Imaging 33, 2031-2038](#), Motion Based X-ray Imaging Modality

Schay G, Herényi L, Fidy J, Osváth S (2013)

[Biophysical Journal 104, 677-682](#), Role of Domain Interactions in the Collective Motion of Phosphoglycerate Kinase

Agócs G, Szabó BT, Köhler G, Osváth S (2012)

[Biophysical Journal 102, 2828-2834](#), Comparing the folding and misfolding energy landscapes of phosphoglycerate kinase.

Agócs G, Solymosi K, Varga A, Módos K, Kellermayer M, Závodszy P, Fidy J, Osváth S (2010)

[FEBS Letters 584, 1139-1142](#), Recovery of functional enzyme from amyloid fibrils.

Osváth S, Quynh LM, Smeller L (2009)

[Biochemistry 48, 10146-10150](#), Thermodynamics and Kinetics of the Pressure Unfolding of Phosphoglycerate Kinase

Szigeti K, Smeller LT, Osváth S, Majer Z, Fidy J (2008)

[Biochim. Biophys. Acta Proteins and Proteomics 1784: 1965-74](#), The Structure of Horseradish Peroxidase C Characterized as a Molten Globule State After Ca²⁺ Depletion

Osváth S, Herényi L, Závodszy P, Fidy J, Köhler G (2006)

[Journal of Biological Chemistry 281, 24375-24380](#), Hierarchic Finite Level Energy Landscape Model – to Describe the Refolding Kinetics of Phosphoglycerate Kinase

Osváth S, Jäckel M, Agócs G, Závodszy P, Köhler G, Fidy J (2006)

[Proteins: Structure, Function, Bioinformatics 62, 909-917](#), Domain Interactions Direct Misfolding and Amyloid Formation of Yeast Phosphoglycerate Kinase

Osváth S, Köhler G, Závodszy P, Fidy J (2005)

[Protein Science 14, 1609-1616](#), Asymmetric Effect of Domain Interactions on the Kinetics of Folding in Yeast Phosphoglycerate Kinase

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[FEBS Journal 272, 1867-1885](#) Correlation Between Conformational Stability of the Ternary Enzyme-Substrate Complex and Domain Closure of 3-Phosphoglycerate Kinase

Osváth S, Sabelko JJ, Gruebele M (2003)

[Journal of Molecular Biology 333, 187-199](#), Tuning the Heterogeneous Early Folding Dynamics of Phosphoglycerate Kinase

Osváth S, Gruebele M (2003)

[Biophysical Journal 85, 1215-1222](#), Proline can have opposite effects on the fast and slow folding phases of multidomain proteins

Ervin J, Larios E, Osváth S, Schulten K, Gruebele M (2002)

[Biophysical Journal 83, 473-483](#), What Causes Hyperfluorescence: Folding Intermediates or Conformationally Flexible Native States?

Laberge M, Osváth S, Fidy J (2001)

[Biochemistry 40, 9226-9237](#), Aromatic substrate specificity of Horseradish Peroxidase C studied by a combined fluorescence line narrowing/energy minimization approach: the effect of localized sidechain reorganization

Osváth S, Larson JW, Wraight CA (2001)

[Biochimica et Biophysica Acta \(Bioenergetics\) 1505, 238-247](#), Site specific labeling of *Rhodobacter sphaeroides* reaction centers with dye probes for surface pH measurements

Osváth S, Maróti P (1997)

[Biophysical Journal](#) **73**, [972-982](#), Coupling of Cytochrome and Quinone Turnovers in Photocycle of Reaction Center from Photosynthetic Bacteria *Rhodobacter sphaeroides*

Osváth S, Laczkó G, Sebban P, Maróti P (1996)

[Photosynthesis Research](#) **47**, [41-49](#), Electron transfer in reaction centers of *Rhodobacter sphaeroides* and *Rhodobacter capsulatus* monitored by fluorescence of the bacteriochlorophyll dimer.

Osváth S, Meszéna G, Barzda V, Garab G (1994)

[Journal of Photochemistry and Photobiology B](#): **26**, [287-292](#), Trapping magnetically oriented chloroplast thylakoid membranes in gels for electric measurements

Patents:

Osváth S, Szigeti K

[US9200947](#), EPO – intention to grant issued, New imaging modality using penetrating radiations

Book chapters:

Szilágyi A, Kardos J, Osváth S, Barna L, Závodszy P (2007)

Handbook of Neurochemistry and Molecular Neurobiology, Volume 7, [Chapter 10](#). Springer, eds.: Lajtha, A; Banik, N: Protein folding

Textbook chapters:

Osváth S, Szabó G (2009)

Medical Biophysics, eds. Damjanovich, S.; Fidy, J.; Söllősi, J. : 309-3011 The structure of the eye

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Medical Biophysics, eds. Damjanovich, S.; Fidy, J.; Söllősi, J. : 312-322 The basis of the biophysics of vision

Damjanovich S, Osváth S (2009)

Medical Biophysics, eds. Damjanovich, S.; Fidy, J.; Söllősi, J. :611-612 Mass spectroscopy

Damjanovich S, Osváth S (2009)

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