

Dr Sheetal Inamdar

MEng, PhD

School of Engineering and Materials Science
Queen Mary University of London
Mile End Road
London E1 4NS

tel: +44 (0)20 7882 3119

email: s.r.inamdar@qmul.ac.uk web: www.sems.qmul.ac.uk/s.r.inamdar

2021

Reversible changes in the 3D collagen fibril architecture during cyclic loading of healthy and degraded cartilage.

Inamdar SR, PrÃ©vost S, Terrill NJ, Knight MM and Gupta HS. *Acta Biomaterialia* vol. 136, 314-326.

Chapter 2: Synchrotron X-ray Imaging Combined with Multiscale Modeling Applied to Biological Soft Tissues.

Gupta HS, Barbieri E, Inamdar SR and Mo J. *Rsc Soft Matter*.

Activation of TRPV4 by mechanical, osmotic or pharmaceutical stimulation is anti-inflammatory blocking IL-1? mediated articular cartilage matrix destruction.

Fu S, Meng H, Inamdar S, Das B, Gupta H, Wang W, Thompson C and Knight M. *Osteoarthritis and Cartilage*. Block JA. *Elsevier*.

2019

Proteoglycan degradation mimics static compression by altering the natural gradients in fibrillar organisation in cartilage.

Inamdar SR, Barbieri E, Terrill NJ, Knight MM and Gupta HS. *Acta Biomaterialia* vol. 97, 437-450. *Elsevier*.

2017

The Secret Life of Collagen: Temporal Changes in Nanoscale Fibrillar Pre-Strain and Molecular Organization During Physiological Loading of Cartilage.

Inamdar SR, Knight DP, Terrill NJ, Karunaratne A, Cacho-Nerin F, Knight MM and Gupta HS. *Acs Nano*.

2012

Cell mechanics, structure, and function are regulated by the stiffness of the three-dimensional microenvironment.

Chen J, Irianto J, Inamdar S, Pravin Kumar P, Lee DA, Bader DL and Knight MM. *Biophys J* vol. 103, (6) 1188-1197.