

**Selected peer-reviewed publications (selected from more than 600) – most recent [2013 to present]**

**2013**

An B, Desrochers TM, Qin G, Xia X, Thiagarajan G, Brodsky B, **Kaplan DL**. The influence of specific binding of collagen-silk chimeras to silk biomaterials on hMSC behavior. *Biomaterials* 34(2): 402-412 (2013) [PMID 23088839]

An B, Abbonante V, Yigit S, Balduini A, **Kaplan DL**, Brodsky B. Definition of the native and denatured Type II collagen binding site for fibronectin using a recombinant collagen system. *J. Biological Chemistry*, ahead of print (2013) [PMID 24375478]

Applegate MB, Marelli B, **Kaplan DL**, Omenetto FG. Determination of multiphoton absorption of silk fibroin using the Z-scan technique. *Optics Express* 21(24): 29637-29642 (2013) [PMID 24514515]

Badalucco S, Di Buduo CA, Campanelli R, Pallotta I, Catarsi P, Rosti V, **Kaplan DL**, Barosi G, Massa M, Balduini A. Involvement of TGF $\beta$ 1 in autocrine regulation of proplatelet formation in healthy subjects and patients with primary myelofibrosis. *Haematologica* ahead of print (2013) [PMID 23403314]

Bai S, Liu S, Zhang C, Xu W, Lu Q, Han H, **Kaplan DL**, Zhu H. Controllable transition of silk fibroin nanostructures: an insight into the in vitro silk self-assembly process. *Acta Biomaterialia* April 27, 9(8): 7806-7813 (2013) [PMID 23628774]

Bellas E, Seiberpg M, Garlick J, **Kaplan DL**. In vitro 3D full thickness skin equivalent tissue model using silk and collagen biomaterials. *Macromolecular Bioscience* 12(12):1627-1636 (2013) [PMID 23161763]

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Blasioli DJ, **Kaplan DL**. The roles of catabolic factors in the development of osteoarthritis. *Tissue Engineering Part B Reviews*, Dec 11, in press (2013) [PMID 24172137]

Brenckle MA, Tao H, Kim S, Paquette M, **Kaplan DL**, Omenetto FG. Protein-protein nanoimprinting of silk fibroin films. *Advanced Materials*. 25(17): 2409-2414 (2013) [PMID 23483712]

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Cebe P, Hu X, **Kaplan DL**, Zhuravlev E, Wurm A, Arbeiter D, Schick C. Beating the heat- fast scanning melts silk beta sheet crystals. *Science Reports*, 3:11130 (2013) [PMID 23350037]

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Chang T, Zimmerley MS, Quinn KP, Lamarre-Jouenne I, **Kaplan DL**, Beaurepaire E, Georgakoudi I. Non-invasive monitoring of cell metabolism and lipid production in 3D engineered human adipose tissues using label-free multiphoton microscopy. *Biomaterials* 34(34):8607-8616 (2013). [PMID 23932290]

DesRochers TM, Suter L, Roth A, **Kaplan DL**. Bioengineered 3D human kidney tissue, a platform for the determination of nephrotoxicity. *PLoS One* 8(3):e59219 (2013) [PMID 23516613]

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Glettig DL, **Kaplan DL**. Extending human hematopoietic stem cell survival in vitro with adipocytes. *Bioresource Open Access*, 2(3): 179-185 (2013) [PMID 23741628]

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## **2014**

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