

Supplementary Material

Continuous and simultaneous measurement of blood biophysical properties in a microfluidic environment

Yang Jun Kang

Department of Mechanical Engineering, Chosun University, Gwangju, Republic of Korea

Address: 309 Pilmun-daero, Dong-gu, Gwangju, Republic of Korea.

Fax: +82-62-234-7055, E-mail: yjkang2011@chosun.ac.kr

Table S1. Overview of previous methods for measuring blood biophysical properties

Authors	Blood Biophysical Properties			Proposed Method	Comparison	
	Viscosity	Viscoelasticity	RBC Aggregation		Continuous	Simultaneous
P. Guillot <i>et al</i> ⁴⁰	0	x	x	Parallel Flow Method	0	x
S. A. Vanapalli <i>et al</i> ⁴¹	0	x	x		x	x
S. Choi <i>et al</i> ⁴²	0	x	x		x	x
D. E. Solomon <i>et al</i> ⁴³	0	x	x		0	x
N. Srivastava <i>et al</i> ⁴⁴	0	x	x	Surface Tension-driven method	x	x
Z. Han <i>et al</i> ⁴⁵	0	x	x		x	x
N. Morhell <i>et al</i> ⁴⁶	0	x	x	Microfluidic Channel Array	x	x
Y. J. Kang <i>et al</i> ³⁷	0	x	x		0	x
Y. J. Kang <i>et al</i> ⁴⁷	0	x	x	Flow Switching Method	0	x
Y. J. Kang <i>et al</i> ²	0	x	x		x	x
Y. J. Kang <i>et al</i> ⁴⁸	0	x	x	Droplet-based Plug	x	x
E. L. Dahl <i>et al</i> ⁴⁹	0	x	x		0	x
M. F. DeLaMarre <i>et al</i> ⁵⁰	0	x	x	Cell Stretching	0	x
S. Cha <i>et al</i> ⁵¹	x	0	x		0	x
S. Sakuma <i>et al</i> ⁵²	x	0	x	Shape variations	0	x
Y. J. Kang <i>et al</i> ⁵³	0	0	x	Reverse Flow Switching	x	0
G. Tomaiuolo <i>et al</i> ⁸	x	0	x	Velocity and Shape	0	x
A. E. Ekpenyong <i>et al</i> ⁷	x	0	x	Optical Stretcher	x	x
M. Brust <i>et al</i> ⁹	x	0	x	Extensional Flow	x	x
P. C. Sousa <i>et al</i> ⁵⁴	x	0	x		0	x
G. Du <i>et al</i> ⁵⁵	x	0	x	Actuated Flexible Membrane	x	x
D. N. Hohne <i>et al</i> ⁵⁶	x	0	x		x	x
G. F. Christopher <i>et al</i> ⁵⁷	x	0	x	Dynamic Oscillatory Strain	x	x
A. E. Koser <i>et al</i> ⁵⁸	x	0	x	Velocity Profile	0	x
J. Zile <i>et al</i> ⁵⁹	x	0	x	Elastic Instability	0	x
E. Yeom <i>et al</i> ²⁰	x	x	0	Average Velocity	x	x
S. Shin <i>et al</i> ²¹	x	x	0	Back Scattering	x	x
O. K. Baskurt <i>et al</i> ²⁴	x	x	0	Electrical Impedance	x	x