

# Kenneth A Barbee

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6807592/publications.pdf>

Version: 2024-02-01

27  
papers

972  
citations

687363

13  
h-index

610901

24  
g-index

27  
all docs

27  
docs citations

27  
times ranked

1317  
citing authors

#	ARTICLE	IF	CITATIONS
1	Mechanically-induced membrane poration causes axonal beading and localized cytoskeletal damage. <i>Experimental Neurology</i> , 2008, 212, 422-430.	4.1	126
2	Mechanisms of cell death and neuroprotection by poloxamer 188 after mechanical trauma. <i>FASEB Journal</i> , 2006, 20, 308-310.	0.5	95
3	Mechanical membrane injury induces axonal beading through localized activation of calpain. <i>Experimental Neurology</i> , 2009, 219, 553-561.	4.1	93
4	In Vitro Cell Shearing Device to Investigate the Dynamic Response of Cells in a Controlled Hydrodynamic Environment. <i>Annals of Biomedical Engineering</i> , 2000, 28, 363-372.	2.5	87
5	The Effect of Poloxamer-188 on Neuronal Cell Recovery from Mechanical Injury. <i>Journal of Neurotrauma</i> , 2005, 22, 119-132.	3.4	76
6	Strain measurements in cultured vascular smooth muscle cells subjected to mechanical deformation. <i>Annals of Biomedical Engineering</i> , 1994, 22, 14-22.	2.5	74
7	Direct, real-time measurement of shear stress-induced nitric oxide produced from endothelial cells in vitro. <i>Nitric Oxide - Biology and Chemistry</i> , 2010, 23, 335-342.	2.7	73
8	Antimicrobial efficacy and wound-healing property of a topical ointment containing nitric-oxide-loaded zeolites. <i>Journal of Medical Microbiology</i> , 2014, 63, 203-209.	1.8	73
9	Role of Subcellular Shear Stress Distributions in Endothelial Cell Mechanotransduction. <i>Annals of Biomedical Engineering</i> , 2002, 30, 472-482.	2.5	52
10	Mechanical Cell Injury. <i>Annals of the New York Academy of Sciences</i> , 2005, 1066, 67-84.	3.8	52
11	Glycated collagen alters endothelial cell actin alignment and nitric oxide release in response to fluid shear stress. <i>Journal of Biomechanics</i> , 2011, 44, 1927-1935.	2.1	48
12	Transport-dependent calcium signaling in spatially segregated cellular caveolar domains. <i>American Journal of Physiology - Cell Physiology</i> , 2008, 294, C856-C866.	4.6	29
13	Shear Stress-Induced NO Production is Dependent on ATP Autocrine Signaling and Capacitative Calcium Entry. <i>Cellular and Molecular Bioengineering</i> , 2014, 7, 510-520.	2.1	18
14	Interactive image analysis programs for quantifying injury-induced axonal beading and microtubule disruption. <i>Computer Methods and Programs in Biomedicine</i> , 2009, 95, 62-71.	4.7	12
15	Cholesterol Enrichment Impairs Capacitative Calcium Entry, eNOS Phosphorylation & Shear Stress-Induced NO Production. <i>Cellular and Molecular Bioengineering</i> , 2017, 10, 30-40.	2.1	11
16	A mathematical model for the role of N <sub>2</sub> O <sub>3</sub> in enhancing nitric oxide bioavailability following nitrite infusion. <i>Nitric Oxide - Biology and Chemistry</i> , 2016, 60, 1-9.	2.7	10
17	Mathematical model for shear stress dependent NO and adenine nucleotide production from endothelial cells. <i>Nitric Oxide - Biology and Chemistry</i> , 2016, 52, 1-15.	2.7	7
18	TRPC channel-derived calcium fluxes differentially regulate ATP and flow-induced activation of eNOS. <i>Nitric Oxide - Biology and Chemistry</i> , 2021, 111-112, 1-13.	2.7	6

#	ARTICLE	IF	CITATIONS
19	Learning Environments and Evidence-Based Practices in Bioengineering and Biomedical Engineering. Biomedical Engineering Education, 2022, 2, 1-16.	0.7	6
20	Nitric oxide release by deoxymyoglobin nitrite reduction during cardiac ischemia: A mathematical model. Microvascular Research, 2017, 112, 79-86.	2.5	5
21	A dynamic computational network model for the role of nitric oxide and the myogenic response in microvascular flow regulation. Microcirculation, 2018, 25, e12465.	1.8	5
22	Nitrite-Mediated Hypoxic Vasodilation Predicted from Mathematical Modeling and Quantified from in Vivo Studies in Rat Mesentery. Frontiers in Physiology, 2017, 8, 1053.	2.8	4
23	Effect of Spatial Heterogeneity and Colocalization of eNOS and Capacitative Calcium Entry Channels on Shear Stress-Induced NO Production by Endothelial Cells: A Modeling Approach. Cellular and Molecular Bioengineering, 2018, 11, 143-155.	2.1	4
24	Coordinated regulation of endothelial calcium signaling and shear stress-induced nitric oxide production by PKC $\beta$ and PKC $\delta$ . Cellular Signalling, 2021, 87, 110125.	3.6	4
25	Effects of radical oxygen species and antioxidants on macrophage polarization. , 2015, , .		2
26	Loading-Rate Dependent Cell Injury: A Design Criterion for Engineered Tissue Constructs. Microscopy and Microanalysis, 2000, 6, 984-985.	0.4	0
27	Response to Dr. Annemiek J.M. Cornelissen editorial. Medical and Biological Engineering and Computing, 2011, 49, 631-632.	2.8	0