

# Cheng Dong

## List of Publications by Year in descending order

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92  
papers

3,683  
citations

147801

31  
h-index

133252

59  
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94  
all docs

94  
docs citations

94  
times ranked

4598  
citing authors

#	ARTICLE	IF	CITATIONS
1	Synthetic DNA for Cell Surface Engineering: Experimental Comparison between Click Conjugation and Lipid Insertion in Terms of Cell Viability, Engineering Efficiency, and Displaying Stability. ACS Applied Materials & Interfaces, 2022, 14, 3900-3909.	8.0	10
2	Genomic and experimental evidence that ALKATI does not predict single agent sensitivity to ALK inhibitors. IScience, 2021, 24, 103343.	4.1	3
3	Fibrinogen and Fibrin Differentially Regulate the Local Hydrodynamic Environment in Neutrophilâ€Tumor Cellâ€Endothelial Cell Adhesion System. Applied Sciences (Switzerland), 2021, 11, 79.	2.5	0
4	Phototherapy and optical waveguides for the treatment of infection. Advanced Drug Delivery Reviews, 2021, 179, 114036.	13.7	26
5	High-affinity mutant Interleukin-13 targeted CAR T cells enhance delivery of clickable biodegradable fluorescent nanoparticles to glioblastoma. Bioactive Materials, 2020, 5, 624-635.	15.6	34
6	Inâ€Situ Synthesis of an Aptamerâ€Based Polyvalent Antibody Mimic on the Cell Surface for Enhanced Interactions between Immune and Cancer Cells. Angewandte Chemie, 2020, 132, 11990-11995.	2.0	6
7	Bone Composites: Citrateâ€Based Tanninâ€Bridged Bone Composites for Lumbar Fusion (Adv. Funct. Mater.) Tj ETOq1 1 0.784314 rgBT 14.9	14.9	3
8	Citrateâ€Based Tanninâ€Bridged Bone Composites for Lumbar Fusion. Advanced Functional Materials, 2020, 30, 2002438.	14.9	43
9	Inâ€Situ Synthesis of an Aptamerâ€Based Polyvalent Antibody Mimic on the Cell Surface for Enhanced Interactions between Immune and Cancer Cells. Angewandte Chemie - International Edition, 2020, 59, 11892-11897.	13.8	57
10	Development of osteopromotive poly (octamethylene citrate glycerophosphate) for enhanced bone regeneration. Acta Biomaterialia, 2019, 93, 180-191.	8.3	18
11	The critical chemical and mechanical regulation of folic acid on neural engineering. Biomaterials, 2018, 178, 504-516.	11.4	31
12	From Cancer Immunoediting to New Strategies in Cancer Immunotherapy: The Roles of Immune Cells and Mechanics in Oncology. Advances in Experimental Medicine and Biology, 2018, 1092, 113-138.	1.6	19
13	Advanced Cell and Tissue Biomanufacturing. ACS Biomaterials Science and Engineering, 2018, 4, 2292-2307.	5.2	14
14	Drug Delivery: Immune Cellâ€Mediated Biodegradable Theranostic Nanoparticles for Melanoma Targeting and Drug Delivery (Small 10/2017). Small, 2017, 13, .	10.0	0
15	VE-Cadherin Disassembly and Cell Contractility in the Endothelium are Necessary for Barrier Disruption Induced by Tumor Cells. Scientific Reports, 2017, 7, 45835.	3.3	43
16	Immune Cellâ€Mediated Biodegradable Theranostic Nanoparticles for Melanoma Targeting and Drug Delivery. Small, 2017, 13, 1603121.	10.0	63
17	The use of nanoparticulates to treat breast cancer. Nanomedicine, 2017, 12, 2367-2388.	3.3	74
18	CD82 suppresses CD44 alternative splicing-dependent melanoma metastasis by mediating U2AF2 ubiquitination and degradation. Oncogene, 2016, 35, 5056-5069.	5.9	32

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19	Mutant B-Raf(V600E) Promotes Melanoma Paracellular Transmigration by Inducing Thrombin-mediated Endothelial Junction Breakdown. <i>Journal of Biological Chemistry</i> , 2016, 291, 2087-2106.	3.4	10
20	Regulation of fibrin-mediated tumor cell adhesion to the endothelium using anti-thrombin aptamer. <i>Experimental Cell Research</i> , 2015, 339, 417-426.	2.6	6
21	A Drosera-bioinspired hydrogel for catching and killing cancer cells. <i>Scientific Reports</i> , 2015, 5, 14297.	3.3	24
22	C6-ceramide nanoliposome suppresses tumor metastasis by eliciting PI3K and PKC $\eta$ tumor-suppressive activities and regulating integrin affinity modulation. <i>Scientific Reports</i> , 2015, 5, 9275.	3.3	21
23	Cyclovirobuxine D Inhibits Cell Proliferation and Induces Mitochondria-Mediated Apoptosis in Human Gastric Cancer Cells. <i>Molecules</i> , 2015, 20, 20659-20668.	3.8	13
24	Localized Modeling of Biochemical and Flow Interactions during Cancer Cell Adhesion. <i>PLoS ONE</i> , 2015, 10, e0136926.	2.5	7
25	Lysosomal Degradation of CD44 Mediates Ceramide Nanoliposome-induced Anoikis and Diminished Extravasation in Metastatic Carcinoma Cells. <i>Journal of Biological Chemistry</i> , 2015, 290, 8632-8643.	3.4	14
26	3D numerical study of tumor blood perfusion and oxygen transport during vascular normalization. <i>Applied Mathematics and Mechanics (English Edition)</i> , 2015, 36, 153-162.	3.6	1
27	Perspectives: Interplay Between Melanoma Regulated Fibrin and Receptor Mediated Adhesion Under Shear Flow. <i>Cellular and Molecular Bioengineering</i> , 2015, 8, 86-95.	2.1	2
28	Multi-scale biological and physical modelling of the tumour micro-environment. <i>Drug Discovery Today: Disease Models</i> , 2015, 16, 7-15.	1.2	1
29	RacGAP1-driven focal adhesion formation promotes melanoma transendothelial migration through mediating adherens junction disassembly. <i>Biochemical and Biophysical Research Communications</i> , 2015, 459, 1-9.	2.1	14
30	Design Strategies and Applications of Circulating Cell-Mediated Drug Delivery Systems. <i>ACS Biomaterials Science and Engineering</i> , 2015, 1, 201-217.	5.2	146
31	Aptamer-Based Polyvalent Ligands for Regulated Cell Attachment on the Hydrogel Surface. <i>Biomacromolecules</i> , 2015, 16, 1382-1389.	5.4	29
32	Micro-PIV measurements of the flow field around cells in flow chamber. <i>Journal of Hydrodynamics</i> , 2015, 27, 562-568.	3.2	3
33	Actinomyosin Contraction, Phosphorylation of VE-Cadherin, and Actin Remodeling Enable Melanoma-Induced Endothelial Cell-Cell Junction Disassembly. <i>PLoS ONE</i> , 2014, 9, e108092.	2.5	14
34	CD44 variant, but not standard CD44 isoforms, mediate disassembly of endothelial VE-cadherin junction on metastatic melanoma cells. <i>FEBS Letters</i> , 2014, 588, 4573-4582.	2.8	23
35	Nuclear Stiffening Inhibits Migration of Invasive Melanoma Cells. <i>Cellular and Molecular Bioengineering</i> , 2014, 7, 544-551.	2.1	34
36	Melanoma upregulates ICAM-1 expression on endothelial cells through engagement of tumor CD44 with endothelial E-selectin and activation of a PKC $\delta$ -p38 $\beta$ -SPAK pathway. <i>FASEB Journal</i> , 2014, 28, 4591-4609.	0.5	42

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37	A noninvasive approach to determine viscoelastic properties of an individual adherent cell under fluid flow. <i>Journal of Biomechanics</i> , 2014, 47, 1537-1541.	2.1	14
38	Simultaneous tracking of 3D actin and microtubule strains in individual MLO-Y4 osteocytes under oscillatory flow. <i>Biochemical and Biophysical Research Communications</i> , 2013, 431, 718-723.	2.1	16
39	Fibrin serves as a divalent ligand that regulates neutrophil-mediated melanoma cells adhesion to endothelium under shear conditions. <i>American Journal of Physiology - Cell Physiology</i> , 2012, 302, C1189-C1201.	4.6	18
40	Cellular and Molecular Bioengineering: A Tipping Point. <i>Cellular and Molecular Bioengineering</i> , 2012, 5, 239-253.	2.1	3
41	Study of Local Hydrodynamic Environment in Cell-Substrate Adhesion Using Side-View $\frac{1}{4}$ PIV Technology. <i>PLoS ONE</i> , 2012, 7, e30721.	2.5	8
42	Theoretical Analysis of Novel Quasi-3D Microscopy of Cell Deformation. <i>Cellular and Molecular Bioengineering</i> , 2012, 5, 165-172.	2.1	6
43	3D numerical study of tumor microenvironmental flow in response to vascular-disrupting treatments. <i>MCB Molecular and Cellular Biomechanics</i> , 2012, 9, 95-125.	0.7	1
44	The effect of cell shape on local hydrodynamic environment. , 2011, , .		0
45	Modeling of Cell Aggregation Dynamics Governed by Receptor-Ligand Binding Under Shear Flow. <i>Cellular and Molecular Bioengineering</i> , 2011, 4, 427-441.	2.1	8
46	Model Simulations Reveal VCAM-1 Augment PAK Activation Rates to Amplify p38 MAPK and VE-Cadherin Phosphorylation. <i>Cellular and Molecular Bioengineering</i> , 2011, 4, 656-669.	2.1	4
47	Determining $\beta$ 2-Integrin and Intercellular Adhesion Molecule 1 Binding Kinetics in Tumor Cell Adhesion to Leukocytes and Endothelial Cells by a Gas-driven Micropipette Assay*. <i>Journal of Biological Chemistry</i> , 2011, 286, 34777-34787.	3.4	31
48	Sequential Binding of $\beta$ 3 and ICAM-1 Determines Fibrin-Mediated Melanoma Capture and Stable Adhesion to CD11b/CD18 on Neutrophils. <i>Journal of Immunology</i> , 2011, 186, 242-254.	0.8	48
49	Application of Population Dynamics to Study Heterotypic Cell Aggregations in the Near-Wall Region of a Shear Flow. <i>Cellular and Molecular Bioengineering</i> , 2010, 3, 3-19.	2.1	9
50	Transiently Entrapped Circulating Tumor Cells Interact with Neutrophils to Facilitate Lung Metastasis Development. <i>Cancer Research</i> , 2010, 70, 6071-6082.	0.9	300
51	p38 MAP kinase is necessary for melanoma-mediated regulation of VE-cadherin disassembly. <i>American Journal of Physiology - Cell Physiology</i> , 2010, 298, C1140-C1150.	4.6	32
52	Adhesion and Signaling of Tumor Cells to Leukocytes and Endothelium in Cancer Metastasis. <i>Studies in Mechanobiology, Tissue Engineering and Biomaterials</i> , 2010, , 477-521.	1.0	2
53	Quasi-3D Cytoskeletal Dynamics of Osteocytes under Fluid Flow. <i>Biophysical Journal</i> , 2010, 99, 2812-2820.	0.5	22
54	Tumor cell extravasation mediated by leukocyte adhesion is shear rate dependent on IL-8 signaling. <i>MCB Molecular and Cellular Biomechanics</i> , 2010, 7, 77-91.	0.7	15

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55	Biomechanics: Cell Research and Applications for the Next Decade. <i>Annals of Biomedical Engineering</i> , 2009, 37, 847-859.	2.5	169
56	Systemic Analysis of Tumor Cell-Induced Endothelial Calcium Signaling and Junction Disassembly. <i>Cellular and Molecular Bioengineering</i> , 2009, 2, 375-385.	2.1	12
57	Single-layer planar on-chip flow cytometer using microfluidic drifting based three-dimensional (3D) hydrodynamic focusing. <i>Lab on A Chip</i> , 2009, 9, 1583.	6.0	185
58	The role of fibrin as a ligand for ICAM-1 and PMN in melanoma adhesion under different shear conditions.. , 2009, , .		0
59	Effects of the Tumor-Leukocyte Microenvironment on Melanoma's Neutrophil Adhesion to the Endothelium in a Shear Flow. <i>Cellular and Molecular Bioengineering</i> , 2008, 1, 189-200.	2.1	25
60	Hydrodynamic Shear Rate Regulates Melanoma-Leukocyte Aggregation, Melanoma Adhesion to the Endothelium, and Subsequent Extravasation. <i>Annals of Biomedical Engineering</i> , 2008, 36, 661-671.	2.5	72
61	Integrin VLA-4 enhances sialyl-Lewis <sup>x</sup> -negative melanoma adhesion to and extravasation through the endothelium under low flow conditions. <i>American Journal of Physiology - Cell Physiology</i> , 2008, 295, C701-C707.	4.6	51
62	Two-dimensional kinetics of $\beta_2$ -integrin and ICAM-1 bindings between neutrophils and melanoma cells in a shear flow. <i>American Journal of Physiology - Cell Physiology</i> , 2008, 294, C743-C753.	4.6	40
63	Targeting Mutant V600E B-Raf in Melanoma Interrupts Immunoediting of Leukocyte Functions and Melanoma Extravasation. <i>FASEB Journal</i> , 2008, 22, 1079.23.	0.5	0
64	Targeting Mutant (V600E) B-Raf in Melanoma Interrupts Immunoediting of Leukocyte Functions and Melanoma Extravasation. <i>Cancer Research</i> , 2007, 67, 5814-5820.	0.9	82
65	Cellular Mechanics and Biology of Tumor Cell-Leukocyte Interactions in the Near Wall Region Under Shear Flow Conditions. , 2007, , 371.		0
66	Regulation of interleukin-8 expression in melanoma-stimulated neutrophil inflammatory response. <i>Experimental Cell Research</i> , 2007, 313, 551-559.	2.6	71
67	Design of a Side-View Particle Imaging Velocimetry Flow System for Cell-Substrate Adhesion Studies. <i>Journal of Biomechanical Engineering</i> , 2006, 128, 271-278.	1.3	32
68	Targeting Mitogen-Activated Protein Kinase/Extracellular Signal-Regulated Kinase Kinase in the Mutant (V600E) B-Raf Signaling Cascade Effectively Inhibits Melanoma Lung Metastases. <i>Cancer Research</i> , 2006, 66, 8200-8209.	0.9	108
69	Monte carlo simulation of heterotypic cell aggregation in nonlinear shear flow. <i>Mathematical Biosciences and Engineering</i> , 2006, 3, 683-696.	1.9	12
70	Kinetics analysis of binding between melanoma cells and neutrophils. <i>MCB Molecular and Cellular Biomechanics</i> , 2006, 3, 79-87.	0.7	18
71	Micromechanics of tumor cell adhesion and migration under dynamic flow conditions. <i>Frontiers in Bioscience - Landmark</i> , 2005, 10, 379.	3.0	25
72	Distinct role of hydrodynamic shear in leukocyte-facilitated tumor cell extravasation. <i>American Journal of Physiology - Cell Physiology</i> , 2005, 288, C831-C839.	4.6	79

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73	Shear stress and shear rate differentially affect the multi-step process of leukocyte-facilitated melanoma adhesion. <i>Experimental Cell Research</i> , 2005, 310, 282-292.	2.6	68
74	Involvement of phospholipase C signaling in melanoma cell-induced endothelial junction disassembly. <i>Frontiers in Bioscience - Landmark</i> , 2005, 10, 1597.	3.0	29
75	Melanoma cell extravasation under flow conditions is modulated by leukocytes and endogenously produced interleukin 8. <i>MCB Molecular and Cellular Biomechanics</i> , 2005, 2, 145-59.	0.7	55
76	Neutrophils influence melanoma adhesion and migration under flow conditions. <i>International Journal of Cancer</i> , 2003, 106, 713-722.	5.1	92
77	Melanoma cell migration to type IV collagen requires activation of NF- $\kappa$ B. <i>Oncogene</i> , 2003, 22, 98-108.	5.9	42
78	In Vitro Characterization and Micromechanics of Tumor Cell Chemotactic Protrusion, Locomotion, and Extravasation. <i>Annals of Biomedical Engineering</i> , 2002, 30, 344-355.	2.5	35
79	[Ca <sup>2+</sup> ] <sub>i</sub> as a potential downregulator of I $\alpha$ 2 $\beta$ 1-integrin-mediated A2058 tumor cell migration to type IV collagen. <i>American Journal of Physiology - Cell Physiology</i> , 2001, 281, C106-C113.	4.6	18
80	Extracellular lipid-mediated signaling in tumor-cell activation and pseudopod protrusion. <i>International Journal of Cancer</i> , 2000, 88, 593-600.	5.1	5
81	Biomechanics of cell rolling: shear flow, cell-surface adhesion, and cell deformability. <i>Journal of Biomechanics</i> , 2000, 33, 35-43.	2.1	210
82	Use of Green Fluorescent Protein-Conjugated $\beta$ -Actin as a Novel Molecular Marker for in Vitro Tumor Cell Chemotaxis Assay. <i>Biotechnology Progress</i> , 2000, 16, 1106-1114.	2.6	10
83	Mechanics of Leukocyte Deformation and Adhesion to Endothelium in Shear Flow. <i>Annals of Biomedical Engineering</i> , 1999, 27, 298-312.	2.5	142
84	Application of the Dual-Micropipet Technique to the Measurement of Tumor Cell Locomotion. <i>Experimental Cell Research</i> , 1999, 248, 160-171.	2.6	28
85	In Vitro Side-View Imaging Technique and Analysis of Human T-Leukemic Cell Adhesion to ICAM-1 in Shear Flow. <i>Microvascular Research</i> , 1998, 55, 124-137.	2.5	54
86	Development of a side-view chamber for studying cell-surface adhesion under flow conditions. <i>Annals of Biomedical Engineering</i> , 1997, 25, 573-580.	2.5	40
87	Responses of tumor cell pseudopod protrusion to changes in medium osmolality. , 1996, 167, 156-163.		13
88	Two Phases of Pseudopod Protrusion in Tumor Cells Revealed by a Micropipette. <i>Microvascular Research</i> , 1994, 47, 55-67.	2.5	40
89	Leukocyte deformability: Finite element modeling of large viscoelastic deformation. <i>Journal of Theoretical Biology</i> , 1992, 158, 173-193.	1.7	76
90	Cytoplasmic rheology of passive neutrophils. <i>Biorheology</i> , 1991, 28, 557-567.	0.4	129

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91	Passive Deformations and Active Motions of Leukocytes. Journal of Biomechanical Engineering, 1990, 112, 295-302.	1.3	27
92	Passive Deformation Analysis of Human Leukocytes. Journal of Biomechanical Engineering, 1988, 110, 27-36.	1.3	170