Ankur Singh

List of Publications by Year
in descending order

79 papers	3,779 citations	126907 33 h-index	128289 60 g-index
84 all docs	84 docs citations	84 times ranked	6377 citing authors

#	Article	IF	Citations
1	Light-triggered in vivo activation of adhesive peptides regulates cell adhesion, inflammation and vascularization of biomaterials. Nature Materials, 2015, 14, 352-360.	27.5	365
2	Hydrogels and Scaffolds for Immunomodulation. Advanced Materials, 2014, 26, 6530-6541.	21.0	286
3	How vinculin regulates force transmission. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 9788-9793.	7.1	209
4	Engineered Nanomaterials for Infection Control and Healing Acute and Chronic Wounds. ACS Applied Materials & Interfaces, 2016, 8, 10049-10069.	8.0	206
5	Silver Nanoparticles Inhibit Replication of Respiratory Syncytial Virus. Journal of Biomedical Nanotechnology, 2008, 4, 149-158.	1.1	149
6	EZH2 enables germinal centre formation through epigenetic silencing of CDKN1A and an Rb-E2F1 feedback loop. Nature Communications, 2017, 8, 877.	12.8	132
7	In-situ crosslinking hydrogels for combinatorial delivery of chemokines and siRNAâ€“DNA carrying microparticles to dendritic cells. Biomaterials, 2009, 30, 5187-5200.	11.4	118
8	Self-assembling nanoparticles for intra-articular delivery of anti-inflammatory proteins. Biomaterials, 2012, 33, 7665-7675.	11.4	113
9	Solid freeform fabrication of designer scaffolds of hyaluronic acid for nerve tissue engineering. Biomedical Microdevices, 2011, 13, 983-993.	2.8	112
10	Nanopatterning Reveals an ECM Area Threshold for Focal Adhesion Assembly and Force Transmission that is regulated by Integrin Activation and Cytoskeleton Tension. Journal of Cell Science, 2012, 125, 5110-23.	2.0	111
11	Adhesion strengthâ€“based, label-free isolation of human pluripotent stem cells. Nature Methods, 2013, 10, 438-444.	19.0	110
12	Alterations to the Gut Microbiome Impair Bone Strength and Tissue Material Properties. Journal of Bone and Mineral Research, 2017, 32, 1343-1353.	2.8	109
13	Eliciting B cell immunity against infectious diseases using nanovaccines. Nature Nanotechnology, 2021, 16, 16-24.	31.5	109
14	ExÂvivo engineered immune organoids for controlled germinal centerÂreactions. Biomaterials, 2015, 63, 24-34.	11.4	108
15	Immuno-engineered organoids for regulating the kinetics of B-cell development and antibody production. Nature Protocols, 2017, 12, 168-182.	12.0	84
16	Integrin Î±vÎ²3 acting as membrane receptor for thyroid hormones mediates angiogenesis in malignant T cells. Blood, 2015, 125, 841-851.	1.4	74
17	Efficient Gene Silencing in Lungs and Liver Using Imidazole-Modified Chitosan As a Nanocarrier for Small Interfering RNA. Oligonucleotides, 2010, 20, 163-172.	2.7	72
18	An injectable synthetic immune-priming center mediates efficient T-cell class switching and T-helper 1 response against B cell lymphoma. Journal of Controlled Release, 2011, 155, 184-192.	9.9	72

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19	A microparticle approach to morphogen delivery within pluripotent stem cell aggregates. Biomaterials, 2013, 34, 7227-7235.	11.4	67
20	Integrin-specific hydrogels as adaptable tumor organoids for malignant B and T cells. Biomaterials, 2015, 73, 110-119.	11.4	66
21	Efficient Modulation of T-cell Response by Dual-mode, Single-carrier Delivery of Cytokine-targeted siRNA and DNA Vaccine to Antigen-presenting Cells. Molecular Therapy, 2008, 16, 2011-2021.	8.2	61
22	Nanoengineered Particles for Enhanced Intraâ€Articular Retention and Delivery of Proteins. Advanced Healthcare Materials, 2014, 3, 1562-1567.	7.6	55
23	Multiscale engineering of immune cells and lymphoid organs. Nature Reviews Materials, 2019, 4, 355-378.	48.7	55
24	Engineered microscale hydrogels for drug delivery, cell therapy, and sequencing. Biomedical Microdevices, 2019, 21, 31.	2.8	50
25	Selfâ€Assembly Protein Nanogels for Safer Cancer Immunotherapy. Advanced Healthcare Materials, 2016, 5, 1413-1419.	7.6	48
26	Point of care technologies for sepsis diagnosis and treatment. Lab on A Chip, 2019, 19, 728-737.	6.0	47
27	Cellular self-assembly and biomaterials-based organoid models of development and diseases. Acta Biomaterialia, 2017, 53, 29-45.	8.3	45
28	Engineering vaccines and niches for immune modulation. Acta Biomaterialia, 2014, 10, 1728-1740.	8.3	42
29	Microfluidic-based patterning of embryonic stem cells for in vitro development studies. Lab on A Chip, 2013, 13, 4617.	6.0	40
30	Endogenous lung surfactant inspired pH responsive nanovesicle aerosols: Pulmonary compatible and site-specific drug delivery in lung metastases. Scientific Reports, 2014, 4, 7085.	3.3	39
31	ExÂvivo synthetic immune tissues with T cell signals for differentiating antigen-specific, high affinity germinal center B cells. Biomaterials, 2019, 198, 27-36.	11.4	39
32	Microscale Bioadhesive Hydrogel Arrays for Cell Engineering Applications. Cellular and Molecular Bioengineering, 2014, 7, 394-408.	2.1	37
33	Biomaterials innovation for next generation exÂvivo immune tissue engineering. Biomaterials, 2017, 130, 104-110.	11.4	37
34	Single-cell analysis of embryoid body heterogeneity using microfluidic trapping array. Biomedical Microdevices, 2014, 16, 79-90.	2.8	36
35	Beyond Tissue Stiffness and Bioadhesivity: Advanced Biomaterials to Model Tumor Microenvironments and Drug Resistance. Trends in Cancer, 2018, 4, 281-291.	7.4	36
36	How Biophysical Forces Regulate Human B Cell Lymphomas. Cell Reports, 2018, 23, 499-511.	6.4	30

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37	Immunomodulatory nanogels overcome restricted immunity in a murine model of gut microbiomeâ€"mediated metabolic syndrome. Science Advances, 2019, 5, eaav9788.	10.3	29
38	Modular Immune Organoids with Integrin Ligand Specificity Differentially Regulate Ex Vivo B Cell Activation. ACS Biomaterials Science and Engineering, 2017, 3, 214-225.	5.2	28
39	Combined EZH2 and Bcl-2 inhibitors as precision therapy for genetically defined DLBCL subtypes. Blood Advances, 2020, 4, 5226-5231.	5.2	28
40	Osteoarthritis: Pathology, Mouse Models, and Nanoparticle Injectable Systems for Targeted Treatment. Annals of Biomedical Engineering, 2016, 44, 2062-2075.	2.5	27
41	Intravital three-photon microscopy allows visualization over the entire depth of mouse lymph nodes. Nature Immunology, 2022, 23, 330-340.	14.5	26
42	Extracellular Matrix in Synthetic Hydrogelâ€Based Prostate Cancer Organoids Regulate Therapeutic Response to EZH2 and DRD2 Inhibitors. Advanced Materials, 2022, 34, e2100096.	21.0	24
43	Elastomeric Cell-Laden Nanocomposite Microfibers for Engineering Complex Tissues. Cellular and Molecular Bioengineering, 2015, 8, 404-415.	2.1	23
44	Award Winner in the Young Investigator Category, 2017 Society for Biomaterials Annual Meeting and Exposition, Minneapolis, MN, April 05â€"08, 2017: Lymph node stiffnessâ€mimicking hydrogels regulate human Bâ€cell lymphoma growth and cell surface receptor expression in a molecular subtypeâ€specific manner. Journal of Biomedical Materials Research - Part A, 2017, 105, 1833-1844.	4.0	23
45	Selfâ€assembled, ellipsoidal polymeric nanoparticles for intracellular delivery of therapeutics. Journal of Biomedical Materials Research - Part A, 2018, 106, 2048-2058.	4.0	22
46	Identification of MALT1 feedback mechanisms enables rational design of potent antilymphoma regimens for ABC-DLBCL. Blood, 2021, 137, 788-800.	1.4	22
47	Injectable mechanical pillows for attenuation of load-induced post-traumatic osteoarthritis. International Journal of Energy Production and Management, 2019, 6, 211-219.	3.7	21
48	Drug discovery and therapeutic delivery for the treatment of B and T cell tumors. Advanced Drug Delivery Reviews, 2017, 114, 285-300.	13.7	20
49	Organoid Polymer Functionality and Mode of Klebsiella pneumoniae Membrane Antigen Presentation Regulates Ex Vivo Germinal Center Epigenetics in Young and Aged B Cells. Advanced Functional Materials, 2020, 30, 2001232.	14.9	19
50	GHz Ultrasonic Chip-Scale Device Induces Ion Channel Stimulation in Human Neural Cells. Scientific Reports, 2020, 10, 3075.	3.3	14
51	Creating artificial lymphoid tissues to study immunity and hematological malignancies. Current Opinion in Hematology, 2017, 24, 377-383.	2.5	13
52	Microbiome as an immune regulator in health, disease, and therapeutics. Advanced Drug Delivery Reviews, 2022, 188, 114400.	13.7	11
53	Materials modulate immunity and gut microbiome. Nature Materials, 2020, 19, 3-4.	27.5	10
54	Microscale Technologies for Engineering Complex Tissue Structures. , 2016, , 3-25.		6

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55	Engineering early memory Bâ€cellâ€like phenotype in hydrogelâ€based immune organoids. Journal of Biomedical Materials Research - Part A, 2022, 110, 1435-1447.	4.0	5
56	Immuno-engineering: The Next Frontier in Therapeutics Delivery. Advanced Drug Delivery Reviews, 2017, 114, 1-2.	13.7	4
57	Biomaterials, Cells, and Patho-physiology: Building Better Organoids and On-Chip Technologies. Biomaterials, 2019, 198, 1-2.	11.4	4
58	Photofunctionalization of Materials to Promote Protein and Cell Interactions for Tissue-Engineering Applications. , 2009, , 297-318.		4
59	Microscale Technologies for Cell Engineering. , 2016, , .		3
60	ITK independent development of Th17 responses during hypersensitivity pneumonitis driven lung inflammation. Communications Biology, 2022, 5, 162.	4.4	3
61	High Fidelity Nanopatterning of Proteins onto Well-Defined Surfaces Through Subtractive Contact Printing. Methods in Cell Biology, 2014, 119, 277-292.	1.1	2
62	Miniature Medicine: Nanobiomaterials for therapeutic delivery and cell engineering applications. IEEE Pulse, 2014, 5, 40-43.	0.3	2
63	Breaking the Barriers in Engineering Organoids and Tissues with Advanced Materials. Advanced Functional Materials, 2020, 30, 2008531.	14.9	2
64	Microfluidic chip for label-free removal of teratoma-forming cells from therapeutic human stem cells. Journal of Immunology and Regenerative Medicine, 2020, 10, 100030.	0.4	2
65	Lipid Membraneâ€Based Antigen Presentation to B Cells Using a Fully Synthetic Ex Vivo Germinal Center Model. Advanced NanoBiomed Research, 2022, 2, .	3.6	2
66	Corrigendum to â€œIn-situ crosslinking hydrogels for combinatorial delivery of chemokines and siRNAâ€“DNA carrying microparticles to dendritic cellsâ€•[Biomaterials 30 (2009) 5187â€“5200]. Biomaterials, 2010, 31, 1460.	11.4	1
67	Drug Delivery: Nanoengineered Particles for Enhanced Intra-Articular Retention and Delivery of Proteins (Adv. Healthcare Mater. 10/2014). Advanced Healthcare Materials, 2014, 3, 1561-1561.	7.6	1
68	Convection-enhanced delivery of drugs for deadliest pediatric brain tumors. Science Translational Medicine, 2018, 10, .	12.4	1
69	Bactericide hydrogel prevents orthopedic implant infections. Science Translational Medicine, 2018, 10, .	12.4	1
70	Send in the decoys: Cell-like particles ameliorate inflammatory autoimmune arthritis. Science Translational Medicine, 2018, 10, .	12.4	1
71	Engineering Niches for Stem and Progenitor Cell Differentiation Into Immune Cells. , 2017, , 547-558.		0
72	Editorial: Probing the Chromatin Architecture. Frontiers in Cell and Developmental Biology, 2021, 9, 727803.	3.7	0

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73	Adhesive Signature-Based, Label-Free Isolation of Human Pluripotent Stem Cells. , 2012, , .		0
74	Immunobioengineering Approaches Towards Combinatorial Delivery of Immune-Modulators and Antigens. , 2013, , 161-181.		0
75	No one is naÃ¯ve: Young infantâ€™s immunity can dodge Darwinian selection. Science Translational Medicine, 2018, 10, .	12.4	0
76	Targeting a conserved epitope: A new chink in malariaâ€™s armor. Science Translational Medicine, 2018, 10, .	12.4	0
77	Charting the course of metastatic cells. Science Translational Medicine, 2018, 10, .	12.4	0
78	T cells, the last samurai against humoral rejection in lung transplants. Science Translational Medicine, 2019, 11, .	12.4	0
79	Extracellular Matrix in Synthetic Hydrogelâ€Based Prostate Cancer Organoids Regulate Therapeutic Response to EZH2 and DRD2 Inhibitors (Adv. Mater. 2/2022). Advanced Materials, 2022, 34, .	21.0	0