

# Collected Papers for “Cellmatrix” (10 papers in each year)

2010 ~ 2019

2019

	Journal	Vol (No)	Page	Year	First Author	Title
1	Bone	103	56	2019	Sakamoto M.	Vibration enhances osteoclastogenesis by inducing RANKL expression via NF- $\kappa$ B signaling in osteocytes.
2	Nature Communications	10 (5446)	558	2019	Kobayashi S.	Enhanced lysosomal degradation maintains the quiescent state of neural stem cells.
3	Scientific Reports	9 (20056)		2019	Hirakawa T.	$\beta$ -catenin signaling inhibitors ICG-001 and C-82 improve fibrosis in preclinical models of endometriosis.
4	Biomaterials	197	305	2019	Usuba R.	EGFL7 regulates sprouting angiogenesis and endothelial integrity in a human blood vessel model.
5	Cancers	11 (5)	604	2019	Sato Y.	High Mannose Binding Lectin (PFL) from <i>Pseudomonas fluorescens</i> Down-Regulates Cancer-Associated Integrins and Immune Checkpoint Ligand B7-H4.
6	Biomaterials Science	7	3460	2019	Tan A.	Probing cell–nanoparticle (cubosome) interactions at the endothelial interface: do tissue dimension and flow matter?
7	Molecular Oncology	13	1706	2019	Akatsu Y.	Fibroblast growth factor signals regulate transforming growth factor- $\beta$ -induced endothelial-to-myofibroblast transition of tumor endothelial cells via Elk1.
8	Carbohydrate Polymers	214	303	2019	Li W.	Anti-obesity effects of chondroitin sulfate oligosaccharides from the skate <i>Raja pulchra</i> .
9	Nat Protocols	14	1323	2019	Toyoshima K.	Regeneration of a bioengineered 3D integumentary organ system from iPS cells.
10	Materialstoday Chemistry	13	8	2019	Ishikawa Y.	Cellular morphologies, motility, and epithelial–mesenchymal transition of breast cancer cells incubated on viscoelastic gel substrates in hypoxia.

2018

	Journal	Vol (No)	Page	Year	First Author	Title
1	Nature	561 (7722)	243	2018	Kurita M.	In vivo reprogramming of wound-resident cells generates skin epithelial tissue.
2	Nature Communications	9	4695	2018	Anton KA, et al	Src-transformed cells hijack mitosis to extrude from the epithelium.
3	Biomaterials	161	24	2018	Takayama K.	Enrichment of high-functioning human iPS cell-derived hepatocyte-like cells for pharmaceutical research.
4	Science advances	4 (10)	eaat5847	2018	Osaki T.	Microphysiological 3D model of amyotrophic lateral sclerosis (ALS) from human iPS-derived muscle cells and optogenetic motor neurons.
5	Scientific Reports	8	10071	2018	Kimura H.	Stem cells purified from human induced pluripotent stem cell-derived neural crest-like cells promote peripheral nerve regeneration.
6	Scientific Reports	8	9229	2018	Fukuda T.	Expression of human mutant cyclin dependent kinase 4, Cyclin D and telomerase extends the life span but does not immortalize fibroblasts derived from loggerhead sea turtle ( <i>Caretta caretta</i> ).
7	Colloid and Surfaces A	546	136	2018	Peanparkdee M.	Stability of bioactive compounds from Thai Riceberry bran extract encapsulated within gelatin matrix during in vitro gastrointestinal digestion.
8	EBioMedicine	27	225	2018	Pauty J.	A Vascular Endothelial Growth Factor-Dependent Sprouting Angiogenesis Assay Based on an In Vitro Human Blood Vessel Model for the Study of Anti-Angiogenic Drugs.
9	Gastric Cancer	21 (6)	946	2018	Akutagawa T.	Cancer-adipose tissue interaction and fluid flow synergistically modulate cell kinetics, HER2 expression, and trastuzumab efficacy in gastric cancer.
10	Sensors & Actuators: B	273	1062	2018	Matsumoto S.	Integration of an oxygen sensor into a polydimethylsiloxane hepatic culture device for two-dimensional gradient characterization.

2017

	Journal	Vol (No)	Page	Year	First Author	Title
1	Nature Cell Biology	19	530	2017	Kon S.	Cell competition with normal epithelial cells promotes apical extrusion of transformed cells through metabolic changes.
2	Nature Communications	44 (2)	140	2017	Ohno Y.	PNPLA1 is a transacylase essential for the generation of the skin barrier lipid $\omega$ -O-acylceramide/collagen.
3	PNAS	114 (12)	e2476	2017	Enoki R.	Synchronous circadian voltage rhythms with asynchronous calcium rhythms in the suprachiasmatic nucleus.
4	Acta Biomaterialia	48	489	2017	Wang Z.	TiAl 6 V 4 particles promote osteoclast formation via autophagy-mediated downregulation of interferon- $\beta$ in osteocytes.
5	Oncotarget	8 (38)	63258	2017	Huan B.	Effect of wound fluid on chemotherapy sensitivity of T24 bladder cancer cells with different enhancer of zeste homolog 2 status.
6	Scientific Reports	7	42426	2017	Takahashi H.	Visualizing dynamics of angiogenic sprouting from a three-dimensional microvasculature model using stage-top optical coherence tomography.
7	Tissue Engineering Part C	23 (6)	357	2017	Tsukamoto Y.	Fabrication of Orientation-Controlled 3D Tissues Using a Layer-by-Layer Technique and 3D Printed a Thermoresponsive Gel Frame.
8	Tissue Engineering Part C	23 (7)	396	2017	Han H.	Development of In Vitro Embryo Production System Using Collagen Matrix Gel Attached with Vascular Endothelial Growth Factor Derived from Interleukin-1 Beta-Treated Porcine Endometrial Tissue.
9	Cellular Physiology	233 (1)	201	2017	Dunon M. J.	Transforming growth factor $\beta$ induces bone marrow mesenchymal stem cell migration via noncanonical signals and N-cadherin.
10	Scientific Reports	7	41733	2017	Enoki R.	Dual origins of the intracellular circadian calcium rhythm in the suprachiasmatic nucleus.

2016

	Journal	Vol (No)	Page	Year	First Author	Title
1	Nat Biotechnol	34 (7)	752	2016	Quarta M.	An artificial niche preserves the quiescence of muscle stem cells and enhances their therapeutic efficacy.
2	Science Advances	2 (4)	e1500887	2016	Takagi R.	Bioengineering a 3D integumentary organ system from iPS cells using an in vivo transplantation model.
3	Nature Communications	7	11349	2016	Okamoto M.	Cell-cycle-independent transitions in temporal identity of mammalian neural progenitor cells.
4	Scientific Reports	6	22071	2016	Tanimoto R.	Detection of Temperature Difference in Neuronal Cells.
5	Scientific Reports	6	28383	2016	Chiba T.	MDCK cells expressing constitutively active Yes-associated protein (YAP) undergo apical extrusion depending on neighboring cell status.
6	Proc Natl Acad Sci USA	113 (1)	E71	2016	Nishio M.	Dysregulated YAP1/TAZ and TGF- $\beta$ signaling mediate hepatocarcinogenesis in <i>Mob1a/1b</i> -deficient mice.
7	Oncogenesis	4	e181	2016	Kamino H.	Miap-regulated mitochondrial quality control is frequently inactivated in human colorectal cancer.
8	Nucleic Acids Res	44 (11)	5105	2016	Yamamoto N.	Bidirectional promoters link cAMP signaling with irreversible differentiation through promoter-associated non-coding RNA (pancRNA) expression in PC12 cells.
9	PLoS One	11 (8)	e0162049	2016	Matsumoto T.	Retinol Promotes In Vitro Growth of Proximal Colon Organoids through a Retinoic Acid-Independent Mechanism.
10	Tissue Engineering Part C	22 (1)	20	2016	Yamazoe H.	Multicomponent Coculture System of Cancer Cells and Two Types of Stromal Cells for In Vitro Evaluation of Anticancer Drugs.

2015

	Journal	Vol (No)	Page	Year	First Author	Title
1	Nat Biotechnol	33 (8)	853	2015	Ogawa M.	Directed differentiation of cholangiocytes from human pluripotent stem cells.
2	Nature Communications	6	6373	2015	Ito K.	Artificial human Met agonists based on macrocycle scaffolds.
3	Nature Communications	6	8021	2015	Ishii T.	Light generation of intracellular Ca(2+) signals by a genetically encoded protein BACCS.
4	Scientific Reports	5	7656	2015	Yamaguchi N.	Leader cells regulate collective cell migration via Rac activation in the downstream signaling of integrin $\beta$ 1 and PI3K.
5	Biomaterials	72	29	2015	Aya R.	Regeneration of elastic fibers by three-dimensional culture on a collagen scaffold and the addition of latent TGF- $\beta$ binding protein 4 to improve elastic matrix deposition.
6	Biomaterials	51	278	2015	Yoshii Y.	High-throughput screening with nanoimprinting 3D culture for efficient drug development mimicking the tumor environment.
7	J Biol Chem	290 (10)	6086	2015	Aki S.	Phosphatidylinositol 3-kinase class II $\alpha$ -isoform PI3K-C2 $\alpha$ is required for transformin $\alpha$ growth factor $\alpha$ -induced Smad signaling in endothelial cells.
8	FEBS Open Bio	4	229	2015	Mitsuda S.	Ursolic acid, a natural pentacyclic triterpenoid, inhibits intracellular trafficking of proteins and induces accumulation of intercellular adhesion molecule-1 linked to high-mannose-type glycans in the endoplasmic reticulum.
9	Oncogene	34 (24)	3176	2015	Satoyoshi R.	Tks5 activation in mesothelial cells creates invasion front of peritoneal carcinomatosis.
10	Acta Biomaterialia	11	449	2015	Kang Y.	Engineering a vascularized collagen- $\beta$ -tricalcium phosphate graft using an electrochemical approach.

## 2014

	Journal	Vol (No)	Page	Year	First Author	Title
1	PLoS One	9 (1)	85132	2014	Ehashi T.	Comprehensive genetic analysis of early host body reactions to the bioactive and bio-inert porous scaffolds.
2	Stem Cell Reports	2 (2)	205	2014	Kamao H.	Characterization of human induced pluripotent stem cell-derived retinal pigment epithelium cell sheets aiming for clinical application.
3	Integr Biol (Camb)	6 (2)	127	2014	DiMarco RL.	Engineering of three-dimensional microenvironments to promote contractile behavior in primary intestinal organoids.
4	PLoS One	9 (1)	86186	2014	Tonosaki M.	L1cam Is Crucial for Cell Locomotion and Terminal Translocation of the Soma in Radial Migration during Murine Corticogenesis.
5	Biomaterials	35 (7)	2172	2014	Jiang N.	Postnatal epithelium and mesenchyme stem/progenitor cells in bioengineered amelogenesis and dentinogenesis
6	Proc Natl Acad Sci USA	11 (47)	16772	2014	Takayama K.	Prediction of interindividual differences in hepatic functions and drug sensitivity by using human iPS-derived hepatocytes.
7	Stem Cells	32 (12)	3266	2014	Asai S.	Tendon progenitor cells in injured tendons have strong chondrogenic potential: the CD105-negative subpopulation induces chondrogenic degeneration.
8	J Biol Chem	289 (16)	11545	2014	Hayashida C.	Osteocytes produce interferon- $\beta$ as a negative regulator of osteoclastogenesis.
9	Scientific Reports	4	4867	2014	Yajima-Himuro S.	The junctional epithelium originates from the odontogenic epithelium of an erupted tooth.
10	Scientific Reports	4	4568	2014	Yuki K.	E-cadherin-downregulation and RECK-upregulation are coupled in the non-malignant epithelial cell line MCF10A but not in multiple carcinoma-derived cell lines.

## 2013

	Journal	Vol (No)	Page	Year	First Author	Title
1	Scientific Reports	3	1418	2013	Kito T.	iPS cell sheets created by a novel magnetite tissue engineering method for reparative angiogenesis.
2	Scientific Reports	3	1144	2013	Nagai H.	Metamorphosis of mesothelial cells with active horizontal motility in tissue culture.
3	Scientific Reports	342 (6163)	1203	2013	Imayoshi I.	Oscillatory control of factors determining multipotency and fate in mouse neural progenitors.
4	Proc Natl Acad Sci USA	110 (8)	2852	2013	Noda K.	Latent TGF-(beta) binding protein 4 promotes elastic fiber assembly by interacting with fibulin-5.
5	Cell Struct Funct	38 (2)	227	2013	Toki F.	Second Harmonic Generation Reveals Collagen Fibril Remodeling in Fibroblast-populated Collagen Gels.
6	PLoS One	8 (8)	66751	2013	Ding T.	Knockdown a water channel protein, aquaporin-4, induced glioblastoma cell apoptosis.
7	PLoS One	8 (8)	71252	2013	Koriyama Y.	Requirement of retinoic acid receptor $\beta$ for genipin derivative-induced optic nerve regeneration in adult rat retina.
8	PLoS One	8 (10)	78061	2013	Kim A.	Aqueous extract of Bambusae Caulis in Taeniam inhibits PMA-induced tumor cell invasion and pulmonary metastasis: suppression of NF- $\kappa$ B activation through ROS signaling.
9	J Biol Chem	288	19958	2013	Tashiro E.	Prefoldin Protects Neuronal Cells from Polyglutamine Toxicity by Preventing Aggregation Formation.
10	J Biol Chem	288	35126	2013	Woskowicz AM.	MT-LOOP-dependent Localization of Membrane Type I Matrix Metalloproteinase (MT1-MMP) to the Cell Adhesion Complexes Promotes Cancer Cell Invasion.

## 2012

	Journal	Vol (No)	Page	Year	First Author	Title
1	Proc Natl Acad Sci USA	109 (41)	16449	2012	Harris AR.	Characterizing the mechanics of cultured cell monolayers.
2	Proc Natl Acad Sci USA	109 (52)	21498	2012	Enoki R.	Topological specificity and hierarchical network of the circadian calcium rhythm in the suprachiasmatic nucleus.
3	Proc Natl Acad Sci USA	109 (52)	21426	2012	Lipinski S.	RNAi screening identifies mediators of NOD2 signaling: implications for spatial specificity of MDP recognition.
4	J Invest Dermatol	132 (7)	1775	2012	Ishitsuka Y.	Pituitary tumor-transforming gene 1 enhances proliferation and suppresses early differentiation of keratinocytes.
5	Nature Neuroscience	15 (9)	1201	2012	Yang YT.	DOCK7 interacts with TACC3 to regulate interkinetic nuclear migration and cortical neurogenesis.
6	Journal of Cell Science	125 (24)	6127	2012	Hashimoto T.	Active involvement of micro-lipid droplets and lipid-droplet-associated proteins in hormone-stimulated lipolysis in adipocytes.
7	Tissue Engineering Part A	18 (15-16)	1677	2012	Wen Y.	Application of induced pluripotent stem cells in generation of a tissue-engineered tooth-like structure.
8	Langmuir	28 (9)	4404	2012	Ogawa Y.	Helical assembly of azobenzene-conjugated carbohydrate hydrogelators with specific affinity for lectins.
9	FEBS Journal	279 (10)	1857	2012	Ishii S.	The response of PKD1L3/PKD2L1 to acid stimuli is inhibited by capsaicin and its pungent analogs.
10	Neuron	73 (5)	911	2012	Cappello S.	A radial glia-specific role of RhoA in double cortex formation.

## 2011

	Journal	Vol (No)	Page	Year	First Author	Title
1	Proc Natl Acad Sci USA	108 (15)	6235	2011	Kondo J.	Retaining cell-cell contact enables preparation and culture of spheroids composed of pure primary cancer cells from colorectal cancer.
2	J Biol Chem	286 (4)	3094	2011	Sugita A.	Cellular ATP Synthesis Mediated by Type III Sodium-dependent Phosphate Transporter Pit-1 Is Critical to Chondrogenesis.
3	J Biol Chem	286 (20)	17536	2011	Nishitsuji K.	Apolipoprotein E Regulates the Integrity of Tight Junctions in an Isoform-dependent Manner in an In Vitro Blood-Brain Barrier Model.
4	J Biol Chem	286 (14)	1524	2011	Sato Y.	Cellular Hypoxia of Pancreatic $\beta$ -Cells Due to High Levels of Oxygen Consumption for Insulin Secretion in Vitro.
5	J Biol Chem	286 (10)	8055	2011	Zhang J.	Angiopoietin-1/Tie2 Signal Augments Basal Notch Signal Controlling Vascular Quiescence by Inducing Delta-Like 4 Expression through AKT-mediated Activation of $\beta$ -Catenin.
6	J Biol Chem	286 (44)	38602	2011	Saito M.	ADAMTSL6 $\beta$ Protein Rescues Fibrillin-1 Microfibril Disorder in a Marfan Syndrome Mouse Model through the Promotion of Fibrillin-1 Assembly.
7	J Biol Chem	286 (9)	7587	2011	Tochowicz A.	The Dimer Interface of the Membrane Type 1 Matrix Metalloproteinase Hemopexin Domain: Crystal Structure and Biological Functions.
8	Tissue Engineering Part A	17 (5-6)	597	2011	Tachi K.	Enhancement of Bone Morphogenetic Protein-2-Induced Ectopic Bone Formation by Transforming Growth Factor- $\beta$ 1.
9	The EMBO Journal	30 (4)	783	2011	Shirakihara T.	TGF- $\beta$ regulates isoform switching of FGF receptors and epithelial-mesenchymal transition.
10	PLoS One	6 (7)	21531	2011	Oshima M.	Functional Tooth Regeneration Using a Bioengineered Tooth Unit as a Mature Organ Replacement Regenerative Therapy.

## 2010

	Journal	Vol (No)	Page	Year	First Author	Title
1	Proc Natl Acad Sci USA	107 (10)	4601	2010	Umezaki T.	Follistatin-like-1, a diffusible mesenchymal factor determines the fate of epithelium.
2	J Biol Chem	285 (47)	36745	2010	Adapala NS.	The Loss of Cbl-Phosphatidylinositol 3-Kinase Interaction Perturbs RANKL-mediated Signaling, Inhibiting Bone Resorption and Promoting Osteoclast Survival.
3	J Biol Chem	285 (43)	33540	2010	Kamioka Y.	Multiple Decisive Phosphorylation Sites for the Negative Feedback Regulation of SOS1 via ERK.
4	J Biol Chem	285 (37)	28826	2010	Hoshino A.	Deficiency of Chemokine Receptor CCR1 Causes Osteopenia Due to Impaired Functions of Osteoclasts and Osteoblasts.
5	Tissue Engineering Part C	16 (2)	311	2010	Evenou F.	Spontaneous Formation of Highly Functional Three-Dimensional Multilayer from Human Hepatoma Hep G2 Cells Cultured on an Oxygen-Permeable Polydimethylsiloxane Membrane.
6	J Biol Chem	285 (36)	28286	2010	Fujihara C.	Role of Mechanical Stress-induced Glutamate Signaling-associated Molecules in Cytodifferentiation of Periodontal Ligament Cells.
7	J Biol Chem	285 (31)	23581	2010	Okada S.	Bach1-dependent and -independent Regulation of Heme Oxygenase-1 in Keratinocytes.
8	J Biol Chem	285 (27)	21013	2010	Nagano M.	ZF21 Protein Regulates Cell Adhesion and Motility.
9	J Biol Chem	285 (10)	7818	2010	Matsunaga-U. R.	The Scaffold Protein Shoc2/SUR-8 Accelerates the Interaction of Ras and Raf.
10	J Invest Dermatol	131 (1)	37	2010	Taguchi S.	Overexpression of the Transcription Factor Yin-Yang-1 Suppresses Differentiation of HaCaT Cells in Three-Dimensional Cell Culture.