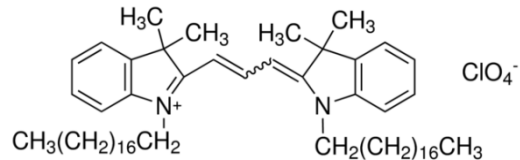
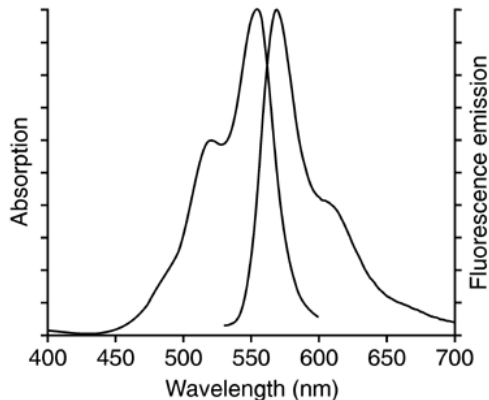


DiI (细胞膜红色荧光探针)

产品编号	产品名称	包装
C1036	DiI (细胞膜红色荧光探针)	10mg

产品简介:

- DiI即DiIC₁₈(3), 全称为1,1'-dioctadecyl-3,3',3'-tetramethylindocarbocyanine perchlorate, 是最常用的细胞膜荧光探针之一, 呈现橙红色荧光。DiI是一种亲脂性膜染料, 进入细胞膜后可以侧向扩散逐渐使整个细胞的细胞膜被染色。
- DiI在进入细胞膜之前荧光非常弱, 仅当进入到细胞膜后才可以被激发出很强的荧光。DiI被激发后可以发出橙红色的荧光, DiI和磷脂双层膜结合后的激发光谱和发射光谱参考下图。其中, 最大激发波长为549nm, 最大发射波长为565nm。



- DiI的分子式为C₅₉H₉₇ClN₂O₄, 分子量为933.88, CAS number为41085-99-8。
- DiI可以溶解于无水乙醇、DMSO和DMF, 其中在DMSO中的溶解度大于10mg/ml。发现较难溶解时可以适当加热, 并用超声处理以促进溶解。
- DiI 被广泛用于正向或逆向的, 活的或固定的神经等细胞或组织的示踪剂或长期示踪剂(long-term tracer)。DiI通常不会影响细胞的生存力(viability)。被DiI标记的神经细胞在体外培养的条件下可以存活长达4周, 在体内可以长达一年。DiI在经过固定的神经元细胞膜上的迁移速率为0.2-0.6mm/day, 在活的神经元细胞膜上的迁移速率为6mm/day。
- DiI除了最简单的细胞膜荧光标记外, 还可以用于检测细胞的融合和粘附, 检测发育或移植过程中细胞迁移, 通过FRAP(Fluorescence Recovery After Photobleaching)检测脂在细胞膜上的扩散, 检测细胞毒性和标记脂蛋白等。
- 用于细胞膜荧光标记时, DiI的常用浓度为1-25μM, 最常用的浓度为5-10μM。DiI可以直接染色活的细胞或组织, 染色时间通常为5-20分钟。对于固定的细胞或组织, 通常宜使用配制在PBS中的4%多聚甲醛进行固定, 使用其它不适当的固定液会导致荧光背景较高。

包装清单:

产品编号	产品名称	包装
C1036	DiI (细胞膜红色荧光探针)	10mg
—	说明书	1份

保存条件:

4°C避光保存, 一年有效。配制的储存液-20°C避光保存, 半年有效。

注意事项:

- 荧光染料均存在淬灭问题, 请尽量注意避光, 以减缓荧光淬灭。
- 本产品仅限于专业人员的科学研究用, 不得用于临床诊断或治疗, 不得用于食品或药品, 不得存放于普通住宅内。
- 为了您的安全和健康, 请穿实验服并戴一次性手套操作。

使用本产品的文献:

- Zhu C, Huang H, Hua R, Li G, Yang D, Luo J, Zhang C, Shi L, Benovic JL, Zhou N. Molecular and functional characterization of adipokinetic hormone receptor and its peptide ligands in *Bombyx mori*. *FEBS Lett*. 2009 May 6;583(9):1463-8.
- Danhier F, Lecouturier N, Vroman B, Jérôme C, Marchand-Brynaert J, Feron O, Pr
- éat V. Paclitaxel-loaded PEGylated PLGA-based nano particles: in vitro and in vivo evaluation. *J Control Release*. 2009 Jan 5; 133(1):11-7.
- Chen DQ, Jiang XQ, Zhang C, Ping QE. pH-Sensitive mPEG- Hz-Cholesterol Conjugates as a Liposome Delivery System. *Journal of Bioactive and Compatible*

- Polymers. 2010 Sep;25(5):527-42.
4. Yu L, Lv JC, Zhou XJ, Zhu L, Hou P, Zhang H. Abnormal expression and dysfunction of novel SGLT2 mutations identified in familial renalglucosuria patients. *Hum Genet.* 2011 Mar;129(3):335-44.
 5. Li RJ, Ying X, Zhang Y, Ju RJ, Wang XX, Yao HJ, Men Y, Tian W, Yu Y, Zhang L, Huang RJ, Lu WL. All-trans retinoic acid stealth liposomes prevent the relapse of breast cancer arising from the cancer stem cells. *J Control Release.* 2011 Feb 10;149(3):281-91.
 6. Liu M, Li ZH, Xu FJ, Lai LH, Wang QQ, Tang GP, Yang WT. An oligopeptide ligand-mediated therapeutic gene nanocomplex for liver cancer-targeted therapy. *Biomaterials.* 2012 Mar;33(7):2240-50.
 7. Cheng C, Zhang XG, Xiang JX, Wang YX, Zhang C, Lu ZT, Li CX. Development of novel self-assembled poly(3-acrylamidophenylboronic acid)/poly(2-lactobionamidoethyl methacrylate) hybrid nanoparticles for improving nasal adsorption of insulin. *Soft Matter.* 2012 8;3:765-73.
 8. Cheng C, Zhang XG, Wang YX, Sun L, Li CX. Phenylboronic acid-containing block copolymers: synthesis, self-assembly, and application for intracellular delivery of proteins. *New J. Chem.* 2012 Apr;6:1413-21.
 9. Zhao W, Zhang WP, Zhang ZL, He RL, Lin Y, Xie M, Wang HZ, Pang DW. Robust and highly sensitive fluorescence approach for point-of-care virus detection based on immunomagnetic separation. *Anal Chem.* 2012 Mar 6;84(5):2358-65.
 10. Li G, Lin DH, Xie XX, Qin LF, Wang JT. Cellular Uptake of PEGylated PLGA Nanoparticles in Hela Cells. *Frontier of Nanoscience and Technology II.* 2012 Jun;(528):80-3.
 11. Li G, Zhou Q, Yu Y, Chen L, Shi Y, Luo J, Benovic J, Lu J, Zhou N. Identification and characterization of distinct C-terminal domains of the human hydroxycarboxylic acid receptor-2 that are essential for receptor export, constitutive activity, desensitization, and internalization. *Mol Pharmacol.* 2012 Dec;82(6):1150-61.
 12. Bo Y, Yan L, Gang Z, Tao L, Yinghui T. Effect of calcitonin gene-related peptide on osteoblast differentiation in an osteoblast and endothelial cell co-culture system. *Cell Biol Int.* 2012 Oct 1;36(10):909-15.
 13. Chen C, Diao D, Guo L, Shi M, Gao J, Hu M, Yu M, Qian L, Guo N. All-trans-retinoic acid modulates ICAM-1 N-glycan composition by influencing GnT-III levels and inhibits cell adhesion and trans-endothelial migration. *PLoS One.* 2012;7(12):e52975.
 14. Guo T, Ke L, Qi B, Wan J, Ge J, Bai L, Cheng B. PTX3 is located at the membrane of late apoptotic macrophages and mediates the phagocytosis of macrophages. *J Clin Immunol.* 2012 Apr;32(2):330-9.
 15. Yin T, Wang P, Zheng R, Zheng B, Cheng D, Zhang X, Shuai X. Nanobubbles for enhanced ultrasound imaging of tumors. *Int J Nanomedicine.* 2012;7:895-904.
 16. Liu L, Kou P, Zeng Q, Pei G, Li Y, Liang H, Xu G, Chen S. CD4+ T Lymphocytes, especially Th2 cells, contribute to the progress of renal fibrosis. *Am J Nephrol.* 2012;36(4):386-96.
 17. Meng Z, Zhang XY, Guo J, Xiang LX, Shao JZ. Scavenger receptor in fish is a lipopolysaccharide recognition molecule involved in negative regulation of NF- κ B activation by competing with TNF receptor-associated factor 2 recruitment into the TNF- α signaling pathway. *J Immunol.* 2012 Oct 15;189(8):4024-39.
 18. Guo HF, Li ZS, Dong SW, Chen WJ, Deng L, Wang YF, Ying DJ. Piezoelectric PU/PVDF electrospun scaffolds for wound healing applications. *Colloids Surf B Biointerfaces.* 2012 Aug 1;96:29-36.
 19. Jiang H, Chen SS, Yang J, Chen J, He B, Zhu LH, Wang L. CREB-binding protein silencing inhibits thrombin-induced endothelial progenitor cells angiogenesis. *Mol Biol Rep.* 2012 Mar;39(3):2773-9.
 20. Bi RY, Kou XX, Meng Z, Wang XD, Ding Y, Gan YH. Involvement of trigeminal ganglionic Na(v) 1.7 in hyperalgesia of inflamed temporo mandibular joint is dependent on ERK1/2 phosphorylation of glial cells in rats. *Eur J Pain.* 2013 Aug;17(7):983-94.
 21. He B, Jia Z, Du W, Yu C, Fan Y, Dai W, Yuan L, Zhang H, Wang X, Wang J, Zhang X, Zhang Q. The transport pathways of polymer nanoparticles in MDCK epithelial cells. *Biomaterials.* 2013 Jun; 34(17):4309-26.
 22. Li J, Cheng Y, Zhang X, Zheng L, Han Z, Li P, Xiao Y, Zhang Q, Wang F. The in vivo immunomodulatory and synergistic anti-tumor activity of thymosin α 1-thymopentin fusion peptide and its binding to TLR2. *Cancer Lett.* 2013 Sep 1;337(2):237-47.
 23. Zhu H, Cao J, Cui S, Qian Z, Gu Y. Enhanced tumor targeting and antitumor efficacy via hydroxycamptothecin-encapsulated folate-modified N-succinyl-N'-octyl chitosan micelles. *J Pharm Sci.* 2013 Apr; 102(4):1318-32.
 24. Zhang XY, Xiao YQ, Zhang Y, Ye W. Protective effect of pioglitazone on retinal ischemia/reperfusion injury in rats. *Invest Ophthalmol Vis Sci.* 2013 Jun 6;54(6):3912-21.
 25. Yang J, Huang H, Yang H, He X, Jiang X, Shi Y, Alatangale D, Shi L, Zhou N. Specific activation of the G protein-coupled receptor BNGR-A21 by the neuropeptide corazonin from the silkworm, *Bombyx mori*, dually couples to the G(q) and G(s) signaling cascades. *J Biol Chem.* 2013 Apr 26;288(17):11662-75.
 26. Zheng C, Guo Q, Wu Z, Sun L, Zhang Z, Li C, Zhang X. Amphiphilic glycopolymer nanoparticles as vehicles for nasal delivery of peptides and proteins. *Eur J Pharm Sci.* 2013 Jul 16;49(4):474-82.
 27. Sun X, Liu X, Zhang Y, Kuang X, Lv B, Ge J. A simple and effective pressure culture system modified from a transwell cell culture system. *Biol Res.* 2013;46(1):47-52.
 28. Cai J, Han Y, Ren H, Chen C, He D, Zhou L, Eisner GM, Asico LD, Jose PA, Zeng C. Extracellular vesicle-mediated transfer of donor genomic DNA to recipient cells is a novel mechanism for genetic influence between cells. *J Mol Cell Biol.* 2013 Aug;5(4):227-38.
 29. Li W, Zhou M, Ren H, Hu HM, Lu L, Cao M, Wang LX. Tumor-derived autophagosomes (DRibbles) induce B cell activation in a TLR2-MyD88 dependent manner. *PLoS One.* 2013;8(1):e53564.
 30. Liu L, Zhao L, Yang J, Wan X, Hu N, Yeh L, Joo SW, Qian S. Low Voltage Pulsed Electric Field Sterilization on a Microfluidic Chip. *Electroanalysis.* 2013 May;25(5):1301-9.
 31. Liu H, Peng H, Wu Y, Zhang C, Cai Y, Xu G, Li Q, Chen X, Ji J, Zhang Y, OuYang HW. The promotion of bone regeneration by nanofibrous hydroxyapatite/chitosan scaffolds by effects on integrin-BMP/Smad signaling pathway in BMSCs. *Biomaterials.* 2013 Jun;34(18):4404-17.
 32. Li H, Feng Z, Tsang TC, Tang T, Jia X, He X, Pennington ME, Badowski MS, Liu AK, Chen D, Harris DT, Martinez J, Meade-Tollin LC. Fusion of HepG2 cells with mesenchymal stem cells increases cancer associated and malignant properties: an in vivo metastasis model. *Oncol Rep.* 2014 Aug;32(2):539-47.
 33. Qian J, Wu C, Chen X, Li X, Ying G, Jin L, Ma Q, Li G, Shi Y, Zhang G, Zhou N. Differential requirements of arrestin-3 and clathrin for ligand-dependent and -independent internalization of human G protein-coupled receptor 40. *Cell Signal.* 2014 Nov;26(11):2412-23.
 34. Deng X, Yang H, He X, Liao Y, Zheng C, Zhou Q, Zhu C, Zhang G, Gao J, Zhou N. Activation of *Bombyx* neuropeptide G protein-coupled receptor A4 via a G α i-dependent signaling pathway by direct interaction with neuropeptide F from silkworm, *Bombyx mori*. *Insect Biochem Mol Biol.* 2014 Feb;45:77-88.
 35. Mi XG, Song ZB, Wu P, Zhang YW, Sun LG, Bao YL, Zhang Y, Zheng LH, Sun Y, Yu CL, Wu Y, Wang GN, Li YX. Alantolactone induces cell apoptosis partially through down-regulation of testes-specific protease 50 expression. *Toxicol Lett.* 2014 Jan 30;224(3):349-55.
 36. Yang X, Wu L, Duan X, Cui L, Luo J, Li G. Adenovirus carrying gene encoding *Haliotis discus discus* sialic acid binding lectin induces cancer cell apoptosis. *Mar Drugs.* 2014 Jun 30;12(7):3994-4004.
 37. Song K, Han Y, Zhang L, Liu G, Yang P, Cheng X, Bu L, Sheng H, Qu S. ATP Synthase β -Chain Overexpression in SR-BI Knockout Mice Increases HDL Uptake and Reduces Plasma HDL Level. *Int J Endocrinol.* 2014;2014:356432.
 38. Xu N, Wang J, Zhang ZF, Pang DW, Wang HZ, Zhang ZL. Anisotropic cell-to-cell spread of vaccinia virus on microgrooved substrate. *Biomaterials.* 2014 Jun;35(19):5049-55.
 39. Wang M, Wang L, Guo Y, Sun R, Yue F, Yi Q, Song L. The broad pattern recognition spectrum of the Toll-like receptor in mollusk *Zhikong scallop*

- Chlamys farreri*. *Dev Comp Immunol*. 2015 Oct;52(2):192-201.
40. Zhao X, Liu L, Hegazy AM, Wang H, Li J, Zheng F, Zhou Y, Wang W, Li J, Liu X, Lin L. Mannose receptor mediated phagocytosis of bacteria in macrophages of blunt snout bream (*Megalobrama amblycephala*) in a Ca(2+)-dependent manner. *Fish Shellfish Immunol*. 2015 Apr; 43(2):357-63.
 41. Zhou Y, Zhou Z, Zhang W, Hu X, Wei H, Peng J, Jiang S. SIRT1 inhibits adipogenesis and promotes myogenic differentiation in C3H10T1/2 pluripotent cells by regulating Wnt signaling. *Cell Biosci*. 2015 Nov 12;5:61.
 42. Cao H, Zhang Z, Zhao S, He X, Yu H, Yin Q, Zhang Z, Gu W, Chen L, Li Y. Hydrophobic interaction mediating self-assembled nanoparticles of succinobucol suppress lung metastasis of breast cancer by inhibition of VCAM-1 expression. *J Control Release*. 2015 May 10;205:162-71.
 43. Cai WB, Yang HL, Zhang J, Yin JK, Yang YL, Yuan LJ, Zhang L, Duan YY. The Optimized Fabrication of Nanobubbles as Ultrasound Contrast Agents for Tumor Imaging. *Sci Rep*. 2015 Sep 3;5:13725.
 44. Zhang C, Yuan H, Liu H, Chen X, Lu P, Zhu T, Yang L, Yin Z, Heng BC, Zhang Y, Ouyang H. Well-aligned chitosan-based ultrafine fibers committed teno-lineage differentiation of human induced pluripotent stem cells for Achilles tendon regeneration. *Biomaterials*. 2015;53:716-30.
 45. Wang D, Zhao J, Gao Z, Chen N, Wen B, Lu W, Lei Z, Chen C, Liu Y, Feng J, Wang JH. Neurons in the barrel cortex turn into processing whisker and odor signals: a cellular mechanism for the storage and retrieval of associative signals. *Front Cell Neurosci*. 2015 Aug 21;9:320.
 46. Gu MJ, Li KF, Zhang LX, Wang H, Liu LS, Zheng ZZ, Han NY, Yang ZJ, Fan TY. In vitro study of novel gadolinium-loaded liposomes guided by GBI-10 aptamer for promising tumor targeting and tumor diagnosis by magnetic resonance imaging. *Int J Nanomedicine*. 2015 Aug 17;10:5187-204.
 47. Lei Z, Liu B, Wang JH. Reward memory relieves anxiety-related behavior through synaptic strengthening and protein kinase C in dentate gyrus. *Hippocampus*. 2016 Apr;26(4):502-16.
 48. Mi XG, Song ZB, Sun LG, Bao YL, Yu CL, Wu Y, Li YX. Cardamonin inhibited cell viability and tumorigenesis partially through blockade of testes-specificprotease 50-mediated nuclear factor-kappaB signaling pathway activation. *Int J Biochem Cell Biol*. 2016 Apr;73:63-71.
 49. Wan XK, Yuan SL, Tao HX, Diao LP, Wang YC, Cao C, Liu CJ. The Upregulation of TRAF1 Induced by *Helicobacter pylori* Plays an Antiapoptotic Effect on the Infected Cells. *Helicobacter*. 2016 Dec;21(6):554-564.
 50. Yan YJ, Wang TM, Liu W, Wu CW, Zhu AY, Chi CF, Lü ZM, Yang JW. Identification and Expression Profile of the Gonadotropin-Releasing Hormone Receptor in Common Chinese Cuttlefish, *Sepiella japonica*. *J Exp Zool A Ecol Genet Physiol*. 2016 Aug;325(7):453-66.
 51. Feng W, Gu YF, Nie L, Guo DY, Xiang LX, Shao JZ. Characterization of SIGIRR/IL-1R8 Homolog from Zebrafish Provides New Insights into Its Inhibitory Role in Hepatic Inflammation. *J Immunol*. 2016 Jul 1;197(1):151-67.
 52. Tang Y, Cui Y, Li Z, Jiao Z, Zhang Y, He Y, Chen G, Zhou Q, Wang W, Zhou X, Luo J, Zhang S. Radiation-induced miR-208a increases the proliferation and radioresistance by targeting p21 in human lung cancer cells. *J Exp Clin Cancer Res*. 2016 Jan 12;35:7.
 53. Lü ZM, Liu W, Liu LQ, Wang TM, Shi HL, Ping HL, Chi CF, Yang JW, Wu CW. Cloning, Characterization, and Expression Profile of Estrogen Receptor in Common Chinese Cuttlefish, *Sepiella japonica*. *J Exp Zool A Ecol Genet Physiol*. 2016 Mar;325(3):181-93.
 54. Xu XG, Hu JF, Ma JX, Nie L, Shao T, Xiang LX, Shao JZ. Essential Roles of TIM-1 and TIM-4 Homologs in Adaptive Humoral Immunity in a Zebrafish Model. *J Immunol*. 2016 Feb 15;196(4):1686-99.
 55. Li J, Gao J, Han L, Zhang Y, Guan W, Zhou L, Yu Y, Han W. Development of a membrane-anchored ligand and receptor yeast two-hybrid system for ligand-receptor interaction identification. *Sci Rep*. 2016 Oct 20;6:35631.
 56. Fan X, Guo Y, Wang L, Xiong X, Zhu L, Fang K. Diagnosis of prostate cancer using anti-PSMA aptamer A10-3.2-oriented lipid nanobubbles. *Int J Nanomedicine*. 2016 Aug 12;11:3939-50.
 57. Yang Z, Xiong F, Wang Y, Gong W, Huang J, Chen C, Liu P, Huang H. TGR5 activation suppressed S1P/S1P2 signaling and resisted high glucose-induced fibrosis in glomerular mesangial cells. *Pharmacol Res*. 2016 Sep;111:226-36.
 58. Xie Y, Zhong Y, Gao T, Zhang X, Li LI, Ruan H, Li D. Human lymphatic endothelial cells contribute to epithelial ovarian carcinoma metastasis by promoting lymphangiogenesis and tumor cell invasion. *Exp Ther Med*. 2016 May;11(5):1587-1594.
 59. Yang SD, Zhu WJ, Zhu QL, Chen WL, Ren ZX, Li F, Yuan ZQ, Li JZ, Liu Y, Zhou XF, Liu C, Zhang XN. Binary-copolymer system based on low-density lipoprotein-coupled N-succinyl chitosan lipoid acid micelles for co-delivery MDR1 siRNA and paclitaxel, enhances antitumor effects via reducing drug. *J Biomed Mater Res B Appl Biomater*. 2016 Mar 23. doi: 10.1002/jbm.b.33636.
 60. Xu H, Li Z, Yu Y, Sizzdahkhani S, Ho WS, Yin F, Wang L, Zhu G, Zhang M, Jiang L, Zhuang Z, Qin J. A dynamic in vivo-like organotypic blood-brain barrier model to probe metastatic brain tumors. *Sci Rep*. 2016 Nov 10;6:36670.
 61. Li W, Zhang L, Zhu Y, Zhang J, Shen L, Huang S, Fang S. Improving ovarian cancer imaging with LHRH-NBs: an experimental study. *Arch Gynecol Obstet*. 2016 Sep;294(3):631-8.
 62. Li G, Gao Y, Cui L, Wu L, Yang X, Chen J. *Anguilla japonica* lectin 1 delivery through adenovirus vector induces apoptotic cancer cell death through interaction with PRMT5. *J Gene Med*. 2016 Apr; 18(4-6): 65-74.
 63. Zhang X, Wang X, Zhong W, Ren X, Sha X, Fang X. Matrix metalloproteinases-2/9-sensitive peptide-conjugated polymer micelles for site-specific release of drugs and enhancing tumor accumulation: preparation and in vitro and in vivo evaluation. *Int J Nanomedicine*. 2016 Apr 22;11:1643-61.
 64. Wang T, Yang Z, Zhou N, Sun L, Lv Z, Wu C. Identification and functional characterization of 5-HT4 receptor in sea cucumber *Apostichopus japonicus* (Selenka). *Sci Rep*. 2017 Jan 6;7:40247.
 65. Wang T, Yang Z, Zhou N, Sun L, Lv Z, Wu C. Identification and functional characterization of 5-HT4 receptor in sea cucumber *Apostichopus japonicus* (Selenka). *SCI REP-UK*. 2017 Jan 6;7:40247.
 66. Zhang L, Li R, Chen H, Wei J, Qian H, Su S, Shao J, Wang L, Qian X, Liu B. Human cytotoxic T-lymphocyte membrane-camouflaged nanoparticles combined with low-dose irradiation: a new approach to enhance drug targeting in gastric cancer. *INT J NANOMED*. 2017 Mar 17;12:2129-2142.
 67. Wang F, Jia Y, Liu J, Zhai J, Cao N, Yue W, He H, Pei X. Dental pulp stem cells promote regeneration of damaged neuron cells on the cellular model of Alzheimer's disease. *Cell Biol Int*. 2017 Jun;41(6):639-650.
 68. Wang Y, Yu D, Liu Z, Zhou F, Dai J, Wu B, Zhou J, Heng BC, Zou XH, Ouyang H, Liu H. Exosomes from embryonic mesenchymal stem cells alleviate osteoarthritis through balancing synthesis and degradation of cartilage extracellular matrix. *Stem Cell Res Ther*. 2017 Aug 14;8(1):189.
 69. Zhu X, Peng Y, Qiu L. Amino-functionalized nano-vesicles for enhanced anticancer efficacy and reduced myelotoxicity of carboplatin. *COLLOID SURFACE B*. 2017 Sep 1;157:56-64.
 70. Chen D, Wu X, Xia M, Wu F, Ding J, Jiao Y, Zhan Q, An F. Upregulated exosomal miR-23b-3p plays regulatory roles in the progression of pancreatic cancer. *Oncol Rep*. 2017 Oct;38(4):2182-2188.
 71. Fan H, Li Y, Yang J, Ye X. Effect of Hydrophobic Chain Length on the Stability and Guest Exchange Behavior of Shell-Sheddable Micelles Formed by Disulfide-Linked Diblock Copolymers. *J Phys Chem B*. 2017 Oct 19;121(41):9708-9717.
 72. Xia D, He Y, Li Q, Hu C, Huang W, Zhang Y, Wan F, Wang C, Gan Y. Transport mechanism of lipid covered saquinavir pure drug nanoparticles in intestinal epithelium. *J Control Release*. 2018 Jan 10;269:159-170.
 73. Chen X, Liu J, Zhou J, Wang J, Chen C, Song Y, Pan J. Urban particulate matter (PM) suppresses airway antibacterial defence. *RESP RES*. 2018 Jan 8;19(1):5.
 74. Lai C, Duan S, Ye F, Hou X, Li X, Zhao J, Yu X, Hu Z, Tang Z, Mo F, Yang X, Lu X. The enhanced antitumor-specific immune response with mannose- and

- CpG-ODN-coated liposomes delivering TRP2 peptide. *Theranostics* . 2018 Feb 12;8(6):1723-1739
75. Chen X, Hao K, Yu X, Huang A, Zhu B, Wang GX, Ling F. Magnolol protects *Ctenopharyngodon idella* kidney cells from apoptosis induced by grass carp reovirus. *FISH SHELLFISH IMMUN* . 2018 Mar;74:426-435
 76. Chen XD, Wang YF, Wang YL, Li QY, Ma HY, Wang L, Sima YH, Xu SQ. Induced Hyperproteinemia and Its Effects on the Remodeling of Fat Bodies in Silkworm, *Bombyx mori*. *Front Physiol* . 2018 Mar 29;9:302
 77. Feng C, Wang K, Lin Y, Song Z, Lu Y, Liu J, Zhu D, Li Y, Dong C. Extracellular retention of a cyclopamine nanoformulation leveraging larger size and more negative charge for improved breast cancer treatment. *J Mater Chem B*. 2018 Mar 28;6(12):1834-1843
 78. Liu J, Chen Y, Wang G, Lv Q, Yang Y, Wang J, Zhang P, Liu J, Xie Y, Zhang L, Xie M. Ultrasound molecular imaging of acute cardiac transplantation rejection using nanobubbles targeted to T lymphocytes. *Biomaterials* . 2018 Apr;162:200-207
 79. Fang H, Shao S, Jiang M, Dang E, Shen S, Zhang J, Qiao P, Li C, Wang G. Proinflammatory role of blister fluid-derived exosomes in bullous pemphigoid. *J Pathol* . 2018 May;245(1):114-125
 80. Shao T, Shi W, Zheng JY, Xu XX, Lin AF, Xiang LX, Shao JZ. Costimulatory Function of Cd58/Cd2 Interaction in Adaptive Humoral Immunity in a Zebrafish Model. *Front Immunol* . 2018 May 31;9:1204
 81. Sheng D, Liu T, Deng L, Zhang L, Li X, Xu J, Hao L, Li P, Ran H, Chen H, Wang Z. Perfluorooctyl bromide & indocyanine green co-loaded nanoliposomes for enhanced multimodal imaging-guided phototherapy. *Biomaterials*. 2018 May;165:1-13
 82. Ma JX, Li JY, Fan DD, Feng W, Lin AF, Xiang LX, Shao JZ. Identification of DEAD-Box RNA Helicase DDX41 as a Trafficking Protein That Involves in Multiple Innate Immune Signaling Pathways in a Zebrafish Model. *Front Immunol* . 2018 Jun 11;9:1327
 83. Yang D, Qiu J, Xu N, Zhao Y, Li T, Ma Q, Huang J, Wang G. Mussel adhesive protein fused with VE-cadherin domain specifically triggers endothelial cell adhesion. *J Mater Chem B*. 2018 Jun 28;6(24):4151-4163
 84. Liu Y, Zhang P, Wang W, Dong M, Wang M, Gong C, Jia Z, Liu Z, Zhang A, Wang L, Song L. A DM9-containing protein from oyster *Crassostrea gigas* (CgDM9CP-2) serves as a multipotent pattern recognition receptor. *Dev Comp Immunol* . 2018 Jul;84:315-326
 85. Bao C, Yang Y, Huang H, Ye H. Inhibitory Role of the Mud Crab Short Neuropeptide F in Vitellogenesis and Oocyte Maturation via Autocrine/Paracrine Signaling. *FRONT ENDOCRINOL* . 2018 Jul 13;9:390
 86. Zhou W, Zhang Y, Zeng Y, Peng M, Li H, Sun S, Ma B, Wang Y, Ye M, Liu J. Screening and characterization of an Annexin A2 binding aptamer that inhibits the proliferation of myeloma cells. *Biochimie* . 2018 Aug;151:150-158
 87. Zhang Z, Qian H, Huang J, Sha H, Zhang H, Yu L, Liu B, Hua D, Qian X. Anti-EGFR-IRGD recombinant protein modified biomimetic nanoparticles loaded with gambogic acid to enhance targeting and antitumor ability in colorectal cancer treatment. *INT J NANOMED* . 2018 Aug 31;13:4961-4975
 88. Li M, Liu Y, Chen J, Liu T, Gu Z, Zhang J, Gu X, Teng G, Yang F, Gu N. Platelet bio-nanobubbles as microvascular recanalization nanoformulation for acute ischemic stroke lesion theranostics. *Theranostics* . 2018 Sep 9;8(18):4870-4883
 89. Shen S, Li Y, Xiao Y, Zhao Z, Zhang C, Wang J, Li H, Liu F, He N, Yuan Y, Liu Y, Guo S, Wang Y, Liao W, Liao Y, Chen Y, Bin J. Folate-conjugated nanobubbles selectively target and kill cancer cells via ultrasound-triggered intracellular explosion. *Biomaterials* . 2018 Oct;181:293-306
 90. Zhu L, Wang L, Liu Y, Xu D, Fang K, Guo Y. CAIX aptamer-functionalized targeted nanobubbles for ultrasound molecular imaging of various tumors. *INT J NANOMED* . 2018 Oct 16;13:6481-6495
 91. Chen WC, Liu L, Shen YF, Hu Y, Ling F, Wang GX, Zhu B. A new coumarin derivative plays a role in rhabdoviral clearance by interfering glycoprotein function during the early stage of viral infection. *Cell Signal* . 2018 Nov;51:199-210
 92. Huang L, Xiao L, Jung Poudel A, Li J, Zhou P, Gauthier M, Liu H, Wu Z, Yang G. Porous chitosan microspheres as microcarriers for 3D cell culture. *CARBOHYD POLYM* . 2018 Dec 15;202:611-620
 93. Deng W, Wang H, Wu B, Zhang X. Selenium-layered nanoparticles serving for oral delivery of phytomedicines with hypoglycemic activity to synergistically potentiate the antidiabetic effect. *Acta Pharm Sin B* . 2019 Jan;9(1):74-86
 94. Zuo R, Liu M, Wang Y, Li J, Wang W, Wu J, Sun C, Li B, Wang Z, Lan W, Zhang C, Shi C, Zhou Y. BM-MSC-derived exosomes alleviate radiation-induced bone loss by restoring the function of recipient BM-MSCs and activating Wnt/ β -catenin signaling. *Stem Cell Res Ther*. 2019 Jan 15;10(1):30
 95. Jiang H, Li C. Common Pathogenesis of Acne Vulgaris and Atherosclerosis. *Inflammation*. 2019 Feb;42(1):1-5
 96. Zhi H, Wu JP, Lu LM, Zhang XM, Chen XY, Wu SK, Tao J, Mai BX. Decarbromodiphenyl ether (BDE-209) promotes monocyte-endothelial adhesion in cultured human aortic endothelial cells through upregulating intercellular adhesion molecule-1. *Environ Res*. 2019 Feb;169:62-71
 97. Hu Y, Liu L, Li B, Shen Y, Wang GX, Zhu B. Synthesis of arctigenin derivatives against infectious hematopoietic necrosis virus. *Eur J Med Chem*. 2019 Feb 1;163:183-194
 98. Ren Y, Liu SF, Nie L, Cai SY, Chen J. Involvement of ayu NOD2 in NF- κ B and MAPK signaling pathways: Insights into functional conservation of NOD2 in antibacterial innate immunity. *Zool Res*. 2019 Mar 18;40(2):77-88
 99. Zhu F, Tang X, Xiao S, Wang H, Zhang Y, Shao Y, Tang F, Chen S, Bai X. The role of *Bombyx mori* Bmtutl-519 protein in the infection of BmN cells by *Nosema bombycis*. *Dev Comp Immunol*. 2019 Mar;92:283-290
 100. Wang T, Liang J, Xiang X, Yuan J, Chen X, Xiang X, Yang J. Functional identification and expression responses of large yellow croaker (*Larimichthys crocea*) interleukin-8 and its receptor. *FISH SHELLFISH IMMUN*. 2019 Apr;87:470-477
 101. Xu L, Tang C, Li X, Li X, Yang H, Mao R, He J, Li W, Liu J, Li Y, Shi S, Xiao X, Wang X. Ligand fishing with cellular membrane-coated cellulose filter paper: a new method for screening of potential active compounds from natural products. *Anal Bioanal Chem*. 2019 Apr;411(10):1989-2000
 102. Song J, Zhang N, Zhang L, Yi H, Liu Y, Li Y, Li X, Wu M, Hao L, Yang Z, Wang Z. IR780-loaded folate-targeted nanoparticles for near-infrared fluorescence image-guided surgery and photothermal therapy in ovarian cancer. *INT J NANOMED*. 2019 Apr 18;14:2757-2772
 103. Hu Y, Shen Y, Li B, Wang GX, Zhu B. Evaluation on the antiviral activity of ribavirin against infectious hematopoietic necrosis virus in epithelioma papulosum cyprini cells. *Virus Res*. 2019 Apr 2;263:73-79
 104. Zhou B, Jiang Q, Xiao X, Xu X, Xu Y, Kong Y, Zhang W, Zeng Y, Liu X, Luo B. Assisting anti-PD-1 antibody treatment with a liposomal system capable of recruiting immune cells. *Nanoscale*. 2019 Apr 23;11(16):7996-8011
 105. Chen Y, Yin YW, Zhao Y, Wu XY, Young K, Song WT, Xia XB, Wen D. Differentiation of human embryonic stem cells derived mesenchymal stem cells into corneal epithelial cells after being seeded on decellularized SMILE-derived lenticules. *INT J OPHTHALMOL-CH*. 2019 May 18;12(5):717-724
 106. Fei X, Wang J, Chen C, Ding B, Fu X, Chen W, Wang C, Xu R. Eupatilin inhibits glioma proliferation, migration, and invasion by arresting cell cycle at G1/S phase and disrupting the cytoskeletal structure. *Cancer Manag Res*. 2019 May 24;11:4781-4796
 107. Zhang J, Chen Y, Deng C, Zhang L, Sun Z, Wang J, Yang Y, Lv Q, Han W, Xie M. The Optimized Fabrication of a Novel Nanobubble for Tumor Imaging. *Front Pharmacol*. 2019 May 31;10:610
 108. Shao S, Fang H, Zhang J, Jiang M, Xue K, Ma J, Zhang J, Lei J, Zhang Y, Li B, Yuan X, Dang E, Wang G. Neutrophil exosomes enhance the skin autoinflammation in generalized pustular psoriasis via activating keratinocytes. *FASEB J*. 2019 Jun;33(6):6813-6828
 109. Liu J, Chen X, Dou M, He H, Ju M, Ji S, Zhou J, Chen C, Zhang D, Miao C, Song Y. Particulate matter disrupts airway epithelial barrier via oxidative stress to promote *Pseudomonas aeruginosa* infection. *J Thorac Dis*. 2019 Jun;11(6):2617-2627. (IF 2.046)
 110. Xia Y, He W, Li J, Zeng L, Chen T, Liao Y, Sun W, Lan J, Zhuo S, Zhang J, Yang H, Chen

- J. Acridone Derivate Simultaneously Featuring Multiple Functions and Its Applications. *Anal Chem.* 2019 Jul 2;91(13):8406-8414
111. Zhou Q, Zeng Y, Xiong Q, Zhong S, Li P, Ran H, Yin Y, Reutlingsperger C, Prinze FW, Ling Z. Construction of CNA35 Collagen-Targeted Phase-Changeable Nanoagents for Low-Intensity Focused Ultrasound-Triggered Ultrasound Molecular Imaging of Myocardial Fibrosis in Rabbits. *ACS APPL MATER INTER.* 2019 Jul 3;11(26):23006-23017
 112. Li Y, Hao L, Liu F, Yin L, Yan S, Zhao H, Ding X, Guo Y, Cao Y, Li P, Wang Z, Ran H, Sun Y. Cell penetrating peptide-modified nanoparticles for tumor targeted imaging and synergistic effect of sonodynamic/HIFU therapy. *INT J NANOMED.* 2019 Jul 29;14:5875-5894
 113. Tan W, Zhang Y, Li M, Zhu X, Yang X, Wang J, Zhang S, Zhu W, Cao J, Yang H, Zhang L. miR-27a-containing Exosomes Secreted by Irradiated Skin Keratinocytes Delayed the Migration of Unirradiated Skin Fibroblasts. *Int J Biol Sci.* 2019 Aug 19;15(10):2240-2255
 114. Yu Y, Zhang L, Chen Y, Li Y, Wang Z, Li G, Wang G, Xin J. GroEL Protein (Heat Shock Protein 60) of *Mycoplasma gallisepticum* Induces Apoptosis in Host Cells by Interacting with Annexin A2. *Infect Immun.* 2019 Aug 21;87(9). pii: e00248-19
 115. Liu PY, Zhang Z, Liu Y, Tang XL, Shu S, Bao XY, Zhang Y, Gu Y, Xu Y, Cao X. TMEM16A Inhibition Preserves Blood-Brain Barrier Integrity After Ischemic Stroke. *Front Cell Neurosci.* 2019 Aug 6;13:360
 116. Pang Z, Lü Z, Wang M, Gong L, Liu B, Jiang L, Liu L. Characterization, relative abundances of mRNA transcripts, and subcellular localization of two forms of membrane progesterin receptors (mPRs) in the common Chinese cuttlefish, *Sepiella japonica*. *Anim Reprod Sci.* 2019 Sep;208:106107
 117. Hu Y, Chen WC, Shen YF, Zhu B, Wang GX. Synthesis and antiviral activity of a new arctigenin derivative against IHNV in vitro and in vivo. *FISH SHELLFISH IMMUN.* 2019 Sep;92:736-745
 118. Liu J, Chen Y, Wang G, Jin Q, Sun Z, Lv Q, Wang J, Yang Y, Zhang L, Xie M. Improving acute cardiac transplantation rejection therapy using ultrasound-targeted FK506-loaded microbubbles in rats. *BIOMATER SCI-UK.* 2019 Sep 1;7(9):3729-3740
 119. Yao B, Hu T, Cui X, Song W, Fu X, Huang S. Enzymatically degradable alginate/gelatin bioink promotes cellular behavior and degradation in vitro and in vivo. *Biofabrication.* 2019 Sep 18;11(4):045020
 120. Zhang Y, Zhong Y, Ye M, Xu J, Liu J, Zhou J, Wang S, Guo D, Wang Z, Ran H. Polydopamine-modified dual-ligand nanoparticles as highly effective and targeted magnetic resonance/photoacoustic dual-modality thrombus imaging agents. *INT J NANOMED.* 2019 Sep 3;14:7155-7171
 121. Qi J, Chen Y, Xue T, Lin Y, Huang S, Cao S, Wang X, Su Y, Lin Z. Graphene oxide-based magnetic nanocomposites for the delivery of melittin to cervical cancer HeLa cells. *Nanotechnology.* 2019 Oct 23;31(6):065102
 122. Wan Z, Chen X, Gao X, Dong Y, Zhao Y, Wei M, Fan W, Yang G, Liu L. Chronic myeloid leukemia-derived exosomes attenuate adipogenesis of adipose derived mesenchymal stem cells via transporting miR-92a-3p. *J Cell Physiol.* 2019 Nov;234(11):21274-21283
 123. Li CZ, Lin YX, Huang TC, Pan JY, Wang GX. Receptor-Interacting Protein Kinase 1 Promotes Cholangiocarcinoma Proliferation And Lymphangiogenesis Through The Activation Protein 1 Pathway. *ONCOTARGETS THER.* 2019 Nov 1;12:9029-9040
 124. Zhang X, Ma Y, Fu S, Zhang A. Facile Synthesis of Water-Soluble Fullerene (C60) Nanoparticles via Mussel-Inspired Chemistry as Efficient Antioxidants. *Nanomaterials (Basel).* 2019 Nov 20;9(12). pii: E1647.
 125. Chen Y, Xu LQ, Lin MJ, Zhang W, Zhang ZJ, Xu WC, Yang LJ, Wei CJ. An improved cellular enucleation method with extracellular matrix and colchicine facilitates the study of nucleocytoplasmic interaction. *Eur J Cell Biol.* 2019 Dec;98(5-8):151045
 126. Wang T, Liang J, Xiang X, Chen X, Zhang B, Zhou N, Huang W, Yang J. Pharmacological characterization, cellular localization and expression profile of NPY receptor subtypes Y2 and Y7 in large yellow croaker, *Larimichthys crocea*. *COMP BIOCHEM PHYS B.* 2019 Dec;238:110347
 127. Jiang M, Fang H, Shao S, Dang E, Zhang J, Qiao P, Yang A, Wang G. Keratinocyte exosomes activate neutrophils and enhance skin inflammation in psoriasis. *FASEB J.* 2019 Dec;33(12):13241-13253
 128. Zeng Z, Qi D, Yang L, Liu J, Tang Y, Chen H, Feng X. Stimuli-responsive self-assembled dendrimers for oral protein delivery. *J Control Release.* 2019 Dec 10;315:206-213
 129. Wang X, Qiao D, Chen L, Xu M, Chen S, Huang L, Wang F, Chen Z, Cai J, Fu L. Chemotherapeutic drugs stimulate the release and recycling of extracellular vesicles to assist cancer cells in developing an urgent chemoresistance. *Mol Cancer.* 2019 Dec 12;18(1):182
 130. Xiaowen Zhong, Mei Zhang, Zedan Tian, Qi Wang, Zhigang Wang. The Study of Enhanced High-Intensity Focused Ultrasound Therapy by Sonodynamic N 2 O Microbubbles. *Nanoscale Res Lett.* 2019 Dec 16;14(1):381.;doi: 10.1186/s11671-019-3219-0
 131. Xueying Zhou, Zhelong Li, Wenqi Sun, Guodong Yang, Changyang Xing, Lijun Yuan. Delivery Efficacy Differences of Intravenous and Intraperitoneal Injection of Exosomes: Perspectives from Tracking Dye Labeled and MiRNA Encapsulated Exosomes. *Curr Drug Deliv.* 2020;17(3):186-194.;doi: 10.2174/1567201817666200122163251
 132. Yang C, Zhang Y, Luo Y, Qiao B, Wang X, Zhang L, Chen Q, Cao Y, Wang Z, Ran H. Dual ultrasound-activatable nanodroplets for highly-penetrative and efficient ovarian cancer theranostics. *J Mater Chem B.* 2020 Jan 22;8(3):380-390
 133. Jianfei Ji, Zhiwei Liao, Youliang Rao, Wenqian Li, Chunrong Yang, Gailing Yuan, Hao Feng, Zhen Xu, Jianzhong Shao, Jianguo Su. Thoroughly Remold the Localization and Signaling Pathway of TLR2. *Front Immunol.* 2020 Jan 17;10:3003.;doi: 10.3389/fimmu.2019.03003
 134. Yusi Bu, Qi Hu, Xiaolin Zhang, Ting Li, Xiaoyu Xie, Sicen Wang. A novel cell membrane-cloaked magnetic nanogripper with enhanced stability for drug discovery. *BIOMATER SCI-UK.* 2020 Jan 21;8(2):673-681.;doi: 10.1039/c9bm01411
 135. Dayong Chen, Hai Qiao, Yiting Wang, Ling Zhou, Na Yin, Liaoqiong Fang, Zhibiao Wang. Adenomyosis-derived extracellular vesicles endow endometrial epithelial cells with an invasive phenotype through epithelial-mesenchymal transition. *Genes & Diseases.* 2020 Jan 23;7(4):636-648.;doi: 10.1016/j.gendis.2020.01.011.
 136. Xiaozhen Liu, Tao Jiang, Xuefei Li, Chao Zhao, Jiayu Li, Fei Zhou, Limin Zhang, Sha Zhao, Yijun Jia, Jinpeng Shi, Guanghui Gao, Wei Li, Jing Zhao, Xiaoxia Chen, Chunxia Su, Shengxiang Ren, Caicun Zhou. Exosomes transmit T790M mutation-induced resistance in EGFR-mutant NSCLC by activating PI3K/AKT signalling pathway. *J Cell Mol Med.* 2020 Jan;24(2):1529-1540.;doi: 10.1111/jcmm.14838
 137. Lin M, Guo W, Zhang Z, Zhou Y, Chen J, Wang T, Zhong X, Lu Y, Yang Q, Wei Q, Han M, Xu D, Gao J. Reduced Toxicity of Liposomal Nitrogen Mustard Prodrug Formulation Activated by an Intracellular ROS Feedback Mechanism in Hematological Neoplasm Models. *MOL PHARMACOL.* 2020 Feb 3;17(2):499-506
 138. Kegan Lin, Yanbing Cao, Dongye Zheng, Qin Li, Hui Liu, Peiwen Yu, Jiong Li, Yanan Xue, Ming Wu. Facile phase transfer of hydrophobic Fe 3 O 4 @Cu 2-x S nanoparticles by red blood cell membrane for MRI and phototherapy in the second near-infrared window. *J Mater Chem B.* 2020 Feb 14;8(6):1202-1211.;doi: 10.1039/c9tb02766a
 139. Yinglu Liu, Chunfu Wu, Zongjuan Hou, Xiaoxiao Fu, Linlin Yuan, Shibo Sun, Haotian Zhang, Depeng Yang, Xuechun Yao, Jingyu Yang. Pseudoginsenoside-F11 Accelerates Microglial Phagocytosis of Myelin Debris and Attenuates Cerebral Ischemic Injury Through Complement Receptor 3. *Neuroscience.* 2020 Feb 1;426:33-49.;doi: 10.1016/j.neuroscience.2019.11.010
 140. Li P, Yang X, Yang Y, He H, Chou CK, Chen F, Pan H, Liu L, Cai L, Ma Y, Chen X. Synergistic effect of all-trans-retinal and triptolide encapsulated in an inflammation-targeted nanoparticle on collagen-induced arthritis in mice. *J Control Release.* 2020 Mar 10;319:87-103
 141. Xue Tian, Hong Liao, Min Wang, Lingyan Feng, Wensheng Fu, Lianzhe Hu. Highly sensitive chemiluminescent sensing of intracellular Al 3+ based on the phosphatase mimetic activity of cerium oxide nanoparticles. *Biosens Bioelectron.* 2020 Mar 15;152:112027.;doi: 10.1016/j.bios.2020.112027
 142. Yunfei Wang, Guoping Sun, Yingying Gong, Yuying Zhang, Xiaofei Liang, Linqing Yang. Functionalized Folate-Modified Graphene Oxide/PEI siRNA Nanocomplexes for Targeted Ovarian Cancer Gene Therapy. *Nanoscale Res Lett.* 2020 Mar

- 6;15(1):57.;doi: 10.1186/s11671-020-3281-7
143. Di Wang, Changfu Hao, Lin Zhang, Jianhui Zhang, Suna Liu, Yiping Li, Yaqian Qu, Youliang Zhao, Ruoxuan Huang, Jingjing Wei, Wu Yao. Exosomal miR-125a-5p derived from silica-exposed macrophages induces fibroblast transdifferentiation *ECOTOX ENVIRON SAFE*. 2020 Apr 1;192:110253.;doi: 10.1016/j.ecoenv.2020.110253
 144. Zhiping Yu, Ming Hu, Zhouquan Li, Dan Xu, Lianhua Zhu, Yanli Guo, Qiuli Liu, Weihua Lan, Jun Jiang, Luofu Wang. Anti-G250 nanobody-functionalized nanobubbles targeting renal cell carcinoma cells for ultrasound molecular imaging *Nanotechnology*. 2020 May 15;31(20):205101.;doi: 10.1088/1361-6528/ab7040
 145. Zhen Sun, Lihua Li, Lili Zhang, Jinchuan Yan, Chen Shao, Zhengyang Bao, Jia Liu, Yalan Li, Mengxue Zhou, Lina Hou, Lele Jing, Qiwen Pang, Yue Geng, Xiang Mao, Wen Gu, Zhongqun Wang. Macrophage galectin-3 enhances intimal translocation of vascular calcification in diabetes mellitus *AM J PHYSIOL-HEART C*. 2020 May 1;318(5):H1068-H1079.;doi: 10.1152/ajpheart.00690.2019
 146. Xilu Hu, Ting Huang, Hong Liao, Lianzhe Hu, Min Wang. The phosphatase-like activity of zirconium oxide nanoparticles and their application in near-infrared intracellular imaging *J Mater Chem B*. 2020 May 27;8(20):4428-4433.;doi: 10.1039/d0tb00450b
 147. Ling Sun, Wenwu Zhu, Pengcheng Zhao, Jian Zhang, Yao Lu, Yeqian Zhu, Wei Zhao, Yaowu Liu, Qiushi Chen, Fengxiang Zhang. Down-Regulated Exosomal MicroRNA-221 - 3p Derived From Senescent Mesenchymal Stem Cells Impairs Heart Repair *Front Cell Dev Biol*. 2020 May 5;8:263.;doi: 10.3389/fcell.2020.00263
 148. Pei Wang, Fuquan Jiang, Biaoqi Chen, Hanxiao Tang, Xiaojiao Zeng, Duanhua Cai, Mingzhi Zhu, Ruimin Long, Dayun Yang, Ranjith Kumar Kankala, Shibin Wang, Yuangang Liu. Bioinspired red blood cell membrane-encapsulated biomimetic nanoconstructs for synergistic and efficacious chemo-photothermal therapy *COLLOID SURFACE B*. 2020 May;189:110842.;doi: 10.1016/j.colsurfb.2020.110842
 149. Shichen Xu, Jie Pan, Xian Cheng, Jiangxia Zheng, Xiaowen Wang, Haixia Guan, Huixin Yu, Jiandong Bao, Li Zhang. Diallyl trisulfide, a H₂S donor, inhibits cell growth of human papillary thyroid carcinoma KTC-1 cells through a positive feedback loop between H₂S and cystathionine-gamma-lyase *Phytother Res*. 2020 May;34(5):1154-1165.;doi: 10.1002/ptr.6586
 150. Mengzhu Wang, Zhigang Wang, Bin Qiao, Jin Cao, Luya Quan, Yuanli Luo, Hanwen Qi, Xiaowen Zhong, Yubei He, Xianquan Zhang, Lan Hao. Inhibited Metastasis and Amplified Chemotherapeutic Effects by Epigene-Transfection Based on a Tumor-Targeting Nanoparticle *INT J NANOMED*. 2020 Jun 23;15:4483-4500.;doi: 10.2147/IJN.S247567
 151. Zhi-Fei Liu, Jian-Fei Ji, Xiao-Feng Jiang, Tong Shao, Dong-Dong Fan, Xin-Hang Jiang, Ai-Fu Lin, Li-Xin Xiang, Jian-Zhong Shao. Characterization of cGAS homologs in innate and adaptive mucosal immunities in zebrafish gives evolutionary insights into cGAS-STING pathway *FASEB J*. 2020 Jun;34(6):7786-7809.;doi: 10.1096/fj.201902833R
 152. Qiongchao Jiang, Yunting Zeng, Yanni Xu, Xiaoyun Xiao, Hejun Liu, Boyang Zhou, Yao Kong, Phei Er Saw, Baoming Luo. Ultrasound Molecular Imaging as a Potential Non-invasive Diagnosis to Detect the Margin of Hepatocarcinoma via CSF-1R Targeting *Front Bioeng Biotechnol*. 2020 Jul 14;8:783.;doi: 10.3389/fbioe.2020.00783.
 153. Bo Zhang, Xinhai Mo, Fei Yu, Yuqin Ma, Fei Yan. Ultrasound monitoring of magnet-guided delivery of mesenchymal stem cells labeled with magnetic lipid-polymer hybrid nanobubbles *BIOMATER SCI-UK*. 2020 Jul 7;8(13):3628-3639.;doi: 10.1039/d0bm00473a
 154. Kai Zheng, Jingxin Ma, Yifei Wang, Zhenan He, Kejun Deng. Sulforaphane Inhibits Autophagy and Induces Exosome-Mediated Paracrine Senescence via Regulating mTOR/TFE3 *Mol Nutr Food Res*. 2020 Jul;64(14):e1901231.;doi: 10.1002/mnfr.201901231
 155. Feifei Li, Lei Zhan, Qian Dong, Qiwei Wang, Yuanhe Wang, Xiaoyan Li, Yong Zhang, Jingdong Zhang. Tumor-Derived Exosome-Educated Hepatic Stellate Cells Regulate Lactate Metabolism of Hypoxic Colorectal Tumor Cells via the IL-6/STAT3 Pathway to Confer Drug Resistance *ONCOTARGETS THER*. 2020 Aug 7;13:7851-7864.;doi: 10.2147/OTT.S253485
 156. Sheng Bai, Jintang Liao, Bo Zhang, Min Zhao, Baiyang You, Pan Li, Haitao Ran, Zhigang Wang, Ruizheng Shi, Guogang Zhang. Multimodal and multifunctional nanoparticles with platelet targeting ability and phase transition efficiency for the molecular imaging and thrombolysis of coronary microthrombi *BIOMATER SCI-UK*. 2020 Sep 15;8(18):5047-5060.;doi: 10.1039/d0bm00818d
 157. Xinnong Liu, Chengjia Qu, Yongbao Zhang, Jie Fang, Lequn Teng, Rujiao Zhang, Xiangyu Zhang, Chenyang Shen. Chemokine-like factor 1 (CKLF1) aggravates neointimal hyperplasia through activating the NF- κ B /VCAM-1 pathway *FEBS Open Bio*. 2020 Sep;10(9):1880-1890.;doi: 10.1002/2211-5463.12942
 158. Zhen Wang, Chenghui Yang, Lili Li, Zhigang Zhang, Jun Pan, Ke Su, Wuzhen Chen, Jinfan Li, Fuming Qiu, Jian Huang. CD62L^{dim} Neutrophils Specifically Migrate to the Lung and Participate in the Formation of the Pre-Metastatic Niche of Breast Cancer *Front Oncol*. 2020 Oct 15;10:540484.;doi: 10.3389/fonc.2020.540484
 159. Shan Zhang, Na Di, Baihetiya Tayier, Lina Guan, Guodong Wang, Hanbing Lu, Fei Yan, Yuming Mu. Early evaluation of survival of the transplanted ovaries through ultrasound molecular imaging via targeted nanobubbles *BIOMATER SCI-UK*. 2020 Oct 7;8(19):5402-5414.;doi: 10.1039/d0bm01125h
 160. Ning Zhang, Yanan Song, Zheyong Huang, Jing Chen, Haipeng Tan, Hongbo Yang, Mengkang Fan, Qiyu Li, Qiaozhi Wang, Jinfeng Gao, Zhiqing Pang, Juying Qian, Junbo Ge. Monocyte mimics improve mesenchymal stem cell-derived extracellular vesicle homing in a mouse MI/RI model *Biomaterials*. 2020 Oct;255:120168.;doi: 10.1016/j.biomaterials.2020.120168
 161. Wangxi Hai, Xiao Bao, Kang Sun, Biao Li, Jinliang Peng, Yuhong Xu. The Labeling, Visualization, and Quantification of Hyaluronan Distribution in Tumor-Bearing Mouse Using PET and MR Imaging *PHARM RES-DORDR*. 2020 Nov 4;37(12):237.;doi: 10.1007/s11095-020-02957-y
 162. Xiaolin Liu, Xin Li, Wenwu Zhu, Yuelin Zhang, Yimei Hong, Xiaoting Liang, Baohan Fan, Hongyan Zhao, Haiwei He, Fengxiang Zhang. Exosomes from mesenchymal stem cells overexpressing MIF enhance myocardial repair *J Cell Physiol*. 2020 Nov;235(11):8010-8022.;doi: 10.1002/jcp.29456
 163. Biao Yang, Jingyu Wang, Hongye Jiang, Huixian Lin, Zihao Ou, Amir Ullah, Yuneng Hua, Juanjiang Chen, Xiaomin Lin, Xiumei Hu, Lei Zheng, Qian Wang. Extracellular Vesicles Derived From *Talaromyces marneffe* Yeasts Mediate Inflammatory Response in Macrophage Cells by Bioactive Protein Components *Front Microbiol*. 2021 Jan 8;11:603183.;doi: 10.3389/fmicb.2020.603183
 164. Yunnan Liu, Yixiao Wang, Chen Wang, Ruijing Shi, Xueying Zhou, Zhelong Li, Wenqi Sun, Lianbi Zhao, Lijun Yuan. Maternal obesity increases the risk of fetal cardiac dysfunction via visceral adipose tissue derived exosomes *Placenta*. 2021 Feb;105:85-93.;doi: 10.1016/j.placenta.2021.01.020
 165. Qiang Tan, Shuang Shi, Jingjie Liang, Dingren Cao, Shaoyu Wang, Zhengguang Wang. Endometrial cell-derived small extracellular vesicle miR-100-5p promotes functions of trophoblast during embryo implantation. *Mol Ther Nucleic Acids*. doi: 10.1016/j.omtn.2020.10.043.
 166. Wenqian Geng, Hao Zou, Hongbo Wang, Yu Dai, Guangzhao Lu, Zhiguo Sun, Ying Lu, Xueying Ding, Yuan Yu. Dual-triggered biomimetic vehicles enable treatment of glioblastoma through a cancer stem cell therapeutic strategy. *Nanoscale*. doi: 10.1039/d0nr08899d.
 167. Wenting Ni, Hui Fan, Xiuqin Zheng, Fangming Xu, Yuanyuan Wu, Xiaoman Li, Aiyun Wang, Shile Huang, Wenxing Chen, Shijun Wang, Yin Lu. Cryptotanshinone Inhibits ER α -Dependent and -Independent BCRP Oligomer Formation to Reverse Multidrug Resistance in Breast Cancer. *Front Oncol*. doi: 10.3389/fonc.2021.624811.
 168. Tong Liu, Yutian Hu, Nan Chen, Qiaochong He, Chuanping Feng. High redox potential promotes oxidation of pyrite under neutral conditions: Implications for optimizing pyrite autotrophic denitrification. *J Hazard Mater*. doi: 10.1016/j.jhazmat.2021.125844.

169. Jie Zhou, Qifan Yang, Lisen Lu, Zhan Tuo, Zhexing Shou, Jing Cheng. PLK1 Inhibition Induces Immunogenic Cell Death and Enhances Immunity against NSCLC. *Int J Med Sci*. doi: 10.7150/ijms.60135.
170. Yanwen Li, Yang Yu, Zheng Xie, Xiaomin Ye, Xiaoyong Liu, Bin Xu, Jianwen Mao. Serum-derived exosomes accelerate scald wound healing in mice by optimizing cellular functions and promoting Akt phosphorylation. *Biotechnol Lett*. doi: 10.1007/s10529-021-03148-4.
171. Hui Li, Yihe Hu, Min Zeng, Junxiao Yang, Xiaolei Fan, Yinan Wang, Jie Xie. Exosomes From Human Urine-Derived Stem Cells Encapsulated Into PLGA Nanoparticles for Therapy in Mice With Particulate Polyethylene-Induced Osteolysis. *Front Med (Lausanne)*. doi: 10.3389/fmed.2021.781449.
172. Jun Zhou, Jingxin Hou, Shuling Liu, Jie Xu, Ying Luo, Jun Zheng, Xin Li, Zhigang Wang, Haitao Ran, Dajing Guo. Theranostic Nanoplatform with Sequential SDT and ADV Effects in Response to Well-Programmed LIFU Irradiation for Cervical Cancer. *Int J Nanomedicine*. doi: 10.2147/IJN.S339257.
173. Haichi Yu, Jun Zhang, Xiaoning Liu, Yingzhi Li. microRNA-136-5p from bone marrow mesenchymal stem cell-derived exosomes facilitates fracture healing by targeting LRP4 to activate the Wnt/ β -catenin pathway. *Bone Joint Res*. doi: 10.1302/2046-3758.1012.BJR-2020-0275.R2.
174. Bowei Li, Xiuli Yi, Tongtian Zhuang, Shaolong Zhang, Shuli Li, Yuqi Yang, Tingting Cui, Jiayi Chen, Yuqian Chang, Tianwen Gao, Chunying Li, Ling Liu. RIP1-Mediated Necroptosis Facilitates Oxidative Stress - Induced Melanocyte Death, Offering Insight into Vitiligo. *J Invest Dermatol*. doi: 10.1016/j.jid.2020.06.042.
175. Fuli Zheng, Zhousong Luo, Xinpei Lin, Wei Wang, Michael Aschner, Ping Cai, Yuan-Liang Wang, Wenya Shao, Guangxia Yu, Zhenkun Guo, Siying Wu, Huangyuan Li. Intercellular transfer of mitochondria via tunneling nanotubes protects against cobalt nanoparticle-induced neurotoxicity and mitochondrial damage. *Nanotoxicology*. doi: 10.1080/17435390.2022.2026515.
176. Yao Qian, Xiaofang Yu, Tianyun Pan, Tian Li, Zikai Zhang, Xuling Lv, Hao Chen, Yucang He, Liqun Li, Ming Lin. Substrate coated with autologous decellularized extracellular matrix facilitates in vitro spreading of spheroid from adipose-derived stem cells through regulating ERK1/2-MMP2/9 pathway. *Cytotechnology*. doi: 10.1007/s10616-021-00497-w.
177. Danli Sheng, Liming Deng, Pan Li, Zhigang Wang, Qunxia Zhang. Perfluorocarbon Nanodroplets with Deep Tumor Penetration and Controlled Drug Delivery for Ultrasound/Fluorescence Imaging Guided Breast Cancer Therapy. *ACS Biomater Sci Eng*. doi: 10.1021/acsbomaterials.0c01333.
178. Xinyu Ge, Qingshu Meng, Lu Wei, Jing Liu, Mimi Li, Xiaoting Liang, Fang Lin, Yuhui Zhang, Yinzhen Li, Zhongmin Liu, Huimin Fan, Xiaohui Zhou. Myocardial ischemia-reperfusion induced cardiac extracellular vesicles harbour proinflammatory features and aggravate heart injury. *J Extracell Vesicles*. doi: 10.1002/jev2.12072.
179. Yu Han, Wei Shi, Yu Tang, Xinguo Zhao, Xueying Du, Shuge Sun, Weishang Zhou, Guangxu Liu. Ocean acidification increases polyspermy of a broadcast spawning bivalve species by hampering membrane depolarization and cortical granule exocytosis. *Aquat Toxicol*. doi: 10.1016/j.aquatox.2020.105740.
180. Wen Zhang, Zhendong Fu, Hongyan Yin, Qingbing Han, Wenhui Fan, Fangkun Wang, Yingli Shang. Macrophage Polarization Modulated by Porcine Circovirus Type 2 Facilitates Bacterial Coinfection. *Front Immunol*. doi: 10.3389/fimmu.2021.688294.
181. Qingwen Zhu, Qicheng Zhang, Miao Gu, Kaiwen Zhang, Tian Xia, Siyu Zhang, Wenhui Chen, Haimeng Yin, Hui Yao, Yue Fan, Si Pan, Haijing Xie, Huiting Liu, Tianyi Cheng, Panpan Zhang, Ting Zhang, Bo You, Yiwen You. MIR106A-5p upregulation suppresses autophagy and accelerates malignant phenotype in nasopharyngeal carcinoma. *Autophagy*. doi: 10.1080/15548627.2020.1781368.
182. Ju Huang, Liang Zhang, Weichen Zhou, Jingxue Wang, Ruo Zhang, Zhigang Wang, Haitao Ran, Pan Li, Rui Li. Dual mitigation of immunosuppression combined with photothermal inhibition for highly effective primary tumor and metastases therapy. *Biomaterials*. doi: 10.1016/j.biomaterials.2021.120856.
183. Yang Liu, Xiao Wang, Jing Li, Jian Tang, Bin Li, Yu Zhang, Ning Gu, Fang Yang. Sphingosine 1-Phosphate Liposomes for Targeted Nitric Oxide Delivery to Mediate Anticancer Effects against Brain Glioma Tumors. *Adv Mater*. doi: 10.1002/adma.202101701.
184. Shiyao Du, Huizi Sha, Naiqing Ding, Ju Yang, Hanqing Qian, Shujuan Zhou, Shu Su, Fanyan Meng, Hong Chen, Fangjun Chen, Lianru Zhang, Baorui Liu, Jia Wei. Lipophilic recombinant-protein insertion endows lymphocytes with enhanced targeting-infiltration ability in EGFR positive cancer. *Cell Immunol*. doi: 10.1016/j.cellimm.2021.104376.
185. Yun Liu, Xiao-Xiang Xu, Ye Cao, Si-Yi Mo, Shan-Shan Bai, Ying-Ying Fan, Xiao-Yu Zhang, Qiu-Fei Xie. 17β -Estradiol Exacerbated Experimental Occlusal Interference-Induced Chronic Masseter Hyperalgesia by Increasing the Neuronal Excitability and TRPV1 Function of Trigeminal Ganglion in Ovariectomized R. *Int J Mol Sci*. doi: 10.3390/ijms22136945.
186. Bin Han, Qiaohong Wei, Fan Wu, Han Hu, Chuan Ma, Lifeng Meng, Xufeng Zhang, Mao Feng, Yu Fang, Olav Rueppell, Jianke Li. Tachykinin signaling inhibits task-specific behavioral responsiveness in honeybee workers. *Elife*. doi: 10.7554/eLife.64830.
187. Jialing Chen, Jieru Xu, Tao Wan, Hongli Deng, Dairong Li. High-Sensitive Detection of Small-Cell Lung Cancer Cells Based on Terminal Deoxynucleotidyl Transferase-Mediated Extension Polymerization Aptamer Probe. *ACS Biomater Sci Eng*. doi: 10.1021/acsbomaterials.0c01633.
188. Bing Zhang, Jing-Wen Yang, Tao Han, De-Xiang Huang, Zi-Hao Zhao, Jia-Qian Feng, Nai-Ming Zhou, Hong-Qing Xie, Tian-Ming Wang. Identification and characterization of a novel 5-hydroxytryptamine receptor in the sea cucumber *Apostichopus japonicus* (Selenka). *J Exp Zool A Ecol Integr Physiol*. doi: 10.1002/jez.2450.
189. Qiting Zhang, Ziyang Wang, Xinyuan Chen, Haoxiang Qiu, Yifan Gu, Ning Wang, Tao Wang, Ze Wang, Huabin Ma, Yufen Zhao, Bin Zhang. 8a, a New Acridine Antiproliferative and Pro-Apoptotic Agent Targeting HDAC1/DNMT1. *Int J Mol Sci*. doi: 10.3390/ijms22115516.
190. Qiang Zheng, Mingzeng Peng, Zhuo Liu, Shuyu Li, Rongcheng Han, Han Ouyang, Yubo Fan, Caofeng Pan, Weiguo Hu, Junyi Zhai, Zhou Li, Zhong Lin Wang. Dynamic real-time imaging of living cell traction force by piezo-phototronic light nano-antenna array. *Sci Adv*. doi: 10.1126/sciadv.abe7738.
191. Wei Wei, Yuanzhu Ma, Xianzhu Zhang, Wenyan Zhou, Hongwei Wu, Jingwei Zhang, Junxin Lin, Chenqi Tang, Youguo Liao, Chenglin Li, Xiaozhao Wang, Xudong Yao, Yi Wen Koh, Wenwen Huang, Hongwei Ouyang. Biomimetic Joint Paint for Efficient Cartilage Repair by Simultaneously Regulating Cartilage Degeneration and Regeneration in Pigs. *ACS Appl Mater Interfaces*. doi: 10.1021/acsaami.1c17629.
192. Cheng Qin, Xin-Lan Bian, Hai-Yin Wu, Jia-Yun Xian, Yu-Hui Lin, Cheng-Yun Cai, Ying Zhou, Xiao-Lin Kou, Ting-You Li, Lei Chang, Chun-Xia Luo, Dong-Ya Zhu. Prevention of the return of extinguished fear by disrupting the interaction of neuronal nitric oxide synthase with its carboxy-terminal PDZ ligand. *Mol Psychiatry*. doi: 10.1038/s41380-021-01118-w.
193. Xiang Liu, Yijia Shao, Jiazichao Tu, Jiapan Sun, Lifu Li, Jun Tao, Jimei Chen. Trimethylamine-N-oxide-stimulated hepatocyte-derived exosomes promote inflammation and endothelial dysfunction through nuclear factor-kappa B signaling. *Ann Transl Med*. doi: 10.21037/atm-21-5043.
194. Meihan Tao, Fang Liang, Jing He, Wei Ye, Rabia Javed, Weizuo Wang, Tianhao Yu, Jun Fan, Xiaohong Tian, Xiaohong Wang, Weijian Hou, Qiang Ao. Decellularized tendon matrix membranes prevent post-surgical tendon adhesion and promote functional repair. *Acta Biomater*. doi: 10.1016/j.actbio.2021.07.038.
195. Si-Yi Xu, Hui-Jie Bian, Shu Shu, Sheng-Nan Xia, Yue Gu, Mei-Juan Zhang, Yun Xu, Xiang Cao. AIM2 deletion enhances blood-brain barrier integrity in experimental ischemic stroke. *CNS Neurosci Ther*. doi: 10.1111/cns.13699.
196. Jiaqian Feng, Tao Han, Yuexing Zhang, Bing Zhang, Dexiang Huang, Tianming Wang, Jingwen Yang. Molecular characterization and biological function of CXCR1 in *Nocardia seriolae*-infected largemouth bass (*Micropterus salmoides*).

- Tissue Cell. doi: 10.1016/j.tice.2021.101551.
197. Shuang Shi, Qiang Tan, Jingjie Liang, Dingren Cao, Shaoyu Wang, Junyong Liang, Kaiyu Chen, Zhengguang Wang. Placental trophoblast cell-derived exosomal microRNA-1290 promotes the interaction between endometrium and embryo by targeting LHX6. *Mol Ther Nucleic Acids*. doi: 10.1016/j.omtn.2021.09.009.
 198. Jing-Ya Yang, Ya-Qin Tan, Gang Zhou. T cell-derived exosomes containing cytokines induced keratinocytes apoptosis in oral lichen planus. *Oral Dis*. doi: 10.1111/odi.13795.
 199. Chuang Yang, Yao Luo, Hao Shen, Min Ge, Jin Tang, Qiaojie Wang, Han Lin, Jianlin Shi, Xianlong Zhang. Inorganic nanosheets facilitate humoral immunity against medical implant infections by modulating immune co-stimulatory pathways. *Nat Commun*. doi: 10.1038/s41467-022-32405-x.
 200. Jun Chen, Tao-Tao Tang, Jing-Yuan Cao, Zuo-Lin Li, Xin Zhong, Yi Wen, An-Ran Shen, Bi-Cheng Liu, Lin-Li Lv. KIM-1 augments hypoxia-induced tubulointerstitial inflammation through uptake of small extracellular vesicles by tubular epithelial cells. *Mol Ther*. doi: 10.1016/j.ymthe.2022.08.013.
 201. Yiting Lei, Yuping Wang, Jieliang Shen, Zhengwei Cai, Chen Zhao, Hong Chen, Xiaoji Luo, Ning Hu, Wenguo Cui, Wei Huang. Injectable hydrogel microspheres with self-renewable hydration layers alleviate osteoarthritis. *Sci Adv*. doi: 10.1126/sciadv.abl6449.
 202. Song Xue, Fan Zhou, Tian Zhao, Huimin Zhao, Xuewei Wang, Long Chen, Jin-Ping Li, Shi-Zhong Luo. Phase separation on cell surface facilitates bFGF signal transduction with heparan sulphate. *Nat Commun*. doi: 10.1038/s41467-022-28765-z.
 203. Zhanqiu Dai, Chen Xia, Tingxiao Zhao, Haoli Wang, Hongsen Tian, Ouyuan Xu, Xunbin Zhu, Jun Zhang, Pengfei Chen. Platelet-derived extracellular vesicles ameliorate intervertebral disc degeneration by alleviating mitochondrial dysfunction. *Mater Today Bio*. doi: 10.1016/j.mtbio.2022.100512.
 204. Yuxin Chen, Lulu Han, Xiaoyan Qiu, Meng Wang, Zheng Chen, Ying Cai, Yong Xin, Yanfang Lv, Ankang Hu, Dafei Chai, Liantao Li, Huizhong Li, Junnian Zheng, Gang Wang. Reassembling of albumin-bound paclitaxel mitigates myelosuppression and improves its antitumoral efficacy via neutrophil-mediated targeting drug delivery. *Drug Deliv*. doi: 10.1080/10717544.2022.2046892.
 205. Zheli Gong, Yanni He, Meijun Zhou, Huijuan Xin, Min Pan, Muhammad Fiaz, Hongmei Liu, Fei Yan. Ultrasound imaging tracking of mesenchymal stem cells intracellularly labeled with biosynthetic gas vesicles for treatment of rheumatoid arthritis. *Theranostics*. doi: 10.7150/thno.66905.
 206. Xiaomei Zhang, Lijia Hou, Fengjie Li, Weiwei Zhang, Chun Wu, Lixin Xiang, Jiuxuan Li, Luping Zhou, Xiaojie Wang, Yang Xiang, Yanni Xiao, Shengwen Calvin Li, Li Chen, Qian Ran, Zhongjun Li. Piezo1-mediated mechanosensation in bone marrow macrophages promotes vascular niche regeneration after irradiation injury. *Theranostics*. doi: 10.7150/thno.64963.
 207. Xiaolin Kou, Jiayun Xian, Zhenquan Huang, Yan Tao, Yuhui Lin, Cheng Qin, Haiyin Wu, Lei Chang, Chunxia Luo, Dongya Zhu. Disrupting the Interaction of nNOS with CAPON Prevents the Reinstatement of Morphine Conditioned Place Preference. *Cereb Cortex*. doi: 10.1093/cercor/bhab234.
 208. Jian Zhang, Yao Lu, Yangming Mao, Yue Yu, Tianyu Wu, Wei Zhao, Yeqian Zhu, Pengcheng Zhao, Fengxiang Zhang. IFN- γ enhances the efficacy of mesenchymal stromal cell-derived exosomes via miR-21 in myocardial infarction rats. *Stem Cell Res Ther*. doi: 10.1186/s13287-022-02984-z.
 209. Libin Hu, Yang Cao, Huaijun Chen, Lei Xu, Qiguo Yang, Hang Zhou, Jianru Li, Qian Yu, Zhangqi Dou, Yin Li, Feng Yan, Fuyi Liu, Gao Chen. The Novel Nrf2 Activator Omaveloxolone Regulates Microglia Phenotype and Ameliorates Secondary Brain Injury after Intracerebral Hemorrhage in Mice. *Oxid Med Cell Longev*. doi: 10.1155/2022/4564471.
 210. Jianhua Gong, Yuying Ji, Xiujun Liu, Yanbo Zheng, Yongsu Zhen. Mithramycin suppresses tumor growth by regulating CD47 and PD-L1 expression. *Biochem Pharmacol*. doi: 10.1016/j.bcp.2021.114894.
 211. Binqing Tang, Yingen Wu, Yada Zhang, Yanqi Cheng, Yuqin Wu, Hong Fang. Scorpion and centipede alleviates severe asthma through M2 macrophage-derived exosomal miR-30b-5p. *Aging (Albany NY)*. doi: 10.18632/aging.204053.
 212. Bo You, Si Pan, Miao Gu, Kaiwen Zhang, Tian Xia, Siyu Zhang, Wenhui Chen, Haijing Xie, Yue Fan, Hui Yao, Tianyi Cheng, Panpan Zhang, Dong Liu, Yiwen You. Extracellular vesicles rich in HAX1 promote angiogenesis by modulating ITGB6 translation. *J Extracell Vesicles*. doi: 10.1002/jev2.12221.
 213. Qifang Niu, Yang Yang, Delong Li, Wenwen Guo, Chong Wang, Haoyue Xu, Zhien Feng, Zhengxue Han. Exosomes Derived from Bone Marrow Mesenchymal Stem Cells Alleviate Ischemia-Reperfusion Injury and Promote Survival of Skin Flaps in Rats. *Life (Basel)*. doi: 10.3390/life12101567.
 214. Ning Su, Chun-Yu Jin, Chong-Bin Hu, Tong Shao, Jian-Fei Ji, Lu-Lu Qin, Dong-Dong Fan, Ai-Fu Lin, Li-Xin Xiang, Jian-Zhong Shao. Extensive involvement of CD40 and CD154 costimulators in multiple T cell-mediated responses in a perciform fish *Larimichthys crocea*. *Dev Comp Immunol*. doi: 10.1016/j.dci.2022.104460.
 215. Junying Liu, Yan Zhou, Chenchen Xie, Ci Li, Li Ma, Yamei Zhang. Anti-Ferroptotic Effects of bone Marrow Mesenchymal Stem Cell-Derived Extracellular Vesicles Loaded with Ferrostatin-1 in Cerebral ischemia-reperfusion Injury Associate with the GPX4/COX-2 Axis. *Neurochem Res*. doi: 10.1007/s11064-022-03770-2.

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