# Sanjay K Nigam

## List of Publications by Citations



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|---|---|---|---|
| 167 papers | 10,150 citations | 61 h-index | 96 g-index |
| 169 ext. papers | 11,095 ext. citations | 7.2 avg, IF | 6.47 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 167 | Eya protein phosphatase activity regulates Six1-Dach-Eya transcriptional effects in mammalian organogenesis. *Nature*, **2003**, 426, 247-54 | 50.4 | 505 |
| 166 | Proteasome inhibition leads to a heat-shock response, induction of endoplasmic reticulum chaperones, and thermotolerance. *Journal of Biological Chemistry*, **1997**, 272, 9086-92 | 5.4 | 361 |
| 165 | Metabolomics reveals signature of mitochondrial dysfunction in diabetic kidney disease. *Journal of the American Society of Nephrology: JASN*, **2013**, 24, 1901-12 | 12.7 | 352 |
| 164 | What do drug transporters really do?. *Nature Reviews Drug Discovery*, **2015**, 14, 29-44 | 64.1 | 303 |
| 163 | The organic anion transporter (OAT) family: a systems biology perspective. *Physiological Reviews*, **2015**, 95, 83-123 | 47.9 | 239 |
| 162 | Impaired organic anion transport in kidney and choroid plexus of organic anion transporter 3 (Oat3 (Slc22a8)) knockout mice. *Journal of Biological Chemistry*, **2002**, 277, 26934-43 | 5.4 | 233 |
| 161 | Molecular cloning and characterization of NKT, a gene product related to the organic cation transporter family that is almost exclusively expressed in the kidney. *Journal of Biological Chemistry* , **1997**, 272, 6471-8 | 5.4 | 203 |
| 160 | HGF-induced tubulogenesis and branching of epithelial cells is modulated by extracellular matrix and TGF-beta. *Developmental Biology*, **1993**, 160, 293-302 | 3.1 | 190 |
| 159 | Involvement of hepatocyte growth factor in kidney development. *Developmental Biology*, **1994**, 163, 525-9 | 3.1 | 184 |
| 158 | Multiple organic anion transporters contribute to net renal excretion of uric acid. *Physiological Genomics*, **2008**, 33, 180-92 | 3.6 | 178 |
| 157 | Decreased renal organic anion secretion and plasma accumulation of endogenous organic anions in OAT1 knock-out mice. *Journal of Biological Chemistry*, **2006**, 281, 5072-83 | 5.4 | 177 |
| 156 | Handling of Drugs, Metabolites, and Uremic Toxins by Kidney Proximal Tubule Drug Transporters. *Clinical Journal of the American Society of Nephrology: CJASN*, **2015**, 10, 2039-49 | 6.9 | 164 |
| 155 | Tight junction proteins form large complexes and associate with the cytoskeleton in an ATP depletion model for reversible junction assembly. *Journal of Biological Chemistry*, **1997**, 272, 16133-9 | 5.4 | 158 |
| 154 | Molecular structure and assembly of the tight junction. *American Journal of Physiology - Renal Physiology*, **1998**, 274, F1-9 | 4.3 | 155 |
| 153 | Molecular characteristics of Na(+)-coupled glucose transporters in adult and embryonic rat kidney. *Journal of Biological Chemistry*, **1995**, 270, 29365-71 | 5.4 | 149 |
| 152 | Impaired Wnt-beta-catenin signaling disrupts adult renal homeostasis and leads to cystic kidney ciliopathy. *Nature Medicine*, **2009**, 15, 1046-54 | 50.5 | 137 |
| 151 | Untargeted metabolomics identifies enterobiome metabolites and putative uremic toxins as substrates of organic anion transporter 1 (Oat1). *Journal of Proteome Research*, **2011**, 10, 2842-51 | 5.6 | 130 |

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|---|---|---|---|
| 150 | Branching morphogenesis and kidney disease. *Development (Cambridge)*, **2004**, 131, 1449-62 | 6.6 | 126 |
| 149 | Adult kidney tubular cell population showing phenotypic plasticity, tubulogenic capacity, and integration capability into developing kidney. *Journal of the American Society of Nephrology: JASN*, **2006**, 17, 188-98 | 12.7 | 123 |
| 148 | Multiple fibroblast growth factors support growth of the ureteric bud but have different effects on branching morphogenesis. *Mechanisms of Development*, **2001**, 109, 123-35 | 1.7 | 123 |
| 147 | Genesis and reversal of the ischemic phenotype in epithelial cells. *Journal of Clinical Investigation*, **2000**, 106, 621-6 | 15.9 | 122 |
| 146 | Folding of secretory and membrane proteins. *New England Journal of Medicine*, **1998**, 339, 1688-95 | 59.2 | 120 |
| 145 | TGF-beta superfamily members modulate growth, branching, shaping, and patterning of the ureteric bud. *Developmental Biology*, **2004**, 266, 285-98 | 3.1 | 115 |
| 144 | Multiple molecular chaperones complex with misfolded large oligomeric glycoproteins in the endoplasmic reticulum. *Journal of Biological Chemistry*, **1997**, 272, 3057-63 | 5.4 | 114 |
| 143 | Involvement of a heterotrimeric G protein alpha subunit in tight junction biogenesis. *Journal of Biological Chemistry*, **1996**, 271, 25750-3 | 5.4 | 112 |
| 142 | Toward a systems level understanding of organic anion and other multispecific drug transporters: a remote sensing and signaling hypothesis. *Molecular Pharmacology*, **2009**, 76, 481-90 | 4.3 | 111 |
| 141 | The organic anion transporter family: from physiology to ontogeny and the clinic. *American Journal of Physiology - Renal Physiology*, **2001**, 281, F197-205 | 4.3 | 108 |
| 140 | Critical role for intracellular calcium in tight junction biogenesis. *Journal of Cellular Physiology*, **1994** , 159, 423-33 | 7 | 103 |
| 139 | The SLC22 Transporter Family: A Paradigm for the Impact of Drug Transporters on Metabolic Pathways, Signaling, and Disease. *Annual Review of Pharmacology and Toxicology*, **2018**, 58, 663-687 | 17.9 | 102 |
| 138 | Spatiotemporal regulation of morphogenetic molecules during in vitro branching of the isolated ureteric bud: toward a model of branching through budding in the developing kidney. *Developmental Biology*, **2004**, 275, 44-67 | 3.1 | 102 |
| 137 | Overlapping in vitro and in vivo specificities of the organic anion transporters OAT1 and OAT3 for loop and thiazide diuretics. *American Journal of Physiology - Renal Physiology*, **2008**, 294, F867-73 | 4.3 | 101 |
| 136 | Key Role for the Organic Anion Transporters, OAT1 and OAT3, in the in vivo Handling of Uremic Toxins and Solutes. *Scientific Reports*, **2017**, 7, 4939 | 4.9 | 100 |
| 135 | Role of tyrosine phosphorylation in the reassembly of occludin and other tight junction proteins. *American Journal of Physiology - Renal Physiology*, **1999**, 276, F737-50 | 4.3 | 99 |
| 134 | Reassembly of the tight junction after oxidative stress depends on tyrosine kinase activity. *Journal of Biological Chemistry*, **2001**, 276, 22048-55 | 5.4 | 98 |
| 133 | Organic anion and cation transporters occur in pairs of similar and similarly expressed genes. *Biochemical and Biophysical Research Communications*, **2003**, 300, 333-42 | 3.4 | 96 |

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|---|---|---|---|
| 132 | Identification of a novel murine organic anion transporter family member, OAT6, expressed in olfactory mucosa. *Biochemical and Biophysical Research Communications*, **2004**, 323, 429-36 | 3.4 | 94 |
| 131 | Developmentally regulated expression of organic ion transporters NKT (OAT1), OCT1, NLT (OAT2), and Roct. *American Journal of Physiology - Renal Physiology*, **2000**, 278, F635-43 | 4.3 | 94 |
| 130 | Remote communication through solute carriers and ATP binding cassette drug transporter pathways: an update on the remote sensing and signaling hypothesis. *Molecular Pharmacology*, **2011**, 79, 795-805 | 4.3 | 90 |
| 129 | Dependence of epithelial intercellular junction biogenesis on thapsigargin-sensitive intracellular calcium stores. *Journal of Biological Chemistry*, **1996**, 271, 13636-41 | 5.4 | 88 |
| 128 | Modulation of HGF-induced tubulogenesis and branching by multiple phosphorylation mechanisms. *Developmental Biology*, **1993**, 159, 535-48 | 3.1 | 86 |
| 127 | A role for the organic anion transporter OAT3 in renal creatinine secretion in mice. *American Journal of Physiology - Renal Physiology*, **2012**, 302, F1293-9 | 4.3 | 85 |
| 126 | Multi-level analysis of organic anion transporters 1, 3, and 6 reveals major differences in structural determinants of antiviral discrimination. *Journal of Biological Chemistry*, **2008**, 283, 8654-63 | 5.4 | 79 |
| 125 | Selective degradation of E-cadherin and dissolution of E-cadherin-catenin complexes in epithelial ischemia. *American Journal of Physiology - Renal Physiology*, **2000**, 278, F847-52 | 4.3 | 77 |
| 124 | Hepatocyte nuclear factors 4 and 1 regulate kidney developmental expression of drug-metabolizing enzymes and drug transporters. *Molecular Pharmacology*, **2013**, 84, 808-23 | 4.3 | 76 |
| 123 | Changes in gene expression patterns in the ureteric bud and metanephric mesenchyme in models of kidney development. *Kidney International*, **2003**, 64, 1997-2008 | 9.9 | 75 |
| 122 | Structural variation governs substrate specificity for organic anion transporter (OAT) homologs. Potential remote sensing by OAT family members. *Journal of Biological Chemistry*, **2007**, 282, 23841-53 | 5.4 | 74 |
| 121 | Novel slc22 transporter homologs in fly, worm, and human clarify the phylogeny of organic anion and cation transporters. *Physiological Genomics*, **2004**, 18, 12-24 | 3.6 | 74 |
| 120 | Involvement of laminin binding integrins and laminin-5 in branching morphogenesis of the ureteric bud during kidney development. *Developmental Biology*, **2001**, 238, 289-302 | 3.1 | 73 |
| 119 | The role of phosphorylation in development of tight junctions in cultured renal epithelial (MDCK) cells. *Biochemical and Biophysical Research Communications*, **1991**, 181, 548-53 | 3.4 | 73 |
| 118 | Identification of pleiotrophin as a mesenchymal factor involved in ureteric bud branching morphogenesis. *Development (Cambridge)*, **2001**, 128, 3283-3293 | 6.6 | 73 |
| 117 | Analyses of coding region polymorphisms in apical and basolateral human organic anion transporter (OAT) genes [OAT1 (NKT), OAT2, OAT3, OAT4, URAT (RST)]. *Kidney International*, **2005**, 68, 1491-9 | 9.9 | 72 |
| 116 | Deletion of multispecific organic anion transporter Oat1/Slc22a6 protects against mercury-induced kidney injury. *Journal of Biological Chemistry*, **2011**, 286, 26391-5 | 5.4 | 68 |
| 115 | The molecular pharmacology of organic anion transporters: from DNA to FDA?. *Molecular Pharmacology*, **2004**, 65, 479-87 | 4.3 | 66 |

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| 114 | Regulation of ureteric bud branching morphogenesis by sulfated proteoglycans in the developing kidney. *Developmental Biology*, **2004**, 272, 310-27 | 3.1 | 66 |
| 113 | Organic anion transporter 3 contributes to the regulation of blood pressure. *Journal of the American Society of Nephrology: JASN*, **2008**, 19, 1732-40 | 12.7 | 65 |
| 112 | Involvement of Galphai2 in the maintenance and biogenesis of epithelial cell tight junctions. *Journal of Biological Chemistry*, **1998**, 273, 21629-33 | 5.4 | 65 |
| 111 | Uraemic syndrome of chronic kidney disease: altered remote sensing and signalling. *Nature Reviews Nephrology*, **2019**, 15, 301-316 | 14.9 | 62 |
| 110 | Analysis of ABCG2 and other urate transporters in uric acid homeostasis in chronic kidney disease: potential role of remote sensing and signaling. *CKJ: Clinical Kidney Journal*, **2016**, 9, 444-53 | 4.5 | 62 |
| 109 | Drug and toxicant handling by the OAT organic anion transporters in the kidney and other tissues. *Nature Clinical Practice Nephrology*, **2007**, 3, 443-8 | | 62 |
| 108 | The drug transporter OAT3 (SLC22A8) and endogenous metabolite communication via the gut-liver-kidney axis. *Journal of Biological Chemistry*, **2017**, 292, 15789-15803 | 5.4 | 61 |
| 107 | Toward an etiological classification of developmental disorders of the kidney and upper urinary tract. *Kidney International*, **2002**, 61, 10-9 | 9.9 | 61 |
| 106 | Constructing kidney-like tissues from cells based on programs for organ development: toward a method of in vitro tissue engineering of the kidney. *Tissue Engineering - Part A*, **2010**, 16, 2441-55 | 3.9 | 58 |
| 105 | In vitro branching tubulogenesis: implications for developmental and cystic disorders, nephron number, renal repair, and nephron engineering. *Kidney International*, **1998**, 54, 14-26 | 9.9 | 58 |
| 104 | Olfactory mucosa-expressed organic anion transporter, Oat6, manifests high affinity interactions with odorant organic anions. *Biochemical and Biophysical Research Communications*, **2006**, 351, 872-6 | 3.4 | 56 |
| 103 | Novel human cDNAs homologous to Drosophila Orct and mammalian carnitine transporters. *Biochemical and Biophysical Research Communications*, **2002**, 297, 1159-66 | 3.4 | 55 |
| 102 | Organic anion transport in choroid plexus from wild-type and organic anion transporter 3 (Slc22a8)-null mice. *American Journal of Physiology - Renal Physiology*, **2004**, 286, F972-8 | 4.3 | 54 |
| 101 | Evolutionary Analysis and Classification of OATs, OCTs, OCTNs, and Other SLC22 Transporters: Structure-Function Implications and Analysis of Sequence Motifs. *PLoS ONE*, **2015**, 10, e0140569 | 3.7 | 53 |
| 100 | The effect of hyaluronic acid size and concentration on branching morphogenesis and tubule differentiation in developing kidney culture systems: potential applications to engineering of renal tissues. *Biomaterials*, **2007**, 28, 4806-17 | 15.6 | 53 |
| 99 | Interaction of organic cations with organic anion transporters. *Journal of Biological Chemistry*, **2009**, 284, 31422-30 | 5.4 | 52 |
| 98 | Functional maturation of drug transporters in the developing, neonatal, and postnatal kidney. *Molecular Pharmacology*, **2011**, 80, 147-54 | 4.3 | 51 |
| 97 | Linkage of organic anion transporter-1 to metabolic pathways through integrated "omics"-driven network and functional analysis. *Journal of Biological Chemistry*, **2011**, 286, 31522-31 | 5.4 | 51 |

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| 96 | Analysis of three-dimensional systems for developing and mature kidneys clarifies the role of OAT1 and OAT3 in antiviral handling. *Journal of Biological Chemistry*, **2011**, 286, 243-51 | 5.4 | 51 |
| 95 | Glial cell-derived neurotrophic factor independent ureteric bud outgrowth from the Wolffian duct. *Journal of the American Society of Nephrology: JASN*, **2007**, 18, 3147-55 | 12.7 | 50 |
| 94 | Intracellular calcium: molecules and pools. *Current Opinion in Cell Biology*, **1992**, 4, 220-6 | 9 | 50 |
| 93 | Developmental approaches to kidney tissue engineering. *American Journal of Physiology - Renal Physiology*, **2004**, 286, F1-7 | 4.3 | 49 |
| 92 | Role of hyaluronan and CD44 in in vitro branching morphogenesis of ureteric bud cells. *Developmental Biology*, **2000**, 224, 312-25 | 3.1 | 49 |
| 91 | Cell-cell dissociation upon epithelial cell scattering requires a step mediated by the proteasome. *Journal of Biological Chemistry*, **1999**, 274, 24579-84 | 5.4 | 49 |
| 90 | Multispecific drug transporter Slc22a8 (Oat3) regulates multiple metabolic and signaling pathways. *Drug Metabolism and Disposition*, **2013**, 41, 1825-34 | 4 | 48 |
| 89 | Beta1-integrin is required for kidney collecting duct morphogenesis and maintenance of renal function. *American Journal of Physiology - Renal Physiology*, **2009**, 297, F210-7 | 4.3 | 48 |
| 88 | Molecular Properties of Drugs Interacting with SLC22 Transporters OAT1, OAT3, OCT1, and OCT2: A Machine-Learning Approach. *Journal of Pharmacology and Experimental Therapeutics*, **2016**, 359, 215-29 | 4.7 | 47 |
| 87 | A strategy for in vitro propagation of rat nephrons. *Kidney International*, **2002**, 62, 1958-65 | 9.9 | 45 |
| 86 | How does the ureteric bud branch?. *Journal of the American Society of Nephrology: JASN*, **2009**, 20, 1465-9 | 12.7 | 43 |
| 85 | Matrix metalloproteinases and their inhibitors regulate in vitro ureteric bud branching morphogenesis. *American Journal of Physiology - Renal Physiology*, **2000**, 279, F891-900 | 4.3 | 43 |
| 84 | The systems biology of uric acid transporters: the role of remote sensing and signaling. *Current Opinion in Nephrology and Hypertension*, **2018**, 27, 305-313 | 3.5 | 42 |
| 83 | Stage-dependent regulation of mammary ductal branching by heparan sulfate and HGF-cMet signaling. *Developmental Biology*, **2011**, 355, 394-403 | 3.1 | 42 |
| 82 | Activin A is an endogenous inhibitor of ureteric bud outgrowth from the Wolffian duct. *Developmental Biology*, **2006**, 295, 473-85 | 3.1 | 42 |
| 81 | Rho kinase acts at separate steps in ureteric bud and metanephric mesenchyme morphogenesis during kidney development. *Differentiation*, **2006**, 74, 638-47 | 3.5 | 42 |
| 80 | Organic anion transport pathways in antiviral handling in choroid plexus in Oat1 (Slc22a6) and Oat3 (Slc22a8) deficient tissue. *Neuroscience Letters*, **2013**, 534, 133-8 | 3.3 | 36 |
| 79 | Growth factor-dependent branching of the ureteric bud is modulated by selective 6-O sulfation of heparan sulfate. *Developmental Biology*, **2011**, 356, 19-27 | 3.1 | 36 |

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| 78 | Selective amplification of protein-coding regions of large sets of genes using statistically designed primer sets. *Nature Biotechnology*, **1996**, 14, 857-61 | 44.5 | 35 |
| 77 | Novel aspects of renal organic anion transporters. *Current Opinion in Nephrology and Hypertension*, **2003**, 12, 551-8 | 3.5 | 34 |
| 76 | A role for intracellular calcium in tight junction reassembly after ATP depletion-repletion. *American Journal of Physiology - Renal Physiology*, **1999**, 277, F524-32 | 4.3 | 34 |
| 75 | Analyses of 5Qregulatory region polymorphisms in human SLC22A6 (OAT1) and SLC22A8 (OAT3). *Journal of Human Genetics*, **2006**, 51, 575-580 | 4.3 | 33 |
| 74 | Loss of the heparan sulfate sulfotransferase, Ndst1, in mammary epithelial cells selectively blocks lobuloalveolar development in mice. *PLoS ONE*, **2010**, 5, e10691 | 3.7 | 32 |
| 73 | Organic anion and cation SLC22 "drug" transporter (Oat1, Oat3, and Oct1) regulation during development and maturation of the kidney proximal tubule. *PLoS ONE*, **2012**, 7, e40796 | 3.7 | 31 |
| 72 | A Network of SLC and ABC Transporter and DME Genes Involved in Remote Sensing and Signaling in the Gut-Liver-Kidney Axis. *Scientific Reports*, **2019**, 9, 11879 | 4.9 | 30 |
| 71 | Development and differentiation of the ureteric bud into the ureter in the absence of a kidney collecting system. *Developmental Biology*, **2006**, 298, 571-84 | 3.1 | 28 |
| 70 | An Organic Anion Transporter 1 (OAT1)-centered Metabolic Network. *Journal of Biological Chemistry*, **2016**, 291, 19474-86 | 5.4 | 27 |
| 69 | Hs2st mediated kidney mesenchyme induction regulates early ureteric bud branching. *Developmental Biology*, **2010**, 339, 354-65 | 3.1 | 27 |
| 68 | Analysis of metagene portraits reveals distinct transitions during kidney organogenesis. *Science Signaling*, **2008**, 1, ra16 | 8.8 | 27 |
| 67 | Implications of gene networks for understanding resilience and vulnerability in the kidney branching program. *Physiology*, **2004**, 19, 339-47 | 9.8 | 27 |
| 66 | The developmental nephrome: systems biology in the developing kidney. *Current Opinion in Nephrology and Hypertension*, **2007**, 16, 3-9 | 3.5 | 26 |
| 65 | Biochemical processing of E-cadherin under cellular stress. *Biochemical and Biophysical Research Communications*, **2003**, 307, 215-23 | 3.4 | 25 |
| 64 | A protein kinase A and Wnt-dependent network regulating an intermediate stage in epithelial tubulogenesis during kidney development. *Developmental Biology*, **2012**, 364, 11-21 | 3.1 | 24 |
| 63 | Gut-derived uremic toxin handling in vivo requires OAT-mediated tubular secretion in chronic kidney disease. *JCI Insight*, **2020**, 5, | 9.9 | 24 |
| 62 | Systems Biology Analysis Reveals Eight SLC22 Transporter Subgroups, Including OATs, OCTs, and OCTNs. *International Journal of Molecular Sciences*, **2020**, 21, | 6.3 | 23 |
| 61 | Analysis of a large cluster of SLC22 transporter genes, including novel USTs, reveals species-specific amplification of subsets of family members. *Physiological Genomics*, **2009**, 38, 116-24 | 3.6 | 22 |

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| 60 | Heregulin induces glial cell line-derived neurotrophic growth factor-independent, non-branching growth and differentiation of ureteric bud epithelia. *Journal of Biological Chemistry*, **2005**, 280, 42181-7 | 5.4 | 22 |
| 59 | Expanding role of G proteins in tight junction regulation: Galpha(s) stimulates TJ assembly. *Biochemical and Biophysical Research Communications*, **2001**, 285, 250-6 | 3.4 | 22 |
| 58 | The instructive role of metanephric mesenchyme in ureteric bud patterning, sculpting, and maturation and its potential ability to buffer ureteric bud branching defects. *American Journal of Physiology - Renal Physiology*, **2009**, 297, F1330-41 | 4.3 | 21 |
| 57 | Organogenesis forum lecture: In vitro kidney development, tissue engineering and systems biology. *Organogenesis*, **2008**, 4, 137-43 | 1.7 | 21 |
| 56 | Unique metabolite preferences of the drug transporters OAT1 and OAT3 analyzed by machine learning. *Journal of Biological Chemistry*, **2020**, 295, 1829-1842 | 5.4 | 21 |
| 55 | Generation of an expandable intermediate mesoderm restricted progenitor cell line from human pluripotent stem cells. *ELife*, **2015**, 4, | 8.9 | 20 |
| 54 | Kidney versus Liver Specification of SLC and ABC Drug Transporters, Tight Junction Molecules, and Biomarkers. *Drug Metabolism and Disposition*, **2016**, 44, 1050-60 | 4 | 18 |
| 53 | Developmental regulation of kidney and liver solute carrier and ATP-binding cassette drug transporters and drug metabolizing enzymes: the role of remote organ communication. *Expert Opinion on Drug Metabolism and Toxicology*, **2018**, 14, 561-570 | 5.5 | 18 |
| 52 | Growth factor-heparan sulfate "switches" regulating stages of branching morphogenesis. *Pediatric Nephrology*, **2014**, 29, 727-35 | 3.2 | 18 |
| 51 | Evolution of gene expression patterns in a model of branching morphogenesis. *American Journal of Physiology - Renal Physiology*, **1999**, 277, F650-63 | 4.3 | 18 |
| 50 | Shared Ligands Between Organic Anion Transporters (OAT1 and OAT6) and Odorant Receptors. *Drug Metabolism and Disposition*, **2015**, 43, 1855-63 | 4 | 17 |
| 49 | Pretreatment with inducers of ER molecular chaperones protects epithelial cells subjected to ATP depletion. *American Journal of Physiology - Renal Physiology*, **1999**, 277, F211-8 | 4.3 | 17 |
| 48 | Determinants of branching tubulogenesis. *Current Opinion in Nephrology and Hypertension*, **1995**, 4, 209-14 | 3.5 | 17 |
| 47 | Concise review: can the intrinsic power of branching morphogenesis be used for engineering epithelial tissues and organs?. *Stem Cells Translational Medicine*, **2013**, 2, 993-1000 | 6.9 | 16 |
| 46 | Conformational changes of the multispecific transporter organic anion transporter 1 (OAT1/SLC22A6) suggests a molecular mechanism for initial stages of drug and metabolite transport. *Cell Biochemistry and Biophysics*, **2011**, 61, 251-9 | 3.2 | 16 |
| 45 | MAPAS: a tool for predicting membrane-contacting protein surfaces. *Nature Methods*, **2008**, 5, 119 | 21.6 | 16 |
| 44 | The Systems Biology of Drug Metabolizing Enzymes and Transporters: Relevance to Quantitative Systems Pharmacology. *Clinical Pharmacology and Therapeutics*, **2020**, 108, 40-53 | 6.1 | 15 |
| 43 | EEG1, a putative transporter expressed during epithelial organogenesis: comparison with embryonic transporter expression during nephrogenesis. *American Journal of Physiology - Renal Physiology*, **2001**, 281, F1148-56 | 4.3 | 14 |

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| 42 | SLC22 Orthologs Related to OATs, OCTs, and OCTNs Regulate Development and Responsiveness to Oxidative Stress. *International Journal of Molecular Sciences*, **2020**, 21, | 6.3 | 13 |
| 41 | Organic anion transporter OAT3 enhances the glucosuric effect of the SGLT2 inhibitor empagliflozin. *American Journal of Physiology - Renal Physiology*, **2018**, 315, F386-F394 | 4.3 | 13 |
| 40 | Protein kinase A regulates GDNF/RET-dependent but not GDNF/Ret-independent ureteric bud outgrowth from the Wolffian duct. *Developmental Biology*, **2010**, 347, 337-47 | 3.1 | 13 |
| 39 | Neuropeptide Y functions as a facilitator of GDNF-induced budding of the Wolffian duct. *Development (Cambridge)*, **2009**, 136, 4213-24 | 6.6 | 13 |
| 38 | Elucidation of common pharmacophores from analysis of targeted metabolites transported by the multispecific drug transporter-Organic anion transporter1 (Oat1). *Bioorganic and Medicinal Chemistry*, **2011**, 19, 3320-40 | 3.4 | 13 |
| 37 | N-sulfation of heparan sulfate regulates early branching events in the developing mammary gland. *Journal of Biological Chemistry*, **2012**, 287, 42064-70 | 5.4 | 12 |
| 36 | Modeling of glycerol-3-phosphate transporter suggests a potential QiltQmechanism involved in its function. *Journal of Bioinformatics and Computational Biology*, **2008**, 6, 885-904 | 1 | 12 |
| 35 | Coordinate regulation of systemic and kidney tryptophan metabolism by the drug transporters OAT1 and OAT3. *Journal of Biological Chemistry*, **2021**, 296, 100575 | 5.4 | 12 |
| 34 | Dynamics of Organic Anion Transporter-Mediated Tubular Secretion during Postnatal Human Kidney Development and Maturation. *Clinical Journal of the American Society of Nephrology: CJASN*, **2019**, 14, 540-548 | 6.9 | 11 |
| 33 | From the ureteric bud to the penome. *Kidney International*, **2003**, 64, 2320-2 | 9.9 | 11 |
| 32 | Tunicamycin preserves intercellular junctions, cytoarchitecture, and cell-substratum interactions in ATP-depleted epithelial cells. *Biochemical and Biophysical Research Communications*, **2004**, 322, 223-31 | 3.4 | 11 |
| 31 | Transcriptome-based reconstructions from the murine knockout suggest involvement of the urate transporter, URAT1 (slc22a12), in novel metabolic pathways. *Biochemistry and Biophysics Reports*, **2015**, 3, 51-61 | 2.2 | 10 |
| 30 | In vitro culture of embryonic kidney rudiments and isolated ureteric buds. *Methods in Molecular Biology*, **2012**, 886, 13-21 | 1.4 | 10 |
| 29 | Complex dynamics of chaperone-protein interactions under cellular stress. *Cell Biochemistry and Biophysics*, **2004**, 40, 263-76 | 3.2 | 10 |
| 28 | Uremic Toxins in Organ Crosstalk. *Frontiers in Medicine*, **2021**, 8, 592602 | 4.9 | 8 |
| 27 | A key role for the transporter OAT1 in systemic lipid metabolism. *Journal of Biological Chemistry*, **2021**, 296, 100603 | 5.4 | 8 |
| 26 | The storytelling brain. Commentary on "On social attribution: implications of recent cognitive neuroscience research for race, law, and politics". *Science and Engineering Ethics*, **2012**, 18, 567-71 | 3.1 | 7 |
| 25 | GDNF-independent ureteric budding: role of PI3K-independent activation of AKT and FOSB/JUN/AP-1 signaling. *Biology Open*, **2013**, 2, 952-9 | 2.2 | 7 |

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| 24 | Renal and non-renal response of ABC and SLC transporters in chronic kidney disease. *Expert Opinion on Drug Metabolism and Toxicology*, **2021**, 17, 515-542 | 5.5 | 7 |
| 23 | Debt91, a putative zinc finger protein differentially expressed during epithelial morphogenesis. *Biochemical and Biophysical Research Communications*, **2003**, 306, 623-8 | 3.4 | 6 |
| 22 | Toward an understanding of epithelial morphogenesis in health and disease. *Current Opinion in Nephrology and Hypertension*, **1992**, 1, 187-91 | 3.5 | 6 |
| 21 | Cellular and developmental strategies aimed at kidney tissue engineering. *Nephron Experimental Nephrology*, **2014**, 126, 101 | | 5 |
| 20 | Relevance of ureteric bud development and branching to tissue engineering, regeneration and repair in acute and chronic kidney disease. *Current Opinion in Organ Transplantation*, **2014**, 19, 153-61 | 2.5 | 3 |
| 19 | Less degradation, more shock, please. *Gastroenterology*, **1999**, 116, 994-5 | 13.3 | 3 |
| 18 | What If Not All Metabolites from the Uremic Toxin Generating Pathways Are Toxic? A Hypothesis.. *Toxins*, **2022**, 14, | 4.9 | 3 |
| 17 | SLC22 Transporters in the Fly Renal System Regulate Response to Oxidative Stress In Vivo.. *International Journal of Molecular Sciences*, **2021**, 22, | 6.3 | 3 |
| 16 | Blockade of organic anion transport in humans after treatment with the drug probenecid leads to major metabolic alterations in plasma and urine.. *Clinical Pharmacology and Therapeutics*, **2022**, | 6.1 | 3 |
| 15 | A Biological Basis for Pharmacokinetics: The Remote Sensing and Signaling Theory. *Clinical Pharmacology and Therapeutics*, | 6.1 | 3 |
| 14 | Molecular and Cellular Mechanisms of Kidney Development **2013**, 859-890 | | 2 |
| 13 | Organic Anion Transporters **2014**, 25-41 | | 2 |
| 12 | Multispecific Organic Cation Transporter 1 (OCT1) from Bos taurus Has High Affinity and Slow Binding Kinetics towards Prostaglandin E2. *PLoS ONE*, **2016**, 11, e0152969 | 3.7 | 2 |
| 11 | Molecular Properties of Drugs Handled by Kidney OATs and Liver OATPs Revealed by Chemoinformatics and Machine Learning: Implications for Kidney and Liver Disease. *Pharmaceutics*, **2021**, 13, | 6.4 | 2 |
| 10 | Regulation of Ureteric Bud Outgrowth and the Consequences of Disrupted Development **2016**, 209-227 | | 1 |
| 9 | Branching morphogenesis: from individual molecules to a systems biology approach: commentary on "Sema4C-Plexin B2 signalling modulates ureteric branching in developing kidney" by Perl et al. *Differentiation*, **2011**, 81, 79-80 | 3.5 | 1 |
| 8 | Gene-targeted deletion in mice of the Ets-1 transcription factor, a candidate gene in the Jacobsen syndrome kidney "critical region," causes abnormal kidney development. *American Journal of Medical Genetics, Part A*, **2019**, 179, 71-77 | 2.5 | 1 |
| 7 | Organic Anion Transport in the Developing Kidney **2017**, 1040-1045.e2 | | |

# List of Publications


6 Renal Regeneration **2014**, 253-261

5 Organic Anion Transporters51-73

4 Folding and bioassembly of secretory proteins in health and disease. *Kidney International*, **2001**, 60, 397 9.9

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