# Rangaramanujam M Kannan

## List of Publications by Year in Descending Order



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| 82 papers | 3,877 citations | 32 h-index | 61 g-index |
| 91 ext. papers | 4,440 ext. citations | 8.6 avg, IF | 5.5 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 82 | Dendrimer-Based N-Acetyl Cysteine Maternal Therapy Ameliorates Placental Inflammation Maintenance of M1/M2 Macrophage Recruitment.. *Frontiers in Bioengineering and Biotechnology*, **2022**, 10, 819593 | 5.8 | 0 |
| 81 | Dendrimer-2PMPA Delays Muscle Function Loss and Denervation in a Murine Model of Amyotrophic Lateral Sclerosis.. *Neurotherapeutics*, **2022**, 1 | 6.4 | 1 |
| 80 | Dendrimer-2PMPA selectively blocks upregulated microglial GCPII activity and improves cognition in a mouse model of multiple sclerosis.. *Nanotheranostics*, **2022**, 6, 126-142 | 5.6 | 3 |
| 79 | Systemic administration of dendrimer N-acetyl cysteine improves outcomes and survival following cardiac arrest.. *Bioengineering and Translational Medicine*, **2022**, 7, e10259 | 14.8 | 0 |
| 78 | ssDNA nanotubes for selective targeting of glioblastoma and delivery of doxorubicin for enhanced survival. *Science Advances*, **2021**, 7, eabl5872 | 14.3 | 2 |
| 77 | NMDA Receptor Antagonism for Neuroprotection in a Canine Model of Hypothermic Circulatory Arrest. *Journal of Surgical Research*, **2021**, 260, 177-189 | 2.5 | 1 |
| 76 | Rationally Designed Galactose Dendrimer for Hepatocyte-Specific Targeting and Intracellular Drug Delivery for the Treatment of Liver Disorders. *Biomacromolecules*, **2021**, 22, 3574-3589 | 6.9 | 1 |
| 75 | Systemic dendrimer nanotherapies for targeted suppression of choroidal inflammation and neovascularization in age-related macular degeneration. *Journal of Controlled Release*, **2021**, 335, 527-540 | 11.7 | 1 |
| 74 | Thermosensitive and biodegradable hydrogel encapsulating targeted nanoparticles for the sustained co-delivery of gemcitabine and paclitaxel to pancreatic cancer cells. *International Journal of Pharmaceutics*, **2021**, 593, 120139 | 6.5 | 9 |
| 73 | Systemic dendrimer delivery of triptolide to tumor-associated macrophages improves anti-tumor efficacy and reduces systemic toxicity in glioblastoma. *Journal of Controlled Release*, **2021**, 329, 434-444 | 11.7 | 11 |
| 72 | Evolution of oxidative stress, inflammation and neovascularization in the choroid and retina in a subretinal lipid induced age-related macular degeneration model. *Experimental Eye Research*, **2021**, 203, 108391 | 3.7 | 10 |
| 71 | Dendrimer-Triamcinolone Acetonide Reduces Neuroinflammation, Pathological Angiogenesis, and Neuroretinal Dysfunction in Ischemic Retinopathy. *Advanced Therapeutics*, **2021**, 4, 2000181 | 4.9 | 3 |
| 70 | Targeted systemic dendrimer delivery of CSF-1R inhibitor to tumor-associated macrophages improves outcomes in orthotopic glioblastoma. *Bioengineering and Translational Medicine*, **2021**, 6, e10205 | 14.8 | 4 |
| 69 | Dendrimer-tesaglitazar conjugate induces a phenotype shift of microglia and enhances β-amyloid phagocytosis. *Nanoscale*, **2021**, 13, 939-952 | 7.7 | 7 |
| 68 | Glycosylation of PAMAM dendrimers significantly improves tumor macrophage targeting and specificity in glioblastoma. *Journal of Controlled Release*, **2021**, 337, 179-192 | 11.7 | 9 |
| 67 | Targeted drug delivery for maternal and perinatal health: Challenges and opportunities. *Advanced Drug Delivery Reviews*, **2021**, 177, 113950 | 18.5 | 1 |
| 66 | Dense hydroxyl polyethylene glycol dendrimer targets activated glia in multiple CNS disorders. *Science Advances*, **2020**, 6, eaay8514 | 14.3 | 29 |

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| 65 | Dendrimer mediated targeted delivery of sinomenine for the treatment of acute neuroinflammation in traumatic brain injury. *Journal of Controlled Release*, **2020**, 323, 361-375 | 11.7 | 41 |
| 64 | Dendrimer-conjugated glutaminase inhibitor selectively targets microglial glutaminase in a mouse model of Rett syndrome. *Theranostics*, **2020**, 10, 5736-5748 | 12.1 | 8 |
| 63 | Glial restricted precursor delivery of dendrimer N-acetylcysteine promotes migration and differentiation following transplant in mouse white matter injury model. *Nanoscale*, **2020**, 12, 16063-16068 | 7.7 | 2 |
| 62 | Targeting Mitochondria in Tumor-Associated Macrophages using a Dendrimer-Conjugated TSPO Ligand that Stimulates Antitumor Signaling in Glioblastoma. *Biomacromolecules*, **2020**, 21, 3909-3922 | 6.9 | 10 |
| 61 | Systemic dendrimer-drug nanomedicines for long-term treatment of mild-moderate cerebral palsy in a rabbit model. *Journal of Neuroinflammation*, **2020**, 17, 319 | 10.1 | 4 |
| 60 | Dendrimer-Mediated Targeted Delivery of Rapamycin to Tumor-Associated Macrophages Improves Systemic Treatment of Glioblastoma. *Biomacromolecules*, **2020**, 21, 5148-5161 | 6.9 | 14 |
| 59 | Dendrimer size effects on the selective brain tumor targeting in orthotopic tumor models upon systemic administration. *Bioengineering and Translational Medicine*, **2020**, 5, e10160 | 14.8 | 21 |
| 58 | Leveraging the interplay of nanotechnology and neuroscience: Designing new avenues for treating central nervous system disorders. *Advanced Drug Delivery Reviews*, **2019**, 148, 181-203 | 18.5 | 14 |
| 57 | Quantitative assessment of surface functionality effects on microglial uptake and retention of PAMAM dendrimers. *Journal of Nanoparticle Research*, **2018**, 20, 1 | 2.3 | 11 |
| 56 | Pediatric oral formulation of dendrimer-N-acetyl-l-cysteine conjugates for the treatment of neuroinflammation. *International Journal of Pharmaceutics*, **2018**, 545, 113-116 | 6.5 | 14 |
| 55 | Toward new design principles for superior gene silencing. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 3200-3201 | 11.5 | 3 |
| 54 | Effect of mannose targeting of hydroxyl PAMAM dendrimers on cellular and organ biodistribution in a neonatal brain injury model. *Journal of Controlled Release*, **2018**, 283, 175-189 | 11.7 | 50 |
| 53 | Scalable synthesis and validation of PAMAM dendrimer--acetyl cysteine conjugate for potential translation. *Bioengineering and Translational Medicine*, **2018**, 3, 87-101 | 14.8 | 30 |
| 52 | Targeting Mitochondrial Dysfunction and Oxidative Stress in Activated Microglia using Dendrimer-Based Therapeutics. *Theranostics*, **2018**, 8, 5529-5547 | 12.1 | 69 |
| 51 | Cognitive impairments induced by necrotizing enterocolitis can be prevented by inhibiting microglial activation in mouse brain. *Science Translational Medicine*, **2018**, 10, | 17.5 | 54 |
| 50 | Preferential and Increased Uptake of Hydroxyl-Terminated PAMAM Dendrimers by Activated Microglia in Rabbit Brain Mixed Glial Culture. *Molecules*, **2018**, 23, | 4.8 | 18 |
| 49 | Subconjunctival dendrimer-drug therapy for the treatment of dry eye in a rabbit model of induced autoimmune dacryoadenitis. *Ocular Surface*, **2018**, 16, 415-423 | 6.5 | 17 |
| 48 | Generation-6 hydroxyl PAMAM dendrimers improve CNS penetration from intravenous administration in a large animal brain injury model. *Journal of Controlled Release*, **2017**, 249, 173-182 | 11.7 | 50 |

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| 47 | Supercritical carbon dioxide (scCO2) dispersion of poly(ethylene terephthalate)/clay nanocomposites: Structural, mechanical, thermal, and barrier properties. *Journal of Applied Polymer Science*, **2017**, 134, | 2.9 | 11 |
| 46 | Subconjunctival injectable dendrimer-dexamethasone gel for the treatment of corneal inflammation. *Biomaterials*, **2017**, 125, 38-53 | 15.6 | 77 |
| 45 | Selective Localization of a Novel Dendrimer Nanoparticle in Myocardial Ischemia-Reperfusion Injury. *Annals of Thoracic Surgery*, **2017**, 104, 891-898 | 2.7 | 9 |
| 44 | Activated Microglia Targeting Dendrimer-Minocycline Conjugate as Therapeutics for Neuroinflammation. *Bioconjugate Chemistry*, **2017**, 28, 2874-2886 | 6.3 | 49 |
| 43 | Maternal dendrimer-based therapy for inflammation-induced preterm birth and perinatal brain injury. *Scientific Reports*, **2017**, 7, 6106 | 4.9 | 50 |
| 42 | Uptake of dendrimer-drug by different cell types in the hippocampus after hypoxic-ischemic insult in neonatal mice: Effects of injury, microglial activation and hypothermia. *Nanomedicine: Nanotechnology, Biology, and Medicine*, **2017**, 13, 2359-2369 | 6 | 37 |
| 41 | Dendrimer-mediated delivery of N-acetyl cysteine to microglia in a mouse model of Rett syndrome. *Journal of Neuroinflammation*, **2017**, 14, 252 | 10.1 | 49 |
| 40 | Targeting specific cells in the brain with nanomedicines for CNS therapies. *Journal of Controlled Release*, **2016**, 240, 212-226 | 11.7 | 50 |
| 39 | Surface functionality affects the biodistribution and microglia-targeting of intra-amniotically delivered dendrimers. *Journal of Controlled Release*, **2016**, 237, 61-70 | 11.7 | 26 |
| 38 | Nanoscale effects in dendrimer-mediated targeting of neuroinflammation. *Biomaterials*, **2016**, 101, 96-107 | 15.6 | 80 |
| 37 | Nanotechnology Approaches to Targeting Inflammation and Excitotoxicity in a Canine Model of Hypothermic Circulatory Arrest-Induced Brain Injury. *Annals of Thoracic Surgery*, **2016**, 102, 743-750 | 2.7 | 11 |
| 36 | Uniform brain tumor distribution and tumor associated macrophage targeting of systemically administered dendrimers. *Biomaterials*, **2015**, 52, 507-16 | 15.6 | 63 |
| 35 | Systemic dendrimer-drug treatment of ischemia-induced neonatal white matter injury. *Journal of Controlled Release*, **2015**, 214, 112-20 | 11.7 | 72 |
| 34 | In vivo bone formation by and inflammatory response to resorbable polymer-nanoclay constructs. *Nanomedicine: Nanotechnology, Biology, and Medicine*, **2015**, 11, 1871-81 | 6 | 10 |
| 33 | Hydroxyl PAMAM dendrimer-based gene vectors for transgene delivery to human retinal pigment epithelial cells. *Nanoscale*, **2015**, 7, 3845-56 | 7.7 | 51 |
| 32 | Dendrimer-enabled transformation of Anaplasma phagocytophilum. *Microbes and Infection*, **2015**, 17, 817-22 | 9.3 | 4 |
| 31 | Systemic and Intravitreal Delivery of Dendrimers to Activated Microglia/Macrophage in Ischemia/Reperfusion Mouse Retina **2015**, 56, 4413-24 | | 55 |
| 30 | Intracellular delivery of dendrimer triamcinolone acetonide conjugates into microglial and human retinal pigment epithelial cells. *European Journal of Pharmaceutics and Biopharmaceutics*, **2015**, 95, 239-49 | 5.7 | 47 |

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| 29 | Dendrimer brain uptake and targeted therapy for brain injury in a large animal model of hypothermic circulatory arrest. *ACS Nano*, **2014**, 8, 2134-47 | 16.7 | 101 |
| 28 | Fetal uptake of intra-amniotically delivered dendrimers in a mouse model of intrauterine inflammation and preterm birth. *Nanomedicine: Nanotechnology, Biology, and Medicine*, **2014**, 10, 1343-51 | 6 | 27 |
| 27 | Folate-functionalized dendrimers for targeting Chlamydia-infected tissues in a mouse model of reactive arthritis. *International Journal of Pharmaceutics*, **2014**, 466, 258-65 | 6.5 | 29 |
| 26 | Concurrent quantification of tryptophan and its major metabolites. *Analytical Biochemistry*, **2013**, 443, 222-31 | 3.1 | 36 |
| 25 | Enhancing the efficacy of Ara-C through conjugation with PAMAM dendrimer and linear PEG: a comparative study. *Biomacromolecules*, **2013**, 14, 801-10 | 6.9 | 28 |
| 24 | Dendrimer-enabled transformation of Chlamydia trachomatis. *Microbial Pathogenesis*, **2013**, 65, 29-35 | 3.8 | 14 |
| 23 | Dendrimer nanoparticles for ocular drug delivery. *Journal of Ocular Pharmacology and Therapeutics*, **2013**, 29, 151-65 | 2.6 | 76 |
| 22 | Biodistribution of fluorescently labeled PAMAM dendrimers in neonatal rabbits: effect of neuroinflammation. *Molecular Pharmaceutics*, **2013**, 10, 4560-71 | 5.6 | 87 |
| 21 | Dendrimer-based targeted intravitreal therapy for sustained attenuation of neuroinflammation in retinal degeneration. *Biomaterials*, **2012**, 33, 979-88 | 15.6 | 145 |
| 20 | A dendrimer-based immunosensor for improved capture and detection of tumor necrosis factor-α cytokine. *Analytica Chimica Acta*, **2012**, 720, 118-25 | 6.6 | 22 |
| 19 | Dendrimer-based postnatal therapy for neuroinflammation and cerebral palsy in a rabbit model. *Science Translational Medicine*, **2012**, 4, 130ra46 | 17.5 | 268 |
| 18 | Poly(amidoamine) dendrimer-erythromycin conjugates for drug delivery to macrophages involved in periprosthetic inflammation. *Nanomedicine: Nanotechnology, Biology, and Medicine*, **2011**, 7, 284-94 | 6 | 70 |
| 17 | Intrinsic targeting of inflammatory cells in the brain by polyamidoamine dendrimers upon subarachnoid administration. *Nanomedicine*, **2010**, 5, 1317-29 | 5.6 | 88 |
| 16 | Cellular Trafficking of Dendrimers **2010**, 231-246 | | |
| 15 | Dendrimer-based drug and imaging conjugates: design considerations for nanomedical applications. *Drug Discovery Today*, **2010**, 15, 171-85 | 8.8 | 638 |
| 14 | Multifunctional Dendrimer-templated Antibody Presentation on Biosensor Surfaces for Improved Biomarker Detection. *Advanced Functional Materials*, **2010**, 20, 409-421 | 15.6 | 54 |
| 13 | Drug release characteristics of PAMAM dendrimer-drug conjugates with different linkers. *International Journal of Pharmaceutics*, **2010**, 384, 189-94 | 6.5 | 134 |
| 12 | Investigation of clay modifier effects on the structure and rheology of supercritical carbon dioxide-processed polymer nanocomposites. *Journal of Polymer Science, Part B: Polymer Physics*, **2010**, 48, 823-831 | 2.6 | 12 |

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| 11 | Poly(amidoamine) dendrimer-drug conjugates with disulfide linkages for intracellular drug delivery. *Biomaterials*, **2009**, 30, 2112-21 | 15.6 | 182 |
| 10 | Supercritical Carbon Dioxide-Processed Dispersed Polystyrene□Clay Nanocomposites. *Macromolecules*, **2008**, 41, 8038-8046 | 5.5 | 31 |
| 9 | Dendrimer-drug conjugates for tailored intracellular drug release based on glutathione levels. *Bioconjugate Chemistry*, **2008**, 19, 2446-55 | 6.3 | 142 |
| 8 | The effect of surface functionality on cellular trafficking of dendrimers. *Biomaterials*, **2008**, 29, 3469-76 | 15.6 | 317 |
| 7 | Rheo-optical measurements of the first and third normal stresses of homopolymer poly(vinyl methyl ether) melt. *Rheologica Acta*, **2006**, 45, 951-958 | 2.3 | 4 |
| 6 | FTIR spectroscopic investigation of thermal effects in semi-syndiotactic polypropylene. *Journal of Polymer Science, Part B: Polymer Physics*, **2005**, 43, 439-461 | 2.6 | 22 |
| 5 | A Rheo-Optical FTIR Spectrometer for Investigating Molecular Orientation and Viscoelastic Behavior in Polymers. *International Journal of Polymer Analysis and Characterization*, **2004**, 9, 245-274 | 1.7 | 8 |
| 4 | Rheooptical Fourier transform infrared spectroscopy of the deformation behavior in quenched and slow-cooled isotactic polypropylene films. *Journal of Polymer Science, Part B: Polymer Physics*, **2002**, 40, 2539-2551 | 2.6 | 47 |
| 3 | Unusual contributions of molecular architecture to rheology and flow birefringence in hyperbranched polystyrene melts. *Journal of Polymer Science, Part B: Polymer Physics*, **2001**, 39, 2562-2571 | 2.6 | 11 |
| 2 | Dendrimers and Hyperbranched Polymers for Drug Delivery105-129 | | 3 |
| 1 | Cellular Interactions of Nano Drug Delivery Systems113-136 | | 2 |