

Books

1. **Al-Jamal KT** (Editor). Nanotechnology and the Brain. International Review of Neurobiology Series· August 2016. (Elsevier, USA) 2016 (ISBN: 978-0-12-803914-4).

Book Chapters

1. Walters AA, Dhadwar B and **Al-Jamal KT**. (2021) Nucleic acid-based immune checkpoint blockade: Progress and potential. In book: Systemic Drug Delivery Strategies. DOI: 10.1016/B978-0-323-85781-9.00011-7
2. Li D and **Al-Jamal KT**. siRNA Design and Delivery Based on Carbon Nanotubes. Methods in Molecular Biology series. Humana Press: 2021; 2282: 181-191.
3. Lizhou Xu and **Al-Jamal KT**. Detection of Cancer-Derived Exosomes Using a Sensitive Colorimetric Aptasensor. Methods in Molecular Biology series. Humana Press: 2022; 978-1-0716-2340-4.
4. Wang JTW, Bai J, **Al-Jamal KT**. Applications of Magnetic Nanoparticles in Multi-Modal Imaging. Chapter in Theranostics and Image Guided Drug Delivery. 2018. RSC Publishing. pp. 53-85
5. Kafa H, Wang JT, **Al-Jamal KT**. Current Perspective of Carbon Nanotubes Application in Neurology. Chapter in International Review of Neurobiology · August 2016. DOI: 10.1016/bs.irn.2016.07.001 (Elsevier, USA) 2016 (ISBN: 978-0-12-803914-4).
6. Chang G, **Al-Jamal KT**, Ali-Boucetta H and Kostarelos K. Cell biology of Carbon Nanotubes. Advances in Carbon Nanomaterials: Science and Applications, (Pan Stanford, Singapore) 2011 (ISBN: 978-98-1426-787-8).
7. **Al-Jamal KT** and Kostarelos K. Imaging Carbon Nanotubes *in vivo*: a vignette of imaging modalities at the nanoscale. In: Beth Goins and William Phillips (eds.), (Pan Stanford, Singapore) 2011 (ISBN: 978-98-1426-709-0).
8. Ali-Boucetta H, **Al-Jamal KT** and Kostarelos K. Cytotoxic assessment of carbon nanotube interaction with cell cultures. Methods in Molecular Biology series. Humana Press: 2011; 726: 299-312.
9. **Al-Jamal KT** and Kostarelos K. Assessment of cellular uptake of CNTs by flow cytometry. In: K. Balasubramanian and M. Burghard (eds.), Carbon Nanotubes, Methods in Molecular Biology series. Humana Press: 2010; 625:123-34.

Research Articles

1. Li Y, Mei KC, Liam-Or R, Wang JTW, Faruqu FN, Zhu S, Wang YL, Lu Y, **Al-Jamal KT***. Graphene Oxide Nanosheets Toxicity in Mice is Dependent on Protein Corona Composition and Host Immunity. **ACS Nano**. 2024 Vol 18/Issue 33.
<https://doi.org/10.1021/acsnano.4c08561> (IF 15.8)

2. Qin Y, Rouatbi N, Wang JT, Baker R, Spicer J, Walters AA, **Al-Jamal KT***. Plasmid DNA Ionisable lipid nanoparticles as non-inert carriers and potent immune activators for cancer immunotherapy. *J Control Release*. 2024 Mar 15;S0168-3659(24)00170-6. [doi: 10.1016/j.jconrel.2024.03.018](https://doi.org/10.1016/j.jconrel.2024.03.018). (IF 11.7)
3. Liam-Or R, Faruqu FN, Walters A, Han S, Xu L, Wang JT, Oberlaender J, Sanchez-Fueyo A, Lombardi G, Dazzi F, Mailaender V, **Al-Jamal KT***. Cellular uptake and in vivo distribution of mesenchymal-stem-cell-derived extracellular vesicles are protein corona dependent *Nature Nanotechnology*. 2024 Feb 16. [doi: 10.1038/s41565-023-01585-y](https://doi.org/10.1038/s41565-023-01585-y). (IF 40.1)
4. Kaasalainen M, Zhang R, Vashisth P, Birjandi AA, S'Ari M, Martella DA, Isaacs M, Mäkilä E, Wang C, Moldenhauer E, Clarke P, Pinna A, Zhang X, Mustfa SA, Caprettini V, Morrell AP, Gentleman E, Brauer DS, Addison O, Zhang X, Bergholt M, **Al-Jamal KT**, Volponi AA, Salonen J, Hondow N, Sharpe P, Chiappini C. Lithiated porous silicon nanowires stimulate periodontal regeneration. *Nat Commun*. 2024 Jan 12;15(1):487. [doi: 10.1038/s41467-023-44581-5](https://doi.org/10.1038/s41467-023-44581-5). (IF 16.6)
5. Yavus E, Walters AA, Chudasama BV, Han S, Qin Y and **Al-Jamal KT***. (2023) Investigating the Potential of Cuboidal Nanometals as Protein Subunit Vaccine Carriers *In Vivo*. *Advanced Materials Interface*. doi.org/10.1002/admi.202202511. (IF 6.38)
6. Graham R, Gazinska P, Zhang B, Khiabany A, Sinha S, Alaguthurai T, Flores-Borja F, Vicencio J, Beuron F, Roxanis I, Matkowski R, Liam-Or R, Tutt A, Ng T, **Al-Jamal KT**, Zhou Y, Irshad S*. Serum-derived extracellular vesicles from breast cancer patients contribute to differential regulation of T-cell-mediated immune-escape mechanisms in breast cancer subtypes. *Front Immunol*. 2023 Jun 22;14:1204224. [doi: 10.3389/fimmu.2023.1204224](https://doi.org/10.3389/fimmu.2023.1204224). (IF 8.7)
7. Lu Y, Wang JT, Li N, Zhu X, Li Y, Bansal S, Wang Y, **Al-Jamal KT***. Intranasal administration of edaravone nanoparticles improves its stability and brain bioavailability. *J Control Release*. 2023 Jun 13;359:257-267. [doi: 10.1016/j.jconrel.2023.06.001](https://doi.org/10.1016/j.jconrel.2023.06.001). (IF 11.7) (won journal cover)
8. Helal DO, Abdel-Mottaleb MMA, Kamel AO, Rouatbi N, Han S, Geneidi AS, **Al-Jamal KT***, Awad GAS. The interplay of solvent-drug-protein interactions during albumin nanoparticles formulations for temozolomide delivery to brain cancer cells. *J Pharm Pharmacol*. 2023 Jun 5:rgad020. [doi: 10.1093/jpp/rgad020](https://doi.org/10.1093/jpp/rgad020). (IF 4.8)
9. Qin Y, Walters AA, Rouatbi N, Wang JT, Abdel-Bar HM, **Al-Jamal KT***. Evaluation of a DoE based approach for comprehensive modelling of the effect of lipid nanoparticle composition on nucleic acid delivery. *Biomaterials*. 2023 Aug;299:122158. [doi: 10.1016/j.biomaterials.2023.122158](https://doi.org/10.1016/j.biomaterials.2023.122158). (IF 12.47)
10. Han S and **Al-Jamal KT***. Combined Facile Synthesis, Purification, and Surface Functionalization Approach Yields Monodispersed Gold Nanorods for Drug Delivery Applications. *Particles and Particles Systems Characterisation*. <https://doi.org/10.1002/ppsc.202300043>. 2023. (IF 3.46)
11. Han S, Wang JT, Yavuz E, Zam A, Rouatbi N, Utami RN, Liam-Or R, Griffiths A, Dickson W, Sosabowski J, **Al-Jamal KT***. Spatiotemporal tracking of gold nanorods after intranasal administration for brain targeting. *J Control Release*. 2023 May;357:606-619. [doi: 10.1016/j.jconrel.2023.04.022](https://doi.org/10.1016/j.jconrel.2023.04.022). (IF 11.7)

12. Qin Y, Walters AA, **Al-Jamal KT***. Plasmid DNA cationic non-viral vector complexes induce cytotoxicity-associated PD-L1 expression up-regulation in cancer cells in vitro. *Int J Pharm.* 2023 Jan 25;631:122481. [doi: 10.1016/j.ijpharm.2022.122481](https://doi.org/10.1016/j.ijpharm.2022.122481). (IF 6.51)
13. Huntington, J.; Abdel-Bar, H. M.; Pachauri, M.; Tomczyk, M.; Qin, Y.; Venditti, L.; **Al-Jamal, KT.**; Giacca, M. Lipid Nanoparticles for Cardiac RNA Delivery. *J. Mol. Cell. Cardiol.* **2022**, 173, S111. <https://doi.org/10.1016/j.yjmcc.2022.08.221>.
14. Walters AA, Ali A, Wang JT, **Al-Jamal KT***. Anti-tumor antibody isotype response can be modified with locally administered immunoadjuvants. *Drug Deliv Transl Res.* 2022 Nov 23. [doi: 10.1007/s13346-022-01258-8](https://doi.org/10.1007/s13346-022-01258-8). (IF 4.617)
15. Hamdi M, Elmowafy E, Abdel-Bar HM*, ElKashlan AM, **Al-Jamal KT**, Awad GAS. Hyaluronic acid-entecavir conjugates-core/lipid-shell nanohybrids for efficient macrophage uptake and hepatotropic prospects. *Int J Biol Macromol.* 2022 Jul 13;217:731-747. [doi: 10.1016/j.ijbiomac.2022.07.067](https://doi.org/10.1016/j.ijbiomac.2022.07.067). (IF 8)
16. Cilibrizzi A, Wang J, Memdouh S, Lacovone A, McElroy K, Jaffar N, Young J, Hider RC, Blower P, **Al-Jamal KT**, Abbate V. PSMA-targeted NIR probes for image-guided detection of prostate cancer. *Colloids and Surfaces B: Biointerfaces.* 218:112734. [doi: 10.1016/j.colsurfb.2022.112734](https://doi.org/10.1016/j.colsurfb.2022.112734) (IF 5.26)
17. Rouatbi N, McGlynn T, **Al-Jamal KT***. (2022). Pre-Clinical Non-Viral Vectors Exploited for In Vivo CRISPR/Cas9 Gene Editing: An Overview. *Biomaterials Science.* 10(13):3410-3432. [doi: 10.1039/d1bm01452h](https://doi.org/10.1039/d1bm01452h). (IF 7.59)
18. Benaouda F, Inacio R, Lim CH, Park H, Pitcher T, Alhnan MA, Aly MMS, **Al-Jamal KT**, Chan KL, Gala RP, Sebastia-Saez D, Cui L, Chen T, Keeble J, Jones SA*. (2022). Needleless administration of advanced therapies into the skin via the appendages using a hypobaric patch. *Proc Natl Acad Sci USA.* [doi: 10.1073/pnas.2120340119](https://doi.org/10.1073/pnas.2120340119). 28. (IF 12.7)
19. Khan AA, Man F, Faruqu FN, Kim J, Al-Saleme F, Carrascal-Miniño A, Volpe A, Liam-Or R, Simpson P, Fruhwirth GO, **Al-Jamal KT**, T M de Rosales R*. (2022). PET Imaging of Small Extracellular Vesicles via [89Zr]Zr(oxinate)4 Direct Radiolabeling. *Bioconjug Chem.* [doi: 10.1021/acs.bioconjchem](https://doi.org/10.1021/acs.bioconjchem) (IF 4.77)
20. Gajewska A, Wang JT, Klippstein R, Martincic M, Pach E, Feldman R, Saccavini JC, Tobias G, Ballesteros B, **Al-Jamal KT***, Da Ros T*. (2021). Functionalization of filled radioactive multi-walled carbon nanocapsules by arylation reaction for in vivo delivery of radio-therapy. *J Mater Chem B*, 10(1):47-56. [doi: 10.1039/d1tb02195h](https://doi.org/10.1039/d1tb02195h). (IF 6.33)
21. Suffian IFM and Al-Jamal KT*. (2021) Bioengineering of virus-like particles as dynamic nanocarriers for in vivo delivery and targeting to solid tumours. *Advanced Drug Delivery Review*, 1:114030. [doi: 10.1016/j.addr.2021.114030](https://doi.org/10.1016/j.addr.2021.114030) (IF 15.47)
22. Walters AA, Dhadwar B and Al-Jamal KT*. (2021) Modulating expression of inhibitory and stimulatory immune 'checkpoints' using nanoparticulate-assisted nucleic acid delivery. *EBioMedicine*, 73:103624. [doi: 10.1016/j.ebiom.2021.103624](https://doi.org/10.1016/j.ebiom.2021.103624) (IF 11.2)

23. Walters AA*, Santacana-Font G, Li J, Routabi N, Qin Y, Claes N, Bals S, Wang JT and **Al-Jamal KT***. (2021) Nanoparticle Mediated in Situ Molecular Reprogramming of Immune Checkpoint Interactions for Cancer Immunotherapy. *ACS Nano*, doi.org/10.1021/acsnano.1c04456 (IF 18)
24. Helal DO, Rouatbi N, Han S, Tzu-Wen Wang J, Walters AA, Abdel-Mottaleb MMA, Kamel AO, Geneidi AS, Awad GAS, **Al-Jamal KT***. (2021). A Natural Protein Based Platform for the Delivery of Temozolomide Acid to Glioma Cells. *Eur J Pharm Biopharm*. S0939-6411(21)00262-9. [doi: 10.1016/j.ejpb.2021.10.007](https://doi.org/10.1016/j.ejpb.2021.10.007). (IF 5.57)
25. Guo L, Zhang Y and **Al-Jamal KT***. (2021) Recent progress in nanotechnology-based drug carriers for celastrol delivery. *Biomaterials Science*. DOI: [10.1039/d1bm00639h](https://doi.org/10.1039/d1bm00639h) (IF 7.59)
26. Tamarov K, Wang JT, Kari J, Happonen E, Vesavaara I, Niemelä M, Perämäki P, **Al Jamal KT***, Xu W*, Lehto VP. (2021) Comparison between Fluorescence Imaging and Elemental Analysis to Determine Biodistribution of Inorganic Nanoparticles with Strong Light Absorption. *ACS Appl Mater Interfaces*. [Doi: 10.1021/acsaami.1c11875](https://doi.org/10.1021/acsaami.1c11875). (IF 10.38)
27. Mei KC, Costa PM, Kreuzer M and **Al-Jamal KT***. (2021) Interpreting 2D Materials Bio-Nano Interactions: Influence of Aggregation Status, Protein Corona, Cell Culture Media, and Cell Types. *Advanced Materials Interface*. [Doi:10.1002/admi.202100251](https://doi.org/10.1002/admi.202100251). (IF 6.38)
28. Li D, Ahmed M, Khan A, Xu L, Walters AA, Ballesteros B, **Al Jamal KT***. (2021) Tailoring the Architecture of Cationic Polymer Brush Modified Carbon Nanotubes for Efficient siRNA Delivery in Cancer Immunotherapy. *ACS Appl Mater Interfaces*. 13(26):30284-30294. [Doi: 10.1021/acsaami.1c02627](https://doi.org/10.1021/acsaami.1c02627). (IF 10.38)
29. Abdel-Bar HM, Walters AA, Lim Y, Rouatbi N, Qin Y, Gheidari F, Han S, Osman R, Wang J, **Al Jamal KT***. (2021) An “Eat me” Combinatory Nano-formulation for Systemic Immunotherapy of Solid Tumours. *Theranostics*. doi:10.7150/thno.56936; [Doi:10.7150/thno.56936](https://doi.org/10.7150/thno.56936). (IF 11.56)
30. Wang JT, Rodrigo AC, Patterson AK, Hawkins K, Aly MMS, Sun J, **Al Jamal KT***, Smith DK*. (2021) Enhanced Delivery of Neuroactive Drugs via Nasal Delivery with a Self-Healing Supramolecular Gel. *Advanced Science* (Weinh). e2101058. [Doi: 10.1002/adv.202101058](https://doi.org/10.1002/adv.202101058). (IF 17.52)
31. Abdel-Bar H, Walters Adam, Wang JT-W, **Al-Jamal KT*** (2021) Combinatory Delivery of Etoposide and siCD47 in a Lipid Polymer Hybrid Delays Lung Tumor Growth in an Experimental Melanoma Lung Metastatic Model. *Advanced Healthcare Materials*. [Doi: 10.1002/adhm.202001853](https://doi.org/10.1002/adhm.202001853). (IF 11.09)
32. Lazaro E, Faruqu F, Saleh A, Silva A, Wang JT-W, Rak J, **Al-Jamal KT***, Dekker N* (2021) Selection of Fluorescent, Bioluminescent and Radioactive Tracers to Accurately Reflect Extracellular Vesicle Biodistribution *In Vivo*. *ACS Nano*. [Doi: abs/10.1021/acsnano.0c09873](https://doi.org/10.1021/acsnano.0c09873). (IF 18)
33. Tu K-H, Yu L-S, Sie Z-H, Hsu H-Y, **Al-Jamal KT**, Wang JT-W, Chiang Y-Y. (2021) Development of Real-Time Transendothelial Electrical Resistance Monitoring for an In Vitro Blood-Brain Barrier System. *Micromachines (Basel)*. [Doi:org/10.3390/mi12010037](https://doi.org/10.3390/mi12010037) (IF 3.49)

34. Al-Badri, MA, Smith P, Sinclair RC, **Al-Jamal, KT** and Lorenz CD. (2021) Accurate large scale modelling of graphene oxide: Ion trapping and chaotropic potential at the interface. **Carbon**. [Doi.org/10.1016/j.carbon.2020.12.032](https://doi.org/10.1016/j.carbon.2020.12.032) (IF 9.59)
35. Faruqu FN, Liam-Or R, Zhou S, Nip R and **Al-Jamal KT*** (2021) Defined serum-free three-dimensional culture of umbilical cord-derived mesenchymal stem cells yields exosomes that promote fibroblast proliferation and migration *in vitro*. **FASEB J**. [doi: org/10.1096/fj.202001768RR](https://doi.org/10.1096/fj.202001768RR) (IF 5.8)
36. Giram PS, Wang JT*, Walters AA, Rade PP, Akhtar M, Han S, Faruqu FN, Abdel-Bar HM, Garnaik B*, **Al-Jamal KT***. (2020) Green synthesis of methoxy-poly(ethylene glycol)-block-poly(L-lactide-co-glycolide) copolymer using zinc proline as a biocompatible initiator for irinotecan delivery to colon cancer *in vivo*. **Biomaterials Science**. [Doi: org/10.1039/D0BM01421D](https://doi.org/10.1039/D0BM01421D) (IF 7.59)
37. Xu L, Faruqu FN, Lim YM, Lim KY, Liam-Or R, Walters AA, Lavender P, Fear D, Wells CM, Wang J T-W, **Al-Jamal KT***. (2021) Exosome-mediated RNAi of PAK4 prolongs survival of pancreatic cancer mouse model after loco-regional treatment. **Biomaterials**. [Doi.org/10.1016/j.biomaterials.2020.120369](https://doi.org/10.1016/j.biomaterials.2020.120369) (IF 15.3)
38. Sofian ZM, Benaouda F, Wang JT, Lu Y, Barlow DJ, Royall PG, Farag DB, Rahman KM, **Al-Jamal KT**, Forbes B, Jones SA. A Cyclodextrin-Stabilized Spermine-Tagged Drug Triplex that Targets Theophylline to the Lungs Selectively in Respiratory Emergency. **Advanced Therapeutics (Weinh)**. doi.org/10.1002/adtp.202000153 (IF 5.2)
39. Xu L*, Chopdat R, Li D, **Al Jamal KT***. (2020) Development of a simple, sensitive and selective colorimetric aptasensor for the detection of cancer-derived exosomes. **Biosens Bioelectron**. 169, 112576. doi.org/10.1016/j.bios.2020.112576. (IF 12.54)
40. Li D and **Al-Jamal KT***. siRNA Design and Delivery Based on Carbon Nanotubes. Methods in Molecular Biology series. Humana Press: 2021; 2282: 181-191. [DOI: 10.1007/978-1-0716-1298-9_12](https://doi.org/10.1007/978-1-0716-1298-9_12) (IF 10.71)
41. Costa PM, Mei KC, Kreuzer M, Li Y, Hosny NA, Grant V, Festy F, Pollard SM and **Al-Jamal KT***. (2020) Selective Toxicity of Functionalised Graphene Oxide to Patients-Derived Glioblastoma Stem Cells and Minimal Toxicity to Non-cancerous Brain Tissue Cells. **2D Materials**. doi.org/10.1016/j.biomaterials.2020.120369 (IF 7.68)
42. Xu L, Faruqu FN, Liam-Or R, Abu Abed O, Li D, Venner K, Errington RJ, Hummers H, Wang JT and **Al Jamal KT**. (2020) Design of experiment (DoE)-driven in vitro and in vivo uptake studies of exosomes for pancreatic cancer delivery enabled by copper-free click chemistry-based labelling. **Journal of Extracellular Vesicles**. 9(1):1779458. doi.org/10.1080/20013078.2020.1779458. (IF 25.84)
43. Faruqu FN, Zhou S, Sami N, Gheidari F, Lu H and **Al-Jamal KT*** (2020) Three-dimensional culture of dental pulp pluripotent-like stem cells (DPPSC) enhances Nanog expression and provides a serum-free condition for exosome isolation. **FASEB BioAdvances**. 28;2(7):419-433, doi.org/10.1096/fba.2020-00025. (IF TBA)

44. Taylor PJ, Hagen J, Faruqu FN, **Al-Jamal KT**, Quigley B, Beeby M, Selkirk ME, Sarkies P. (2020). *Trichinella spiralis* secretes abundant unencapsulated small RNAs with potential effects on host gene expression. **Int J Parasitol.** 50(9):697-705. [doi: 10.1016/j.ijpara.2020.05.008](https://doi.org/10.1016/j.ijpara.2020.05.008). (IF 3.98)
45. Tung SL, Agarwal A, Matthews RI, Fanelli G, Letizia M, Jacob J, Vizcay-Barrena G, Boardman D, Faruqu FN, Philippeos C, Hannen R, **Al-Jamal KT**, Lombardi G and Smyth LA*. (2020) Regulatory T Cell Extracellular Vesicles Modify T-Effector Cell Cytokine Production and Protect Against Human Skin Allograft Damage. **Frontiers in Cell and Developmental Biology.**20; 8:317. [doi: 10.3389/fcell.2020.00317](https://doi.org/10.3389/fcell.2020.00317). (IF 6.68)
46. Xu L, Shoaie N, Jahanpeyma F, Zhao J, Azimzadeh M, **Al Jamal KT**. (2020) Optical, electrochemical and electrical (nano)biosensors for detection of exosomes: A comprehensive overview. **Biosens Bioelectron.** 21;161:112222. [DOI: 10.1016/j.bios.2020.112222](https://doi.org/10.1016/j.bios.2020.112222). (IF 12.54)
47. Walters AA, Wang JT and **Al-Jamal KT***. (2020) Evaluation of cell surface reactive immuno-adjuvant in combination with immunogenic cell death inducing drug for in situ chemo-immunotherapy. **J Control Release.** 31;322:519-529. [DOI: 10.1016/j.jconrel.2020.03.029](https://doi.org/10.1016/j.jconrel.2020.03.029) (IF 11.47)
48. Wang, JT-W*, Martino U, Khan R, Southern P, Tuncel D*, and **Al-Jamal KT***. (2020) Engineering red-emitting multi-functional nanocapsules for magnetic tumour targeting and imaging. **Biomaterials Science.** [doi: 10.1039/d0bm00314j](https://doi.org/10.1039/d0bm00314j) (IF 7.59)
49. Wang, JT-W, Spinato C, Klippstein R, Martincic M, Pach E, Perez de Garibay A, Ménard-Moyon C, Feldman R, Michel Y, Kyriakou I, Emfietzoglou D, Saccavinie J-C, Ballesteros B, Tobias G, Bianco A and **Al-Jamal KT***. (2020) Neutron-irradiated antibody-functionalised carbon nanocapsules for targeted cancer radiotherapy. **Carbon.** doi.org/10.1016/j.carbon.2020.02.060 (IF 9.59)
50. Hamdi M, Abdel-Bar HM, Elmowafy E, **Al-Jamal KT**, Awad GAS. (2020) An integrated vitamin E-coated polymer hybrid nanoplatfrom: A lucrative option for an enhanced in vitro macrophage retention for an anti-hepatitis B therapeutic prospect. **PLoS One.** doi.org/10.1371/journal.pone.0227231 (IF 3.24)
51. Wang, JT-W*, Hodgins NO, Al-Jamal WT, Maher J, Sosabowski JK, **Al-Jamal KT*** (2020) Organ Biodistribution of Radiolabelled $\gamma\delta$ T Cells Following Liposomal Alendronate Administration in Different Mouse Tumour Models. **Nanotheranostics.** [doi:10.7150/ntno.32876](https://doi.org/10.7150/ntno.32876) 4(2):71-82. (IF 5.2)
52. Managuli RS, Wang, JT-W, Faruqu FN, Pandeya A, Jain S, **Al-Jamal KT**, Mutalika S. (2020) Surface engineered nanoliposomal platform for selective lymphatic uptake of asenapine maleate: In vitro and in vivo studies. **Materials Science and Engineering: C.** doi.org/10.1016/j.msec.2019.110620 (7.3)
53. Wang JT-W, Klippstein R, Martincic M, Pach E, Feldman R, Sefl M, Michel Y, Sosabowski JK, Kalbac M, Da Ros T, Ménard-Moyon C, Bianco A, Kyriakou I, Emfietzoglou D, Saccavini J-C, Ballesteros B*, **Al-Jamal KT*** and Tobias G*. (2019) Neutron activated samarium-153

encapsulated single- and multi-walled carbon nanotubes for *in vivo* imaging and tumour radiotherapy. **ACS Nano**. doi.org/10.1021/acsnano.9b04898 (IF 18)

54. Rahman R, Campbell E, Brem H, Pearl M, Green J, Janowski M, Walczak P, Tyler B, Warren K, Singleton W, Mullen A, Boyd M, Veal G, Hargrave D, van Vuurden D, Powell S, Battaglia G, Vivanco I, **Al-Jamal KT**, Walker D. SCIDOT-08. (2019) Children's Brain Tumour Drug Delivery Consortium. **Neuro-Oncology**, doi.org/10.1093/neuonc/noy130.050 (IF 10)
55. Wang J, Kafa H, Rubio N, Bansal S, Festy F, Sosabowski J, Abbott J and **Al-Jamal KT***. (2019) Functionalised LRP1 targeted carbon nanotubes across the blood-brain barrier in vitro and in vivo after intravenous injection. **Neuro-Oncology**, doi.org/10.1093/neuonc/noz167.011 (IF 10)
56. Rouatbi N, Lim YM, Grant V, Pollard S, Wang J and **Al-Jamal KT***. (2019) CRISPR/Cas9 gene editing of brain cancer stem cells using lipid-based nano-delivery. **Neuro-Oncology**, doi.org/10.1093/neuonc/noz167.029 (IF 10)
57. Sunoqrot S*, Al-Debsi T, Al-Shalabi E, Ibrahim LH, Faruqu FN, Walters A, Palgrave R, **Al-Jamal KT**. (2019) Bioinspired Polymerization of Quercetin to Produce a Curcumin-Loaded Nanomedicine with Potent Cytotoxicity and Cancer-Targeting Potential in Vivo. **ACS Biomaterials Science and Engineering**. [doi/10.1021/acsbiomaterials.9b01240](https://doi.org/10.1021/acsbiomaterials.9b01240) (IF 5.13)
58. Llenas M, Sandoval S, Costa PM, Oró-Solé J, Lope-Piedrafita S, Ballesteros B, **Al-Jamal KT**, Tobias G. (2019) Microwave-Assisted Synthesis of SPION-Reduced Graphene Oxide Hybrids for Magnetic Resonance Imaging (MRI). **Nanomaterials (Basel)**. doi.org/10.3390/nano9101364 (IF 4.91)
59. Hamed A, Osman R, **Al-Jamal KT**, Holayel SM, Geneidi A-S (2019) Enhanced antitubercular activity, alveolar deposition and macrophages uptake of mannosylated stable nanoliposomes. **Journal of Drug Delivery Science and Technology**. doi.org/10.1016/j.jddst.2019.03.032 (IF 3.98)
60. Managuli RS, Wang JT, Faruqu FN, Kushwah V, Raut SY, Shreya AB, **Al-Jamal KT**, Jain S, Mutalik S (2019). Asenapine maleate loaded nanostructured lipid carriers for oral administration: Design of experiment aided formulation optimization and *in vitro*, *ex vivo* and *in vivo* evaluations. **Nanomedicine (Lond)**. 14(7):889-910. doi.org/10.2217/nnm-2018-0289 (IF 5.3)
61. Hassan HAFM, Diebold SS, Smyth LA, Walters AA, Lombardi G, **Al-Jamal KT*** (2019). Application of carbon nanotubes in cancer vaccines: Achievements, challenges and chances. **J Control Release**.297:79-90. doi.org/10.1016/j.jconrel.2019.01.017 (IF 11.47)
62. Faruqu FN, Wang JT-W, Xu L, McNickle L, Chong EM-Y, Walters A, Gurney M, Clayton A, Smyth LA, Hider R, Sosabowski JK, **Al-Jamal KT*** (2019) Membrane radiolabelling of exosomes for comparative biodistribution analysis in immunocompetent and immunodeficient mice – a novel and universal approach. **Theranostics**. 9(6): 1666-1682. [doi:10.7150/thno.27891](https://doi.org/10.7150/thno.27891) (IF 11.56)

63. Gourevich D, Thanou M, Li N, **Al-Jamal K**, Nonell S, de Rosales RMT, Lindner L, Cochran D, Thurston D. (2018) Theranostics and image guided drug delivery. **Royal Society of Chemistry**. <https://books.google.co.uk/e>
64. Wang JTW, Bai J, **Al-Jamal KT**. Applications of Magnetic Nanoparticles in Multi-Modal Imaging. Chapter in Theranostics and Image Guided Drug Delivery. 2018. RSC Publishing. <https://books.google.co.uk/> pp. 53-85
65. Näkki S, Wang JT-W, Wu JW, Fan L, Rantanen J, Nissinen T, Kettunen MI, Backholm M, Ras RHA, **Al-Jamal KT**, Lehto V-P, Xu WJ (2018) Designed inorganic porous nanovector with controlled release and MRI features for safe administration of doxorubicin. **International Journal of Pharmaceutics**. 554:327-336. doi.org/10.1016/j.ijpharm.2018.10.074 (IF 5.87)
66. Faruqu FN, Xu L, **Al-Jamal KT*** (2018) Preparation of exosomes for siRNA delivery to cancer cells. **Journal of Visual Experiments**. (142), e58814, doi:10.3791/58814. [doi: 10.3791/58814](https://doi.org/10.3791/58814) (IF 1.35)
67. Mei KC, Ghazaryan A, Teoh EZ, Summers HD, Li Y, Ballesteros B, Piasecka J, Walters A, Hider RC, Mailänder V, **Al-Jamal KT**. (2018) Protein-corona-by-design in 2D: a reliable platform to decode bio-nano interactions for the next generation quality-by-design nanomedicines. **Advanced Materials**. 30, 1802732. doi.org/10.1002/adma.201802732 (IF 32.08)
68. Behroozi F, Abdkhodaie M.-J. *, Sadeghi Abandansari H, Satarian L, Molazem M and **Al-Jamal KT**, Baharvand H. * (2018) Engineering folate-targeting diselenide-containing triblock copolymer as a redox-responsive shell-sheddable micelle for antitumor therapy *in vivo*. **Acta Biomaterialia**. 76:239-256. doi.org/10.1016/j.actbio.2018.05.031 (IF 8.9)
69. Suffian IFM, Wang J, Faruqu FN, Benitez J, Nishimura Y, Ogino C, Kondo A and **Al-Jamal KT***. (2018) Engineering HER2-targeting hepatitis B virus core nanoparticles for siRNA delivery *in vitro* and *in vivo*. **ACS Applied Nano Materials**. 1(7):3269-3282. [doi/10.1021/acsanm.8b00480](https://doi.org/10.1021/acsanm.8b00480) (IF 5.09)
70. Costa PM, Wang JT-W, Morfin J-F, Khanum T, To W, Sosabowski JK, Tóth E and **Al-Jamal KT***. (2018) Functionalised carbon nanotubes enhance brain delivery of amyloid-targeting Pittsburgh Compound B (PiB)-derived ligands. **Nanotheranostics**. 2(2):168-183. (Won the cover image) doi.org/10.1016/j.nano.2018.02.018 (IF 5.6)
71. Hodgins NO, Wang JT and **Al-Jamal KT***. (2017) Nano-technology based carriers for nitrogen-containing bisphosphonates delivery as sensitizers of $\gamma\delta$ T cells for anticancer immunotherapy. **Adv Drug Deliv Rev**. 114:143-160. doi.org/10.1016/j.addr.2017.07.003 (IF 15.47)
72. Summers HD, Rees P, Wang JT and **Al-Jamal KT***. (2017) Spatially-resolved profiling of carbon nanotube uptake across cell lines. **Nanoscale**. 9(20):6800-6807. doi.org/10.1039/C7NR01561E (IF 8.3)
73. Hodgins NO, Al-Jamal WT, Wang JT, Klippstein R, Costa PM, Sosabowski JK, Marshall JF, Maher J and **Al-Jamal KT***. (2017) Investigating *in vitro* and *in vivo* $\alpha\beta 6$ integrin receptor-targeting liposomal alendronate for combinatory $\gamma\delta$ T cell immunotherapy. **J Control Release**. 256:141-152. doi.org/10.1016/j.jconrel.2017.04.025 (IF 11.47)

74. Ingallina C, Costa PM, Ghirga F, Klippstein R, Wang JT, Berardozi S, Hodgins N, Infante P, Pollard SM, Botta B and **Al-Jamal KT***. (2017) Polymeric glabrescine B nanocapsules for passive targeting of Hedgehog-dependent tumor therapy *in vitro*. **Nanomedicine (Lond)**. 12(7):711-728. [doi:10.2217/nnm-2016-0388](https://doi.org/10.2217/nnm-2016-0388) (IF 5.3)
75. Bin Mohamed Suffian IF, Garcia-Maya M, Brown P, Bui T, Nishimura Y, Palermo AR, Ogino C, Kondo A and **Al-Jamal KT***. (2017) Yield optimisation of hepatitis B virus core particles in E. coli expression system for drug delivery applications. **Sci Rep**. 7:43160. [doi: 10.1038/srep43160](https://doi.org/10.1038/srep43160). (IF 4.3). ISSN: 2045-2322.
76. Perez Ruiz de Garibay A, Spinato C, Klippstein R, Bourgoignon M, Martincic M, Pach E, Ballesteros B, Ménard-Moyon C and **Al-Jamal KT***, Tobias G, Bianco A. (2017) Evaluation of the immunological profile of antibody-functionalized metal-filled single-walled carbon nanocapsules for targeted radiotherapy. **Sci Rep**. 7:42605. [doi: 10.1038/srep42605](https://doi.org/10.1038/srep42605). (IF 4.3). ISSN: 2045-2322.
77. Mohamed Suffian IF, Wang JT, Hodgins NO, Klippstein R, Garcia-Maya M, Brown P, Nishimura Y, Heidari H, Bals S, Sosabowski JK, Ogino C, Kondo A and **Al-Jamal KT***. (2017) Engineering hepatitis B virus core particles for targeting HER2 receptors *in vitro* and *in vivo*. **Biomaterials**. 120:126-138. [doi: 10.1016/j.biomaterials.2016.12.012](https://doi.org/10.1016/j.biomaterials.2016.12.012). (IF 15.3) ISSN: 2206-7418.
78. Dubey RD, Klippstein R, Wang J, Hodgins N, Mei KC, Sosabowski J, Hider RC, Abbate V, Gupta PN and **Al-Jamal KT***. (2017) Novel hyaluronic acid conjugates for dual nuclear imaging and therapy in CD44-expressing tumors in mice *in vivo*. **Nanotheranostics**. 1(1): 59-79. [doi:10.7150/ntno.17896](https://doi.org/10.7150/ntno.17896). (IF 5.2) ISSN: 2197-6740.
79. Elsaid Z, Taylor KMG, Puri S, Eberlein CA and **Al-Jamal KT**, Bai J, Klippstein R, Wang J, Forbes B, Chana J, Somavarapu S*. (2016) Mixed micelles of lipoic acid-chitosan-poly(ethylene glycol) and distearoylphosphatidylethanolamine-poly(ethylene glycol) for tumor delivery. **European Journal of Pharmaceutical Sciences**. 101: 228-242. doi.org/10.1016/j.ejps.2017.02.001 (IF 4.38) ISSN · 0928-0987.
80. Costa PM, Bourgoignon M, Wang JT and **Al-Jamal KT***. (2016) Functionalised carbon nanotubes: From intracellular uptake and cell-related toxicity to systemic brain delivery. **J Control Release**. 241:200-219. [doi: 10.1016/j.jconrel.2016.09.033](https://doi.org/10.1016/j.jconrel.2016.09.033). Review. (IF 11.47) ISSN: 1873-4995.
81. **Al-Jamal KT***. (2016) Preface. **Int Rev Neurobiol**. 130:xi-xiv. [doi: 10.1016/S0074-7742\(16\)30152-0](https://doi.org/10.1016/S0074-7742(16)30152-0). (IF 1.2) ISSN: ISSN:0074-7742.
82. Kafa H, Wang JT and **Al-Jamal KT***. (2016) Current perspective of carbon nanotubes application in neurology. **Int Rev Neurobiol**. 130:229-63. [Doi 10.1016/bs.irn.2016.07.001](https://doi.org/10.1016/bs.irn.2016.07.001). (IF 1.2) ISSN:0074-7742.
83. Hodgins NO, Al-Jamal WT, Wang J, Parente-Pereira AC, Liu M, Maher J and **Al-Jamal KT***. (2016) *In vitro* potency, *in vitro* and *in vivo* efficacy of liposomal alendronate in combination with $\gamma\delta$ T cell immunotherapy in mice. **J. Control. Rel**. 241:229-241. [doi: 10.1016/j.jconrel.2016.09.023](https://doi.org/10.1016/j.jconrel.2016.09.023). (IF 11.4) ISSN: 1873-4995.

84. Mei KC, Bai J, Lorrio S, Wang J and **Al-Jamal KT***. (2016) Investigating the effect of tumor vascularization on magnetic targeting *in vivo* using retrospective design of experiment. **Biomaterials**. 106:276-85. [doi: 10.1016/j.biomaterials.2016.07.005](https://doi.org/10.1016/j.biomaterials.2016.07.005). (IF 15.3) ISSN-01429612.
85. **Al-Jamal KT***, Bai J, Wang J, Protti A, Southern, P, Bogart L, Heidari H, Li X, Cakebread A, Asker D, Al-Jamal WT, Shah AM, Bals S, Sosabowski J and Pankhurst Q*. (2016) Magnetic drug targeting: preclinical *in vivo* studies, mathematical modeling and extrapolation to humans. 16(9):5652-60. [doi: 10.1021/acs.nanolett.6b02261](https://doi.org/10.1021/acs.nanolett.6b02261). **Nano Letters**. (IF 11.19) ISSN: 1530-6984.
86. Klippstein R, Bansal S and **Al-Jamal KT***. (2016) Doxorubicin enhances curcumin's cytotoxicity in human prostate cancer cells *in vitro* by enhancing its cellular uptake. **International Journal of Pharmaceutics**. 514(1):169-175. [doi: 10.1016/j.ijpharm.2016.08.003](https://doi.org/10.1016/j.ijpharm.2016.08.003). (IF 5.87) ISSN: 0378- 5173.
87. Hassan HA, Smyth L, Wang JT, Costa PM, Ratnasothy K, Diebold SS, Lombardi G and **Al-Jamal KT***. (2016) Dual stimulation of antigen presenting cells using carbon nanotube-based vaccine delivery system for cancer immunotherapy. **Biomaterials**. 104:310-22 [doi: 10.1016/j.biomaterials.2016.07.005](https://doi.org/10.1016/j.biomaterials.2016.07.005). (IF 15.3) ISSN-01429612.
88. Bai J, Wang JT, Mei KC, Al-Jamal WT and **Al-Jamal KT***. (2016) Real-time monitoring of magnetic drug targeting using fibered confocal fluorescence microscopy. **J. Control. Rel.** 244B:240–246; [doi: 10.1016/j.jconrel.2016.07.026](https://doi.org/10.1016/j.jconrel.2016.07.026). (IF 11.47) ISSN: 1873-4995.
89. Bai J, Wang J, Rubio N, Protti A, Heidari H, Elgogary R, Southern P, Al-Jamal WT, Sosabowski J, Shah A, Bals S, Pankhurst Q and **Al-Jamal KT***. (2016) Triple-modal imaging of magnetically-targeted nanocapsules in solid tumours *in vivo*. **Theranostics**. 6(3):342-56. [doi: 10.7150/thno.11918](https://doi.org/10.7150/thno.11918). (IF 11.56) ISSN 1838-7640.
90. Cabana L, Bourgoignon M, Wang JT, Protti A, Klippstein R, de Rosales RT, Shah AM, Fontcuberta J, Tobías-Rossell E, Sosabowski JK and **Al-Jamal KT***, Tobias G*. (2016) The shortening of MWNT-SPION hybrids by steam treatment improves their magnetic resonance imaging properties *in vitro* and *in vivo*. **Small**. 12(21):2893-905. [doi: 10.1002/smll.201502721](https://doi.org/10.1002/smll.201502721). (IF 15.15) ISSN: 1613-6810.
91. Kafa H, Wang JT, Rubio N, Klippstein R, Costa P, Hassan HAFM, Sosabowski J, Bansal S, Preston JE, Abbott NJ and **Al-Jamal KT***. (2016) Translocation of LRP1 targeted carbon nanotubes of different diameters across the blood-brain barrier *in vitro* and *in vivo*. **J. Control. Rel.** 225:217-29. [doi: 10.1016/j.jconrel.2016.01.031](https://doi.org/10.1016/j.jconrel.2016.01.031). (IF 11.47) ISSN: 1873-4995.
92. Hassan HAFM, Smyth L, Rubio N, Ratnasothy K, Wang J, Bansal S, Summers HD, Diebold S, Lombardi G and **Al-Jamal KT***. (2016) Carbon nanotubes' surface chemistry determines their potency as vaccine nanocarriers *in vitro* and *in vivo*. **J. Control. Rel.** 225:205-16. [doi: 10.1016/j.jconrel.2016.01.030](https://doi.org/10.1016/j.jconrel.2016.01.030). (IF 11.47) ISSN: 1873-4995.
93. Wang J, Rubio N, Kafa H, Venturelli E, Fabbro C, Ménard-Moyon C, Da Ros T, Sosabowski J, Lawson AD, Robinson MK, Prato M, Bianco A, Festy F, Preston JE, Kostarelos K and **Al-Jamal KT***. (2016) Kinetics of functionalised carbon nanotube distribution in mouse brain after

systemic injection: Spatial to ultra-structural analyses. *J. Control. Rel.* 224:22-32. [doi: 10.1016/j.jconrel.2015.12.039](https://doi.org/10.1016/j.jconrel.2015.12.039). (IF 11.47) ISSN: 1873-4995.

94. Spinato C, Ruiz de Garibay AP, Kierkowicz M, Pach E, Martincic M, Klippstein R, Bourgognon M, Wang J T-W, Ménard-Moyon C and **Al-Jamal KT**, Ballesteros B, Tobias G* and Bianco A*. (2016) Design of antibody-functionalized carbon nanotubes filled with radioactivable metals towards a targeted anticancer therapy. *Nanoscale*. 8(25):12626-38. [doi: 10.1039/c5nr07923c](https://doi.org/10.1039/c5nr07923c). (IF 8.3) ISSN: 2040-3364.
95. Suaifan G, Shehadeh MB, Al-Ije HA and **Al-Jamal KT**, Taha M*. (2016) Pharmacophore and QSAR modeling of neuronal nitric oxide synthase ligands and subsequent validation and in silico search for new scaffolds. *Medicinal Chemistry*. 12(4):371-93. [DOI: 10.2174/1573406411666151002130609](https://doi.org/10.2174/1573406411666151002130609) (IF 2.5) ISSN: 1573-4064.
96. Wang JT and **Al-Jamal KT***. (2015) Functionalized carbon nanotubes: revolution in brain delivery. *Nanomedicine (Lond)*. 10(17):2639-42. [doi: 10.2217/nnm.15.114](https://doi.org/10.2217/nnm.15.114). (IF 5.3) ISSN: 1748-6963.
97. Rubio N, Mei KC, Klippstein R, Costa PM, Hodgins N, Wang JT, Festy F, Abbate V, Hider RC, Chan KL and **Al-Jamal KT***. (2015) Solvent-free click-mechanochemistry for the preparation of cancer cell targeting graphene oxide. *ACS Appl Mater Interfaces*. 7(34):18920-3. [doi: 10.1021/acsami.5b06250](https://doi.org/10.1021/acsami.5b06250). (IF 10.38) ISSN:1944-8244.
98. Mei KC, Rubio N, Costa PM, Kafa H, Abbate V, Festy F, Bansal S, Hider RC and **Al-Jamal KT***. (2015) Synthesis of double-clickable functionalised graphene oxide for biological applications. *Chem Commun (Camb)*. 51(81):14981-4. [doi: 10.1039/c5cc05412e](https://doi.org/10.1039/c5cc05412e). (IF 6.2) ISSN: 1359-7345. (Won back cover image)
99. Bourgognon M, Klippstein R and **Al-Jamal KT***. (2015) Kupffer cell isolation for nanoparticle toxicity testing. *Journal of Visual Experiments*. (102):e52989. [doi: 10.3791/52989](https://doi.org/10.3791/52989). (IF 1.3) ISSN 1940-087X.
100. Klippstein R, Wang JT, El-Gogary RI, Bai J, Mustafa F, Rubio N, Bansal S, Al-Jamal WT and **Al-Jamal KT***. (2015) Passively targeted curcumin-loaded PEGylated PLGA nanocapsules for colon cancer therapy *in vivo*. *Small*. 11(36):4704-22. [doi: 10.1002/smll.201403799](https://doi.org/10.1002/smll.201403799). (IF 15.15) ISSN: 1613-6810.
101. Mei KC, Guo Y, Bai J, Costa PM, Kafa H, Protti A, Hider RC and **Al-Jamal KT***. (2015) Organic solvent-free, one-step engineering of graphene-based magnetic-responsive hybrids using design of experiment-driven mechanochemistry. *ACS Appl Mater Interfaces*. 7(26):14176-81. [doi: 10.1021/acsami.5b03577](https://doi.org/10.1021/acsami.5b03577). (IF 10.38) ISSN:1944-8244.
102. Pereira S, Lee J, Rubio N, Hassan HA, Suffian IB, Wang JT, Klippstein R, Ballesteros B, Al-Jamal WT and **Al-Jamal KT***. (2015) Cationic liposome- multi-walled carbon nanotubes hybrids for dual siPLK1 and doxorubicin delivery *in vitro*. *Pharm Res*. 32(10):3293-308. [doi: 10.1007/s11095-015-1707-1](https://doi.org/10.1007/s11095-015-1707-1). (IF 4.2) ISSN: 0724-8741.
103. Bussy C, **Al-Jamal KT**, Boczkowski J, Lanone S, Prato M, Bianco A and Kostarelos K*. (2015) Microglia determine brain region-specific neurotoxic responses to chemically

functionalized carbon nanotubes. **ACS Nano**. 9(8):7815-30. [doi: 10.1021/acsnano.5b02358](https://doi.org/10.1021/acsnano.5b02358). (IF 15.88) ISSN 1936-0851.

104. Guo C, Al-Jamal WT, Toma FM, Bianco A, Prato M, **Al-Jamal KT*** and Kostarelos K*. (2015) Design of cationic multiwalled carbon nanotubes as efficient siRNA vectors for lung cancer xenograft Eradication. **Bioconjug Chem**. 26(7):1370-9. [doi: 10.1021/acs.bioconjchem.5b00249](https://doi.org/10.1021/acs.bioconjchem.5b00249). (IF 4.77) ISSN 1043-1802.
105. Rubio N, Hirvonen LM, Chong EZ, Wang JT, Bourgognon M, Kafa H, Hassan HA, Al-Jamal WT, McCarthy D, Hogstrand C, Festy F* and **Al-Jamal KT***. (2015) Multiphoton luminescence imaging of chemically functionalized multi-walled carbon nanotubes in cells and solid tumors. **Chem Commun (Camb)**. 51(45):9366-9. [doi: 10.1039/c5cc02675j](https://doi.org/10.1039/c5cc02675j). (IF 6.2) ISSN: 1359-7345.
106. Kafa H, Wang JT, Rubio N, Venner K, Anderson G, Pach E, Ballesteros B, Preston JE, Abbott NJ and **Al-Jamal KT***. (2015) The interaction of carbon nanotubes with an *in vitro* blood-brain barrier model and mouse brain *in vivo*. **Biomaterials**. 53:437-52. [doi: 10.1016/j.biomaterials.2015.02.083](https://doi.org/10.1016/j.biomaterials.2015.02.083). (IF 15.3) ISSN-01429612.
107. Bin Mohamed Suffian IF, Nishimura Y, Morita K, Nakamura-Tsuruta S, **Al-Jamal KT**, Ishii J, Ogino C and Kondo A*. (2015) Mutation of arginine residues to avoid non-specific cellular uptakes for hepatitis B virus core particles. **J Nanobiotechnology**. 13:15. [doi/10.1186/s12951-015-0074-8](https://doi.org/10.1186/s12951-015-0074-8) (IF 10.43) ISSN:1477-3155.
108. Rubio N, Serra-Maia R, Kafa H, Mei, K-C, Pach E, Luckhurst W, Zloh M, Festy F, Richardson J, Naglik J, Ballesteros B and **Al-Jamal KT***. (2014) Production of water-soluble few-layer graphene mesosheets by dry milling with hydrophobic drug. **Langmuir**. 16;30(49);14999-5008. [doi/10.1021/la5038475](https://doi.org/10.1021/la5038475) (IF 4.3) ISSN 0743-7463. (*Langmuir is ranked # 1 in Multidisciplinary Materials Science*)
109. Wang T -W J, Fabbro C, Venturelli E, Ménard-Moyon C, Chaloin O, Da Ros T, Methven L, Nunes A, Mather SJ, Robinson M, Amadou J, Prato M, Bianco A, Kostarelos K* and **Al-Jamal KT***. (2014) The relationship between the diameter of chemically-functionalized multi-walled carbon nanotubes and their organ biodistribution profiles *in vivo*. **Biomaterials**. 35(35):9517-28. [doi/S0142961214008631](https://doi.org/10.1016/j.biomaterials.2014.08.031) (IF 15.3) ISSN-01429612. (*Biomaterials is ranked # 1 in Biomaterials Science*)
110. El-Gogary R, Rubio N, Wang J T-W, Al-Jamal WT, Bourgognon M, Kafa H, Naeem M, Klippstein R, Abbate V, Leroux F, Bals S, Van Tendeloo G, Kamel AO, Awad GAS, Mortada ND, and **Al-Jamal KT***. (2014) Polyethylene glycol conjugated polymeric nanocapsules for targeted delivery of quercetin to folate-expressing cancer cells *in vitro* and *in vivo*. **ACS Nano**. 8(2):1384-401. [doi/10.1021/nn405155b](https://doi.org/10.1021/nn405155b) (IF 18) ISSN 1936-0851.
111. Wang T -W J, Cabana L, Bourgognon M, Kafa H, Protti A, Venner K, Shah AM, Sosabowski J, Mather SJ, Roig A, Ke X, Van Tendeloo G, de Rosales RTM, Tobias G*, and **Al-Jamal KT***. (2014) Magnetically decorated multi-walled carbon nanotubes as dual MRI and SPECT contrast agents. **Advanced Functional Materials**. 24 (13): 1880-1894. doi.org/10.1002/adfm.201302892 (IF 19.92) ISSN: 1616-3028. (*It won the Frontpiece's cover image*)

112. Suaifan GARY, Shehadeh MB, Al-Ije HA, **Al-Jamal KT** and Taha MO. (2014) Ritodrine potently inhibits neuronal nitric oxide synthase as a link between tocolysis and autism. **Medicinal Chemistry Research**. 23 (12): 5102-5109 [DOI:10.1007/s00044-014-1066-1](https://doi.org/10.1007/s00044-014-1066-1) (IF 1.7) ISSN: 1054-2523.
113. Servant A, Bussy C, **Al-Jamal KT**, and Kostarelos K. (2013) Design, engineering and structural integrity of electro-responsive carbon nanotube-poly(methyl) methacrylate hydrogels for pulsatile drug release. **Journal of Materials Chemistry B**. 9(36): 4593-4600. doi.org/10.1039/C3TB20614A (IF 6.33) ISSN 2050-750X.
114. Bardi G, Nunes A, Gherardini L, Bates K, **Al-Jamal KT**, Gaillard C, Prato M, Bianco A, Pizzorusso T* and Kostarelos K*. (2013) Functionalized carbon nanotubes in the brain: cellular internalization and neuroinflammatory responses. **PLoS One**. 8(11):e80964. doi.org/10.1371/journal.pone.0080964 (IF 3.24) ISSN: 1932-6203.
115. Osman R, **Al Jamal KT**, Kan PL, Awad G, Mortada N, El-Shamy AE and Alpar O*. (2013) Inhalable DNase I microparticles engineered with biologically active excipients. **Pulmonary Pharmacology and Therapeutics**. 26(6):700-9. doi.org/10.1016/j.pupt.2013.07.010 (IF 3.41) ISSN: 1522-9629.
116. **Al-Jamal KT***. (2013) Active drug targeting: lessons learned and new things to consider. **International Journal of Pharmaceutics**. 545, 1, 525-526. doi.org/10.1016/j.ijpharm.2013.03.050 (IF 5.87) ISSN: 0378- 5173.
117. Battigelli A, Wang T.-W. J., Russier J, Da Ros T, Kostarelos K, **Al-Jamal KT**, Prato M* and Bianco A*. (2013) Ammonium and guanidinium dendron-carbon nanotubes by amidation and click chemistry and their use for siRNA delivery. **Small**. 9 (21) 3610-3619. [doi/10.1002/smll.201300264](https://doi.org/10.1002/smll.201300264) (IF 15.15) ISSN: 1613-6810.
118. **Al-Jamal KT***, Al-Jamal KT, Wang J, Rubio N, Buddle J, Gathercole D, Zloh M and Kostarelos K*. (2013) Cationic poly-L-lysine dendrimer complexes doxorubicin and delays tumor growth *in vitro* and *in vivo*. **ACS Nano**. 7(3):1905-17. [doi/10.1021/nn305860k](https://doi.org/10.1021/nn305860k) (IF 18) ISSN:1936-0851.
119. Raffa V*, Vittorio O, Costa M, Ziaei A, Nitodas S, Riggio C, **Al-Jamal KT**, Gherardini L, Bardi G, Pizzorusso T, Karachalios T and Cuschieri A*. (2012) Multiwalled carbon nanotube antennas induce effective plasmid DNA transfection of bacterial cells. **Journal of Nanoneuroscience**. 2: 56-62. doi.org/10.1166/jns.2012.1016 ISSN: 1939-0653.
120. Nunes A, **Al-Jamal KT**, Nakajima T, Hariz M and Kostarelos K*. (2012) Applications of carbon nanotubes in neurology: clinical perspectives and toxicological risks. **Archives in toxicology**. 86(7):1009-20. [doi/10.1007/s00204-012-0860-0](https://doi.org/10.1007/s00204-012-0860-0) (IF 5.19) ISSN: 1432-0738.
121. Nunes A, **Al-Jamal KT** and Kostarelos*. (2012) Therapeutics, imaging & toxicity of nanomaterials in the central nervous system. **J. Control. Rel.** 161(2):290-306. doi.org/10.1016/j.jconrel.2012.03.026 (IF 11.47) ISSN: 1873-4995.
122. Nunes A, Bussy C, Gherardini L, Meneghetti M, Herrero MA, Bianco A, Prato M, Pizzorusso T, **Al-Jamal KT*** and Kostarelos K*. (2012) *In vivo* degradation of functionalized carbon

nanotubes after stereotactic injection in the brain cortex. *Nanomedicine (London)*. 7(10): 1485-1494. doi.org/10.2217/nnm.12.33 (IF 5.3) ISSN: 1748-6963.

123. **Al-Jamal KT**, Nunes A, Methven L, Al-Jamal WT, Shouping L, Herrero MA, ten Eikelder HMM, Mather SJ, Prato M, Bianco A and Kostarelos K*. (2012) Degree of chemical functionalization of carbon nanotubes determines tissue distribution and excretion profile. *Angewandte Chemie*. 51(26):6389-93. doi.org/10.1002/ange.201201991 (IF 16.82) ISSN: 0570-0833.
124. Liu Y, Servant A, Guy OJ, **Al-Jamal KT**, Williams R Hawkins KM and Kostarelos K*. (2012) An electric-field responsive microsystem for controllable miniaturised drug delivery applications. *Sensors and Actuators B*. 175: 100-105. doi.org/10.1016/j.proeng.2011.12.242 (IF 7.33) ISSN: 1873-3077.
125. **Al-Jamal KT***, Al-Jamal WT, Kostarelos K, Turton A and Florence AT. (2012) Anti-angiogenic poly-L-lysine dendrimer binds heparin and neutralizes its activity. *Results in Pharma Sciences*. 2:9-15. DOI: [10.1016/j.rinphs.2011.12.002](https://doi.org/10.1016/j.rinphs.2011.12.002) (IF 0.7) ISSN: 2211-3517.
126. Lacerda L, Russier J, Pastorin G, Herrero MA, Venturelli E, Dumortier H, **Al-Jamal KT**, Prato M, Kostarelos K and Bianco A*. (2012) Translocation mechanisms of chemically functionalised carbon nanotubes across plasma membranes. *Biomaterials*. 33:3334-43. doi.org/10.1016/j.biomaterials.2012.01.024 (IF 15.3) ISSN: 0142-9612.
127. Chang G, **Al-Jamal KT**, Ali-Boucetta H and Kostarelos K. Cell biology of Carbon Nanotubes. *Advances in Carbon Nanomaterials: Science and Applications*, (Pan Stanford, Singapore) 2011 <http://www.nanomedicinelab.com> (ISBN: 978-98-1426-787-8).
128. Raffa V, Gherardini L, Vittorio O, Bardi G, Ziaei A, Pizzorusso T, Riggio C, Nitodas S, Karachalios T, **Al-Jamal KT**, Kostarelos K, Costa M and Cuschieri A*. (2011) Carbon nanotube-mediated wireless cell permeabilization: drug and gene uptake. *Nanomedicine (Lond)*. 6:1709-18. [doi/10.2217/nnm](https://doi.org/10.2217/nnm) (IF 6.2) ISSN: 1748-6963.
129. **Al-Jamal KT**, Gherardini L, Bardi G, Nunes A, Guo C, Bussy C, Herrero MA, Bianco A, Prato M, Kostarelos K* and Pizzorusso T*. (2011) Functional motor recovery from brain ischemic insult by carbon nanotube-mediated siRNA silencing. *Proceedings of the National Academy of Science*. 108:10952-7. doi.org/10.1073/pnas.110093010 (IF 12.7) ISSN: 0027-8424.
130. Ali-Boucetta H, **Al-Jamal KT**, Müller KH, Li S, Porter AE, Eddaoudi A, Prato M, Bianco A* and Kostarelos K*. (2011) Cellular Uptake and Cytotoxic Impact of Chemically Functionalized and Polymer-Coated Carbon Nanotubes. *Small*. 7(22): 3230-3238. doi.org/10.1002/sml.201101004 (IF 15.15) ISSN: 1613-6810.
131. Liu Y, Servant A, Guy OJ, **Al-Jamal KT**, Williams R Hawkins KM and Kostarelos K*. (2012) An electric-field responsive microsystem for controllable miniaturised drug delivery applications. *Procedia Engineering* 25, 984-987. 175: 100-105. doi.org/10.1016/j.proeng.2011.12.242 (IF 1.6) ISSN: 1873-3077.
132. **Al-Jamal KT**, Nerl H, Müller KH, Ali-Boucetta H, Li S, Hanes PD, Jinschek JR, Prato M, Bianco A, Kostarelos K* and Porter AE*. (2011) Cellular uptake mechanisms of functionalised

multi-walled carbon nanotubes by 3D electron tomography imaging. *Nanoscale*. 3:2627-35. doi.org/en/content/articlelanding/2011 (IF 8.3) ISSN: 2040-3364.

133. Murphy FA, Poland CA, Duffin R, **Al-Jamal KT**, Ali-Boucetta H, Nunes A, Byrne F, Prina-Mello A, Li S, Mather SJ, Bianco A, Prato M, MacNee W, Kostarelos K* and Donaldson K*. (2011) Length-Dependent Retention of Carbon Nanotubes in the Pleural Space of Mice Initiates Sustained Inflammation and Progressive Fibrosis on the Parietal Pleura. *The American Journal of Pathology*. 78:2587-600. doi.org/10.1016/j.ajpath.2011.02.040 (IF 4.1) ISSN: 0002-9440.
134. Singh P, Samorì C, Toma FM, Bussy C, Nunes A, **Al-Jamal KT**, Ménard-Moyon C, Prato M, Kostarelos K*, and Bianco A*. (2011) Polyamine functionalized carbon nanotubes: synthesis, characterization, cytotoxicity and siRNA binding. *Journal of Materials Chemistry*. 21: 4850-4860. doi.org/en/content/articlelanding/2011/jm (IF 6.6) ISSN: 0959-9428.
135. Tian B, Al-Jamal WT, **Al-Jamal KT** and Kostarelos K*. (2011) Doxorubicin-loaded lipid-quantum dot hybrids: Surface topography and release properties. *International Journal of Pharmaceutics*. 416:443-7. doi.org/S0378517311000883?via%3Dihub (IF 5.87) ISSN: 0378-5173.
136. **Al-Jamal KT** and Kostarelos K. Imaging Carbon Nanotubes *in vivo*: a vignette of imaging modalities at the nanoscale. In: Beth Goins and William Phillips (eds.), (Pan Stanford, Singapore) 2011 (ISBN: 978-98-1426-709-0). doi.org/2012/02
137. Ali-Boucetta H, **Al-Jamal KT** and Kostarelos K. Cytotoxic assessment of carbon nanotube interaction with cell cultures. Methods in Molecular Biology series. Humana Press: 2011; 726: 299-312. doi/10.1007/978-1-61779-052-2_19
138. **Al-Jamal KT** and Kostarelos K. Assessment of cellular uptake of CNTs by flow cytometry. In: K. Balasubramanian and M. Burghard (eds.), Carbon Nanotubes, Methods in Molecular Biology series. Humana Press: 2010; 625:123-34. <https://book/10.1007/978-1-60761-579-8>
139. Chang G, **Al-Jamal KT**, Bianco A, Prato M and Kostarelos K. Carbon nanotube-dendron series for siRNA delivery: mechanisms of cellular internalisation, Drug Discovery Today 23 (15), 1100: 2011 (ISBN: 9780470015537). doi.org/10.1016/j.drudis.2010.09.404 (IF 7.85)
140. Li M, **Al-Jamal KT**, Kostarelos K and Reineke J*. (2010) Physiologically-Based Pharmacokinetic Modeling of Nanoparticles. *ACS Nano*. 4:6303-17. doi/10.1021/nn1018818 (IF 18) ISSN:1936-0851.
141. Nunes A, Amsharov N, Guo C, Van den Bossche J, Santhosh PI, Karachalios T, Nitodas S, Burghard M, Kostarelos K* and **Al-Jamal KT***. (2010) Hybrid polymer-grafted multiwalled carbon nanotubes for *in vitro* gene delivery. *Small*. 6:2281-91. doi/10.1002/smll.201000864 (IF 15.15) ISSN: 1613-6810.
142. **Al-Jamal KT**, Francesca M, Herrero MA, Yilmazer A, Ali-Boucetta H, Nunes A, Herrero MA, Tian B, Eddaoui A, Al-Jamal WT, Bianco A, Prato M and Kostarelos K*. (2010) Enhanced cellular internalization and gene silencing with a series of cationic dendron-multiwalled carbon nanotube:siRNA complexes. *FASEB J*. 24:4354-65. doi/full/10.1096/fj.09-141036 (IF 5.19) ISSN: 1530-6860.

143. Hong SY, Tobias G, **Al-Jamal KT**, Ballesteros B, Ali-Boucetta H, Lozano-Perez S, Nellist PD, Sim R B, Finucane C, Mather SJ, Green MLH, Kostarelos K* and Davis BG*. (2010) Filled and glycosylated carbon nanotubes for in vivo radioemitter localization and imaging. **Nature Materials**. 9: 485–490. <https://www.nature.com/articles/nmat2766> (IF 47.66) ISSN: 1476-1122.
144. **Al-Jamal KT***, Al-Jamal WT, Akerman S, Podesta JE, Yilmazer A, Turton JA, Bianco A, Vargesson N, Kanthou C, Florence AT, Tozer GM and Kostarelos K*. (2010) Systemic antiangiogenic activity of cationic poly-L-lysine dendrimer delays tumor growth. **Proceedings of the National Academy of Science**. 107:3966-3971. doi.org/content/107/9/3966 (IF 12.7) ISSN: 0027-8424.
145. Vigor K, Panagiotis G, Kyrtatos P, Minogue S, **Al-Jamal KT**, Kogelberg H, Tolner B, Kostarelos K, Begent RH, Pankhurst Q, Lythgoe MF and *Chester K. (2009) Nanoparticles functionalised with recombinant single chain Fv antibody fragments (scFv) for the magnetic resonance imaging of cancer cells. **Biomaterials**. 31:1307-1315. [doi/S0142961209011429](https://doi.org/10.1016/j.biomaterials.2009.01.042) (IF 15.3) ISSN: 0142-9612.
146. Al-Jamal WT, **Al-Jamal KT**, Cakebread A, Halket JM and Kostarelos K*. (2009) Blood circulation and tissue biodistribution of lipid-quantum dot (L-QD) hybrid vesicles intravenously administered in mice. **Bioconjug Chem**. 20:1696-1702 [doi/10.1021/bc900047n](https://doi.org/10.1021/bc900047n). (IF 6.33) ISSN: 1043-1802.
147. Herrero MA, Francesca M, **Al-Jamal KT**, Kostarelos K, Bianco A, Da Ros T, Bano F, Casalis L, Scoles G and Prato M*. (2009) Synthesis and characterization of a carbon nanotube-dendron series for efficient siRNA delivery. **Journal of the American Chemical Society**. 131:9843-8. [doi/10.1021/ja903316z](https://doi.org/10.1021/ja903316z) (IF 16.38) ISSN: 1520-5126.
148. Al-Jamal WT, **Al-Jamal KT**, Bowen T, Cakebread A, Halket JM and Kostarelos K*. (2009) Tumor targeting of functionalized quantum Dot–liposome hybrids by intravenous administration. **Molecular Pharmaceutics**. 6: 520–530. [doi/10.1021/mp800187d](https://doi.org/10.1021/mp800187d) (IF 4.93) ISSN: 1543-8392.
149. Podesta JE, **Al-Jamal KT**, Herrero MA, Tian B, Ali-Boucetta H, Hegde V, Bianco A*, Maurizio P* and Kostarelos K*. (2009) Antitumor activity and prolonged survival by carbon-nanotube-mediated therapeutic siRNA silencing in a human lung xenograft model. **Small**. 5:1176-1185. [doi/full/10.1002/smll.200801572](https://doi.org/10.1002/smll.200801572) (IF 15.15) ISSN: 1613-6810.
150. Al-Jamal WT, **Al-Jamal KT**, Bomans PH, Frederik PM and Kostarelos K*. (2008) Functionalized quantum dot – liposome hybrids for enhanced *in vivo* tumor uptake and retention. **Small**. 4:1406-1415. [doi/full/10.1002/smll.200701043](https://doi.org/10.1002/smll.200701043) (IF 15.15) ISSN: 1613-6810.
151. Singh R, **Al-Jamal KT**, Lacerda L and Kostarelos K*. (2008) Nanoengineering artificial lipid envelopes around adenovirus by self-assembly. **ACS Nano**. 2:1040–1050. [doi/full/10.1021/nn8000565](https://doi.org/10.1021/nn8000565) (IF 18) ISSN:1936-0851.

152. Al-Jamal WT, **Al-Jamal, KT**, Tian B, Lacerda L, Bomans PH, Frederik PM and Kostarelos K*. (2008) Lipid-Quantum Dot (L-QD) bilayer vesicles enhance tumor cell uptake & retention *in vitro* and *in vivo*. **ACS Nano**. 2:408-418. [doi/10.1021/nn700176a](https://doi.org/10.1021/nn700176a) (IF 18) ISSN:1936-0851.
153. Lacerda L, Soundararajan A, Singh R, Pastorin G, **Al-Jamal K T**, Turton JA, Frederik P, Herrero MA, Li S, Bao A, Emfietzoglou D, Mather S, Phillips WT, Prato M, Bianco A, Goins B and Kostarelos K*. (2008) Dynamic imaging of functionalized multi-walled carbon nanotube systemic circulation and urinary excretion. **Advanced Materials**. 20:225-230. [doi/abs/10.1002/adma.200702334](https://doi.org/10.1002/adma.200702334) (IF 32.08) ISSN: 1521-4095.
154. Ali-Boucetta H, **Al-Jamal KT**, McCarthy D, Prato M, Bianco A and Kostarelos K*. (2008) Multiwalled carbon nanotube-doxorubicin supramolecular complexes for cancer therapeutics. **Chemical Communications**, 459-461. [doi/2008/cc/b712350g#!divAbstract](https://doi.org/2008/cc/b712350g#!divAbstract) (IF 6.22) ISSN: 1359-7345.
155. Ruenraroengsak P, **Al-Jamal KT**, Hartell N, Braeckmans K, De Smedt SC and Florence AT*. (2007) Cell uptake, cytoplasmic diffusion and nuclear access of a 6.5 nm diameter dendrimer. **International Journal of Pharmaceutics**, 331: 215-219. doi.org/10.1016/j.ijpharm.2006.12.012 (IF 5.87) ISSN: 0378-5173.
156. **Al-Jamal KT** and Kostarelos K*. (2006) European nanomedicine research, training and regulation consolidates. **Nanomedicine**. 1: 491-492. [doi/10.2217/17435889.1.4.491](https://doi.org/10.2217/17435889.1.4.491) (IF 5.3) ISSN: 1748-6963.
157. **Al-Jamal KT**, Ruenraroengsak P, Hartell N and Florence AT*. (2006) An intrinsically fluorescent dendrimer as a nanoprobe of cell transport. **Journal of Drug Targeting**. 14: 405-412. [doi/10.1080/10611860600834441](https://doi.org/10.1080/10611860600834441) (IF 3.4) ISSN: 1029-2330.
158. Galal S, **Al-Jamal KT**, Khalafallah N and Alpar OH*. (2006) Preparation and characterization of polymer-lipid composite nanoparticles as DNA carriers. **Journal of Pharmacy and Pharmacology**. 58: A72-A73. [doi/10.1211/002235706778251483](https://doi.org/10.1211/002235706778251483) (IF 3.76) ISSN: 0022-3573.
159. **Al-Jamal KT**, Ramaswamy C and Florence AT*. (2005) Supramolecular structures from dendrons and dendrimers. **Advanced Drug Delivery Reviews**. 57: 2238-2270. doi.org/10.1016/j.addr.2005.09.015 (IF 15.47) ISSN: 1872-8294.
160. **Al-Jamal KT**, Ramaswamy C, Singh B and Florence AT*. (2005) Structures from lysine-based dendrons and dendrimers: monolayers, dendriplexes, dendrisomes, nanoparticles and micellar aggregates. **Journal of Drug Delivery Science and Technology**. 15: 11-18. [doi.org/10.1016/S1773-2247\(05\)50002-9](https://doi.org/10.1016/S1773-2247(05)50002-9) (IF 3.98) ISSN: 1773-2247.
161. **Al-Jamal KT**, Sakthivel T and Florence AT*. (2005) Solubilisation and transformation of amphipathic lipidic dendron vesicles (dendrisomes) into mixed micelles. **Colloids and Surfaces A-Physicochemical and Engineering Aspects**. 268: 52-59. doi.org/10.1016/j.colsurfa.2005.05.028 (IF 4.53) ISSN: 0927-7757.
162. **Al-Jamal KT**, Sakthivel T and Florence AT*. (2005) Dendrisomes: vesicular structures derived from a cationic lipidic dendron. **Journal of Pharmaceutical Sciences**. 94: 102-113. doi.org/10.1002/jps.20161 (IF 3.53) ISSN: 0022-3549.

163. **Al-Jamal KT**, Sakthivel T and Florence AT*. (2003) Dendrisomes: cationic lipidic dendron vesicular assemblies. *International Journal of Pharmaceutics*. 254: 33-36.
[doi.org/10.1016/S0378-5173\(02\)00678-6](https://doi.org/10.1016/S0378-5173(02)00678-6) (IF 5.87) ISSN: 0378-5173.
164. **Al-Jamal KT**, Sakthivel T and Florence AT*. (2003) Dendrisomes: cationic lipidic dendron vesicular assemblies. *Journal of Pharmacy and Pharmacology*. 55, 35-35.
[doi.org/10.1016/S0378-5173\(02\)00678-6](https://doi.org/10.1016/S0378-5173(02)00678-6) (IF 3.76) ISSN: 0022-3573.