

Publications:

1. X. Ding, C. Yang, W. Moreira, P. Yuan, B. Periaswamy, P. F. de Sessions, H. Zhao, J. Tan, A. Lee, K. X. Ong, N. Park, Z. C. Liang, J. L. Hedrick, Y. Y. Yang*. A macromolecule reversing antibiotic resistance phenotype and repurposing drugs as potent antibiotics. *Advanced Science* 7 (2020) 2001374. (IF: 15.840)
2. J. Leong, C. Yang, B. Q. Tan, S. Hor, J. L. Hedrick, Y. Y. Yang*. Combination of guanidinium and quaternary ammonium polymers with distinctive antimicrobial mechanisms achieving a synergistic antimicrobial effect. *Biomaterials Science* 2020, DOI: 10.1039/D0BM00752H. (IF: 6.183)
3. X. Wang, Y. Zheng, G. Zhong, C. Bao, S. Liu, N. Wiradharma, W. Fan, Y. Y. Yang*, X. Wang, Y. Huang. Branched α -helical peptides enhanced antitumor efficacy and selectivity. *Biomaterials Science* 2020, accepted manuscript published online. (IF: 6.183)
4. J. Tan, J. Tay, J. Hedrick and Y. Y. Yang*. Synthetic macromolecules as therapeutics that overcome resistance in cancer and microbial infection. *Biomaterials* 252 (2020) 120078. (IF: 10.317)
5. J. Leong, Y.-T. Hong, Y.-F. Wu, E. Ko, S. Dvoretzkiy, J. Y. Teo, B. S. Kim, K. Kim, H. Jeon, M. Boppart, Y. Y. Yang and H. Kong. Surface tethering of inflammation-modulatory nanostimulators to stem cells for ischemic muscle repair. *ACS Nano* 14 (2020) 5298-5313. (IF: 14.588)
6. Y. Li, Y. Gan, C. Li, Y. Y. Yang*, P. Yuan, X. Ding. Cell membrane-engineered hybrid soft nanocomposites for biomedical applications. *J. Mater. Chem. B* 2020 DOI: 10.1039/D0TB00472C. (IF: 5.344)
7. S. Venkataraman, G. Wei, K. P. Mineart, J. L. Hedrick, V. M. Prabhu, Y. Y. Yang*. The effect of solvent quality on pathway-dependent solution-state self-assembly of an amphiphilic diblock copolymer. *Journal of Applied Physics* 127 (2020) 125104. (IF: 2.367)
8. **Y. Y. Yang***, J. Nicolas. "Celebration of a chemical centenary". **Nature Chemistry** 11 (2019) 870-871. (IF: 26.201)
9. J. P. K. Tan, J. Tan, N. Park, K. Xu, E. D. Chan, C. Yang, V. A. Piunova, Z. Ji, A. Lim, J. Shao, A. Bai, X. Bai, D. Mantione, H. Sardon, **Y. Y. Yang***, J. L. Hedrick. "Upcycling poly(ethylene terephthalate) refuse to advanced therapeutics for the treatment of nosocomial and Mycobacterial infections". **Macromolecules** 52 (2019) 7878-7885. (IF: 5.914)
10. X. Chen, G. Zheng, J. Cheng, **Y. Y. Yang**. "Supramolecular theranostics". **Theranostics** 9 (2019) 3014-3016. (IF: 8.063)

11. A. L. Z. Lee, C. Yang, S. Gao, J. L. Hedrick, **Y. Y. Yang***. “Subcutaneous vaccination using injectable biodegradable hydrogels for long-term immune response”. **Nanomedicine: Nanotechnology, Biology and Medicine** 21 (2019) 102056 (IF: 5.57)
12. Y. Chuan, W. Lou, G. Zhong, A. Lee, J. Leong, W. Chin, B. Ding, C. Bao, J. P. K. Tan, Q. Pu, S. Gao, L. Xu, L. Y. Hsu, M. Wu, J. L. Hedrick, W. Fan, **Y. Y. Yang***. Degradable antimicrobial polycarbonates with unexpected activity and selectivity for treating multidrug-resistant *Klebsiella pneumoniae* lung infection in mice. **Acta Biomaterialia** 94 (2019) 268-280 (IF: 6.383)
13. S. Venkataraman, J. P. K. Tan, S. T. Chong, C. Y. H. Chu, E. A. Wilianto, C. X. Cheng, **Y. Y. Yang***. Identification of structural attributes contributing towards potency and selectivity of antimicrobial polyionenes: Amides are better than esters. **Biomacromolecules** 20 (2019) 2737-2742. (IF: 5.738)
14. W. Chin, G. Zhong, Q. Pu, C. Yang, W. Lou, P. F. De Sessions, B. Periaswamy, A. Lee, Z. C. Liang, X. Ding, S. Gao, C. Chu, S. Bianco, C. Bao, Y. W. Tong, W. Fan, M. Wu, J. L. Hedrick and **Y. Y. Yang***, “A macromolecular therapeutic approach to eradicate multidrug resistant bacterial infections while mitigating drug resistance onset”, **Nature Communications** 9 (2018) 917. (IF: 12.124)
15. D. Park, W. Cheng, F. Lai, C. Yang, P. F. de Sessions, B. Periaswamy, C. Chu, S. Bianco, S. Liu, S. Venkataraman, Q. Chen, **Y. Y. Yang***, J. L. Hedrick, “Addressing Drug Resistance in Cancer with Macromolecular Chemotherapeutic Agents”, **Journal of the American Chemical Society** 140 (2018) 4244-4252. (IF: 13.858)
16. G. Zhong, C. Yang, S. Liu, Y. Zheng, W. Lou, J. Y. Teo, C. Bao, W. Cheng, J. P. K. Tan, S. Gao, N. Park, S. Venkataraman, Y. Huang, M. H. Tan, X. Wang, J. L. Hedrick, W. Fan, **Y. Y. Yang***, “Polymers with distinctive anticancer mechanism that kills MDR cancer cells and inhibits tumor metastasis”, **Biomaterials** 199 (2019) 76-87. (IF: 8.806)
17. J. P. K. Tan, Z. X. Voo, S. Lim, S. Venkataraman, K. M. Ng, S. Gao, J. L. Hedrick, **Y. Y. Yang***, “Effective encapsulation of apomorphine into biodegradable polymeric nanoparticles through a reversible chemical bond for delivery across the blood–brain barrier”, **Nanomedicine: Nanotechnology, Biology and Medicine** 17 (2019) 236-245. (IF: 6.5)
18. J. Y. Teo, Y. Seo, E. Ko, J. Leong, Y. T. Hong, **Y. Y. Yang**, H. Kong, “Surface tethering of stem cells with H₂O₂-responsive anti-oxidizing colloidal particles for protection against oxidation-induced death”, **Biomaterials** 201 (2019) 1-15. (IF: 8.806)
19. S. Liu, R. J. Ono, C. Yang, S. Gao, M. J. Y. Tan, J. L. Hedrick, **Y. Y. Yang***, “Dual pH-responsive shell-cleavable polycarbonate micellar nanoparticles for in vivo anticancer drug delivery”, **ACS Appl. Mater. Interfaces** 10 (2018) 19355-19364. (IF: 8.097)

20. A. L. Z. Lee, Z. X. Voo, W. Chin, R. J. Ono, C. Yang, S. Gao, J. L. Hedrick, **Y. Y. Yang***, “Injectable coacervate hydrogel for delivery of anticancer drug-loaded nanoparticles in vivo”, **ACS Appl. Mater. Interfaces** 10 (2018) 13274-13282. (IF: 8.097)
21. C. Yang, A. Lee, S. Gao, S. Liu, J. L. Hedrick, **Y. Y. Yang***, “Hydrogels with prolonged release of therapeutic antibody: Block junction chemistry modification of ‘ABA’ copolymers provides superior anticancer efficacy”, **Journal of Controlled Release** 293 (2019) 193-200. (IF: 7.877)
22. W. Lou, S. Venkataraman, G. Zhong, B. Ding, J. P. K. Tan, L. Xu, W. Fan, **Y. Y. Yang***, “Antimicrobial polymers as therapeutics for treatment of multidrug-resistant *Klebsiella pneumoniae* lung infection”, **Acta Biomaterialia** 78 (2018) 78-88. Jul 20. doi: 10.1016/j.actbio.2018.07.038. (IF: 6.383)
23. S. Venkataraman, A. L. Z. Lee, J. P. K. Tan, Y. C. Ng, A. Lee, J. Y. K. Yong, G. Yi, Y. Zhang, I. J. Lim, T. T. Phan, **Y. Y. Yang***, “Functional cationic derivatives of starch as antimicrobial agents”, **Polymer Chemistry** published online on 28 November 2018. 10.1039/C8PY00740C. (IF: 4.927)
24. J. Leong, W. Chin, X. Ke, S. Gao, H. Kong, J. L. Hedrick, **Y. Y. Yang***, “Disease-directed design of biodegradable polymers: Reactive oxygen species and pH-responsive micellar nanoparticles for anticancer drug delivery”, **Nanomedicine** 14 (2018) 2666-2677. Jul 12. doi: 10.1016/j.nano.2018.06.015. (IF: 6.5)
25. Y. Seo, J. Leong, J. D. Park, Y.-T. Hong, S.-H. Chu, C. Park, D. H. Kim, Y.-H. Deng, V. Dushnov, J. Soh, S. Rogers, **Y. Y. Yang**, H. Kong, “Diatom microbubbler for active biofilm removal in confined spaces”, **ACS Appl. Mater. Interfaces** published online on August 14, 2019 10.1021/acsami.8b08643. (IF: 8.097)
26. C. Ren, X. Ding, A. Roy, J. Shen, S. Zhou, F. Chen, Y. S. F. Yau, H. Ren, **Y. Y. Yang**, H. Zeng. “A halogen bond-mediated highly active artificial chloride channel with high anticancer activity”, **Chem. Sci.** 9 (2018) 4044-4051. (IF: 9.063)
27. K. Narayanan, M. Khan, B. Gopalan, J. Antony, T. Das, **Y. Y. Yang**, A. C. A. Wan, “Sensitization of cancer cells via non-viral delivery of apoptosis inducing proteins using a cationic bolaamphiphile”, **Biotechnol. J.** 2018 May 26:e1800020. doi: 10.1002/biot.201800020. (IF: 3.507)
28. P. Yuan, X. Ding, **Y. Y. Yang**, Q. H. Xu, “Metal nanoparticles for diagnosis and therapy of bacterial infection”, **Adv. Healthc. Mater.** 2018 Mar 27:e1701392. doi: 10.1002/adhm.201701392. (IF: 5.11).
29. S. Obuobi, Z. X. Voo, M. W. Low, B. Czarny, V. Selvarajan, N. L. Ibrahim, **Y. Y. Yang***, P. L. R. Ee, “Phenylboronic acid functionalized polycarbonate hydrogels for controlled release of polymyxin B in *Pseudomonas aeruginosa* infected burn wounds”, **Adv. Healthc. Mater.** 2018, Mar 6. doi: 10.1002/adhm.201701388. (IF: 5.11).

30. S. Venkataraman, K. Mineart, V. Prabhu, J. Hedrick, **Y. Y. Yang***, “Cholesterol functionalized aliphatic N-substituted 8-membered cyclic carbonate”, *Polymer Chemistry* 2018, April 10. 10.1039/C8PY00406D. (IF: 5.375)
31. K. P. Mineart, S. Venkataraman, **Y. Y. Yang**, J. L. Hedrick, V. M. Prabhu, “Fabrication and characterization of hybrid stealth liposomes”, **Macromolecules** 51 (2018) 3184-3192. (IF: 5.835)
32. J. Leong, J. Y. Teo, V. K. Aakalu, **Y. Y. Yang**, H. Kong, “Engineering polymersomes for diagnostics and therapy”, **Adv. Healthc. Mater.** 7 (2018) e1701276 (IF: 5.11).
33. S. Liu, R. J. Ono, H. Wu, J. Y. Teo, Z. C. Liang, K. Xu, M. Zhang, G. Zhong, J. P. K. Tan, M. Ng, C. Yang, J. Chan, Z. Ji, C. Bao, K. Kumar, S. Gao, A. Lee, M. Fevre, H. Dong, J. Y. Ying, L. Li, W. Fan, J. L. Hedrick, **Y. Y. Yang***, “Highly potent antimicrobial polyionenes with rapid killing kinetics, skin biocompatibility and *in vivo* bactericidal activity”, **Biomaterials** 127 (2017) 36-48. (IF: 8.387)
34. X. Ke, C. Yang, W. Cheng, **Y. Y. Yang***, “Delivery of NF- κ B shRNA using carbamate-mannose modified PEI for eliminating cancer stem cells”, **Nanomedicine: Nanotechnology, Biology and Medicine** 14 (2017) 405-414. (IF: 5.72)
35. X. Ding, W. Chin, C. N. Lee, J. L. Hedrick, **Y. Y. Yang***. “Peptide-functionalized polyurethane coatings prepared *via* grafting-to strategy to selectively promote endothelialization”, **Adv. Healthc. Mater.** 7 (2017) doi: 10.1002/adhm.201700944. (IF: 5.11)
36. S. Liu, K. Fukushima, S. Venkataraman, J. L. Hedrick, **Y. Y. Yang***, “Supramolecular nanofibers self-assembled from cationic small molecules derived from repurposed poly(ethylene terephthalate) for antibiotic delivery”, **Nanomedicine: Nanotechnology, Biology and Medicine** 14 (2018) 165-172. (IF: 5.72)
37. K. Xu, Z. C. Liang, X. Ding, H. Hu, S. Liu, M. Nurmik, S. Bi, F. Hu, Z. Ji, J. Ren, S. Yang, **Y. Y. Yang***, L. Li, “Nanomaterials in the prevention, diagnosis, and treatment of Mycobacterium tuberculosis infections”, **Adv. Healthc. Mater.** 7 (2018) doi: 10.1002/adhm.201700509. (IF: 5.11)
38. G. Wei, S. Venkataraman, **Y. Y. Yang**, J. L. Hedrick, V. M. Prabhu, “Enthalpy-driven micellization of oligocarbonate-fluorene end-functionalized Poly (ethylene glycol)”, *Polymer* 134 (2018) 94-103. (IF: 3.48)
39. R. J. Ono, A. L. Z. Lee, Z. X. Voo, S. Venkataraman, B. W. Koh, **Y. Y. Yang***, J. L. Hedrick, “Biodegradable strain-promoted click hydrogels for encapsulation of drug-loaded nanoparticles and sustained release of therapeutics”, **Biomacromolecules** 18 (2017) 2277–2285. (IF: 5.246)

40. Z. Y. Ong, C. Yang, W. Cheng, Z. X. Voo, W. Chin, J. L. Hedrick, **Y. Y. Yang***, “Biodegradable cationic poly(carbonates): Effect of varying side chain hydrophobicity on key aspects of gene transfection”, **Acta Biomaterialia** 54 (2017) 201-211. (IF: 6.319)
41. J. S. Khara, S. Obuobi, Y. Wang, M. S. Hamilton, B. D. Robertson, S. M. Newton, **Y. Y. Yang**, P. R. Langford, P. L. R. Ee, “Disruption of drug-resistant biofilms using de novo designed short α -helical antimicrobial peptides with idealized facial amphiphilicity”, **Acta Biomaterialia** 57 (2017) 103-114. (IF: 6.319)
42. J. P. K. Tan, D. J. Coady, H. Sardon, A. Yuen, S. Gao, S. W. Lim, Z. C. Liang, E. W. Tan, S. Venkataraman, A. C. Engler, M. Fevre, R. Ono, **Y. Y. Yang***, J. L. Hedrick, “Broad spectrum macromolecular antimicrobials with biofilm disruption capability and in vivo efficacy”, **Adv. Healthc. Mater.** 6 (2017). doi: 10.1002/adhm.201601420. (IF: 5.76).
43. G. Wei, S. Venkataraman, **Y. Y. Yang**, J. L. Hedrick, V. M. Prabhu, “Self-assembly and dynamics driven by oligocarbonate-fluorene end-functionalized poly(ethylene glycol) ABA triblock copolymer”, **Macromolecules** 50 (2017) 1090 - 1101. (IF: 5.554)
44. G. Zhong, J. Cheng, Z. C. Liang, L. Xu, W. Lou, C. Bao, Z. Y. Ong, H. Dong, **Y. Y. Yang***, W. Fan, “Short Synthetic β -Sheet Antimicrobial Peptides for the Treatment of Multidrug-Resistant *Pseudomonas Aeruginosa* Burn Wound Infections”, **Adv. Healthc. Mater.** 6 (2017) DOI: 10.1002/adhm.201601134. (IF: 5.797)
45. H. Wu, S. Liu, N. Wiradharma, Z. Y. Ong, Y. Li, **Y. Y. Yang***, J. Y. Ying, “Short Synthetic α -Helical-Forming Peptide Amphiphiles for Fungal Keratitis Treatment *In Vivo*”, **Adv. Healthc. Mater.** 6 (2017) DOI: 10.1002/adhm.201600777. (IF: 5.797)
46. J. M. W. Chan, R. J. Wojtecki, H. Sardon, A. L. Z. Lee, C. E. Smith, A. Shkumatov, S. Gao, H. Kong, **Y. Y. Yang**, J. L. Hedrick, “Self-Assembled, Biodegradable Magnetic Resonance Imaging Agents: Organic Radical-Functionalized Diblock Copolymers”, **ACS Macroletters** 6 (2017) 176-180. (IF: 5.766)
47. N. H. Park, Z. X. Voo, **Y. Y. Yang**, J. L. Hedrick, “Convergent Approach to Boronic Acid Functionalized Polycarbonates: Accessing New Dynamic Material Platforms”, **ACS Macroletters** 6 (2017) 252-256. (IF: 5.766)
48. A. Bossion, G. O. Jones, D. Taton, D. Mecerreyes, J. L. Hedrick, Z. Y. Ong, **Y. Y. Yang**, H. Sardon, “Non-Isocyanate Polyurethane Soft Nanoparticles Obtained by Surfactant-Assisted Interfacial Polymerization”, **Langmuir** 33 (2017) 1959-1968. (IF: 3.993)

49. G. Wei, S. Venkataraman, **Y. Y. Yang**, J. L. Hedrick, V. M. Prabhu, “Enthalpy-driven micellization of oligocarbonate-fluorene end-functionalized poly(ethylene glycol)”, **Polymer** (2017) doi.org/10.1016/j.polymer.2017.11.057. (IF: 3.684)
50. J. Y. Teo, W. Chin, X. Ke, S. Gao, S. Liu, W. Cheng, J. L. Hedrick, **Y. Y. Yang***, “pH and Redox Dual-Responsive Biodegradable Polymeric Micelles with High Drug Loading for Effective Anticancer Drug Delivery”, **Nanomedicine: Nanotechnology, Biotechnology and Medicine** 13 (2016) 431-442. (IF: 5.671)
51. A. Yuen, A. Bossion, E. Gomez-Bengoa, F. Ruiperez, M. Isik, J. L. Hedrick, D. Mecerreyes, Y. Y. Yang, H. Sardon, “Room Temperature Synthesis of Non-Isocyanate Polyurethanes (NIPUs) Using Highly Reactive *N*-Substituted 8-Membered Cyclic Carbonates”, **Polymer Chemistry** 7 (2016) 2105-2111. (IF: 5.687)
52. X. Ding, P. Yuan, **Y. Y. Yang***, Q. Xu, “Au-Ag Core-shell Nanoparticles for Simultaneous Bacterial Imaging and Synergistic Antibacterial Activity”, **Nanomedicine: Nanotechnology, Biotechnology and Medicine** 13 (2017) 297-305. (IF: 5.671)
53. Y. Wang, X. Ke, Z. X. Voo, S. Y. S. Ling, C. Yang, S. Gao, S. Liu, S. Venkataraman, S. A. O. Obuobi, J. S. Khara, **Y. Y. Yang***, P. L. R. Ee, “Biodegradable Functional Polycarbonate Micelles for Controlled Release of Amphotericin B”, **Acta Biomaterialia** 46 (2016) 211-220. (IF: 6.008)
54. S. Venkataraman, J. P. K. Tan, V. W. L. Ng, E. W. P. Tan, J. L. Hedrick, **Y. Y. Yang***, “Amphiphilic and Hydrophilic Block Copolymers from Aliphatic *N*-Substituted 8-Membered Cyclic Carbonates: A Versatile Macromolecular Platform for Biomedical Applications”, **Biomacromolecules** 18 (2017) 178-188. (IF: 5.583)
55. G. H. Lee, M. M. Aung, C. Yang, J. L. Hedrick, S. G. Lim, **Y. Y. Yang**, “Polyethylenimines (PEI) polymer functionalized with L-mannose moieties inhibits hepatitis B virus (HBV) entry into HepG2-hNTCP cells with negligible cellular toxicity”, **Hepatology** 64 (2016) 938A-938A. (IF: 13.246)
56. N. H. Park, M. Fevre, Z. X. Voo, R. J. Ono, **Y. Y. Yang** and J. L. Hedrick, “Expanding the Cationic Polycarbonate Platform: Attachment of Sulfonium Moieties by Postpolymerization Ring Opening of Epoxides”, **ACS Macro Letters** 5 (2016) 1247-1252. (IF: 5.766)
57. C. Englert, M. Fevre, R. J. Wojtecki, X. Qingxing, W. Cheng, C. Yang, M. Hartlieb, K. Kempe, J. M. Garcia, R. J. Ono, U. S. Schubert, **Y. Y. Yang***, J. L. Hedrick, “Facile Carbohydrate-Mimetic Modifications of Poly(ethylene imine) Carriers for Gene Delivery Applications”, **Polymer Chemistry** 7 (2016) 5862-5872. (IF: 5.687)
58. M. Zhang, J. J. Teo, S. Liu, Z. C. Liang, X. Ding, R. J. Ono, G. Breyta, A. C. Engler, D. J. Coady, J. Garcia, A. Nelson, **Y. Y. Yang***, J. L. Hedrick, “Simple and Cost-

Effective Polycondensation Routes to Antimicrobial Consumer Products”, **Polymer Chemistry** 7 (2016) 3923-3932. (IF: 5.687)

59. M. Isik, J. P. Tan, R. J. Ono, A. Sanchez-Sanchez, D. Mecerreyes, **Y. Y. Yang**, J. L. Hedrick, H. Sardon, “Tuning the Selectivity of Biodegradable Antimicrobial Cationic Polycarbonates by Exchanging the Counter-Anion”, **Macromolecular Bioscience** 16 (2016) 1360-1367. (IF: 3.85)
60. J. S. Khara, M. Priestman, I. Uhl’a, M. S. Hamilton, N. Krishnan, Y. Wang, **Y. Y. Yang**, P. R. Langford, S. M. Newton, B. D. Robertson, P. L. R. Ee, “Unnatural Amino Acid Analogues of Membrane-Active Helical Peptides with Anti-Mycobacterial Activity and Improved Stability”, **Journal of Antimicrobial Chemotherapy** 71 (2016) 2181-2191. (IF: 5.313)
61. Z. Y. Ong, D. J. Coady, J. P. K. Tan, Y. Li, J. M. W. Chan, **Y. Y. Yang***, J. L. Hedrick, “Design and Synthesis of Biodegradable Grafted Cationic Polycarbonates as Broad Spectrum Antimicrobial Agents”, **Journal of Polymer Science Part A – Polymer Chemistry** 54 (2016) 1029-1035. (IF: 3.245)
62. S. Venkataraman, V. W. L. Ng, D. J. Coady, H. W. Horn, G. O. Jones, T. S. Fung, H. Sardon, R. M. Waymouth, J. L. Hedrick, **Y. Y. Yang***, “A Simple and Facile Approach to Functional Eight-Membered Aliphatic Cyclic Carbonates and Their Organo-Catalytic Polymerization”, **Journal of the American Chemical Society** 137 (2015) 13851-13860. (IF: 12.113)
63. R. J. Wojtecki, G. O. Jones, A. Y. Yuen, W. Chin, D. J. Boday, A. Nelson, J. M. García, **Y. Y. Yang**, J. L. Hedrick, “Developments in Dynamic Covalent Chemistries from the Reaction of Thiols with Hexahydrotriazines”, **Journal of the American Chemical Society** 137 (2015) 14248-14251. (IF: 12.113)
64. K. Ichiyama, C. Yang, L. Chandrasekaran, S. Liu, L. Rong, Y. Zhao, S. Gao, A. Lee, K. Ohba, Y. Suzuki, Y. Yoshinaka, K. Shimotohno, K. Miyakawa, A. Ryo, J. Hedrick, N. Yamamoto, **Y. Y. Yang***, “Cooperative Orthogonal Macromolecular Assemblies with Broad Spectrum Antiviral Activity, High Selectivity and Resistance Mitigation”, **Macromolecules** 49 (2016) 2618-2629. (Impact Factor-IF: 5.80)
65. C. Yang, S. Krishnamurthy, J. Liu, S. Liu, X. Lu, D. J. Coady, W. Cheng, G. De Libero, A. Singhal, J. L. Hedrick, **Y. Y. Yang***, “Broad-Spectrum Antimicrobial Star Polycarbonates Functionalized with Mannose for Targeting Bacteria Residing Inside Immune Cells”, **Adv. Healthc. Mater.** 11 (2016) 1272-1281. (IF: 5.797)
66. Q. Xu, C. Yang, J. L. Hedrick, **Y. Y. Yang***, “Quaternary Ammonium-Functionalized Silica Particles with Antimicrobial Properties Synthesized via One-Step Grafting of Amphiphilic Cyclic Carbonates”, **Polymer Chemistry** 7 (2016) 2192-2201 (IF: 5.52)

67. P. Y. Teo, W. Cheng, J. L. Hedrick, **Y. Y. Yang***, “Co-Delivery of Drugs and Plasmid DNA for Cancer therapy”, **Advanced Drug Delivery Reviews** 98 (2016) 41-63. (IF: 15.038)
68. J. M. W. Chan, J. P. K. Tan, A. C. Engler, X. Ke, S. Gao, C. Yang, H. Sardon, **Y. Y. Yang***, J. L. Hedrick, “Organocatalytic Anticancer Drug Loading of Degradable Polymeric Mixed Micelles *via* a Biomimetic Mechanism”, **Macromolecules** 49 (2016) 2013-2021. (IF: 5.80)
69. S. Krishnamurthy, V. W. L. Ng, S. Gao, M.-H. Tan, J. L. Hedrick, **Y. Y. Yang***, “Codelivery of Dual Drugs from Polymeric Micelles for Simultaneous Targeting of Both Cancer Cells and Cancer Stem Cells”, **Nanomedicine** 10 (2015) 2819-2832. (IF: 5.413)
70. Z. X. Voo, M. Khan, Q. Xu, K. Narayanan, V. W. J. Ng, J. L. Hedrick, **Y. Y. Yang***, “Antimicrobial Coatings against Biofilm Formation: The Unexpected Balance between Antifouling and Bactericidal Behavior”, **Polymer Chemistry** 7 (2016) 656-668. (IF: 5.52)
71. A. Yuen, A. Bossion, E. Gómez-Bengoa, F. Ruipérez, M. Isik, J. L. Hedrick, D. Mecerreyes, **Y. Y. Yang**, H. Sardon, “Room Temperature Synthesis of Non-Isocyanate Polyurethanes (NIPUs) Using Highly Reactive N-Substituted 8-Membered Cyclic Carbonates”, **Polymer Chemistry** 7 (2016) 2105-2111. (IF: 5.52)
72. C. Englert, M. Hartlieb, P. Bellstedt, K. Kempe, C. Yang, S. K. Chu, X. Ke, J. M. Garcia, R. J. Ono, M. Fevre, R. J. Wojtecki, U. S. Schubert, **Y. Y. Yang***, J. L. Hedrick, “Enhancing the Biocompatibility and Biodegradability of Linear Poly(ethylene imine) through Controlled Oxidation”, **Macromolecules** 48 (2015) 7420-7427. (IF: 5.80)
73. J. S. Khara, F. K. Lim, Y. Wang, X.-Y. Ke, Z. X. Voo, **Y. Y. Yang**, R. Lakshminarayanan and P. L. R. Ee, “Designing α -Helical Peptides with Enhanced Synergism and Selectivity against Mycobacteria: Discerning the Role of Hydrophobicity and Helicity”, **Acta Biomaterialia** 28 (2015) 99-108. (IF: 6.025)
74. V. M. Prabhu, S. Venkataraman, **Y. Y. Yang**, J. L. Hedrick, “Equilibrium Self-Assembly, Structure, and Dynamics of Clusters of Star-Like Micelles”, **ACS Macro Letters** 4 (2015) 1128-1133. (IF: 5.764)
75. V. M. Prabhu, S. Venkataraman, **Y. Y. Yang**, J. L. Hedrick. “Star-Like Structure of Polycarbonate-Fluorene End-Functionalized Polyethylene Glycol ABA Triblock Polymers below the Gel Point”, **Macromolecular Symposia** 358 (2015) 157-169.
76. J. Cheng, W. Chin, H. Dong, L. Xu, G. Zhong, Y. Huang, L. Li, K. Xu, M. Wu, J. L. Hedrick, **Y. Y. Yang***, W. Fan, “Biodegradable Antimicrobial Polycarbonates with *In Vivo* Efficacy against Multidrug-Resistant MRSA Systemic Infection”, **Adv. Healthc. Mater.** 4 (2015) 2128-2136 (IF: 5.797)

77. W. Cheng, C. Yang, X. Ding, A. C. Engler, J. L. Hedrick, **Y. Y. Yang***, “Broad-Spectrum Antimicrobial/Antifouling Soft Material Coatings Using Poly(ethylenimine) as a Tailorable Scaffold”, **Biomacromolecules** 16 (2015) 1967-1977. (IF: 5.750)
78. R. J. Ono, A. L. Z. Lee, W. Chin, W. S. Goh, A. Y. L. Lee, **Y. Y. Yang***, J. L. Hedrick, “Biodegradable Block Copolyelectrolyte Hydrogels for Tunable Release of Therapeutics and Topical Antimicrobial Skin Treatment”, **ACS Macro Letters** 4 (2015) 886-891. (IF: 5.764)
79. P. Y. Teo, C. Yang, L. M. Whilding, A. C. Parente-Pereira, J. Maher, A. J. George, J. L. Hedrick, **Y. Y. Yang***, S. Ghaem-Maghami., “Ovarian Cancer Immunotherapy Using PD-L1 siRNA Targeted Delivery from Folic Acid-Functionalized Polyethylenimine: Strategies to Enhance T Cell Killing”, **Adv. Healthc. Mater.** 4 (2015) 1180-1189. (IF: 5.797)
80. H. Sardon, J. P. Tan, J. M. Chan, D. Mantione, D. Mecerreyes, J. L. Hedrick, **Y. Y. Yang***, “Thermoresponsive Random Poly(ether urethanes) with Tailorable LCSTs for Anticancer Drug Delivery”, **Macromolecular Rapid Communications** 36 (2015) 1761-1767. (IF: 4.941)
81. S. Tan, C. Gan, R. Li, Y. Ye, S. Zhang, X. Wu, **Y. Y. Yang***, W. Fan, M. Wu, “A Novel Chemosynthetic Peptide with β -Sheet Motif Efficiently Kills *Klebsiella Pneumoniae* in a Mouse Model”, **International Journal of Nanomedicine** 10 (2015) 1045-1059. (IF: 4.383)
82. C. Yang, S. Q. Liu, S. Venkataraman, S. J. Gao, X. Y. Ke, X. T. Chia, J. L. Hedrick, **Y. Y. Yang***, “Structure-Directing Star-Shaped Block Copolymers: Supramolecular Vesicles for the Delivery of Anticancer Drugs”, **Journal of Controlled Release** 208 (2015) 93-105. (IF: 7.261)
83. A. Pascual, J. P. Tan, A. Yuen, J. M. Chan, D. J. Coady, D. Mecerreyes, J. L. Hedrick, **Y. Y. Yang***, H. Sardon, “Broad-Spectrum Antimicrobial Polycarbonate Hydrogels with Fast Degradability”, **Biomacromolecules** 16 (2015) 1169-1178. (IF: 5.788)
84. A. C. Engler, X. Ke, S. Gao, J. M. W. Chan, D. J. Coady, R. J. Ono, R. Lubbers, A. Nelson, **Y. Y. Yang***, J. L. Hedrick, “Hydrophilic Polycarbonates: Promising Degradable Alternatives to Poly(ethylene glycol)-Based Stealth Materials”, **Macromolecules** 48 (2015) 1673-1678. (IF: 5.927)
85. Z. X. Voo, M. Khan, K. Narayanan, D. Seah, J. L. Hedrick, **Y. Y. Yang***, “Antimicrobial/Antifouling Polycarbonate Coatings: Role of Block Copolymer Architecture”, **Macromolecules** 48 (2015) 1055-1064. (IF: 5.927)
86. Q. Xu, H. Sardon, J. M. W. Chan, J. L. Hedrick, **Y. Y. Yang***, “Polyurethane-Coated Silica Particles with Broad-Spectrum Antibacterial Properties”, **Polymer Chemistry** 6 (2015) 2011-2022. (IF: 5.368)

87. A. L. Z. Lee, S. Venkataraman, C. H. Fox, D. J. Coady, C. W. Frank, J. L. Hedrick, **Y. Y. Yang***, “Modular Composite Hydrogels from Cholesterol-Functional Polycarbonates for Biomedical Applications”, **Journal of Materials Chemistry B** 3 (2015) 6953-6963. (IF: 4.726)
88. Z. Y. Ong, N. Wiradharma, **Y. Y. Yang***, “Strategies Employed in the Design and Optimization of Synthetic Antimicrobial Peptide Amphiphiles with Enhanced Therapeutic Potentials”, **Advanced Drug Delivery Reviews** 78 (2014) 28-45. (IF: 15.038)
89. V. Ng, J. Chan, H. Sardon, R. J. Ono, J. M. García, **Y. Y. Yang***, J. L. Hedrick, “Antimicrobial Hydrogels: A New Weapon in the Arsenal against Multidrug-Resistant Infections”, **Advanced Drug Delivery Reviews** 78 (2014) 46-62. (IF: 15.038)
90. **Y. Y. Yang***, “Emergence of Multidrug-Resistant Bacteria: Important Role of Macromolecules and Drug Delivery Systems”, **Advanced Drug Delivery Reviews** 78 (2014) 1-2. (IF: 15.038)
91. A. L. Z. Lee, V. W. L. Ng, S. Gao, J. L. Hedrick, **Y. Y. Yang***, “Injectable Biodegradable Hydrogels for Subcutaneous Delivery of Avastin with Enhanced Therapeutic Efficiency against Metastatic Colorectal Cancer”, **Biomacromolecules** 16 (2015) 465-475. (IF: 5.788)
92. R. J. Ono, S. Q. Liu, S. Venkataraman, W. Chin, **Y. Y. Yang**, J. L. Hedrick, “Benzyl Chloride Functionalized Polycarbonates: A Versatile Platform for the Synthesis of Functional Biodegradable Polycarbonates”, **Macromolecules** 47 (2014) 7725-7731. (IF: 5.927)
93. H. Wu, Z. Y. Ong, S. Liu, Y. Li, N. Wiradharma, **Y. Y. Yang***, J. Y. Ying, “Synthetic β -Sheet Forming Peptide Amphiphiles for Treatment of Fungal Keratitis”, **Biomaterials** 43 (2015) 44-49. (IF: 8.312)
94. A. L. Z. Lee, V. W. Ng, G. L. Poon, X. Ke, J. L. Hedrick, **Y. Y. Yang***, “Co-Delivery of Anti-Viral and Anti-Fungal Therapeutics for the Treatment of Sexually Transmitted Infections Using a Moldable, Supramolecular Hydrogel”, **Adv. Healthc. Mater.** 4 (2015) 385-394. (IF: 5.797)
95. S. Krishnamurthy, X. Ke, **Y. Y. Yang***, “Delivery of Therapeutics Using Nanocarriers for Targeting Cancer Cells and Cancer Stem Cells”, **Nanomedicine** 10 (2015) 143-160. (IF: 5.824)
96. C. Yang, X. Ding, R. J. Ono, H. Lee, L. Y. Hsu, Y. W. Tong, J. Hedrick, **Y. Y. Yang***, “Brush-Like Polycarbonates Containing Dopamine, Cations, and PEG Providing a Broad-Spectrum, Antibacterial, and Antifouling Surface via One-Step Coating”, **Advanced Materials** 26 (2014) 7346-7351. (IF: 15.409)

97. S. Krishnamurthy, V. W. Ng, S. Gao, M. H. Tan, **Y. Y. Yang***, “Phenformin-Loaded Polymeric Micelles for Targeting Both Cancer Cells and Cancer Stem Cells *In Vitro* and *In Vivo*”, **Biomaterials** 35 (2014) 9177-9186. (IF: 8.312)
98. X. Ke, V. W. Ng, R. J. Ono, J. M. Chan, S. Krishnamurthy, Y. Wang, J. L. Hedrick, **Y. Y. Yang***, “Role of Non-Covalent and Covalent Interactions in Cargo Loading Capacity and Stability of Polymeric Micelles”, **Journal of Controlled Release** 193 (2014) 9-26. (IF: 7.261)
99. J. M. W. Chan, X. Ke, H. Sardon, A. C. Engler, **Y. Y. Yang**, J. L. Hedrick, “Chemically Modifiable N-Heterocyclefunctionalized Polycarbonates as a Platform for Diverse Smart Biomimetic Nanomaterials”, **Chemical Science** 5 (2014) 3294-3300. (IF: 8.601)
100. S. Q. Liu, S. Venkataraman, Z. Y. Ong, J. M. W. Chan, C. Yang, J. L. Hedrick, **Y. Y. Yang***, “Overcoming Multidrug Resistance in Microbials Using Nanostructures Self-Assembled from Cationic Bent-Core Oligomers”, **Small** 10 (2014) 4130-4135. (IF: 8.368)
101. A. Attia, P. Oh, C. Yang, J. Tan, N. Rao, J. L. Hedrick, **Y. Y. Yang***, R. Ge, “Insights into EPR Effect Versus Lectin-Mediated Targeted Delivery: Biodegradable Polycarbonate Micellar Nanoparticles with and without Galactose Surface Decoration”, **Small** 10 (2014) 4281-4286. (IF: 8.368)
102. P. Yuan, X. Ding, Z. Guan, N. Gao, R. Ma, X. F. Jiang, **Y. Y. Yang***, Q. H. Xu, “Plasmon-Coupled Gold Nanospheres for Two-Photon Imaging and Photoantibacterial Activity”, **Adv. Healthc. Mater.** 4 (2015) 674-678. (IF: 5.797)
103. K. Fukushima, S. Q. Liu, H. Wu, A. C. Engler, D. J. Coady, H. Maune, J. Pitera, A. Nelson, N. Wiradharma, S. Venkataraman, Y. Huang, W. M. Fan, J. Y. Ying, **Y. Y. Yang***, J. L. Hedrick, “Supramolecular High Aspect Ratio Assemblies with Strong Antifungal Activity”, **Nature Communications** 4 (2013) 2861. (IF: 10.742)
104. A. L. Z. Lee, V. W. L. Ng, S. J. Gao, J. L. Hedrick, **Y. Y. Yang***, “Development of Vitamin E-Containing Injectable Hydrogel for Subcutaneous Delivery of Antibody for Cancer Therapy”, **Advanced Functional Materials** 24 (2014) 1538-1550. (IF: 10.439)
105. Y. Wang, X.-Y. Ke, J. S. Khara, P. Bahety, S. Liu, S. V. Seow, **Y. Y. Yang***, P. L. R. Ee, “Synthetic Modifications of the Immunomodulating Peptide Thymopentin to Confer Anti-Mycobacterial Activity”, **Biomaterials** 35 (2014) 3102-3109. (IF: 8.312)
106. V. W. L. Ng, J. P. K. Tan, J. Leong, Z. X. Voo, J. L. Hedrick, **Y. Y. Yang***, “Antimicrobial Polycarbonates: Investigating the Impact of Nitrogen-Containing Heterocycles as Quaternizing Agents”, **Macromolecules** 47 (2014) 1285-1291. (IF: 5.927)

107. X. Ke, D. J. Coady, C. Yang, A. C. Engler, J. L. Hedrick, **Y. Y. Yang***, "pH-Sensitive Polycarbonate Micelles for Enhanced Intracellular Release of Anticancer Drugs: A Strategy to Circumvent Multidrug Resistance", **Polymer Chemistry** 5 (2014) 2621-2628. (IF: 5.231)
108. S. Venkataraman, J. L. Hedrick, **Y. Y. Yang***, "Fluorene-Functionalized Aliphatic Polycarbonates: Design, Syntheses and Self-Assembly of Amphiphilic Block Copolymers", **Polymer Chemistry** 5 (2014) 2035-2040. (IF: 5.231)
109. Z. Y. Ong, J. Cheng, Y. Huang, K. Xu, Z. Ji, W. Fan, **Y. Y. Yang***, "Effect of Stereochemistry, Chain Length and Sequence Pattern on Antimicrobial Properties of Short Synthetic β -Sheet Forming Peptide Amphiphiles", **Biomaterials** 35 (2014) 1315-1325. (IF: 8.312)
110. D. J. Coady, Z. Y. Ong, P. S. Lee, S. Venkataraman, W. Chin, A. C. Engler, **Y. Y. Yang***, J. L. Hedrick, "Enhancement of Cationic Antimicrobial Materials via Cholesterol Incorporation", **Adv. Healthc. Mater.** 3 (2014) 882-889. (IF: 5.797)
111. J. S. Khara, Y. Wang, X. Y. Ke, S. Q. Liu, S. M. Newton, P. R. Langford, **Y. Y. Yang***, P. L. R. Ee, "Anti-Mycobacterial Activities of Synthetic Cationic α -Helical Peptides and Synergistic Effect in Combination with Rifampicin against Various Mycobacterial Strains", **Biomaterials** 35 (2014) 2032-2038. (IF: 8.312)
112. A. C. Engler, J. P. K. Tan, D. J. Coady, V. W. L. Ng, **Y. Y. Yang***, J. L. Hedrick, "Antimicrobial Polycarbonates: Investigating the Impact of Balancing Charge and Hydrophobicity Using a Same Centered Polymer Approach", **Biomacromolecules** 14 (2013) 4331-4339. (IF: 5.788)
113. W. Chin, C. Yang, V. W. L. Ng, Y. Huang, J. Cheng, Y. W. Tong, D. J. Coady, W. Fan, J. L. Hedrick, **Y. Y. Yang***, "Biodegradable Broad-Spectrum Antimicrobial Polycarbonates: Investigating the Role of Chemical Structure on Activity and Selectivity", **Macromolecules** 46 (2013) 8797-8807. (IF: 5.927)
114. X. Ke, V. W. L. Ng, S. J. Gao, Y. W. Tong, J. L. Hedrick, **Y. Y. Yang***, "Co-Delivery of Thioridazine and Doxorubicin Using Polymeric Micelles for Targeting Both Cancer Cells and Cancer Stem Cells", **Biomaterials** 35 (2014) 1096-1108. (IF: 8.312)
115. A. L. Z. Lee, V. W. L. Ng, W. Wang, J. L. Hedrick, **Y. Y. Yang***, "Block Copolymer Mixtures as Antimicrobial Hydrogels for Biofilm Eradication", **Biomaterials** 34 (2013) 10278-10286. (IF: 8.312)
116. V. W. L. Ng, X. Ke, A. L. Z. Lee, J. L. Hedrick, **Y. Y. Yang***, "Synergistic Co-Delivery of Membrane-Disrupting Polymers with Commercial Antibiotics against Highly Opportunistic Bacteria", **Advanced Materials** 25 (2013) 6730-6736. (IF: 15.409)

117. Z. Y. Ong, S. J. Gao, **Y. Y. Yang***, "Short Synthetic β -Sheet Forming Peptide Amphiphiles as Broad Spectrum Antimicrobials with Antibiofilm and Endotoxin Neutralizing Capabilities", **Adv. Funct. Mater.** 23 (2013) 3682-3692. (IF: 10.439)
118. S. Venkataraman, N. Veronica, Z. X. Voo, J. L. Hedrick, **Y. Y. Yang***, "2-Amino-1,3-Propane Diols: A Versatile Platform for the Synthesis of Aliphatic Cyclic Carbonate Monomers", **Polymer Chemistry** 4 (2013) 2945-2948. (IF: 5.23)
119. S. Venkataraman, A. L. Lee, H. T. Maune, J. L. Hedrick, V. M. Prabhu, **Y. Y. Yang***, "Formation of Disk- and Stacked Disk-Like Self-Assembled Morphologies from Cholesterol-Functionalized Amphiphilic Polycarbonate Diblock Copolymers", **Macromolecules** 46 (2013) 4839-4846. (IF: 5.927)
120. A. B. E. Attia, C. Yang, J. P. K. Tan, S. Gao, D. F. Williams, J. L. Hedrick, **Y. Y. Yang***, "The Effect of Kinetic Stability on Biodistribution and Anti-Tumor Efficacy of Drug-Loaded Biodegradable Polymeric Micelles", **Biomaterials** 34 (2013) 3132-3140. (IF: 8.312)
121. W. Cheng, C. Yang, J. L. Hedrick, D. F. Williams, **Y. Y. Yang***, P. G. Ashton-Rickardt, "Delivery of a Granzyme B Inhibitor Gene Using Carbamate-Mannose Modified PEI Protects Against Cytotoxic Lymphocyte Killing", **Biomaterials** 34 (2013) 3697-3705. (IF: 8.312)
122. P. Y. Teo, C. Yang, J. L. Hedrick, A. C. Engler, D. J. Coady, S. Ghaem-Maghami, A. J. T. George, **Y. Y. Yang***, "Hydrophobic Modification of Low Molecular Weight Polyethylenimine for Improved Gene Transfection", **Biomaterials** 34 (2013) 7971-7979. (IF: 8.312)
123. C. Yang, W. Cheng, P. Y. Teo, A. C. Engler, D. J. Coady, J. L. Hedrick, **Y. Y. Yang***, "Mitigated Cytotoxicity and Tremendously Enhanced Gene Transfection Efficiency of PEI Through Facile One-Step Carbamate Modification", **Adv. Healthc. Mater.** 2 (2013) 1304-1308. (IF: 5.797)
124. M. Khan, K. Narayanan, H. Lu, Y. Choo, C. Du, N. Wiradharma, **Y. Y. Yang**, A. C. A. Wan, "Delivery of Reprogramming Factors into Fibroblasts for Generation of Non-Genetic Induced Pluripotent Stem Cells using a Cationic Bolaamphiphile as a Non-Viral Vector", **Biomaterials** 34 (2013) 5336-5343. (IF: 8.312)
125. L. Liu, J. Yang, J. Xie, Z. Luo, J. Jiang, **Y. Y. Yang***, S. Liu, "The Potent Antimicrobial Properties of Cell Penetrating Peptide-Conjugated Silver Nanoparticles with Excellent Selectivity for Gram-Positive Bacteria over Erythrocytes", **Nanoscale** 5 (2013) 3834-3840. (IF: 6.233)
126. A. C. Engler, J. M. W. Chan, D. J. Coady, J. M. O'Brien, H. Sardon, A. Nelson, D. P. Sanders, **Y. Y. Yang**, J. L. Hedrick, "Accessing New Materials through Polymerization and Modification of a Polycarbonate with a Pendant Activated Ester", **Macromolecules** 46 (2013) 1283-1290. (IF: 5.927)

127. H. Sardon, A. C. Engler, J. M. W. Chan, D. J. Coady, J. M. O'Brien, D. Mecerreyes, **Y. Y. Yang**, J. L. Hedrick, "Homogeneous Isocyanate- and Catalyst-Free Synthesis of Polyurethanes in Aqueous Media", **Green Chemistry** 15 (2013) 1121-1126. (IF: 8.02)
128. S. Venkataraman, Z. A. Chowdhury, A. L. Lee, Y. W. Tong, I. Akiba, **Y. Y. Yang***, "Access to Different Nanostructures via Self-Assembly of Thiourea-Containing PEGylated Amphiphiles", **Macromolecular Rapid Communications** 34 (2013) 652-658. (IF: 4.929)
129. Z. Y. Ong, C. Yang, S. J. Gao, X. Y. Ke, J. L. Hedrick, **Y. Y. Yang***, "Galactose-Functionalized Cationic Polycarbonate Diblock Copolymer for Targeted Gene Delivery to Hepatocytes", **Macromolecular Rapid Communications** 34 (2013) 1714-1720. (IF: 4.929)
130. N. Han, **Y. Y. Yang**, S. Wang, S. Zheng, W. Fan, "Polymer-Based Cancer Nanotheranostics: Retrospectives of Multi-Functionalities and Pharmacokinetics", **Current Drug Metabolism** 14 (2013) 661-674. (IF: 4.405)
131. D. J. Coady, H. W. Horn, G. O. Jones, H. Sardon, A. C. Engler, R. M. Waymouth, J. E. Rice, **Y. Y. Yang**, J. L. Hedrick, "Polymerizing Base Sensitive Cyclic Carbonates Using Acid Catalysis", **ACS Macro Letters** 2 (2013) 306-312. (IF: 5.242)
132. A. C. Engler, J. M. W. Chan, K. Fukushima, D. J. Coady, **Y. Y. Yang**, J. L. Hedrick, "Polycarbonate-Based Brush Polymers with Detachable Disulfide-Linked Side Chains", **ACS Macro Letters** 2 (2013) 332-336. (IF: 5.242)
133. Y. Li, K. Fukushima, D. J. Coady, A. Engler, S. Liu, Y. Huang, J. S. Cho, Y. Guo, L. S. Miller, P. K. Tan, P. L. R. Ee, W. Fan, **Y. Y. Yang***, J. L. Hedrick, "Broad-Spectrum Antimicrobial and Biofilm Disrupting Hydrogels: Stereocomplex-Driven Supramolecular Assemblies", **Angewandte Chemie International Edition** 52 (2013) 674-678. (IF: 13.734)
134. K. Fukushima, J. P. K. Tan, P. A. Korevaar, **Y. Y. Yang***, J. Pitera, A. Nelson, H. Maune, D. J. Coady, J. E. Frommer, A. C. Engler, Y. Huang, K. Xu, Z. Ji, Y. Qiao, W. Fan, L. Li, N. Wiradharma, E. W. Meijer, J. L. Hedrick. "Broad-Spectrum Antimicrobial Supramolecular Assemblies with Distinctive Size and Shape", **ACS Nano** 6 (2012) 9191-9199. (IF: 12.881)
135. N. Wiradharma, M. Y. S Sng, M. Khan, Z. Y. Ong, **Y. Y. Yang***, "Rationally-Designed α -Helical Broad-Spectrum Antimicrobial Peptides with Idealized Facial Amphiphilicity", **Macromolecular Rapid Communications** 34 (2013) 74-80. (IF: 4.929)
136. S. Q. Liu, C. Yang, Y. Huang, X. Ding, Y. Li, W. M. Fan, J. L. Hedrick, **Y. Y. Yang***, "Antimicrobial and Antifouling Hydrogels Formed *In Situ* from Polycarbonate

and Poly(ethylene glycol) *via* Michael Addition”, **Advanced Materials** 24 (2012) 484-489. (IF: 15.409)

137. L. Liu, Y. Huang, S. N. Riduan, S. Gao, **Y. Yang**, W. Fan, Y. Zhang, “Main-Chain Imidazolium Oligomer Material as a Selective Biomimetic Antimicrobial Agent”, **Biomaterials** 33 (2012) 8625-8631. (IF: 8.312)
138. Y. Huang, N. Wiradharma, K. Xu, Z. Ji, S. Bi, L. Li, **Y. Y. Yang***, W. Fan, “Cationic Amphiphilic Alpha-Helical Peptides for the Treatment of Carbapenem-Resistant *Acinetobacter baumannii* Infection”, **Biomaterials** 33 (2012) 8841-8847. (IF: 8.312)
139. X. Ding, C. Yang, T. P. Lim, L. Y. Hsu, A. C. Engler, J. L. Hedrick, **Y. Y. Yang***, “Antibacterial and Antifouling Catheter Coatings Using Surface Grafted PEG-b-Cationic Polycarbonate Diblock Copolymers”, **Biomaterials** 33 (2012) 6593-6603. (IF: 8.312)
140. X. D. Guo, N. Wiradharma, S. Q. Liu, L. J. Zhang, M. Khan, Y. Qian, **Y. Y. Yang***, “Oligomerized Alpha-Helical KALA Peptides with Pendant Arms Bearing Cell Adhesion, DNA-Binding and Endosome-Buffering Domains as Efficient Gene Transfection Vectors”, **Biomaterials** 33 (2012) 6284-6291. (IF: 8.312)
141. A. C. Engler, N. Wiradharma, Z. Y. Ong, D. J. Coady, J. L. Hedrick, **Y. Y. Yang***, “Emerging Trends in Macromolecular Antimicrobials to Fight Multi-Drug-Resistant Infections”, **Nano Today** 7 (2012) 201-222. (IF: 18.432)
142. Y. Li, C. Yang, M. Khan, S. Q. Liu, J. L. Hedrick, **Y. Y. Yang***, P. L. R. Ee “Nanostructured PEG-Based Hydrogels with Tunable Physical Properties for Gene Delivery to Human Mesenchymal Stem Cells”, **Biomaterials** 33 (2012) 6533-6541. (IF: 8.312)
143. M. Khan, Z. Y. Ong, N. Wiradharma, A. Attia, **Y. Y. Yang***, “Advanced Materials for Co-Delivery of Drugs and Genes in Cancer Therapy”, **Adv. Healthc. Mater.** 1 (2012) 373-392. (IF: 5.797)
144. M. Khan, C. Y. Ang, N. Wiradharma, L. K. Yong, S. Liu, L. Liu, S. Gao, **Y. Y. Yang***, “Diaminododecane-Based Cationic Bolaamphiphile as a Non-Viral Gene Delivery Carrier”, **Biomaterials** 33 (2012) 4673-4680. (IF: 8.312)
145. A. L. Z. Lee, S. Venkataraman, S. B. M. Sirat, S. Gao, J. L. Hedrick, **Y. Y. Yang***, “Exploiting Hydrophobic Interactions for the Delivery of Anticancer Drugs: Synthesis, Assembly and Evaluation of Cholesterol-Containing Biodegradable Block Copolymers”, **Biomaterials** 33 (2012) 1921-1928. (IF: 8.312)
146. C. Yang, A. Attia, J. P. K. Tan, J. L. Hedrick, **Yi Yan Yang***, “Polymeric Micelles That Employed Non-Covalent Interactions to Enhance Anticancer Drug Loading and Kinetics”, **Biomaterials** 33 (2012) 2971-2979. (IF: 8.312)

147. N. Wiradharma, S. Q. Liu, **Y. Y. Yang***, “Branched and Star-Like Alpha-Helical Peptide Structures with Enhanced Antimicrobial Potency and Selectivity”, **Small** 8 (2012) 362-366. (IF: 8.368)
148. Y. Qiao, C. Yang, D. J. Coady, Z. Y. Ong, J. L. Hedrick, **Y. Y. Yang***, “Highly Dynamic Biodegradable Micelles Capable of Lysing Gram-Positive and Gram-Negative Bacterial Membrane”, **Biomaterials** 33 (2012) 1146-1153. (IF: 8.312)
149. N. Wiradharma, M. Khan, L. K. Yong, C. A. E. Hauser, S. V. Seow, S. G. Zhang, **Y. Y. Yang***, “The Effect of Thiol Functional Group Incorporation into Cationic Helical Peptides on Antimicrobial Activities and Spectra”, **Biomaterials** 32 (2011) 9100-9108. (IF: 8.312)
150. C. Yang, Z. Y. Ong, **Y. Y. Yang***, P. L. R. Ee and J. L. Hedrick, “Novel Biodegradable Block Copolymers of Poly(ethylene glycol) and Cationic Polycarbonate: Effects of PEG configuration on Gene Delivery”, **Macromolecular Rapid Communications** 32 (2011) 1826-1833. (IF: 4.929)
151. D. J. Coady, A. C. Engler, **Y. Y. Yang**, J. L. Hedrick, “Facile Routes to Star Polymers *via* an Organocatalytic Approach”, **Polymer Chemistry** 2 (2011) 2619-2622. (IF: 5.321)
152. S. Venkataraman, J. L. Hedrick, Z. Y. Ong, C. Yang, P. L. R. Ee, P. T. Hammond, **Y. Y. Yang***, “Effects of Polymeric Nanostructural Shape on Cell Penetration and Biodistribution”, **Advanced Drug Delivery Reviews** 63 (2011) 1228-1246. (IF: 15.038)
153. S. H. Kim, K. Fukushima, F. Nederberg, J. P. K. Tan, **Y. Y. Yang***, R. M. Waymouth, J. L. Hedrick, “Thermoresponsive Nanostructured Polycarbonate Block Copolymers as Biodegradable Therapeutic Delivery Carriers”, **Biomaterials** 32 (2011) 5505-5514. (IF: 8.312)
154. F. Nederberg, Y. Zhang, J. P. K. Tan, K. Xu, H. Wang, C. Yang, S. Gao, X. D. Guo, K. Fukushima, L. J. Li, J. L. Hedrick, **Y. Y. Yang***, “Biodegradable Nanostructures with Selective Lysis of Microbial Membranes”, **Nature Chemistry** 3 (2011) 409-414. (IF: 25.87)
155. A. L. Z. Lee, S. Dhillon, Y. Wang, S. Pervaiz, W. Fan, **Y. Y. Yang***, “Synergistic Anti-Cancer Effects *via* Co-Delivery of TNF-Related Apoptosis-Inducing Ligand (TRAIL/Apo2L) and Doxorubicin Using Micellar Nanoparticles”, **Molecular BioSystems** 7 (2011) 1512-1522. (IF: 3.35).
156. S. Venkataraman, W. L. Ong, Z. Y. Ong, S. C. J. Loo, P. L. R. Ee, **Y. Y. Yang***, “The Role of PEG Architecture and Molecular Weight in the Gene Transfection Performance of PEGylated Poly(dimethylaminoethyl methacrylate) Based Cationic Polymers”, **Biomaterials** 32 (2011) 2369-2378. (IF: 8.312)

157. N. Wiradharma, U. Khoe, C. E. Hauser, S. V. Seow, S. Zhang, **Y. Y. Yang***, "Synthetic Cationic Amphiphilic α -Helical Peptides as Antimicrobial Agents", **Biomaterials** 32 (2011) 2204-2212. (IF: 8.312)
158. A. L. Z. Lee, Y. Wang, S. Pervaiz, **Y. Y. Yang***, "Synergistic Anticancer Effects Achieved by Co-Delivery of TRAIL and Paclitaxel Using Cationic Polymeric Micelles", **Macromolecular Bioscience** 11 (2011) 296-307. (IF: 3.742)
159. Z. Y. Ong, K. Fukushima, D. J. Coady, **Y. Y. Yang***, P. L. R. Ee, J. L. Hedrick, "Rational Design of Biodegradable Cationic Polycarbonates for Gene Delivery", **Journal of Controlled Release** 152 (2011) 120-126. (IF: 7.261)
160. C. Yang, J. P. K. Tan, W. Cheng, A. Attia, C. Tan, A. Nelson, J. L. Hedrick, **Y. Y. Yang***, "Supramolecular Nanostructures Designed for High Cargo Loading Capacity and Kinetic Stability", **Nano Today** 5 (2010) 515-523. (IF: 18.432)
161. A. B. E. Attia, Z. Y. Ong, J. L. Hedrick, P. P. Lee, P. Hammond, **Y. Y. Yang***, "Mixed Micelles Self-Assembled from Block copolymers for Drug Delivery", Invited Review for **Current Opinion in Colloid & Interface Science** 16 (2011) 182-194. (IF: 6.629)
162. L. Li, H. Wang, Z. Y. Ong, K. Xu, P. L. R. Ee, S. Zheng, J. L. Hedrick, **Y. Y. Yang***, "Polymer- and Lipid-Based Nanoparticle Therapeutics for the Treatment of Liver Diseases", **Nano Today** 4 (2010) 296-312. (IF: 18.432)
163. J. Zhang, B. P. Ting, M. Khan, M. C. Pearce, **Y. Y. Yang**, Z. Q. Gao, J. Y. Ying, "Pt Nanoparticle Label-Mediated Deposition of Pt Catalyst for Ultrasensitive Electrochemical Immunosensors", **Biosensors & Bioelectronics** 26 (2010) 418-423. (IF: 6.409)
164. Y. C. Wang, Y. Li, T. M. Sun, M. H. Xiong, J. Wu, **Y. Y. Yang**, J. Wang, "Core-Shell-Corona Micelle Stabilized by Reversible Cross-Linkage for Intracellular Drug Delivery", **Macromolecular Rapid Communications** 34 (2010) 1201-1206. (IF: 4.929)
165. J. P. K. Tan, S. H. Kim, F. Nederberg, K. Fukushima, D. J. Coady, A. Nelson, **Y. Y. Yang***, J. L. Hedrick, "Delivery of Anticancer Drugs Using Polymeric Micelles Stabilized by Hydrogen-Bonding Urea Groups", **Macromolecular Rapid Communications** 31 (2010) 1187-1192. (IF: 4.929)
166. S. H. Kim, J. P. K. Tan, F. Nederberg, K. Fukushima, J. Colson, A. Nelson, **Y. Y. Yang***, J. L. Hedrick, "Hydrogen Bonding-Enhanced Micelle Assemblies for Drug Delivery", **Biomaterials** 31 (2010) 8063-8071. (IF: 8.312)
167. S. Q. Liu, Q. Tian, J. L. Hedrick, J. H. P. Hui, P. L. R. Ee, **Y. Y. Yang***, "Biomimetic Hydrogels for Chondrogenic Differentiation of Human Mesenchymal Stem Cells to Neocartilage", **Biomaterials** 31 (2010) 7298-7307. (IF: 8.312)

168. N. Wiradharma, Y. W. Tong, **Y. Y. Yang***, “Design and Evaluation of Peptide Amphiphiles with Different Hydrophobic Blocks for Simultaneous Delivery of Drugs and Genes”, **Macromolecular Rapid Communications** 34 (2010) 1212-1217. (IF: 4.929)
169. M. Khan, N. Wiradharma, G. Beniah, N. B. M. Rafiq, S. Q. Liu, J. Au, **Y. Y. Yang***, “Branched Disulfide-Based Polyamidoamines Capable of Mediating High Gene Transfection”, **Current Pharmaceutical Design** 21 (2010) 2341-2349. (IF: 3.311)
170. W. Y. Seow, **Y. Y. Yang**, A. J. T. George, “Novel Triblock Oligopeptides as Efficient Non-viral Vectors: Characterization and Further Insights”, **Macromolecular Rapid Communications** 34 (2010) 1170-1174. (IF: 4.929)
171. S. Q. Liu, Q. Tian, L. Wang, J. L. Hedrick, **Y. Y. Yang***, P. L. R. Ee, “Synthesis and Characterization of Injectable Biodegradable Poly(ethylene glycol)/RGD Peptide Hybrid Hydrogels for *In Vitro* Chondrogenesis of Human Mesenchymal Stem Cells”, **Macromolecular Rapid Communications** 34 (2010) 1148-1154. (IF: 4.929)
172. N. T. Zaman, **Y. Y. Yang**, J. Y. Ying, “Stimuli-Responsive Polymers for the Targeted Delivery of Paclitaxel to Hepatocytes”, **Nano Today** 5 (2010) 9-14. (IF: 18.432)
173. M. Khan, G. Beniah, N. Wiradharma, X. D. Guo, **Y. Y. Yang***, “Brush-Like Amphoteric Poly(isobutylene-*alt*-maleic acid-*graft*-oligoethyleneamine)/DNA Complexes for Efficient Gene Transfection”, **Macromolecular Rapid Communications** 34 (2010) 1142-1147. (IF: 4.929)
174. F. Suriano, R. Pratt, J. P. K. Tan, N. Wiradharma, A. Nelson, **Y. Y. Yang***, P. Dubois, J. L. Hedrick, “Synthesis of a Family of Amphiphilic Glycopolymers via Controlled Ring-Opening Polymerization of Functionalized Cyclic Carbonates and Their Application in Drug Delivery”, **Biomaterials** 31 (2010) 2637-2645. (IF: 8.312)
175. H. Wang, K. Xu, L. Liu, J. P. K. Tan, Y. Chen, Y. Li, W. Fan, Z. Wei, J. Sheng, **Y. Y. Yang***, L. Li, “The Efficacy of Self-Assembled Cationic Antimicrobial Peptide Nanoparticles against *Cryptococcus Neoformans* for the Treatment of Meningitis”, **Biomaterials** 31 (2010) 2874-2881. (IF: 8.312)
176. S. Venkataraman, Y. Zhang, L. Liu, **Y. Y. Yang***, “Design, Synthesis and Evaluation of Hemocompatible PEGylated-Antimicrobial Polymers with Well-Controlled Molecular Structures”, **Biomaterials** 31 (2010) 1751-1756. (IF: 8.312)
177. S. Q. Liu, R. Tay, M. Khan, P. L. R. Ee, J. L. Hedrick, **Y. Y. Yang***, “Synthetic Hydrogels for Controlled Stem Cell Differentiation”, **Soft Matter** 6 (2010) 67-81. (IF: 3.91)

178. X. D. Guo, J. P. K. Tan, S. H. Kim, L. J. Zhang, Y. Zhang, J. L. Hedrick, **Y. Y. Yang***, Y. Qian, "Computational Studies on Self-Assembled Paclitaxel Structures: Templates for Hierarchical Block Copolymer Assemblies and Sustained Drug Release", **Biomaterials** 30 (2009) 6556-6563. (IF: 8.312)
179. B. P. Ting, J. Zhang, M. Khan, **Y. Y. Yang**, J. Y. Ying*, "The Solid-State Ag/AgCl Process as a Highly Sensitive Detection Mechanism for an Electrochemical Immunosensor", **Chemical Communications** 41 (2009) 6231-6233. (IF: 6.834)
180. W. Y. Seow, **Y. Y. Yang***, A. George, "Oligopeptide-Mediated Gene Transfer into Mouse Corneal Endothelial Cells: Expression, Design Optimization, Uptake Mechanism and Nuclear Localization", **Nucleic Acids Research** 37 (2009) 6276-6289 (IF: 9.112)
181. L. H. Liu, K. J. Xu, H. Y. Wang, J. P. K. Tan, W. M. Fan, S. S. Venkatraman, L. J. Li, **Y. Y. Yang***, "Self-Assembled Cationic Peptide Nanoparticles as an Efficient Antimicrobial Agent", **Nature Nanotechnology** 4 (2009) 457-463. (IF: 38.986)
182. N. Wiradharma, Y. Zhang, S. Venkataraman, J. L. Hedrick, **Y. Y. Yang***, "Self-Assembled Polymer Nanostructures for Delivery of Anticancer Therapeutics", **Nano Today** 4 (2009) 302-317. (IF: 18.432)
183. W. Y. Seow, **Y. Y. Yang***, "Functional Polycarbonates and Their Self-Assemblies as Promising Non-Viral Vectors", **Journal of Controlled Release** 139 (2009) 40-47. (IF: 7.633)
184. S. H. Kim, F. Nederberg, R. Jakobs, J. P. K. Tan, K. Fukushima, A. Nelson, E. W. Meijer, **Y. Y. Yang**, J. L. Hedrick, "A Supramolecularly Assisted Transformation of Block Copolymer Micelles into Nanotubes", **Angewandte Chemie-International Edition** 48 (2009) 4508-4512. (IF: 13.734) (Featured as the cover page)
185. F. Nederberg, E. Appel, J. P. K. Tan, S. H. Kim, K. Fukushima, J. Sly, R. D. Miller, R. M. Waymouth, **Y. Y. Yang***, J. L. Hedrick, "A Simple Approach to Stabilized Micelles Employing Mikto-Arm Terpolymers and Stereocomplexes with Application in Paclitaxel Delivery", **Biomacromolecules** 10 (2009) 1460-1468. (IF: 5.788)
186. N. Wiradharma, Y. W. Tong, **Y. Y. Yang***, "Self-Assembled Oligopeptide Nanostructures for Co-Delivery of Drug and Gene in Achieving Synergistic Therapeutic Effect", **Biomaterials** 30 (2009) 3100-3109. (IF: 8.312)
187. X. D. Guo, J. P. K. Tan, L. J. Zhang, M. Khan, S. Q. Liu, **Y. Y. Yang***, Y. Qian, "Phase Behavior Study of Paclitaxel Loaded Amphiphilic Copolymer in Two Solvents by Dissipative Particle Dynamics Simulations", **Chemical Physics Letters** 473 (2009) 336-342. (IF: 2.145)

188. J. P. K. Tan, S. H. Kim, F. Nederberg, E. A. Appel, R. M. Waymouth, Y. Zhang, J. L. Hedrick, **Y. Y. Yang***, "Hierarchical Supramolecular Structures for Sustained Drug Release", **Small** 5 (2009) 1504-1507. (IF: 8.368)
189. S. Q. Liu, P. L. R. Ee, C. Y. Ke, J. L. Hedrick, **Y. Y. Yang***, "Biodegradable Poly(ethylene glycol)-Peptide Hydrogels with Well-Defined Structure and Properties for Cell Delivery", **Biomaterials** 30 (2009) 1453-1461. (IF: 8.312)
190. A. Lee, Y. Wang, H. Y. Cheng, S. Pervaiz, **Y. Y. Yang***, "Co-Delivery of Paclitaxel and Herceptin Using Cationic Micellar Nanoparticles: Achieving Enhanced Cytotoxicity and Targeting", **Biomaterials** 30 (2009) 919-927. (IF: 8.312)
191. S. H. Kim, F. Nederberg, J. Tan, K. Fukushima, **Y. Y. Yang**, R. M. Waymouth, J. L. Hedrick, "Mixed Micelle Formation through Stereocomplexation between Enantiomeric Poly(lactide) Block Copolymers", **Macromolecules** 42 (2009) 25-29. (IF: 5.927) (Featured as the cover page).
192. C. W. Beh, W. Y. Seow, Y. Wang, Y. Zhang, Z. Y. Ong, P. L. R. Ee, **Y. Y. Yang***, "Efficient Delivery of Bcl-2-Targeted siRNA Using Cationic Polymer Nanoparticles: Downregulating mRNA Expression Level and Sensitizing Cancer Cells to Anticancer Drug", **Biomacromolecules** 10 (2009) 41-48. (IF: 5.788)
193. K. Fukushima, R. C. Pratt, F. Nederberg, J. Tan, **Y. Y. Yang**, R. M. Waymouth, J. L. Hedrick, "Organocatalytic Approach to Amphiphilic Comb-Block Copolymers Capable of Stereocomplexation and Self-Assembly", **Biomacromolecules** 9 (2008) 3051-3056. (IF: 5.788)
194. X. D. Guo, F. Tandiono, N. Wiradharma, D. Y. Khor, C. G. Tan, M. Khan, Y. Qian, **Y. Y. Yang***, "Cationic Micelles Self-Assembled from Cholesterol-Conjugated Oligopeptides as An Efficient Gene Delivery Vector", **Biomaterials** 29 (2008) 4838-4846. (IF: 8.312)
195. W. Y. Seow, **Y. Y. Yang***, "A Class of Cationic Triblock amphiphilic Oligopeptides as Efficient Gene Delivery Vectors", **Advanced Materials** 21 (2009) 86-90. (IF: 15.409)
196. H. Chen, L. H. Liu, L. S. Wang, C. B. Ching, H. W. Yu, **Y. Y. Yang***, "Thermally Responsive Reversed Micelles for Immobilization of Enzymes", **Adv. Funct. Mater.** 18 (2008) 95-102. (IF: 10.439)
197. L. H. Liu, S. S. Venkatraman, **Y. Y. Yang***, K. Guo, J. Lu, B. P. He, S. Moochhala, L. J. Kan, "Polymeric Micelles Anchored with TAT for Delivery of Antibiotics across the Blood-Brain Barrier", **Biopolymers** 90 (2008) 617-623. (IF: 2.879).

198. A. Lee, Y. Wang, W. H. Ye, H. S. Yoon, S. Y. Chan, **Y. Y. Yang***, "Efficient Intracellular Delivery of Functional Proteins Using Cationic Polymer Core/Shell Nanoparticles", **Biomaterials** 29 (2008) 1224-1232. (IF: 8.312)
199. L. H. Liu, K. Guo, J. Lu, S. S. Venkatraman, D. Luo, K. C. Ng, E. A. Ling, S. Moochhala, **Y. Y. Yang***, "Biologically Active Core/Shell Nanoparticles Self-assembled from Cholesterol-Terminated PEG-TAT for Drug Delivery across the Blood-Brain Barrier", **Biomaterials** 29 (2008) 1509-1517. (IF: 8.312)
200. N. Wiradharma, M. Khan, Y. W. Tong, S. Wang, **Y. Y. Yang***, "Self-Assembled Cationic Peptide Nanoparticles Capable of Inducing Efficient Gene Expression *In Vitro*", **Adv. Funct. Mater.** 18 (2008) 943-951. (IF: 10.439) (Featured as the cover page)
201. Y. Wang, C. Y. Ke, C. W. J. Beh, S. Q. Liu, S. H. Goh, **Y. Y. Yang***, "The Self Assembly of Biodegradable Cationic Polymer Micelles as Vectors for Gene Transfection", **Biomaterials** 28 (2007) 5358-5368. (IF: 8.312)
202. Y. Wang, S. J. Gao, H. Wen, H. S. Yoon, **Y. Y. Yang***, "Co-Delivery of Drugs and DNA from Cationic Core-Shell Nanoparticles Self-Assembled from a Biodegradable Copolymer", **Nature Materials** 5 (2006) 791-796. Highlighted in the cover page of October Issue of *Nature Materials*. Highlighted in *Nature Biotechnology* 24 (2006) 1233. Highlighted in *Nano Today* 1 (2006) 16. (IF: 39.737)
203. P. Chan, M. Kurisawa, J. E. Chung, **Y. Y. Yang***, "Synthesis and Characterization of Chitosan-*g*-Poly(ethylene glycol)-Folate as a Non Viral Carrier for Tumor-Targeted Gene Delivery", **Biomaterials** 28 (2007) 540-549. (IF: 8.312)
204. S. Q. Liu, N. Wiradharma, S. J. Gao, Y. W. Tong, **Y. Y. Yang***, "Bio-Functional Micelles Self-Assembled from a Folate-Conjugated Block Copolymer for Targeted Intracellular Delivery of Anticancer Drugs", **Biomaterials** 28 (2007) 1423-1433. (IF: 8.312)
205. W. Y. Seow, J. M. Xue, **Y. Y. Yang***, "Targeted and Intracellular Delivery of Paclitaxel Using Multi-Functional Polymeric Micelles", **Biomaterials** 28 (2007) 1730-1740. (IF: 8.312)
206. X. Jiang, H. Dai, K. W. Leong, S. H. Goh, H. Q. Mao, **Y. Y. Yang***, "Chitosan-*g*-PEG/DNA Complexes Deliver Gene to the Rat Liver via Intrabiliary and Intraportal Infusions", **Journal of Gene Medicine** 8 (2006) 477-487. (IF: 2.163)
207. L. S. Wang, P. Y. Chow, T. T. Phan, J. Lim, **Y. Y. Yang***, "Fabrication and Characterization of Nano-Structured and Thermo-Sensitive Polymer Membranes for Wound Healing and Cell Grafting", **Adv. Funct. Mater.** 16 (2006) 1171-1178. (Impact Factor: 10.439)

208. K. S. Soppimath, L. H. Liu, W. Y. Seow, S. Q. Liu, R. Powell, P. Chan, **Y. Y. Yang***, “Multifunctional Core/Shell Nanoparticles Self-Assembled from pH-Induced Thermosensitive Polymers for Targeted Intracellular Anticancer Drug Delivery”, **Adv. Funct. Mater.** 17 (2007) 355-362. (IF: 10.439)
209. Y. Wang, L. S. Wang, S. H. Goh, **Y. Y. Yang***, “Synthesis and Characterization of Cationic Micelles Self-Assembled from a Biodegradable Copolymer for Gene Delivery”, **Biomacromolecules** 8 (2007) 1028-1037. (IF: 5.788)
210. **Y. Y. Yang***, Y. Wang, R. Powell, P. Chan, “Polymeric Core-Shell Nanoparticles for Therapeutics”, **Clinical and Experimental Pharmacology and Physiology** 33 (2006) 557-562. (IF: 2.16)
211. G. P. Tang, H. Y. Guo, F. Alexis, X. Wang, S. Zeng, T. M. Lim, J. Ding, **Y. Y. Yang**, S. Wang, “Low Molecular Weight Polyethylenimines Linked by Beta-Cyclodextrin for Gene Transfer into the Nervous System”, **Journal of Gene Medicine** 8 (2006) 736-744. (IF: 2.163)
212. H. W. Yu, H. Chen, X. Wang, **Y. Y. Yang**, C. B. Ching, “Cross-Linked Enzyme Aggregates (CLEAs) with Controlled Particles: Application to Candida Rugosa Lipase”, **Journal of Molecular Catalysis B – Enzymatic** 43 (2006) 124-127. (IF: 2.823)
213. D. Tan, B. Zhao, S. Moochhala, **Y. Y. Yang**, “Sustained-Release of Caffeine from A Polymeric Tablet Matrix: An *In Vitro* and Pharmacokinetic Study”, **Materials Science and Engineering B – Solid State Materials for Advanced Technology** 132 (2006) 143-146. (IF: 1.846)
214. D. Tan, B. Zhao, S. Moochhala, **Y. Y. Yang**, “Pharmacokinetic Profile of a Sustained-Delivery System for Physostigmine in Rats”, **Materials Science and Engineering B – Solid State Materials for Advanced Technology** 132 (2006) 155-158. (IF: 1.846)
215. M. Kurisawa, J. E. Chung, **Y. Y. Yang**, S. J. Gao, H. Uyama, “Injectable Biodegradable Hydrogels Composed of Hyaluronic Acid-Tyramine Conjugates for Drug Delivery and Tissue Engineering”, **Chemical Communications** 34 (2005) 4312-4314. (Impact Factor: 6.834)
216. J. S. Wei, H. B. Zeng, S. Q. Liu, X. G. Wang, E. H. Tay, **Y. Y. Yang***, “Temperature- and pH-Sensitive Core-Shell Nanoparticles Self-Assembled from Poly(*N*-isopropylacrylamide-*co*-acrylic acid-*co*-cholesteryl Acrylate) for Intracellular Delivery of Anticancer Drugs”, **Frontiers in Bioscience** 10 (2005) 3058-3067. (IF: 3.95)
217. S. Q. Liu, Y. W. Tong, **Y. Y. Yang***, “Thermally Sensitive Micelles Self-assembled from Poly(*N*-isopropylacrylamide-*co*-*N,N*-dimethylacrylamide)-*b*-

- poly(D,L-lactide-co-glycolide) for Controlled Delivery of Paclitaxel”, **Molecular BioSystems** 1 (2005) 158-165. (IF: 3.534)
218. K. S. Soppimath, C. W. Tan, **Y. Y. Yang***, “pH-Triggered Thermally Responsive Polymer Core-shell Nanoparticles for Drug Delivery”, **Advanced Materials** 17 (2005) 318-323. (IF: 15.409) (Featured in *NanoBiotech News* 4 April 2005)
 219. N. Wu, L. S. Wang, C. W. Tan, S. M. Mochhala, **Y. Y. Yang***, “Mathematical Modeling and *In Vitro* Study of Controlled Drug Release via a Highly Swellable and Dissoluble Polymer Matrix: Polyethylene Oxide (PEO) with High Molecular Weights”, **Journal of Controlled Release** 102 (2005) 569-581. (IF: 7.261)
 220. M. Y. Wang, **Y. Y. Yang***, P. W. S. Heng, “Skin Permeation of Physostigmine from Fatty Acids-Based Formulations: Evaluating the Choice of Solvent”, **International Journal of Pharmaceutics** 290 (2005) 25-36. (IF: 3.607)
 221. J. Y. Wu, S. Q. Liu, W. S. Heng, **Y. Y. Yang***, “Evaluating Proteins Release from, and Their Interactions with, Thermosensitive Poly (*N*-isopropylacrylamide) Hydrogels”, **Journal of Controlled Release** 102 (2005) 361-372. (IF: 7.261)
 222. S. Q. Liu, Y. W. Tong, **Y. Y. Yang***, “Incorporation and *In Vitro* Release of Doxorubicin in Thermally Sensitive Micelles Made from Poly(*N*-isopropylacrylamide-co-*N,N*-dimethylacrylamide)-*b*-poly(D,L-lactide-co-glycolide) with Varying Compositions”, **Biomaterials** 26 (2005) 5064-5074. (IF: 8.312)
 223. H. W. Yu, H. Chen, **Y. Y. Yang**, C. B. Ching, “Effect of Salts on Activity, Stability and Enantioselectivity of Candida Rugosa Lipase in Isooctane”, **Journal of Molecular Catalysis B – Enzymatic** 35 (2005) 28-32. (IF: 2.823)
 224. L. S. Wang, P. Y. Chow, C. W. Tan, W. D. Zhang, **Y. Y. Yang***, “Nano-Structured and Transparent Polymer Membranes with Thermo-Sensitivity for Wound Dressing and Cell Grafting”, **Advanced Materials** 16 (2004) 1790-1794. (IF: 15.409) (Featured in *NanoBiotech News* 4 August 2004)
 225. M. Y. Wang, **Y. Y. Yang***, W. S. Heng, “Role of Solvent in Interactions between Fatty Acids-Based Formulations and Lipids in Porcine Stratum Corneum”, **Journal of Controlled Release** 94 (2004) 207-216. (IF: 7.261)
 226. L. Wang, C. S. Chaw, **Y. Y. Yang***, S. M. Mochhala, B. Zhao, S. Ng, J. Heller, “Preparation, Characterization, and *In Vitro* Evaluation of Physostigmine-Loaded Poly(ortho ester) and Poly(ortho ester)/Poly (D,L-lactide-co-glycolide) Blend Microspheres Fabricated by Spray Drying”, **Biomaterials** 25 (2004) 3275-3282. (IF: 8.312)
 227. C. S. Chaw, K. W. Chooi, X. M. Liu, C. W. Tan, L. Wang, **Y. Y. Yang***, “Thermally Responsive Core-Shell Nanoparticles Self-Assembled from Cholesteryl

End-capped and Grafted Polyacrylamides: Drug Incorporation and *In Vitro* Release”, **Biomaterials** 25 (2004) 4297-4308. (IF: 8.312)

228. X. M. Liu, P. K. Pallathadka, **Y. Y. Yang**, S. Y. Chow, C. B. He, “Cholesteryl-Grafted Functional Amphiphilic Poly(*N*-isopropylacrylamide-co-*N*-hydroxymethylacrylamide): Synthesis, Temperature-Sensitivity, Self-Assembly and Encapsulation of a Hydrophobic Agent”, **Biomaterials** 25 (2004) 2619-2628. (IF: 8.312)
229. M. Y. Wang, **Y. Y. Yang***, P. W. S. Heng, S. M. Moochhala, “New Insights into Skin Permeation Enhancement by Fatty Acids”, **Architecture and Application of Biomaterials and Biomacromolecular Materials in Materials Research Society Symposium Proceedings** 1 (2004) 399-401.
230. S. Q. Liu, **Y. Y. Yang***, X. M. Liu, T. Y. Wah, “Preparation and Characterization of Temperature-Sensitive Poly(*N*-isopropylacrylamide)-*b*-Poly(D,L-lactide) Microspheres for Protein Delivery”, **Biomacromolecules** 4 (2003) 1784-1793. (IF: 5.788)
231. X. M. Liu, **Y. Y. Yang***, K. W. Leong, “Thermally Responsive Polymeric Micellar Nanoparticles Self-Assembled from Cholesteryl End-Capped Random Poly(*N*-isopropylacrylamide-co-*N,N*-dimethylacrylamide): Synthesis, Temperature-Sensitivity, and Morphologies”, **Journal of Colloid and Interface Science** 266 (2003) 295-303. (IF: 3.172)
232. M. Shi, **Y. Y. Yang***, C. S. Chaw, S. H. Goh, S. M. Moochhala, “POE/PLGA Double Walled Microspheres: Encapsulation of Water-Soluble and Water-Insoluble Proteins and Their Release Properties”, **Journal of Controlled Release** 89 (2003) 167-177. (IF: 7.261)
233. **Y. Y. Yang***, M. Shi, S. H. Goh, S. M. Moochhala, “POE/PLGA Composite Microspheres: Formation and *In Vitro* Behavior of Double Walled Microspheres”, **Journal of Controlled Release** 88 (2003) 201-213. (IF: 7.261)
234. C. S. Chaw, C. W. Tan, **Y. Y. Yang***, L. Wang, S. M. Moochhala, “Design of Physostigmine-Loaded Polymeric Microparticles for Pretreatment against Exposure to Organophosphate Agents”, **Biomaterials** 24 (2003) 1271-1277. (IF: 8.312)
235. B. Zhao, S. M. Moochhala, C. S. Chaw, **Y. Y. Yang**, “Simple Liquid Chromatographic Method for The Determination of Physostigmine and Its Metabolite Eseroline in Rat Plasma: Application to a Pharmacokinetic Study”, **Journal of Chromatography B – Analytical Technologies in the Biomedical and Life Sciences** 784 (2003) 323-329. (IF: 2.487)
236. C. S. Chaw, **Y. Y. Yang***, I. J. Lim, T. T. Phan, “Water-Soluble Betamethasone-Loaded Poly(lactide-co-glycolide) Hollow Microparticles as a Sustained Release Dosage Form”, **Journal of Microencapsulation** 20 (2003) 349-359. (IF: 1.89)

237. F. J. Wang, **Y. Y. Yang***, X. Z. Zhang, X. Zhu, T. S. Chung, S. M. Mochhala, "Cellulose Acetate Membranes for Transdermal Delivery of Scopalamine", **Materials Science and Engineering C-Biomimetic and Supramolecular Systems** 20 (2002) 93-100. (IF: 2.404)
238. L. Wang, **Y. Y. Yang***, T. S. Chung, X. Q. Chen, "Determination of Betamethasone Disodium Phosphate in the *In Vitro* Media of PLGA Microspheres by High-Performance Liquid Chromatography", **Journal of Pharmaceutical and Biomedical Analysis** 28 (2002) 629-635. (IF: 2.947)
239. X. Z. Zhang, R. X. Zhuo, **Y. Y. Yang**, "Using Mixed Solvent to Synthesize Temperature Sensitive Poly(N-isopropylacrylamide) Gel with Rapid Dynamics Properties", **Biomaterials** 23 (2002) 1313-1318. (IF: 8.312)
240. X. Z. Zhang, **Y. Y. Yang***, T. S. Chung, "The Influence of Cold Treatment on Properties of Temperature-Sensitive Poly(N-isopropylacrylamide) Hydrogels", **Journal of Colloid and Interface Science** 246 (2002) 105-111. (IF: 3.172)
241. X. Z. Zhang, **Y. Y. Yang***, T. S. Chung, "Effect of Mixed Solvents on Characteristics of Poly(N-isopropylacrylamide) Gels", **Langmuir** 18 (2002) 2538-2542. (IF: 4.457)
242. X. Z. Zhang, **Y. Y. Yang***, F. J. Wang, T. S. Chung, "Thermosensitive Poly(N-isopropylacrylamide-co-acrylic acid) Hydrogels with Expanded Network Structures and Improved Oscillating Swelling-Deswelling Properties", **Langmuir** 18 (2002) 2013-2018. (IF: 4.457)
243. W. Liu, **Y. Y. Yang**, T. S. Chung, J. Kwang, "Induction of Humoral Immune Response and Protective Immunity in Chickens against Salmonella Enteritidis after A Single Dose of Killed Bacterium-Loaded Microspheres", **Avian Diseases** 45 (2001) 797-806. (IF: 1.734)
244. X. Z. Zhang, **Y. Y. Yang***, T. S. Chung, K. X. Ma, "Fabrication and Characterization of Fast Response Poly(N-isopropylacrylamide) Hydrogels", **Langmuir** 17 (2001) 6094-6099. (IF: 4.457)
245. J. P. Wan, **Y. Y. Yang***, D. Tan, T. S. Chung, S. Ng, J. Heller, "POE-PEG-POE Triblock Copolymeric Microspheres Containing Protein. I Polymer Erosion and Protein Release Mechanism", **Journal of Controlled Release** 75 (2001) 129-141. (IF: 7.261)
246. **Y. Y. Yang***, J. P. Wan, T. S. Chung, S. Ng, J. Heller, "POE-PEG-POE Triblock Copolymeric Microspheres Containing Protein. I Preparation and Characterization", **Journal of Controlled Release** 75 (2001) 115-128. (IF: 7.633)
247. H. H. Chia, **Y. Y. Yang***, T. S. Chung, S. Ng, J. Heller, "Auto-Catalyzed Poly(ortho ester) Microspheres: A Study of Their Erosion and Drug Release Mechanism", **Journal of Controlled Release** 75 (2001) 11-25. (IF: 7.261)

248. X. Q. Chen, **Y. Y. Yang**, L. Wang, T. S. Chung, "Effect of Inner Water Volume on the Peculiar Surface Morphology of Microspheres Fabricated by Double Emulsion Technique", **Journal of Microencapsulation** 18 (2001) 637-649. (IF: 1.89)
249. X. L. Bai, **Y. Y. Yang***, T. S. Chung, S. Ng, J. Heller, "Effect of Polymer Composites on the Fabrication of Poly(ortho-ester) Microspheres for Controlled Release of Protein", **Journal of Applied Polymer Science** 80 (2001) 1630-1642. (IF: 1.395)
250. **Y. Y. Yang***, T. S. Chung, N. P. Ng, "Morphology, Drug Distribution, and *In Vitro* Release Profiles of Biodegradable Polymeric Microspheres Containing Protein Fabricated by Double-Emulsion Solvent Extraction/Evaporation Method", **Biomaterials** 22 (2001) 231-241. (IF: 8.312)
251. **Y. Y. Yang***, T. S. Chung, X. L. Bai, W. K. Chan, "Effect of Preparation Conditions on Morphology and Release Profiles of Biodegradable Polymeric Microspheres Containing Protein Fabricated by Double-Emulsion Method", **Chemical Engineering Science** 55 (2000) 2223-2236. (IF: 2.653)
252. **Y. Y. Yang***, H. H. Chia, T. S. Chung, "Effect of Preparation Temperature on the Characteristics and Release Profiles of PLGA Microspheres Containing Protein Fabricated by Double-Emulsion Solvent Extraction/Evaporation Method", **Journal of Controlled Release** 69 (2000) 81-96. (IF: 7.261)

*Corresponding Author

Granted Patents:

1. A. Cahan, X. Ding, M. B. Fevre, J. L. Hedrick, Z. C. Liang, N. H. Park, T. G. Van Kessel, R. J. Wojtecki, Y. Y. Yang. Tailorable surface topology for antifouling coatings. US10752787B2 granted on August 25, 2020.
2. Mareva B Fevre, James L Hedrick, Nathaniel H Park, Victoria A Piunova, Pang Kern Jeremy Tan, Yi Yan Yang, Mu San Zhang. Monomer compositions with antimicrobial functionality. US10743537B2 granted on August 18, 2020.
3. Amos Cahan, Xin Ding, Mareva B Fevre, James L Hedrick, Zhen Chang Liang, Nathaniel H Park, Theodore G Van Kessel, Rudy J Wojtecki, Yi Yan Yang. Fluorinated networks for anti-fouling surfaces. US10745586B2 granted August 18, 2020.
4. D. J. Boday, W. Chin, J. M. Garcia, J. L. Hedrick, X. Ke, R. J. Wojtecki, Y. Y. Yang. Method of making sulfur-containing polymers from hexahydrotriazine and dithiol precursors. US10702610B2 granted on July 7, 2020.
5. Mareva B Fevre, James L Hedrick, Nathaniel H Park, Victoria A Piunova, Pang Kern Jeremy Tan, Chaun Yang, Yi Yan Yang. Antimicrobial polymers with enhanced functionalities. US10687528B2 granted on June 23, 2020.

6. Mareva B Fevre, James L Hedrick, Nathaniel H Park, Victoria A Piunova, Pang Kern Jeremy Tan, Yi Yan Yang, Mu San Zhang. Hydrophilic polymers with antimicrobial functionalities. US10687530B2 granted on June 23, 2020.
7. D. Boday, W. Chin, M. B. Fevre, J. Garcia, J. L. Hedrick, E. Leong, N. H. Park, R. J. Wojtecki, Y. Y. Yang. Block copolymers and self-assembling nanoparticles formed therefrom. US10682313B2 granted on June 16, 2020.
8. M. B. Fevre, J. L. Hedrick, N. H. Park, V. A. Piunova, P. K. J. Tan, C. Yang, Y. Y. Yang. Antimicrobial ionene compositions with a variety of functional groups. US10667514B2 granted on June 2, 2020.
9. M. B. Fevre, J. L. Hedrick, N. H. Park, V. A. Piunova, P. K. J. Tan, C. Yang, Y. Y. Yang. Polymers with antimicrobial functionalities. US10653142B2 granted on May 19, 2020.
10. Julian MW Chan, Amanda C Engler, James L Hedrick, Xiyu Ke, Victor WL Ng, Haritz Sardon, Jeremy PK Tan, Yi Yan Yang. Polycarbonates bearing aromatic N-heterocycles for drug delivery. US10610597B2 granted on April 7, 2020.
11. M. B. Fevre, J. L. Hedrick, N. H. Park, V. A. Piunova, P. K. J. Tan, C. Yang, Y. Y. Yang. Antimicrobial polymers capable of supramolecular assembly. US10595527B2 granted on March 24, 2020.
12. W. Chin, J. L. Hedrick, N. F. F. Nathel, V. A. Piunova, Z. X. Voo, Y. Y. Yang. Star polymers with enhanced antimicrobial activity in response to light. US10561146B2 granted on February 18, 2020.
13. A. Cahan, H. Deligianni, X. Ding, M. B. Fevre, J. L. Hedrick, P.-Y. S. Hsueh, Z. C. Liang, N. H. Park, T. G. Van Kessel, R. J. Wojtecki, Y. Y. Yang. Prevention of biofilm formation. US10563069B2 granted on February 18, 2020.
14. A. Cahan, M. B. Fevre, J. L. Hedrick, N. H. Park, T. G. Van Kessel, R. J. Wojtecki, Y. Y. Yang. Highly hydrophobic antifouling coatings for implantable medical devices. US10507267B2 granted on December 17, 2019.
15. J. L. Hedrick, I. Koji, N. Yamamoto, C. Yang, Y. Y. Yang. Cationic polyamines for treatment of viruses. US10485824B2 granted on November 26, 2019.
16. D. Boday, W. Cheng, J. M. Garcia, J. Hedrick, N. H. Park, R. J. Wojtecki, C. Yang, Y. Y. Yang. Macromolecular chemotherapeutics. US10463746B2 granted on November 5, 2019.
17. D. J. Boday, W. Chin, J. M. Garcia, J. L. Hedrick, E. Leong Jiayu, S. Venkataraman, Z. X. Voo, R. J. Wojtecki, Y. Y. Yang. Preparation of robust polythioaminal carriers. US10457772B2 granted on October 29, 2019.

18. Willy Chin, Daniel J Coady, Amanda C Engler, James L Hedrick, Ashlynn LZ Lee, Victor WL Ng, Zhan-Yuin Ong, Yi Yan Yang. Antimicrobial cationic polycarbonates. US9999633B2 granted on June 19, 2018
19. Wei Cheng, Mareva B Fevre, James L Hedrick, Nor Lizawati Ibrahim, Ashlynn LZ Lee, Victor WL Ng, Robert J Ono, Chuan Yang, Yi Yan Yang. Vitamin functionalized gel-forming block copolymers for biomedical applications. US9987369B2 granted on June 5, 2018
20. Daniel J Coady, Amanda C Engler, Kazuki Fukushima, James L Hedrick, Jeremy PK Tan, Yi Yan Yang. Cationic polymers for antimicrobial applications and delivery of bioactive materials. US9974303B2 granted on May 22, 2018.
21. Willy Chin, Yukti Choudhury, Shujun Gao, James L Hedrick, Xiyu Ke, Min-Han Tan, Jye Yng Teo, Yi Yan Yang. Block copolymers for therapeutic drug delivery. US9901649B2 granted on February 27, 2018.
22. Y. Y. Yang, C. Yang, W. Cheng, P. Y. Teo, J. L. Hedrick, D. J. Coady, A. C. Engler, "Branched Polyamines for Delivery of Biologically Active Materials," US8703197B2 granted on April 22, 2014; China Patent Granted in April 2017, Singapore Patent Granted in March 2017.
23. Y. Y. Yang, C. Yang, J. L. Hedrick, I. Koji, N. Yamamoto, "Cationic polyamines for treatment of viruses", US patent granted on June 20, 2017; US9682100B2.
24. J. M. W. Chan, J. L. Hedrick, R. J. Ono, J. Y. Teo, Y. Y. Yang, M. S. Zhang, "Antimicrobial polymers formed by bulk polyaddition", US patent granted on May 9, 2017; US9642360B2.
25. G. Breyta, J. M. W. Chan, D. J. Coady, A. C. Engler, J. M. Garcia, W. Han, J. L. Hedrick, S. Liu, A. Nelson, R. J. Ono, J. Y. Teo, Y. Y. Yang, M. S. Zhang, "Condensation polymers for antimicrobial applications", US patent granted on February 28, 2017; US9580554B2.
26. Y. Y. Yang, N. Wiradharma and C. Hauser, "Antimicrobial peptides," US Patent Granted January 12, 2016. US9234004B2
27. Y. Y. Yang and Z. Y. Ong, "Peptides and Uses Thereof," US patent granted on March 1, 2016; US9273096B2.
28. J. M. W. Chan, J. L. Hedrick, A. L. Z. Lee, R. J. Wojtecki, Y. Y. Yang, "Biodegradable organic radical-functionalized polycarbonates for medical applications", US patent granted on August 1, 2017; US9718957B2.
29. M. B. Fevre, J L. Hedrick, V. W. L. Ng, R. J. Ono, S. Venkataraman, Z. X. Voo, Y. Y. Yang, "Cyclic carbonate monomers and ring opened polycarbonates therefrom", US patent granted on April 18, 2017; US9624191B2.
30. J. M. W. Chan, A. C. Engler, J. L. Hedrick, X. Ke, V. W. L. Ng, H. Sardon, J. P. K. Tan, Y. Y. Yang, "Polycarbonates bearing aromatic n-heterocycles for drug delivery",

US patent granted on August 1, 2017; US9717797B2.

31. Y. Y. Yang, C. Yang, W. Cheng, P. Y. Teo, J. L. Hedrick, D. J. Coady, A. C. Engler, "Low Molecular Weight Branched Polyamines For Delivery Of Biologically Active Materials," US9109087B2 granted on August 18, 2015; Singapore Patent Granted in November 2016.
32. Y. Y. Yang, C. Yang, W. Cheng, X. Ding, J. M. Garcia, J. L. Hedrick, "Antimicrobial cationic polyamines", US patent granted on July 26, 2016; US9399044B2.
33. Y. Y. Yang, V. Ng, A. Lee and J. L. Hedrick, "Vitamin Functionalized Gel-Forming Block Copolymers for Biomedical Applications," US Patent Granted on December 6, 2016; US9511146B2.
34. D. J. Coady, A. C. Engler, J. L. Hedrick, X. Ke, Y. Y. Yang, "Water soluble polycarbonates for medical applications", US patent filed on October 18, 2016; US9469726B2.
35. D. J. Coady, R. A. DiPietro, A. C. Engler, J. L. Hedrick, V. W. L. Ng, Z. -Y. Ong, J. P. K. Tan, Y. Y. Yang, "Antimicrobial cationic polycarbonates", US patent granted on June 7, 2016; US9357772B2.
36. Y. Y. Yang, L. Liu, "Cationic Core-Shell Peptide," Singapore Patent Granted on January 15, 2013. China Patent Granted August 19, 2015; CN101945887B.
37. Yi-Yan Yang, Zhan Yuin Ong. Amphiphilic peptides for treatment of keratitis. US9221875B2 granted on December 29, 2015.
38. D. J. Coady, A. C. Engler, J. M. Garcia, J. L. Hedrick, J. P. K. Tan, Y. Y. Yang, "1,3,6-dioxazocan-2-ones and antimicrobial cationic polycarbonates therefrom", US patent granted on December 22, 2015; US9215876B2.
39. J. M. W. Chan, D. J. Coady, A. C. Engler, J. M. Garcia, J. L. Hedrick, Z. Y. Ong, H. Sardon, Y. Y. Yang, "Catalyst-free methods of forming polyurethanes from pentafluorophenyl carbonates", US patent granted on June 23, 2015; US9062160B1.
40. D. Coady, A. Engler, J. Garcia, J. Hedrick, Z. Y. Ong, H. Sardon and Y. Y. Yang, "Catalyst-Free Methods of Forming Polyurethanes from Pentafluorophenyl Carbonates," US Patent Granted on June 23, 2015; US 9062160.
41. D. J. Coady, R. Dipietro, A. C. Engler, J. L. Hedrick, S. Q. Liu, H. Maune, A. Nelson, J. Pitera, S. Venkataraman and Y. Y. Yang, "Self-Assembling bis-Urea Compounds for Drug Delivery," US Patent Granted on July 21, 2015; US 9084735.
42. Y. Y. Yang, X. Ding, C. Yang and J. L. Hedrick, "Antimicrobial Surface Modified Silicone Rubber and Methods of Preparation Thereof," US Patent Granted on February 24, 2015; US 8,962,772B2.

43. J. L. Hedrick, S. Venkataraman and Y. Y. Yang, "Polycarbonates Bearing Pendant Primary Amines for Medical Applications," US Patent Granted on January 6, 2015; US 8,926,998.
44. Y. Y. Yang, Y. Wang, C.-W. D. Tan, J. Y. Ying, "Methods and Articles for the Delivery of Therapeutic Agents," US Patent Granted on September 2, 2014; US8821859B2.
45. K. Fukushima, J. L. Hedrick, Y. Y. Yang, "Biodegradable polymers, complexes thereof for gene therapeutics and drug delivery, and methods related thereto", EP2516504B1 granted on December 2, 2015; CN103613749B granted on November 18, 2015; JP5671553B2 granted on February 18, 2015.
46. J. L. Hedrick, A. L. Lee, S. Venkataraman, Y. Y. Yang, "Polycarbonates for delivery of drugs and methods of preparation thereof", US patent granted on September 16, 2014; US8834861B2.
47. D. J. Coady, A. C. Engler, K. Fukushima, J. L. Hedrick, S. Liu, H. T. Maune, A. Nelson, J. W. Pitera, Y. Y. Yang, "Cationic bis-urea compounds as effective antimicrobial agents ", US patent granted on December 30, 2014; US8921426B2.
48. D. J. Coady, R. Dipietro, A. C. Engler, J. L. Hedrick, A. L. Lee, S. Venkataraman, and Y. Y. Yang, "Composite Hydrogels for the Delivery of Biologically Active Materials," US Patent Granted on January 21, 2014; US 8,633,296.
49. D. J. Coady, A. C. Engler, K. Fukushima, J. L. Hedrick, S. Liu, H. T. Maune, A. Nelson, J. W. Pitera and Y. Y. Yang, "Cationic Bis-Urea Compounds as Effective Antimicrobial Agents," US Patent Granted on December 30, 2014; US 8,921,426.
50. D. J. Coady, A. C. Engler, K. Fukushima, J. L. Hedrick, J. Tan and Y. Y. Yang "Cationic Polymers for Antimicrobial Applications and Delivery of Bioactive Materials," US Patent Granted on April 29, 2014; US 8,709,466.
51. Y. Y. Yang, S. Venkataraman, L. Z. Lee and J. L. Hedrick, "Polycarbonates for Delivery of Drugs and Methods of Preparation Thereof," US Patent Granted on September 16, 2014; US 8,834,861.
52. J. L. Hedrick, D. J. Coady, K. Fukushima, Y. Y. Yang, "Antimicrobial Compositions, Methods of Preparation Thereof, and Uses Thereof," US Patent Granted on February 4, 2014; US 8,642,086.
53. Y. Y. Yang, S. Q. Liu, C. Yang, J. L. Hedrick, D. J. Coady, A. C. Engler, "Antimicrobial Hydrogels, Methods of Preparation Thereof, and Articles Therefrom," US Patent Granted on July 30, 2013; US8,496,946.
54. Y. Y. Yang, C. Yang, J. L. Hedrick, A. Nelson, "Biodegradable Block Polymers for Drug Delivery, and Methods Related Thereto," US Patent Granted on June 25, 2013; US8,470,891.
55. J. L. Hedrick, K. Fukushima, Y. Y. Yang, "Antimicrobial Polymers and Methods of

Manufacture Thereof," US Patent Granted on January 29, 2013; US8,361,495.

56. Y. Y. Yang, Y. Wang and L. A. Lee, "Method of Delivering a Protein into a Cell," US8425900B2 granted on April 23, 2013; Singapore Patent Granted in July 2010.
57. Y. Y. Yang, S. Q. Liu, "Micelles for Drug Delivery," US Patent Granted on August 20, 2013; US8512757B2.
58. J. L. Hedrick, K. Fukushima, Y. Y. Yang, "Antimicrobial Polymers and Methods of Manufacture Thereof," US patent granted on January 29, 2013; US8,361,495.
59. L. Zhuo, J. E. Chung, M. Kurisawa, Y. Y. Yang, "Aldehyde Conjugated Flavonoid Preparations," EP1888651B1 granted on July 30, 2014; CA2606583C granted on September 17, 2013.
60. Y. Y. Yang, N. Wiradharma, W. Y. Seow, "Cationic Peptide for Delivering an Agent into a Cell (Cationic Nanoparticles Self-Assembled from Triblock Amphiphilic
61. Oligopeptides for Efficient Gene Expression)," Singapore Patent Granted on February 15, 2011.
62. Y. Y. Yang, Y. Wang, C. -W. D. Tan and J. Y. Ying, "Methods and Articles for the Delivery of Therapeutic Agents," Singapore Patent Granted on August 13, 2010; Japan Patent Granted on August 5, 2011.
63. J. E. Chung, M. Kurisawa, Y. Y. Yang and L. Zhuo, "Versatile Micellar Nanocomplexes for Delivery of Drug Protein and Gene," US7858080B2 granted on December 28, 2010; Singaporean Patent Granted on October 31, 2008.
64. Y. Y. Yang and L. S. Wang, "Thermosensitive Polymers for Therapeutic Use and Methods of Preparation," Australia Patent Granted on June 5, 2008; Singapore Patent Granted on August 29, 2008; India Patent Granted on January 14, 2009; Chinese Patent Granted on January 12, 2011; Canada Patent Granted on June 28, 2011; Japan Patent Granted on September 23, 2011; Europe Patent Granted on February, 8, 2012; US Patent Granted on March 12, 2013.
65. Y. Y. Yang and K. Soppimath, "Novel Temperature and pH Sensitive Copolymers," US7316816B2 granted on January 8, 2008; Singapore Patent Granted on September 28, 2007.
66. Y. Y. Yang, C. Chaw, S. Moochhala, D. Tan, B. Zhao, "Sustained release formulation for carbamates and a method therefor", US patent granted on July 18, 2003; US10622316.
67. P. Y. Chow and Y. Y. Yang, "Polymer Having Interconnected Pores for Drug Delivery and Method," EP1773893B1 granted on June 2, 2010; CN101018814B granted on May 4, 2011; Taiwan Patent Granted in August 2007; Singapore Patent Granted in February 2008.

68. Y. Y. Yang, X. M. Liu, C. S. Chaw, L. Wang and K. Leong, "Improved Temperature Sensitive Micelles," Singapore Patent Granted on August 31, 2005.
69. Y. Y. Yang, J. Kwang, X. Chen, T. -S. Chung, W. Liu, "Biodegradable and biocompatible polymeric microspheres encapsulating Salmonella enteritidis bacteria", US patent granted on November 7, 2006; US7132108B1.