

DR Raymond Wong Chung Wen

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Total Publications: 40

Journal Article (29)

- 1 Compositional Tailoring of Mg–2Zn–1Ca Alloy Using Manganese to Enhance Compression Response and In-Vitro Degradation (2022). *Materials*, 15(3), 810. doi:[10.3390/ma15030810](https://doi.org/10.3390/ma15030810)
- 2 Ng, S. L., Das, S., Ting, Y. -P., Wong, R. C. W., & Chanchareonsook, N. (2021). Benefits and Biosafety of Use of 3D-Printing Technology for Titanium Biomedical Implants: A Pilot Study in the Rabbit Model. *INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES*, 22(16), 19 pages. doi:[10.3390/ijms22168480](https://doi.org/10.3390/ijms22168480)
- 3 Kujur, M. S., Manakari, V., Parande, G., Prasad, S., Wong, R., Mallick, A., & Gupta, M. (2021). Development of rare-earth oxide reinforced magnesium nanocomposites for orthopaedic applications: A mechanical/immersion/biocompatibility perspective. *JOURNAL OF THE MECHANICAL BEHAVIOR OF BIOMEDICAL MATERIALS*, 114, 11 pages. doi:[10.1016/j.jmbbm.2020.104162](https://doi.org/10.1016/j.jmbbm.2020.104162)
- 4 Kujur, M. S., Manakari, V., Parande, G., Prasad, S., Wong, R., Mallick, A., & Gupta, M. (2021). Effect of samarium oxide nanoparticles on degradation and invitro biocompatibility of magnesium. *MATERIALS TODAY COMMUNICATIONS*, 26, 7 pages. doi:[10.1016/j.mtcomm.2021.102171](https://doi.org/10.1016/j.mtcomm.2021.102171)
- 5 Suresh, S., Sun, C. -N., Tekumalla, S., Rosa, V., Nai, S. M. L., & Wong, R. C. W. (2021). Mechanical properties and in vitro cytocompatibility of dense and porous Ti-6Al-4V ELI manufactured by selective laser melting technology for biomedical applications. *JOURNAL OF THE MECHANICAL BEHAVIOR OF BIOMEDICAL MATERIALS*, 123, 12 pages. doi:[10.1016/j.jmbbm.2021.104712](https://doi.org/10.1016/j.jmbbm.2021.104712)
- 6 Chuah, S. J., Yong, C. W., Teo, K. Y. W., Chew, J. R. J., Cheow, Y. A., Zhang, S., . . . Toh, W. S. (2021). Mesenchymal stromal cell-derived small extracellular vesicles modulate macrophage polarization and enhance angiogenesis to promote bone healing. *Genes & Diseases*. doi:[10.1016/j.gendis.2021.11.012](https://doi.org/10.1016/j.gendis.2021.11.012)
- 7 Sivamuni, S. S., Ngeow, W. C., & Wong, R. C. W. (2021). Postdefecation Cleansing in the Asian Population and the Spread of COVID-19. *ASIA-PACIFIC JOURNAL OF PUBLIC HEALTH*, 2 pages. doi:[10.1177/10105395211052181](https://doi.org/10.1177/10105395211052181)
- 8 Prasad, S., Suresh, S., Hong, K. L., Bhargav, A., Rosa, V., & Wong, R. C. W. (2020). Biomechanics of alloplastic mandible reconstruction using biomaterials: The effect of implant design on stress concentration influences choice of material. *JOURNAL OF THE MECHANICAL BEHAVIOR OF BIOMEDICAL MATERIALS*, 103, 7 pages. doi:[10.1016/j.jmbbm.2019.103548](https://doi.org/10.1016/j.jmbbm.2019.103548)
- 9 Lim, L. Z., Koh, P. S. F., Cao, S., & Wong, R. C. W. (2020). Can carotid artery calcifications on dental radiographs predict adverse vascular events? A systematic review. *CLINICAL ORAL INVESTIGATIONS*, 25(1), 37-53. doi:[10.1007/s00784-020-03696-5](https://doi.org/10.1007/s00784-020-03696-5)
- 10 Prasad, S., Manakari, V., Parande, G., Wong, R. C. W., & Gupta, M. (2020). Hollow silica reinforced magnesium nanocomposites with enhanced mechanical and biological properties with computational modeling analysis for mandibular reconstruction. *INTERNATIONAL JOURNAL OF ORAL SCIENCE*, 12(1), 11 pages. doi:[10.1038/s41368-020-00098-x](https://doi.org/10.1038/s41368-020-00098-x)
- 11 Shi, H. A., & Wong, C. W. R. (2020). Intracranial extension of Lemierre's syndrome from odontogenic cause: A review and case report. *Journal of Oral and Maxillofacial Surgery, Medicine, and Pathology*, 32(6), 477-483. doi:[10.1016/j.ajoms.2020.06.010](https://doi.org/10.1016/j.ajoms.2020.06.010)
- 12 Parande, G., Manakari, V., Prasad, S., Chauhan, D., Rahate, S., Wong, R., & Gupta, M. (2020). Strength retention, corrosion control and biocompatibility of Mg-Zn-Si/HA nanocomposites. *JOURNAL OF THE MECHANICAL BEHAVIOR OF BIOMEDICAL MATERIALS*, 103, 13 pages. doi:[10.1016/j.jmbbm.2019.103584](https://doi.org/10.1016/j.jmbbm.2019.103584)

- 13 Sha, Y., Hong, K., Liew, M. K. M., Lum, J. L., & Wong, R. C. W. (2019). Juxta-articular tumoral calcinosis associated with the temporomandibular joint: a case report and concise review. *BMC ORAL HEALTH*, 19, 7 pages. doi:[10.1186/s12903-019-0816-3](https://doi.org/10.1186/s12903-019-0816-3)
- 14 Medical emergencies in Dentistry: Practical tips in Implementation (2019). *Annals of Dentistry*, 26, 42-52. doi:[10.22452/adum.vol26no7](https://doi.org/10.22452/adum.vol26no7)
- 15 Prasad, S., Ratheesh, V., Manakari, V., Parande, G., Gupta, M., & Wong, R. (2019). The Potential of Magnesium Based Materials in Mandibular Reconstruction. *METALS*, 9(3), 20 pages. doi:[10.3390/met9030302](https://doi.org/10.3390/met9030302)
- 16 Prasad, S., Suresh, S., & Wong, R. (2018). Osteogenic Potential of Graphene in Bone Tissue Engineering Scaffolds. *MATERIALS*, 11(8), 18 pages. doi:[10.3390/ma11081430](https://doi.org/10.3390/ma11081430)
- 17 Prasad, S., & Wong, R. C. W. (2018). Unraveling the mechanical strength of biomaterials used as a bone scaffold in oral and maxillofacial defects. *Oral Science International*, 15(2), 48-55. doi:[10.1016/S1348-8643\(18\)30005-3](https://doi.org/10.1016/S1348-8643(18)30005-3)
- 18 Islam, I., Lim, A. A. T., & Wong, R. C. W. (2017). Changes in bite force after orthognathic surgical correction of mandibular prognathism: a systematic review. *INTERNATIONAL JOURNAL OF ORAL AND MAXILLOFACIAL SURGERY*, 46(6), 746-755. doi:[10.1016/j.ijom.2017.01.012](https://doi.org/10.1016/j.ijom.2017.01.012)
- 19 Hong, K. L., Wong, R. C. W., Lim, A. A. T., Loh, F. C., Yeo, J. F., & Islam, I. (2017). Cone beam computed tomographic evaluation of the maxillary sinus septa and location of blood vessels at the lateral maxillary sinus wall in a sample of the Singaporean population. *JOURNAL OF ORAL AND MAXILLOFACIAL SURGERY MEDICINE AND PATHOLOGY*, 29(1), 39-44. doi:[10.1016/j.ajoms.2016.09.005](https://doi.org/10.1016/j.ajoms.2016.09.005)
- 20 Multiple Myeloma: Concise Review of the Literature and A Case Report of Mandibular Involvement (2016). *International Journal of Dentistry and Oral Science*, 309-314. doi:[10.19070/2377-8075-1600062](https://doi.org/10.19070/2377-8075-1600062)
- 21 Lim, A. A. T., Wee, T. H., & Wong, R. C. W. (2014). Epidemiology of Oral Cancer Diagnosed at a Singapore Tertiary Healthcare Institution. *ANNALS ACADEMY OF MEDICINE SINGAPORE*, 43(2), 96-101. Retrieved from <http://gateway.webofknowledge.com/>
- 22 Hong, P. M., & Wong, R. (2013). The changes in oral health related quality of life in patients with temporomandibular joint disorders following arthrocentesis: a pilot study. *International Journal of Oral and Maxillofacial Surgery*, 42(10), 1363. doi:[10.1016/j.ijom.2013.07.685](https://doi.org/10.1016/j.ijom.2013.07.685)
- 23 Wong, R. C. W., Tideman, H., Merckx, M. A. W., Jansen, J., & Goh, S. M. (2012). The modular endoprosthesis for mandibular body replacement - Part 1: Mechanical testing of the reconstruction. *JOURNAL OF CRANIO-MAXILLOFACIAL SURGERY*, 40(8), E479-E486. doi:[10.1016/j.jcms.2012.03.009](https://doi.org/10.1016/j.jcms.2012.03.009)
- 24 Wong, R. C. W., Tideman, H., Merckx, M. A. W., Jansen, J., & Goh, S. M. (2012). The modular endoprosthesis for mandibular body replacement. Part 2: Finite element analysis of endoprosthesis reconstruction of the mandible. *JOURNAL OF CRANIO-MAXILLOFACIAL SURGERY*, 40(8), E487-E497. doi:[10.1016/j.jcms.2012.03.010](https://doi.org/10.1016/j.jcms.2012.03.010)
- 25 Wong, R. C. W., Lee, S., Tideman, H., Merckx, M. A. W., Jansen, J., & Liao, K. (2011). Effect of replacement of mandibular defects with a modular endoprosthesis on bone mineral density in a monkey model. *INTERNATIONAL JOURNAL OF ORAL AND MAXILLOFACIAL SURGERY*, 40(6), 633-639. doi:[10.1016/j.ijom.2010.10.028](https://doi.org/10.1016/j.ijom.2010.10.028)
- 26 Wong, R. C. W., Tideman, H., Merckx, M. A. W., Jansen, J., Goh, S. M., & Liao, K. (2011). Review of biomechanical models used in studying the biomechanics of reconstructed mandibles. *INTERNATIONAL JOURNAL OF ORAL AND MAXILLOFACIAL SURGERY*, 40(4), 393-400. doi:[10.1016/j.ijom.2010.11.023](https://doi.org/10.1016/j.ijom.2010.11.023)
- 27 Wong, R. C. W., Tideman, H., Kin, L., & Merckx, M. A. W. (2010). Biomechanics of mandibular reconstruction: a review. *INTERNATIONAL JOURNAL OF ORAL AND MAXILLOFACIAL SURGERY*, 39(4), 313-319. doi:[10.1016/j.ijom.2009.11.003](https://doi.org/10.1016/j.ijom.2009.11.003)

- 28 Wong, R. C. W., & EL Peck, R. (2010). Enlargement of the Right Maxilla - Report of an Unusual Peripheral Osteoma. *ANNALS ACADEMY OF MEDICINE SINGAPORE*, 39(7), 576-577. Retrieved from <http://gateway.webofknowledge.com/>
- 29 Intekhab, I., Rosa, V., & Wong, R. C. W. (n.d.). HESC to IPSC: prohibition to controlled permissiveness to ethical panacea. *Eubios Journal of Asian and International Bioethics*, 26(4), 154-159.

Conference Paper (5)

- 30 Prasad, S., Manakari, V., Parande, G., Srivatsan, T. S., Wong, R., & Gupta, M. (2019). Bioresorbable Nano-Hydroxyapatite Reinforced Magnesium Alloplastic Bone Substitute for Biomedical Applications: A Study. In T. S. Srivatsan, & M. Gupta (Eds.), *NANOCOMPOSITES VI: NANOSCIENCE AND NANOTECHNOLOGY IN ADVANCED COMPOSITES* (pp. 71-82). San Diego, CA: SPRINGER INTERNATIONAL PUBLISHING AG. doi:[10.1007/978-3-030-35790-0_6](https://doi.org/10.1007/978-3-030-35790-0_6)
- 31 Kujur, M. S., Manakari, V., Parande, G., Prasad, S., Wong, R., Mallick, A., & Gupta, M. (2019). Effect of rare earth oxide nanoparticles on the mechanical and biological properties of magnesium. In *MS and T 2019 - Materials Science and Technology 2019* (pp. 1121-1129). doi:[10.7449/2019/MST_2019_1121_1129](https://doi.org/10.7449/2019/MST_2019_1121_1129)
- 32 Wong, R. C. W., Loh, J. S. P., & Islam, I. (2018). Alloplastic reconstruction of the mandible—Where are we now?. In *IFMBE Proceedings* Vol. 63 (pp. 437-441). doi:[10.1007/978-981-10-4361-1_74](https://doi.org/10.1007/978-981-10-4361-1_74)
- 33 Loh, J., Islam, I., & Wong, R. (2018). Microvascular free flaps in mandibular reconstruction—The role of computational fluid dynamics modelling. In *IFMBE Proceedings* Vol. 63 (pp. 537-539). doi:[10.1007/978-981-10-4361-1_91](https://doi.org/10.1007/978-981-10-4361-1_91)
- 34 Islam, I., Loh, J. S. P., & Wong, R. C. W. (2018). Temporomandibular joint replacement—Past, present and future: A bioengineering perspective. In *IFMBE Proceedings* Vol. 63 (pp. 547-551). doi:[10.1007/978-981-10-4361-1_93](https://doi.org/10.1007/978-981-10-4361-1_93)

Book (2)

- 35 *Handbook of Biomaterials Biocompatibility* (2020). . Elsevier. doi:[10.1016/c2018-0-02461-5](https://doi.org/10.1016/c2018-0-02461-5)
- 36 *Nanocomposites VI: Nanoscience and Nanotechnology in Advanced Composites* (2019). . Springer International Publishing. doi:[10.1007/978-3-030-35790-0](https://doi.org/10.1007/978-3-030-35790-0)

Book Chapter (4)

- 37 Wong, C. W. R., Suresh, S., Prasad, S., Ratheesh, V., & Gupta, M. (2021). Biocompatibility of Metal Matrix Composites Used for Biomedical Applications.. In D. Brabazon (Ed.), *Encyclopedia of Materials: Composites* (Vol. 1, pp. 474-501). Oxford.
- 38 Raymond Wong Chung Wen., Prasad, S., Manakari, V., Parande, G., Srivatsan, T. S., & Gupta, M. (2020). Bioresorbable Nano-Hydroxyapatite Reinforced Magnesium Alloplastic Bone Substitute for Biomedical Applications: A Study. In T. Srivatsan, & M. Gupta (Eds.), *Nanocomposites VI: Nanoscience and Nanotechnology in Advanced Composites* (pp. 71-82). Springer.
- 39 Raymond Wong Chung Wen., Prasad, S., & Ratheesh, V. (2020). Impact of biomaterial mechanics on cellular and molecular responses. In M. Mozafari (Ed.), *Handbook of Biomaterials Biocompatibility* (pp. 85-103). Woodhead Publishing Limited.
- 40 Wong, R. C. W., Loh, J. S. P., & Intekhab, I. (n.d.). The role of Finite Element Analysis in studying Potential Failure of Mandibular Reconstruction Methods. In P. Radostina (Ed.), *Perusal of the Finite Element Method* (pp. 191-212).