DAFTAR PUSTAKA

Aldabib, Jamal Moammar, and Zainal Arifin Mohd Ishak. 2020. "Effect of Hydroxyapatite Filler Concentration on Mechanical Properties of Poly (Methyl Methacrylate) Denture Base." *SN Applied Sciences* 2(4):1–14. doi: 10.1007/s42452-020-2546-1.

Azis, Yelmida, Novesar Jamarun, Syukri Arief, and Hadi Nur. 2015. "Facile Synthesis of Hydroxyapatite Particles from Cockle Shells (Anadaragranosa) by Hydrothermal Method." *Oriental Journal of Chemistry* 31(2):1099–1105. doi: 10.13005/ojc/310261.

Baradaran, S., E. Moghaddam, W. J. Basirun, M. Mehrali, M. Sookhakian, M. Hamdi, M. R. Nakhae. Moghaddam, and Y. Alias. 2014. "Mechanical Properties and Biomedical Applications of a Nanotube Hydroxyapatite-Reduced Graphene Oxide Composite." *Carbon* 69:32–45. doi: 10.1016/j.carbon.2013.11.054.

Bera, Madhab, Chandravati, Pragya Gupta, and Pradip K. Maji. 2017. "Facile One-Pot Synthesis of Graphene Oxide by Sonication Assisted Mechanochemical Approach and Its Surface Chemistry." *Journal of Nanoscience and Nanotechnology* 18(2):902–12. doi: 10.1166/jnn.2018.14306.

Bharath, G., B. Swarna Latha, Edreese H. Alsharaeh, P. Prakash, and N. Ponpandian. 2017. "Enhanced Hydroxyapatite Nanorods Formation on Graphene Oxide Nanocomposite as a Potential Candidate for Protein Adsorption, PH Controlled Release and an Effective Drug Delivery Platform for Cancer Therapy." *Analytical Methods* 9(2):240–52. doi: 10.1039/c6ay02348g.

Chen, Xiaodong, Zhan Qu, Zhe Liu, and Guoyu Ren. 2022a. "Mechanism of Oxidization of Graphite to Graphene Oxide by the Hummers Method." *ACS Omega* 7(27):23503–10. doi: 10.1021/acsomega.2c01963.

Chen, Xiaodong, Zhan Qu, Zhe Liu, and Guoyu Ren. 2022b. "Mechanism of Oxidization of Graphite to Graphene Oxide by the Hummers Method." *ACS Omega* 7(27):23503–10. doi: 10.1021/acsomega.2c01963.

Crichton, Robert. 2019. "Biomineralization." *Biological Inorganic Chemistry* 517–44. doi: 10.1016/b978-0-12-811741-5.00019-9.

Dimiev, Ayrat M., and James M. Tour. 2014. “Mechanism of Graphene Oxide Formation.” *ACS Nano* 8(3):3060–68. doi: 10.1021/nn500606a.

Ebrahimi, Shamsi, Coswald Stephen Sipaut Mohd Nasri, and Sazmal Effendi Bin Arshad. 2021. “Hydrothermal Synthesis of Hydroxyapatite Powders Using Response Surface Methodology (RSM).” *PLoS ONE* 16(5 May):1–24. doi: 10.1371/journal.pone.0251009.

Fan, Zengjie, Jinqing Wang, Zhaofeng Wang, Haiqiong Ran, Yang Li, Lengyuan Niu, Peiwei Gong, Bin Liu, and Shengrong Yang. 2014. “One-Pot Synthesis of Graphene/Hydroxyapatite Nanorod Composite for Tissue Engineering.” *Carbon* 66:407–16. doi: 10.1016/j.carbon.2013.09.016.

Fatimah, Is, Rico Nurillahi, Della Fahrani, Tia Harmawantika, Greef Rose Aulia, and Wellyana Puspitasari. 2018. “Hydroxyapatite Prepared from Snail (Pilla Ampulacea) and Scallop (Anadara Granosa) Shells as Low Cost-Renewable Catalyst in Biodiesel Conversion.” *AIP Conference Proceedings* 2026. doi: 10.1063/1.5065032.

Fihri, Aziz, Christophe Len, Rajender S. Varma, and Abderrahim Solhy. 2017. “Hydroxyapatite: A Review of Syntheses, Structure and Applications in Heterogeneous Catalysis.” *Coordination Chemistry Reviews* 347:48–76. doi: 10.1016/j.ccr.2017.06.009.

Fu, Chuan, Xiaoyu Yang, Shulian Tan, and Liangsong Song. 2017. “Enhancing Cell Proliferation and Osteogenic Differentiation of MC3T3-E1 Pre-Osteoblasts by BMP-2 Delivery in Graphene Oxide-Incorporated PLGA/HA Biodegradable Microcarriers.” *Scientific Reports* 7(1):1–13. doi: 10.1038/s41598-017-12935-x.

Ghaemi, Amirhossein, Shohreh Javadi, Maryam Kavousi Heidari, Hamid Rashedi, Fatemeh Yazdian, Meisam Omidi, Zahra Tavakoli, and Mojgan Sheikhpour. 2020. “Graphene-Based Materials in Drug Delivery and Growth Factor Release: A Critical Review.” *Wound Medicine* 31(February 2019):100193. doi: 10.1016/j.wndm.2020.100193.

Ghiasi, Behrad, Yahya Sefidbakht, and Maryam Rezaei. 2019. *Hydroxyapatite for Biomedicine and Drug Delivery*. Vol. 104. Springer International Publishing.

Gomes, D. S., A. M. C. Santos, G. A. Neves, and R. R. Menezes. 2019. “A Brief

Review on Hydroxyapatite Production and Use in Biomedicine." *Ceramica* 65(374):282–302. doi: 10.1590/0366-69132019653742706.

Haider, Adnan, Sajjad Haider, Sung Soo Han, and Inn Kyu Kang. 2017. "Recent Advances in the Synthesis, Functionalization and Biomedical Applications of Hydroxyapatite: A Review." *RSC Advances* 7(13):7442–58. doi: 10.1039/c6ra26124h.

Hart, Abarasi. 2020. "Mini-Review of Waste Shell-Derived Materials' Applications." *Waste Management and Research* 38(5):514–27. doi: 10.1177/0734242X19897812.

Hashim, N. C., and D. Nordin. 2019. "A COMPARATIVE STUDY OF SOLID-TO-SOLID AND WET PRECIPITATION FOR THE FABRICATION OF GRAPHENE OXIDE-HYDROXYAPATITE." 14(4):991–1002.

Heshmatpour, Felora, and Saeedeh Haghbin. 2021. "Nanohydroxyapatite/Graphene Oxide Nanocomposites Modified with Synthetic Polymers: Promising Materials for Bone Tissue Engineering Applications." *International Journal of Polymeric Materials and Polymeric Biomaterials* 70(8):585–91. doi: 10.1080/00914037.2020.1740990.

Iacoboni, Ilaria, Francesco Perrozzi, Ludovico Macera, Giuliana Taglieri, Luca Ottaviano, and Giulia Fioravanti. 2019. "In Situ Syntheses of Hydroxyapatite-Grafted Graphene Oxide Composites." *Journal of Biomedical Materials Research - Part A* 107(9):2026–39. doi: 10.1002/jbm.a.36716.

Ishihara, Shiho, Takuya Matsumoto, Takamasa Onoki, Mohammad Hafiz Uddin, Taiji Sohmura, and Atsushi Nakahira. 2010. "Regulation of the Protein-Loading Capacity of Hydroxyapatite by Mercaptosuccinic Acid Modification." *Acta Biomaterialia* 6(3):830–35. doi: 10.1016/j.actbio.2009.10.019.

Jamarun, Novesar, Yulfitrin -, and Syukri Arief. 2015. "Pembuatan Precipitated Calcium Carbonate (Pcc) Dari Batu Kapur Dengan Metoda Kaustik Soda." *Jurnal Riset Kimia* 1(1):20. doi: 10.25077/jrk.v1i1.54.

Jamarun, Novesar, Zefri Azharman, Syukri Arief, Tika Permata Sari, Asregi Asril, and Sri Elfina. 2015. "Effect of Temperature on Synthesis of Hydroxyapatite from Limestone." *Rasayan Journal of Chemistry* 8(1):133–37.

Jamarun, Novesar, Zefri Azharman, Zilfa, and Upita Septiani. 2016. “Effect of Firing for Synthesis of Hydroxyapatite by Precipitation Method.” *Oriental Journal of Chemistry* 32(4):2095–99. doi: 10.13005/ojc/320437.

Kane, Shashank N., Ashutosh Mishra, and Anup K. Dutta. 2016. “Preface: International Conference on Recent Trends in Physics (ICRTP 2016).” *Journal of Physics: Conference Series* 755(1). doi: 10.1088/1742-6596/755/1/011001.

Karunakaran, Gopalu, Eun Bum Cho, Govindan Suresh Kumar, Evgeny Kolesnikov, Gopinathan Janarthanan, Mamatha Muraleedharan Pillai, Selvakumar Rajendran, Selvakumar Boobalan, Kattakgoundar Govindaraj Sudha, and Mohan Prasanna Rajeshkumar. 2020. “Mesoporous Mg-Doped Hydroxyapatite Nanorods Prepared from Bio-Waste Blue Mussel Shells for Implant Applications.” *Ceramics International* (August):1–14. doi: 10.1016/j.ceramint.2020.08.009.

Kattimani, Vivekanand Sabanna, Sudheer Kondaka, and Krishna Prasad Lingamaneni. 2016. “Hydroxyapatite–-Past, Present, and Future in Bone Regeneration.” *Bone and Tissue Regeneration Insights* 7:BTRI.S36138. doi: 10.4137/btri.s36138.

Klébert, Szilvia, Csaba Balázsi, Katalin Balázsi, Eszter Bódis, Péter Fazekas, Anna Mária Keszler, János Szépvölgyi, and Zoltán Károly. 2015. “Spark Plasma Sintering of Graphene Reinforced Hydroxyapatite Composites.” *Ceramics International* 41(3):3647–52. doi: 10.1016/j.ceramint.2014.11.033.

Kumar, Alok, Krishanu Biswas, and Bikramjit Basu. 2013. “On the Toughness Enhancement in Hydroxyapatite-Based Composites.” *Acta Materialia* 61(14):5198–5215. doi: 10.1016/j.actamat.2013.05.013.

Langer, Robert. 1998. “Drug Delivery and Targeting.” *Nature* 392(6679 SUPPL.):5–10.

Legeros, Racquel Zapanta, and John P. Legeros. 2008. “Hydroxyapatite.” *Bioceramics and Their Clinical Applications* 367–94. doi: 10.1533/9781845694227.2.367.

Li, Ming, Qian Liu, Zhaojun Jia, Xuchen Xu, Yan Cheng, Yufeng Zheng, Tingfei Xi, and Shicheng Wei. 2014. “Graphene Oxide/Hydroxyapatite Composite

Coatings Fabricated by Electrophoretic Nanotechnology for Biological Applications." *Carbon* 67:185–97. doi: 10.1016/j.carbon.2013.09.080.

Li, Ming, Pan Xiong, Feng Yan, Sijie Li, Changhong Ren, Zhichen Yin, Ang Li, Huafang Li, Xunming Ji, Yufeng Zheng, and Yan Cheng. 2018. "An Overview of Graphene-Based Hydroxyapatite Composites for Orthopedic Applications." *Bioactive Materials* 3(1):1–18. doi: 10.1016/j.bioactmat.2018.01.001.

Li, Yaling, Cuilian Liu, Halei Zhai, Genxing Zhu, Haihua Pan, Xurong Xu, and Ruikang Tang. 2014. "Biomimetic Graphene Oxide-Hydroxyapatite Composites via in Situ Mineralization and Hierarchical Assembly." *RSC Advances* 4(48):25398–403. doi: 10.1039/c4ra02821j.

Lin, K., and J. Chang. 2015. *Structure and Properties of Hydroxyapatite for Biomedical Applications*. Vol. 4214. Elsevier Ltd.

Manoratne, C. H., S. R. D. Rosa, and I. R. M. Kottegoda. 2017. "XRD-HTA, UV Visible, FTIR and SEM Interpretation of Reduced Graphene Oxide Synthesized from High Purity Vein Graphite." *Material Science Research India* 14(1):19–30. doi: 10.13005/msri/140104.

Marcano, Daniela C., Dmitry V Kosynkin, Jacob M. Berlin, Alexander Sinitskii, Zhengzong Sun, Alexander Slesarev, Lawrence B. Alemany, Wei Lu, and James M. Tour. 2010. "Improved Synthesis of Graphene Oxide." *ACS Nano* 4(8):4806–14. doi: 10.1021/nn1006368.

Matsumoto, T., M. Okazaki, M. Inoue, S. Yamaguchi, T. Kusunose, T. Toyonaga, Y. Hamada, and J. Takahashi. 2004. "Hydroxyapatite Particles as a Controlled Release Carrier of Protein." *Biomaterials* 25(17):3807–12. doi: 10.1016/j.biomaterials.2003.10.081.

Mei, Xiufeng, Xiuqing Meng, and Fengmin Wu. 2015. "Hydrothermal Method for the Production of Reduced Graphene Oxide." *Physica E: Low-Dimensional Systems and Nanostructures* 68(April 2015):81–86. doi: 10.1016/j.physe.2014.12.011.

Michelot, Audric, Stéphanie Sarda, Catherine Audin, Eric Deydier, Eric Manoury, Rinaldo Poli, and Christian Rey. 2015. "Spectroscopic Characterisation of Hydroxyapatite and Nanocrystalline Apatite with Grafted Aminopropyltriethoxysilane: Nature of Silane–Surface Interaction." *Journal*

of Materials Science 50(17):5746–57. doi: 10.1007/s10853-015-9122-x.

Mitragotri, Samir, and Joerg Lahann. 2012. "Materials for Drug Delivery: Innovative Solutions to Address Complex Biological Hurdles." *Advanced Materials* 24(28):3717–23. doi: 10.1002/adma.201202080.

Muljani, Srie, Erwan Adi Saputra, and Ketut Sumada. 2021. "Transformation of Calcium Carbonate Polymorph From Various Type of Shells by Carbonation Methods." *Reaktor* 21(1):27–34. doi: 10.14710/reaktor.21.1.27-34.

Nardin, Michel, and Jacques Schultz. 1993. "Interactions and Properties of Composites : B) Adhesion-Composites Properties Relationships BT - The Interfacial Interactions in Polymeric Composites." Pp. 95–105 in, edited by G. Akovali. Dordrecht: Springer Netherlands.

Naumov, Anton V. 2016. "Optical Properties of Graphene Oxide." *Graphene Oxide: Fundamentals and Applications* 147–74. doi: 10.1002/9781119069447.ch5.

Nosrati, Hassan, Rasoul Sarraf Mamoory, Fatemeh Dabir, Maria Canillas Perez, Miguel Angel Rodriguez, Dang Quang Svend Le, and Cody Eric Bünger. 2019. "In Situ Synthesis of Three Dimensional Graphene-Hydroxyapatite Nano Powders via Hydrothermal Process." *Materials Chemistry and Physics* 222(October 2018):251–55. doi: 10.1016/j.matchemphys.2018.10.023.

Nosrati, Hassan, Rasoul Sarraf Mamoory, Dang Quang Svend Le, and Cody Eric Bünger. 2019. "Preparation of Reduced Graphene Oxide/Hydroxyapatite Nanocomposite and Evaluation of Graphene Sheets/Hydroxyapatite Interface." *Diamond and Related Materials* 100(October):107561. doi: 10.1016/j.diamond.2019.107561.

Nosrati, Hassan, Rasoul Sarraf-Mamoory, Dang Quang Svend Le, Amir Hossein Ahmadi, Maria Canillas Perez, and Cody Eric Bünger. 2020. "Investigating the Mechanical Behavior of Hydroxyapatite-Reduced Graphene Oxide Nanocomposite under Different Loading Rates." *Nano Express* 1(1):010053. doi: 10.1088/2632-959x/ab98e2.

Nosrati, Hassan, Rasoul Sarraf-Mamoory, Dang Quang Svend Le, and Cody Eric Bünger. 2020. "Enhanced Fracture Toughness of Three Dimensional Graphene- Hydroxyapatite Nanocomposites by Employing the Taguchi

Method.” *Composites Part B: Engineering* 190(September 2019):107928. doi: 10.1016/j.compositesb.2020.107928.

Nosrati, Hassan, Rasoul Sarraf-Mamoory, Dang Quang Svend Le, Reza Zolfaghari Emameh, Maria Canillas Perez, and Cody Eric Bünger. 2020. “Improving the Mechanical Behavior of Reduced Graphene Oxide/Hydroxyapatite Nanocomposites Using Gas Injection into Powders Synthesis Autoclave.” *Scientific Reports* 10(1):1–13. doi: 10.1038/s41598-020-64928-y.

Nudelman, Fabio, and Nico A. J. M. Sommerdijk. 2012. “Biomineralization as an Inspiration for Materials Chemistry.” *Angewandte Chemie - International Edition* 51(27):6582–96. doi: 10.1002/anie.201106715.

Obada, D. O., E. T. Dauda, J. K. Abifarin, D. Dodoo-Arhin, and N. D. Bansod. 2020. “Mechanical Properties of Natural Hydroxyapatite Using Low Cold Compaction Pressure: Effect of Sintering Temperature.” *Materials Chemistry and Physics* 239(July 2019):122099. doi: 10.1016/j.matchemphys.2019.122099.

Öner, Mualla, Erman Yetiz, Esin Ay, and Umut Uysal. 2011. “Ibuprofen Release from Porous Hydroxyapatite Tablets.” *Ceramics International* 37(7):2117–25. doi: 10.1016/j.ceramint.2011.02.021.

Pàmies, Pep, and Alison Stoddart. 2013. “Materials for Drug Delivery.” *Nature Materials* 12(11):957. doi: 10.1038/nmat3798.

Prabakaran, K., A. Balamurugan, and S. Rajeswari. 2005. “Development of Calcium Phosphate Based Apatite from Hen’s Eggshell.” *Bulletin of Materials Science* 28(2):115–19. doi: 10.1007/BF02704229.

Priyadarsini, Subhashree, Swaraj Mohanty, Sumit Mukherjee, Srirupa Basu, and Monalisa Mishra. 2018. “Graphene and Graphene Oxide as Nanomaterials for Medicine and Biology Application.” *Journal of Nanostructure in Chemistry* 8(2):123–37. doi: 10.1007/s40097-018-0265-6.

Rafiee, Mohammad A., Javad Rafiee, Zhou Wang, Huaihe Song, Zhong Zhen Yu, and Nikhil Koratkar. 2009. “Enhanced Mechanical Properties of Nanocomposites at Low Graphene Content.” *ACS Nano* 3(12):3884–90. doi: 10.1021/nn9010472.

Ramadas, M., G. Bharath, N. Ponpandian, and A. M. Ballamurugan. 2017.

"Investigation on Biophysical Properties of Hydroxyapatite/Graphene Oxide (HAp/GO) Based Binary Nanocomposite for Biomedical Applications." *Materials Chemistry and Phys*

ics 199:179–84. doi: 10.1016/j.matchemphys.2017.07.001.

Raucci, M. G., D. Giugliano, A. Longo, S. Zeppetelli, G. Carotenuto, and L. Ambrosio. 2017. "Comparative Facile Methods for Preparing Graphene Oxide–Hydroxyapatite for Bone Tissue Engineering." *Journal of Tissue Engineering and Regenerative Medicine* 11(8):2204–16. doi: https://doi.org/10.1002/term.2119.

Reina, Giacomo, José Miguel González-Domínguez, Alejandro Criado, Ester Vázquez, Alberto Bianco, and Maurizio Prato. 2017. "Promises, Facts and Challenges for Graphene in Biomedical Applications." *Chemical Society Reviews* 46(15):4400–4416. doi: 10.1039/c7cs00363c.

Shao, Fengwei, Lin Liu, Kejie Fan, Yurong Cai, and Juming Yao. 2012. "Ibuprofen Loaded Porous Calcium Phosphate Nanospheres for Skeletal Drug Delivery System." *Journal of Materials Science* 47(2):1054–58. doi: 10.1007/s10853-011-5894-9.

Shao, Guilin, Yonggen Lu, Fangfang Wu, Changling Yang, Fanlong Zeng, and Qilin Wu. 2012. "Graphene Oxide: The Mechanisms of Oxidation and Exfoliation." *Journal of Materials Science* 47(10):4400–4409. doi: 10.1007/s10853-012-6294-5.

Singh, Swarnima, Krishna Kant Pandey, O. S. Asiq Rahman, Swati Haldar, Debrupa Lahiri, and Anup Kumar Keshri. 2020. "Investigation of Crystallinity, Mechanical Properties, Fracture Toughness and Cell Proliferation in Plasma Sprayed Graphene Nano Platelets Reinforced Hydroxyapatite Coating." *Materials Research Express* 7(1). doi: 10.1088/2053-1591/ab6c23.

Song, Saijie, He Shen, Yuli Wang, Xiaohong Chu, Jing Xie, Ninglin Zhou, and Jian Shen. 2020. "Biomedical Application of Graphene: From Drug Delivery, Tumor Therapy, to Theranostics." *Colloids and Surfaces B: Biointerfaces* 185(November 2019):110596. doi: 10.1016/j.colsurfb.2019.110596.

Sumathra, Murugan, Kishor Kumar Sadasivuni, S. Suresh Kumar, and Mariappan

Rajan. 2018. “Cisplatin-Loaded Graphene Oxide/Chitosan/Hydroxyapatite Composite as a Promising Tool for Osteosarcoma-Affected Bone Regeneration.” *ACS Omega* 3(11):14620–33. doi: 10.1021/acsomega.8b02090.

Sun, Jian, Lisheng Wang, and Dongfang Zhao. 2017. “Polymorph and Morphology of CaCO3 in Relation to Precipitation Conditions in a Bubbling System.” *Chinese Journal of Chemical Engineering* 25(9):1335–42. doi: 10.1016/j.cjche.2016.12.004.

Sun, Ling. 2019. “Structure and Synthesis of Graphene Oxide.” *Chinese Journal of Chemical Engineering* 27(10):2251–60. doi: 10.1016/j.cjche.2019.05.003.

Syafaat, Firda Yanuar, and Yusril Yusuf. 2019. “Influence of ca/p Concentration on Hydroxyapatite (Hap) from Asian Moon Scallop Shell (Amusium Pleuronectes).” *International Journal of Nanoelectronics and Materials* 12(3):357–62.

Szcześ, Aleksandra, Lucyna Hołysz, and Emil Chibowski. 2017. “Synthesis of Hydroxyapatite for Biomedical Applications.” *Advances in Colloid and Interface Science* 249(April):321–30. doi: 10.1016/j.cis.2017.04.007.

Taghzouti, Othmane Khalifi, Khalil El Mabrouk, Meriame Bricha, and Khalid Nouneh. 2019. “Controlled Adsorption and Release of Amoxicillin in GO/HA Composite Materials.” *SN Applied Sciences* 1(3):1–11. doi: 10.1007/s42452-019-0240-y.

Tang, Mi, Siqi Liu, Lan Luo, Fang Cao, Congjun Wang, Rigui Chen, and Juan Shen. 2020. “Synthesizing Surface Modified Hydroxyapatite Embedded in Three-Dimensional Graphene Oxide Networks for Drug Loading.” *Materials Letters* 265:127426. doi: 10.1016/j.matlet.2020.127426.

Thomas, Shindu, Bentham Science Publisher Harshita, Pawan Mishra, and Sushama Talegaonkar. 2015. “Ceramic Nanoparticles: Fabrication Methods and Applications in Drug Delivery.” *Current Pharmaceutical Design* 21(42):6165–88. doi: 10.2174/1381612821666151027153246.

Trakoolwannachai, V., P. Kheolamai, and S. Ummartyotin. 2019. “Characterization of Hydroxyapatite from Eggshell Waste and Polycaprolactone (PCL) Composite for Scaffold Material.” *Composites Part B: Engineering*

173:106974. doi: 10.1016/j.compositesb.2019.106974.

Uskoković, Vuk, and Dragan P. Uskoković. 2011. “Nanosized Hydroxyapatite and Other Calcium Phosphates: Chemistry of Formation and Application as Drug and Gene Delivery Agents.” *Journal of Biomedical Materials Research - Part B Applied Biomaterials* 96 B(1):152–91. doi: 10.1002/jbm.b.31746.

Vemulapalli, Ajay Kumar, Rama Murty Raju Penmetsa, Ramanaiah Nallu, and Rajesh Siriyala. 2020. “HAp/TiO2 Nanocomposites: Influence of TiO2 on Microstructure and Mechanical Properties.” *Journal of Composite Materials* 54(6):765–72. doi: 10.1177/0021998319868517.

Wang, Bing Yen, Steven Hsu, Chia Man Chou, Tair I. Wu, and Vincent K. S. Hsiao. 2021. “Improved Mechanical Properties of Ultra-High Shear Force Mixed Reduced Graphene Oxide/Hydroxyapatite Nanocomposite Produced Using Spark Plasma Sintering.” *Nanomaterials* 11(4). doi: 10.3390/nano11040986.

Xie, Xingyi, Kaiwen Hu, Dongdong Fang, Lihong Shang, Simon D. Tran, and Marta Cerruti. 2015. “Graphene and Hydroxyapatite Self-Assemble into Homogeneous, Free Standing Nanocomposite Hydrogels for Bone Tissue Engineering.” *Nanoscale* 7(17):7992–8002. doi: 10.1039/c5nr01107h.

Yang, Zebin, Jitao Liu, Jinkun Liu, Xiliang Chen, Tingting Yan, and Qinghua Chen. 2021. “Investigation on Physicochemical Properties of Graphene Oxide / Nano-Hydroxyapatite Composites and Its Biomedical Applications.” 625–33.

Yao, Chengli, Jinmiao Zhu, Anjian Xie, Yuhua Shen, Hongying Li, Bin Zheng, and Yanxin Wei. 2017. “Graphene Oxide and Creatine Phosphate Disodium Dual Template-Directed Synthesis of GO/Hydroxyapatite and Its Application in Drug Delivery.” *Materials Science and Engineering C* 73:709–15. doi: 10.1016/j.msec.2016.11.083.

Yu, Hsing Ning, Hsueh Chuan Hsu, Shih Ching Wu, Cheng Wei Hsu, Shih Kuang Hsu, and Wen Fu Ho. 2020. “Characterization of Nano-Scale Hydroxyapatite Coating Synthesized from Eggshells through Hydrothermal Reaction on Commercially Pure Titanium.” *Coatings* 10(2). doi: 10.3390/coatings10020112.

Zeng, Yongxiang, Xibo Pei, Shuying Yang, Han Qin, He Cai, Shanshan Hu, Lei Sui, Qianbing Wan, and Jian Wang. 2016. “Graphene Oxide/Hydroxyapatite

Composite Coatings Fabricated by Electrochemical Deposition." *Surface and Coatings Technology* 286:72–79. doi: 10.1016/j.surfcoat.2015.12.013.