

DAFTAR PUSTAKA

- Adak, M.D., and K.M. Purohit. 2011. Synthesis of Nano-crystalline Hydroxyapatite from Dead Snail Shells for Biological Implantation. Biomaterials Indian Journal. 25(3):101-106
- Agnieszka S, Z Kowalski, Z Wzorek, 2009, Preparation of hydroxyapatite from animal bones, Acta of Bio engineering and biomechanics, 11, 4: 23-28.
- Agrawal.K., Gurbinder Singh., Devendra Puri., Satya Prakash. 2011. Synthesis and Characterization of Powder by sol-gel method for biomedical Application. Journal Minerals and material characterization and Engineering. 10(8): 727-734.
- Alqap. A.S.F., I.Sopyan and S.A. Zubir. 2010. Concentration effect of aqueous synthesis on biphasic hydroxyapatite- β -Tricalcium phosphate composition. Advanced material research. 93-94, 405-408.
- Alonso. LM., Raul GC., Luis alberto dos santos. 2011. Effects of silica addition on the chemical, mechanical and biological properties of a new α -tricalcium phosphate/tricalcium silicate cement. Material Research. 14(4): 475-482.
- Aminzare, M, A., Eskandari., MH, Boronian., A Baroonian., A. Berenov., Z. Razavi Hesabi., M. Taheri., S.K. sadrnezhaad. 2013. Hydroxyapatite nanocomposites: Synthesis, sintering and Mechanical properties. Sciverse Science Direct Elsevier. 39: 2197-2206.
- Angelescu. N., Ungureanu. D. N., Anghelina F.V. 2011. Synthesis and characterization of hydroxyapatite obtained in different experimental conditions, Material and Mechanics. 6(9): 15-18.
- Anjuvan S, 2012, Hydroxyapatite, a Biomaterial: Its chemical synthesis, characterization and study of biocompatibility prepared from shell of garden snail, *Helix aspersa*, Bull Material Science,35, 6, 1031-1038.
- Arcos, J., Rodríguez-Carvajal., and M. Vallet-Regí. 2004. Silicon Incorporation in Hydroxylapatite Obtained by Controlled Crystallization. American Chemical Society.
- Asliza SM., A. Zaheruddin K., Shahrizal H. 2009. Study the properties of dense hydroxyapatite extract from cow bone. Journal of nuclear and related technologies. 6(1): 175-182.

- Ayers RA, DE Burkes, G Gottoli, HC Yi, F Zhim, LH Yahia, JJ Moore, 2006 Combustion synthesis of porous biomaterials, Wiley Inter science, 634-645.
- Bharanichandar. J., Chandramohan, B. M, 2014, Natural fiber reinforced polymer composite in synthetic bone grafting- A new approach, Journal of Middle East Applied Science and Technology, 16, 588-596.
- Boccaccini AR, M Erol, WJ Stark, D Mhon, Z Hong, JF mano, 2011, Polymer/bioactive glassnanocompositefor biomedical application, 70, 1764-1776.
- Bogya, S.B., R. Barabas., A. Csavdari., V. Dejeu., I. Baldera, 2009, Hydroxyapatite modified with silica used for sorption of copper(II), Chemical Paper, 63, 5, 568-573.
- Burmawi., N. Jamarun., S. Arief and Gunawarman. 2017. Strength of material HAp-Borosilicate and Their Sintering Behaviors. Oriental Journal Of Chemistry. (33)2: 920-924.
- Budiatin, A.S., M. zainuddin., Junaidi Khotib., Ferdiansyah. 2014. Pelepasan gentamisin dari pellet bovine-hydroxyapatite-gelatine sebagai system penghantaran obat dan pengisi tulang. jurnal farmasi dan ilmu Kefarmasiaan Indonesia. 1(1): 10-15.
- Bulut. B., N. Demirkol., Z.E. Erkmen,, E.S. Kayali. 2015. Comparison of Microstructural and Mechanical properties of hydroxyapatite-Al₂O₃ Composites with commercial Inert Glass (CIG) Addition. Acta Physica Polonia. 127(4): 1094-1096.
- Cimdina, L.B., and N. Borodajenko. 2011, Research of Calcium Phosphate Using Fourier Transform Infra Red Spectroscopy, Material Science, Engineering and Technology. Edited by Theophile Theophanides. 123-148.
- Cyster L.A, D.M. Grant, S.M. Howdle, F.R.A.J. Rose, D.J. Irvine, D. Freeman, C.A. Scotchford, K.M. Shakesheff, 2005, The Influence of dispersant concentration on the pore morphology of hydroxyapatite ceramics for bone tissue engineering, Biomaterial, pp 697 – 702.
- Chu. T.M.G, S.J. Hollister, J.W. Halloran, S.E. Feinberg and D.G. Orton, 2002, Manufacturing and Characteization of 3-D hydroxyapatite bone tissue engineering Scaffold, Ann, N.Y. Acad Sci, 961, 114-117.
- Constantin. LV, S. Iconaru, CS. Ciobanu, 2012, Europium doped hydroxyapatite for applications in environmental field, Romanian report in fisics, 64, 3, 788-794.
- Damen JJM, Ten Cate, 1992, *Silica-induced Precipitation of Calcium Phosphate in the Presence of Inhibitors of Hydroxyapatite Formation*

- Dahlan.K, 2013, Potensi Kerang Ranga sebagai sumber kalsium dalam sintesis biomaterial substitusi tulang, prosiding semirata FMIPA Unila, 147-151.
- Darwis D, Yessi Warastuti, 2008, Sintetis dan Karakterisasi Komposit Hidroksiapatit (HA) sebagai graft Tulang Sintetis, Jurnal Aplikasi Isotop dan Radiasi, Vol 4 No 2.
- De Campos DDP, Bertran CA, 2009, Synthesis of carbonated hydroxyapatite nanorods in liquid crystals. Chemistry Institute, University of Campinas, P.O. Box 6154, Campinas - SP, Brazil.
- Department of research and development, sigmaGraft, Brea, CA, USA, 2013, Effect of thermal treatment of the hydroxyapatite powder on the micropore and microstructure of porous biphasic calcium phosphate composite granules, Journal of biomaterials and nano biotechnology, 4, 114-118.
- Dorozhkin SV, 2013, Calcium Orthophosphate-Based Bioceramics, Materials, 6, 3840-3942.
- Ducheyne. P, S. Radin , L King. 1993, The Effect of Calcium Phosphate ceramic composition and structure on in vitro behavior, Journal Dissolution,J.Biomed.Mater.27 25- 34
- Elsherekshi NW, et al, 2009, Effect of Fiber Incorporation on the Fracture Toughness Properties of Denture Base Poly MethylMethacrylate, Journal of Physical Science, Vol 20, pp 1 – 12.
- Eny.K, Aida R, Pudjiastuti, Sotya, Astutiningsih and S. Harjanto, 2012, Preparation of Hydroxyapatite from Bovine Bone by Combination Methods of Ultrasonic and Spray Drying, ICBEE'2012.
- Elkayar A, Yehia E and Mariana A, 2009, Properties of hydroxyapatite from bovine teeth, Libertas Academica, 2, 31-36.
- El Yacoubi, A. Massit, M.Fathi, B.Chafik, El Idris , K. Yamni, 2014, Characterization of silicon-substituted by hydroxyapatite powders synthesized by a wet precipitation method, IOSRJAC, 7, 11, 24-29.
- Fahimah. AD, Sri Wardhani, M. Misbah.K, 2014, pengaruh perbandingan massa Ca:P terhadap sintesis hidroksiapatit tulang sapi dengan metode kering, Kimia student journal, 1, 2, 196-202.
- Faizul.C.P, Abdullah.C & B.Faizul, 2013, Review of Ekstration of silica from Agricultural Wastes using Acid Leaching treatment, Advanced Material Research, 626, 997-1000.

- Fariba, N, M.A.S. Sadjadi, S.J.Fateami, M.K.Mobarakeh and R.M.Afshar, 2016, The Effect of Silica and a Nature Polymer on the site and properties of nano-hidroxyapatite, 32, 3, 1639-1647.
- Farid A, PO Vassiliev and L Bergstrom, Hierarchically porous ceramics from diatomite powders by pulsed current processing, 2009, 92, 2, 338-343.
- Figueredo. M, A. Fernando, G. Martins, J. Freitas, F. Judas, H. Figueredo, 2010, Effect of the Calcination temperature on the composition and microstrukture of hydroxyapatite derived from human and animal Bone, Ceramic International, 36, pp 2383 – 2393.
- Gamal.G.A, F.A. Almuhtadi, A.H.Said, 2013, Effect of Iron additives on the microstructure of hydroxyapatite, ETASR, 3, 6, 532-539.
- Ghanaati S, Samuel. EU, Mike B, Ines W, Oliver K, Robert AS and C James K, 2013, Implantation of silicon dioxide-based nanocrystalline hydroxyapatite and pure phase beta-tricalciumphosphate bone substitute granules in caprine muscle tissue does not induce new bone formation, Head and Face Medicine, 9, 1, 1-7.
- Gergely G, Ferenc weber, Istvan Lukacs, Attila L, Toth, Zsolt E, Horvath, Judit Mihaly, Csaba Balazsi, 2010, Ceramics International, 36, 803-806.
- Grennspand. D, 2012, Comparison of A synthetic and Bovine Derived hydroxyapatite Bone Graft Substitute.
- Gomes Vega. JM, E Saiz, AP. Tomsia, G.W marshall, SJ. Marshall, 2000, Bioactive glass coatings with hydroxyapatite and Bioglass particles on Ti-Based Implants, 1. Processing, , Biomaterial, 21, 105-111.
- Hallman M and Andreas Thour, 2000, Bone substitutes and growth factors as an alternative/complement to autogenous bone for grafting in implant dentistry, Periodontology, 47, 172-192.
- Handayani. A, Sulistiono Giat S dan Deswita, 2012, Preparasi dan Karakterisasi hidroksiapatit berpori dari tulang ikan, Indinesian Journal of material Science, 14, 47-50.
- Helmi M Bin MA, Mohd halim Irwan Bin Ibrahim, 2016, Thermal characteristic of waste-derived hydroxyapatite (HA) reinforced ultra high molecular weight polyethylene (UHMWPE) composites for fused deposition modeling (FDM) process, Colloquium of Advanced Mechanics (CAMS), IOP Publishing, 1-10.

- Hilal. MK, Basavaraj FK, 2014, Fabrication and characterization of hydroxyapatite/zirconia composite using powder press technique, Medical Science, 3, 5, 181-184.
- Hosseinzadeh, 2014, fabrication of a Hard Tissue Replacement using natural Hydroxyapatite Derived from Bovine Bones by Thermal Decomposition Method, International Journal of Organ Transplantation Medicine, vol 5 no 1, pp 23- 31.
- Hong Li, P Hrma, JD Vienna, M Qian, Y Su, DE Smith, 2003, Effects of Al₂O₃, B₂O₃, Na₂O and SiO₂ on nepheline formation in borosilicate glasses: chemical and physical correlations, 331, 202-216.
- Hung. I-Ming, Wei-Jen Shih, Min-Hsiung Hon and Moo-Chin Wang, 2012, The properties of sintered calcium phosphate with (Ca/P)= 1,5. Int J Mol Sci, 13, 13569-13586.
- Itatani Kiyoshi, Kenta Tsuchiya, Yoshio Sakka, Ian J Davies, Seilero Koda, 2011, Superplastic deformation of Hydroxyapatite ceramics with B₂O₃ or Na₂O addition fabricated by pulse current pressure sintering Journal of the European Ceramic Society .31 2641-2648.,
- Jamarun N., Z.Azharman, S.Arief, T.P.Sari, A.Asril, S.Elfina, 2015, *Rasayan Journal Chemical*, 8, 1, 133-137.
- Jamarun, N., S. Elfina, S. Arief, A. Jamaan, 2016, HydroxyapatiteMaterial : Synthesis by using precipitation Method from Lime Stone , Der Pharma Chemica Journal, 4: 542-549.
- Jamarun. N., A. Asril. Zulhadjri, Zilfa, U. Septiani, 2018, Effect of Hidrothermal temperature on synthesis of hydroxyapatite from lime stone via hydrothermal method, International Journal of Applied Pharmaceutics, 10 (1) : 136-139.
- Jamarun. N., A. Azharman. Zilfa, U. Septiani, 2016, Effect of firing for synthesis of hydroxyapatite by precipitation method, Oriental Journal of Chemistry, 32 (4) : 2095-2099.
- Jugdaohsingh, 2007, SILICON AND BONE HEALTH - NCBI - National Institutes of Health.
- Joo HL., Hong-Jun C, Seong YY, Byung KH and Hong CP, 2013, Processing of porous hydroxyapatite scaffolds containing calcium phosphate glass ceramics for bone tissue engineering, Journal of ceramics processing research, 14, 4, 544-548.
- Karaziha M, MH fathi, 2010, Improvementof mechanical properties and biocompatibility of forsterite bioceramic addressed to bone tissue engineering materials, Journal of mechanichal behavior of biomedical material, 3, 530-537.

- Karande TS, JL Ong and CM Agrawal, 2004, Diffusion in musculoskeletal Tissue engineering scaffolds: design issues related to porosity, permeability, architecture and nutrient mixing, *Annals of biomedical engineering*, 32, 12, 1728-1743.
- Kentaro Tanaka. Synthesis and Characterization of Silicon-Doped Hydroxyapatite. (2009).
- Khemthong,P., S Prayoonpokarach, J Wittayakun Suranaree, 2007, *J. Sci, Synthesis and characterization of zeolite LSX from rice husk silica Technol* 12 (4), 367-379.
- Khelendra A, G Singh, D. Puri, S. Prakash, 2011, Synthesis and Characterization of hydroxyapatite Powder by sol-gel method for biomedical Application, 10, 727-734.
- Kishore A, R. Begum. S, Arumaikkannu.G, 2015, Additive Manufacturing of a Novel Bone Scaffolds and its porosity Evaluation. *Journal of Mechanical and Civil Engineering*, pp 1-6.
- Krishnamurty, Malliga Raman Murati, M Hamdi, AA. Abbas, Hanumantharao Balaji, T. Kamarul, 2014, Characterization of bovine-derived porous hydroxyapatite scaffold and its potential to support osteogenic differentiation of human bone marrow derived mesenchymal stem cells, *Ceramics International*, 40, 771-777.
- Kim. SR, J.H. Lee, Y.T. Kim, D.H. Riu, SJ, Riu, SJ. Jung, YJ. Lee, SC. Chung, YH. Kim, 2003, Synthesis of Si, Mg substituted hydroxyapatite and their sintering behaviours, *Biomaterials*, 24, 1389-1398.
- Lafon P, Champione E, Bernache Assolant, (2008). Processing of AB-type carbonated hydroxyapatite ceramics with controlled composition. *Jurnal European Ceramic Society*, 28(1):139-147.
- Lahiri D, Virendra S, Ana paula B, Sudipta S, Lidia K, arvind A, 2011, Boron nitride nanotube reinforced hydroxyapatite composite: mechanical and tribological performance and in vitro biocompatibility to osteoblasts, *Science direct*, 4, 44-56.
- Lee. JH, HJ Choi, SY Yoon, BK Kim, HC Park, 2013, Processingof pouros hydroxyapatite scaffolds containing calcium phosphate glassceramic for bone tissue engineering, *Journal of ceramic Processing Research*, 14, 4, 544-548.
- Lee KH, SH hee, 2009, The mechanical properties and bioactivity of poly(methyl methacrylate)/SiO₂-CaO nanocomposite, *Biomaterials*, 30, 3444-3449.
- Leong.C.H, A. Muchtar, C.Y. Tan, M.Razali and Noor F A, 2014, Sintering of hydroxyapatite/Yitria Stabilized zirconia Nanocomposites under Nitrogen gas for dental materials, Hindawi, 1-6.

- Lereley. M.A, R.G. Corrodegos, L Alberto dos Santos, 2011, Effect of Silica addition on the chemical and Biological properties of a new α -Tricalcium phosphate/Tricalcium Silicate Cement, Material Research, 14, 475-482.
- Lianxiang. B., Steve Jung., Delbert Day., Katie Nelding., Vladimir Dusevich., David Eick., Lynda Bonewald. 2012, Evaluation of bone regeneration, angiogenesis and hydroxyapatite conversion in critical-sized rat calvarial defects implanted with bioactive glaa scaffolds. Society for Biomaterial. Wiley Priodical inc.
- Li. L., Haihua. P, Jinhui T, Xurong X, Caiyun M, Xinhua G and Ruikang T, 2008, Repair of enamel by using hydroxyapatite nanoparticles as the building bloks, Journal of materials Chemistry, 18, 4079-4084.
- Mi Zo.S., Deepti S, Ashok K, Yong W C, Tae H O and Sung S H, 2012, Current Science, 103, 12, 1438-1446.
- Mondal S., Biswanath M, apurba D, sudit S M, 2012, studies on processing and characterization of hydroxyapatite biomaterials from different bio waste, Journal of Mineral & Material Characterization & Engineering, 11, 1, 55-67.
- Monmaturapoj N and C Yatongchai, 2010, Effect of sintering on microstructure and properties of hydroxyapatite produced by different synthesizing methods, Journal of metal, materials and mineral, 30, 2, 53-61.
- Mour, M., D. Das, T. Winklers, E. Hoeing, G. Mielke, M.M. Morlock, A.F. Schilling, 2010, Advances in Porous Biomaterial for Dental and Orthopaedic Applications, Material, 3, 2947-2974.
- Najafizadeh. F, Mir Abdullah. SS, Seyed J.F, Mahmood. K.M, and Reza M.A, 2016, The effect of silica and a nature polymer on the site and properties of nano-hydroxyapatite, Oriental of chemistry, 32, 3, 1639-1647.
- Nandi, SK, S. Roy, P ,Mukherjee, B.Kundu, D.K De& D. Basu, 2010, Orthopaedic application of bone graft & graft sudstitutes: a Review, Indian J Med res 132, pp 15-30.
- Nathanael. AJ., D. Mangalaraj, S.I. Hong, 2009, Biocompatibility and antimicrobial activity of hydroxyapatite/titania bio-nanocomposite, 18th ICCM, 1-6.
- Nath. S., Krishanu B, Kaishi W, Rajendra K, Bordia and Bikramjit B, 2010, Sintering, Phase Stability and Properties of Calcium Phosphate-Mullite Composites, J. Am Ceramic Science, 93, 6, 1639-1649.

- Naruporn M, Chokchai Y, 2010, Effect of Sintering on Microstructure and Properties of hydroxyapatite produced by different synthesizing methods, journal of Metal, materials and Minerals, 20, 2, 53-61.
- Nayak, AK, 2010, Hydroxyapatite synthesis methodologies : an Overview, International journal of ChemTech Research, 2, 2, 903-907.
- Nilson M, JS Wang, L Wielanek, KE Tanner, L Lidgren, 2004, Biodegradation and biocompatibility of a calcium sulphate-hydroxyapatite bone substitute, The journal of bone and surgery, 86-B, 120-125.
- Noorisa R, D Apriliawati, A Aziz, S Bayu sentono, 2017, The Characterization of patients with femoral fracture in department of orthopaedic and traumatology Dr Sutomo 2013-2016, Jurnal Unair, 6, 1, 1-11.
- Oktar . FN, simeon A, L S. Ozyegin, O. Gunduz, N. Demirkol, Y. Bozkurt, Serdar S, 2007, Mechanical properties of bovine hydroxyapatite (BHA) composites doped with SiO₂, MgO, Al₂O₃, and ZrO₂, J Mater Sci: Mater Medicine,
- Olena S, O Gunduz, N Pinchuk, GE Stan, FN Oktar, 2016, Tissue engineering scaffolds from La₂O₃ Hydroxyapatite/Boron glass composites, Journal of Australian ceramic, 52,2, 103-110.
- Onsten. I, Anders Nordqvist, Ake S.Carlsson, Jack Besjakov, Susan Shott, 1998, Hydroxyapatite augmentation of porous coating improves fixation of tibial components, The journal of bone and joint surgery, 80, 3, 417-425.
- Orlovski.VS, VS Komlev and SM Borian, 2002, Hidroksiapatite and Hidroksiapatite-Based Ceramics, pp 1139-1172
- Pattanayak,K, Deepak, Divya P, Sujal Upadhyay, R.C. Prasad, B.T Rao and T.R Rama Mohan, 2005, Trends Biomaterial Artif Organs , Vol 18(2).
- Pazourkova L, Grazyna SM and Daniela P, 2015, J Nanotechnology: Nanomedicine & Nanobiotechnology, 2, 007, 1-8.
- Peon. E, G Fuentes, J.A. Delgado, L. Morejon, A. almirall and R. Garcia,2004, Latin American Applied Research, 34, 225-228.
- Pinchuk N, C Pakhomy and O Sych, 2017, In vitro investigation of bioactive glass-ceramic composites based on biogenic hydroxyapatite or synthetic calcium phosphate, 12, 111, 1-8.

- Porter. M.M, S. Lee, N. Tanadchangsaeng, M.J. Jaremko, J. Yu, M. Meyers, J. McKittrick, 2012, Porous hydroxyapatite –polyhydroxybutyrate composites fabricated by a novel method via centrifugation.
- Pramanik. S, A.K. Agarwal, K.N. Rai, 2005, Development of high strength hydroxyapatite for hard tissue replacement. *Trends in Biomaterials and Artificial Organs* 19 (1), 46-51.
- Prakasam. M, Janis L, Kristine. SA, Dagnija L, Alain L, 2015, BC, Fabrication, Properties and Applications of dense hydroxyapatite : a review, *J. Funct Biomater*, 6, 1099-1140.
- Puska M, AJ Aho and P Vallitu, 2012, Polymer composites for bone reconstruction, *Advances in Composite materials*, 55-72.
- Putra. A, K dan Dwi Asmi. 2014. Sintesis dan karakterisasi biokeramik hidroksiapatit bahan tulang sapi pada suhu 800-1100°C. *Journal teori dan aplikasi fisika*. 2(2): 125-129.
- Qianli H, X yang, R Zhang, X Liu, Z Shen, Q Feng, 2015, Enhanced hydrophilicity and in vitro bioactivity of porous TiO₂ film through the incorporation of boron, *Science direct*, 4, 4452-4459.
- Ragavenda SS, GR Jadhav, KM Gathani, P Kotadia, 2017, Bioceramic in endodontics, *Journal Istanbul*, 51, 5128-5137.
- Rahman. I.AB, Nam'an M.M, Nurhayati L and Rayee AS, 2014, One-pot synthesis of hydroxyapatite-silica nanopowder composite for hardness enhancement of glass ionomer cement (GIC), *Bull Mater Sci*, 37, 2, 213-219.
- Rahaman MN, DE day, BS Bal, Q Pu, SB Jung, LF Bonewald, AP Tomsia, 2011, Bioactive glass in tissue engineering, *Acta Biomaterialia*, 7, 2355-2373.
- Ramakrishna S, J Mayer, E Wintermantel, Kam E Leong, 2001, Biomedical applications of polymer-composite materials, *Composites science and technology*, 61, 1189-1224.
- Ramesh.S, K.L.Aw, R.Tolouei, M.Amiriyan, C.Y.Tan, M.Hamdi, J.Purbolaksono, M.A.Hasan, W.D.Teng, 2013, Sintering properties of hydroxyapatite powders prepared using different methods, *Ceramic International*, 39, 111-119.
- Rivera. Eric M, Miguel Araiza, Witold Brostow, Victor M. Castano, J.R. Diaz-Estrada, R.Hernandez, J. Rogelio Rodriguez, 1999, Synthesis of hydroxyapatite from eggshells, *Materials Letter*, 41, 128-134.

- Robert. F. Brown, M.N.Rahman, Agatha B, Dwilewicz, W. Huang, 2008, Effect of Borate glass composition on its conversion to Hydroxyapatite and on the proliferation of MC3T3-E1 cells, Wiley Periodical, Inc.
- Russias, JE. saiz, R.K. Nalla, K Gryn, R.O. Ritchie, A.P. Tomsia, 2006, Fabrication and mechanical properties of PLA/HA composites: A study of in vitro degradation, Materials Science & Engineering, 26, 1289-1295.
- Sara Bogya, E , Reka Barabas, Alexandra C, Valentina Dejeu and Ioan baldea, 2009, Hydroxyapatite modified with silica used sorption of cooper (II), Chemical Paper (63, 5, 568-573
- Sharon K.J.U and Nazmin S, 2016, Contact angle, Conductivity and Mechanical properties of Polycaprolactone/hydroxyapatite/polypyrrole scaffolds using freeze-drying technique, ARPN, 11, 13686-13691.
- Septiarini, 2009, Sintesis Hidroksiapatit Berpori Dengan Porogen Kitosan Dan Karakterisasinya (Synthesis Of Hydroxyapatite Porous With Chitosan Porogen And Its Characterization).
- Serbetqi.K, F.Korkusuz, N.Hasirci, 2000, Mechanical and Thermal Properties of hydroxyapatite-impregnated Bone Cement, Turk J Med Sci, 30, 543-549.
- Shirazi, F.S., M.Mehrali, A.A. Oshkour, H.S.C. Metselaar, N.A. Kadri, N.A. abu Osman, 2014, Mechanical and physical properties of calcium silicate/alumina composite for biomedical engineering applications, Journal of Mechanical Behaviour of Biomedical Materials, 30, 168-175.
- Sobczak, Agnieszka, Zigmunt K, Zbigniew W, 2009, Preparation of hydroxyapatite from animal bones, Acta of bioengineering and biomechanics, 11, 4, 23-28.
- Sopyan, Ahmad Fadli, Maizirwan M, 2011, Effect of hydroxyapatite and tricalcium phosphate addition on protein foaming-consolidation porous alumina, J Porous mater, 10,.
- Stevanovic.S, Chevanne P, Braissant O, Pieles U, Gruner P and Schumacher R, 2013, Improvement of mechanical properties of 3-D printed hydroxyapatite scaffolds by polymeric infiltration, Bioceramics development and applications, 1-3.
- Sych. Olena, Nataliya Pinchuk, Liana Ivanchenko, 2009, Structure evolution properties of biogenic hydroxyapatite –based biocomposite, Processing and Application of Ceramics, 3, 3, 157-160.

- Tham. WH, Mat Uzir wahit, M. rafiq Abdul Kadir and Tuck Whye Wong, 2013, Mechanical and thermal properties of biodegradable hydroxyapatite/poly(sorbitol sebacate malate) composites, SJST, 35, 1, 57-61.
- Thuadaij.N and Apinon Nuntiya, 2008, synthesis and Characterization of Nanosilica from Rice Husk ash Prepared by Precipitation Method, CMU. J.Nat. Sci. 7, 59-65.
- Tsuchiya A, Shinichi S, Yoshinori A, Masanori K, Yosihisa K Tetsuro O, Junzo T and Kenichi S, 2008, Effect of Pore size and implant volume of porous hydroxyapatite/collagen (HAp/Col) on bone formation in a Rabbit bone defect model, J Med Dent Sci, 55, 91-99.
- Tolouei.R, C.Y.Tan, S.Ramesh, I. Sopyan, W.D.Teng, 2011, Effect of nano silica on the sinterability of hydroxyapatite dense bodies, Advanced material research, 264-265, 1832-1838.
- Umami. G.D, Aminatun, Dwi Winarni, 2014, Sintesis dan karakterisasi biokompatibilitas Si-Ca₁₀(PO₄)₆(OH)₂ dengan metode hydrothermal untuk aplikasi *bone filler*,Jurnal fisika dan terapannya, 2, 1, 106-117.
- Vandiver J, Delphine D, Nelesh Patel, Claudia B, Serena B, Jose D S, Maria A. Lopes, William B, Christine O, 2006, Silicon addition to hydroxyapatite increases nanoscale electrostatic, van der waals and adhesive interactions, Inter Science, 10, 352-363.
- Vasques. CG, C. Pina Barba and N. Munguia, 2005, Stoichiometric hydroxyapatite obtained by precipitation and sol-gel processes, Revista Mexicana de Fisica, 51, 3, 284-293.
- Wahl, DA, 2006, Collagen –Hydroxyapatite Composites for Hard Tissue Repair, European Cells and Materials, vol 11, pp 43 – 56.
- Weinand. WR, F.F.R. Gocalves and W.M. Lima, 2010, Effect of sintering Temperature in physical-mechanical behavior and in titanium-hydroxyapatite composite sinterability.
- Whang, K, et al, 1999, Engineering Bone regeneration with Bioresorbable Scaffolds with Novel Microarchitecture, , Tissue Engineering, Vol 5 N0 1, pp 35-51.
- Weng Hong Tham, M.U. Wahit, M.R.A. Kadir and T.W. Wong, 2013, Mechanical and thermal properties of biodegradable hydroxyapatite/poly(sorbitol sebacate malate) composite, SJST,35, 1, 57-61.
- Wenyi Y, J Berthe, C Wen, 2011, Numerical investigation of the effect of porous titanium femoral prosthesis on bone engineering, Materials and design, 32, 1776-1782.

Xiong. Z., Yongnian Yan, Shenguo Wang, Renji Zhang, Chao Zhang, 2002, Fabrication of porous scaffolds for bone tissue engineering via low-temperature deposition, Scripta Material, 46, 771-776.

Xiao HG, WN wang, MJ Wang, CC Mao, J Zhang, FL Meng, WW Xu, 2012, Facile Fabrication of Porous hydroxyapatite monoliths: Their Enhanced Bioactivity and adsorption capability for heavy metal ions, nanomedicine & nanotechnology, 3, 2, 1-8.

Zeng J, yan zhang, Ke-Chao Z, Dou Zhang, 2014, Effect of alcohol additives on pore structure and morphology of freeze-cast ceramics, Transactions of Non ferrous Metals society of china, 24, 718-722.

