## Izath Nizeet Aguilar

List of Publications by Year in descending order

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Version: 2024-02-01

103 papers

2,393 citations

236833 25 h-index 254106 43 g-index

103 all docs 103
docs citations

103 times ranked 2941 citing authors

| #  | Article  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Bone Morphogenetic Protein-2 Rapidly Heals Two Distinct Critical Sized Segmental Diaphyseal Bone Defects in a Porcine Model. Military Medicine, 2023, 188, 117-124.  | 0.4 | O         |
| 2  | Effects of diet, BMPâ€⊋ treatment, and femoral skeletal injury on endothelial cells derived from the ipsilateral and contralateral limbs. Journal of Orthopaedic Research, 2022, 40, 439-448.  | 1.2 | 4         |
| 3  | Osteoclast-mediated bone loss observed in a COVID-19 mouse model. Bone, 2022, 154, 116227.   | 1.4 | 28        |
| 4  | Soluble Immune Checkpoints Are Dysregulated in COVID-19 and Heavy Alcohol Users With HIV Infection. Frontiers in Immunology, 2022, 13, 833310.   | 2,2 | 10        |
| 5  | Murine Gut Microbiome Meta-analysis Reveals Alterations in Carbohydrate Metabolism in Response to Aging. MSystems, 2022, 7, e0124821.  | 1.7 | 5         |
| 6  | The Impacts of COVID-19 on Musculoskeletal Health. Current Osteoporosis Reports, 2022, 20, 213-225.  | 1.5 | 11        |
| 7  | Internal Fixation Construct and Defect Size Affect Healing of a Translational Porcine Diaphyseal Tibial Segmental Bone Defect. Military Medicine, 2021, 186, e1115-e1123.  | 0.4 | 6         |
| 8  | Association of Urinary and Blood Concentrations of Heavy Metals with Measures of Bone Mineral Density Loss: a Data Mining Approach with the Results from the National Health and Nutrition Examination Survey. Biological Trace Element Research, 2021, 199, 92-101. | 1.9 | 9         |
| 9  | Analysis of the effects of spaceflight and local administration of thrombopoietin to a femoral defect injury on distal skeletal sites. Npj Microgravity, 2021, 7, 12.  | 1.9 | 9         |
| 10 | Bibliometric Analysis of the English Musculoskeletal Literature over the Last 30 Years. Scientific World Journal, The, 2021, 2021, 1-29.   | 0.8 | 5         |
| 11 | The effects of high fat diet, bone healing, and BMP-2 treatment on endothelial cell growth and function. Bone, 2021, 146, 115883.  | 1.4 | 11        |
| 12 | Cellular components of the hematopoietic niche and their regulation of hematopoietic stem cell function. Current Opinion in Hematology, 2021, 28, 243-250.   | 1.2 | 8         |
| 13 | The effects of bone morphogenetic protein 2 and thrombopoietin treatment on angiogenic properties of endothelial cells derived from the lung and bone marrow of young and aged, male and female mice. FASEB Journal, 2021, 35, e21840.                               | 0.2 | 7         |
| 14 | Methodology, selection, and integration of fracture healing assessments in mice. Journal of Orthopaedic Research, 2021, 39, 2295-2309.   | 1.2 | 8         |
| 15 | The Interaction of the Inflammatory Response and Megakaryocytes in COVID-19 Infection. Experimental Hematology, 2021, 104, 32-39.  | 0.2 | 11        |
| 16 | Predicting fracture healing with blood biomarkers: the potential to assess patient risk of fracture nonunion. Biomarkers, 2021, 26, 703-717.   | 0.9 | 5         |
| 17 | Clinical applications of thrombopoietin silencing: A possible therapeutic role in COVID-19?. Cytokine, 2021, 146, 155634.  | 1.4 | 1         |
| 18 | Gene-metabolite networks associated with impediment of bone fracture repair in spaceflight. Computational and Structural Biotechnology Journal, 2021, 19, 3507-3520.   | 1.9 | 5         |

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|----|--|-----|-----------|
| 19 | The Effects of SRT1720 Treatment on Endothelial Cells Derived from the Lung and Bone Marrow of Young and Aged, Male and Female Mice. International Journal of Molecular Sciences, 2021, 22, 11097.                   | 1.8 | 5         |
| 20 | Processing and Sectioning Undecalcified Murine Bone Specimens. Methods in Molecular Biology, 2021, 2230, 231-257.  | 0.4 | 5         |
| 21 | The Effects of TMP Treatment and High Fat Diet on Bone Fracture Healing. Proceedings of IMPRS, 2021, 4, .  | 0.0 | 0         |
| 22 | No pain, no gain? The effects of pain-promoting neuropeptides and neurotrophins on fracture healing. Bone, 2020, 131, 115109.  | 1.4 | 63        |
| 23 | Bibliometric and authorship trends over a 30 year publication history in two representative US sports medicine journals. Heliyon, 2020, 6, e03698.   | 1.4 | 27        |
| 24 | No pain, no gain: Will migraine therapies increase bone loss and impair fracture healing?. EBioMedicine, 2020, 60, 103025.   | 2.7 | 5         |
| 25 | The loss of STAT3 in mature osteoclasts has detrimental effects on bone structure. PLoS ONE, 2020, 15, e0236891.   | 1.1 | 11        |
| 26 | Assessment, Quantification, and Management of Fracture Pain: from Animals to the Clinic. Current Osteoporosis Reports, 2020, 18, 460-470.  | 1.5 | 15        |
| 27 | Trends in Gender Authorship and Collaborations: A 30-Year Comparative Bibliometric Analysis of Manuscripts from The Journal of Bone and Joint Surgery and The Bone and Joint Journal. Scientifica, 2020, 2020, 1-11. | 0.6 | 5         |
| 28 | A comprehensive review of mouse diaphyseal femur fracture models. Injury, 2020, 51, 1439-1447.   | 0.7 | 8         |
| 29 | Aging-Related Reduced Expression of CXCR4 on Bone Marrow Mesenchymal Stromal Cells Contributes to Hematopoietic Stem and Progenitor Cell Defects. Stem Cell Reviews and Reports, 2020, 16, 684-692.                  | 1.7 | 14        |
| 30 | Geneâ€Metabolite Network Linked to Inhibited Bioenergetics in Association With Spaceflightâ€Induced Loss of Male Mouse Quadriceps Muscle. Journal of Bone and Mineral Research, 2020, 35, 2049-2057.                 | 3.1 | 12        |
| 31 | Comparative analysis of authorship trends in the Journal of Hand Surgery European and American volumes: A bibliometric analysis. Annals of Medicine and Surgery, 2020, 55, 200-206.                                  | 0.5 | 11        |
| 32 | Neonatal Osteomacs and Bone Marrow Macrophages Differ in Phenotypic Marker Expression and Function. Journal of Bone and Mineral Research, 2020, 36, 1580-1593.   | 3.1 | 13        |
| 33 | Megakaryocytes promote osteoclastogenesis in aging. Aging, 2020, 12, 15121-15133.  | 1.4 | 7         |
| 34 | The effects of spaceflight and fracture healing on distant skeletal sites. Scientific Reports, 2019, 9, 11419.   | 1.6 | 30        |
| 35 | Aging negatively impacts the ability of megakaryocytes to stimulate osteoblast proliferation and bone mass. Bone, 2019, 127, 452-459.  | 1.4 | 17        |
| 36 | Skeletal adaptations in young male mice after 4 weeks aboard the International Space Station. Npj Microgravity, 2019, 5, 21.   | 1.9 | 28        |

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|----|---|-----|-----------|
| 37 | Scaffold-free bioprinting of mesenchymal stem cells using the Regenova printer: Spheroid characterization and osteogenic differentiation. Bioprinting, 2019, 15, e00050.  | 2.9 | 32        |
| 38 | Scaffold-free bioprinting of mesenchymal stem cells with the regenova printer: Optimization of printing parameters. Bioprinting, 2019, 15, e00048.  | 2.9 | 32        |
| 39 | Effects of Bone Morphogenetic Protein-2 on Neovascularization During Large Bone Defect<br>Regeneration. Tissue Engineering - Part A, 2019, 25, 1623-1634.   | 1.6 | 43        |
| 40 | Authorship Trends Over the Past 30-Years in the Annals of Biomedical Engineering. Annals of Biomedical Engineering, 2019, 47, 1171-1180.  | 1.3 | 6         |
| 41 | A Bibliometric Study of Authorship and Collaboration Trends Over the Past 30 Years in Four Major<br>Musculoskeletal Science Journals. Calcified Tissue International, 2019, 104, 239-250.                                 | 1.5 | 19        |
| 42 | Dysfunctional stem and progenitor cells impair fracture healing with age. World Journal of Stem Cells, 2019, 11, 281-296.   | 1.3 | 23        |
| 43 | Megakaryocyte and Osteoblast Interactions Modulate Bone Mass and Hematopoiesis. Stem Cells and Development, 2018, 27, 671-682.  | 1.1 | 16        |
| 44 | Pyk2 deficiency potentiates osteoblast differentiation and mineralizing activity in response to estrogen or raloxifene. Molecular and Cellular Endocrinology, 2018, 474, 35-47.   | 1.6 | 15        |
| 45 | Bibliometric Analysis of Gender Authorship Trends and Collaboration Dynamics Over 30 Years of Spine 1985 to 2015. Spine, 2018, 43, E849-E854.   | 1.0 | 25        |
| 46 | Historical Analysis of Bibliometric Trends in the Journal of Pediatric Orthopaedics With a Particular Focus on Sex. Journal of Pediatric Orthopaedics, 2018, 38, e168-e171.   | 0.6 | 16        |
| 47 | Inhibition of CaMKK2 Enhances Fracture Healing by Stimulating Indian Hedgehog Signaling and Accelerating Endochondral Ossification. Journal of Bone and Mineral Research, 2018, 33, 930-944.                              | 3.1 | 29        |
| 48 | Bibliometric analysis of authorship trends and collaboration dynamics over the past three decades of BONE's publication history. Bone, 2018, 107, 27-35.  | 1.4 | 19        |
| 49 | Forces associated with launch into space do not impact bone fracture healing. Life Sciences in Space Research, 2018, 16, 52-62.   | 1.2 | 14        |
| 50 | Comparative Analysis of Bibliometric, Authorship, and Collaboration Trends Over the Past 30-Year Publication History of the Journal of Orthopaedic Trauma and Injury. Journal of Orthopaedic Trauma, 2018, 32, e327-e333. | 0.7 | 13        |
| 51 | Authorship trends in the Journal of Orthopaedic Research: A bibliometric analysis. Journal of Orthopaedic Research, 2018, 36, 3071-3080.  | 1.2 | 19        |
| 52 | Development of a step-down method for altering male C57BL/6 mouse housing density and hierarchical structure: Preparations for spaceflight studies. Life Sciences in Space Research, 2018, 17, 44-50.                     | 1.2 | 10        |
| 53 | The protoâ€oncogene function of Mdm2 in bone. Journal of Cellular Biochemistry, 2018, 119, 8830-8840.   | 1.2 | 7         |
| 54 | Defining Parameters Attributing to the Role of Osteomacs in Regulating Stem Cell Function and the Hematopoietic Niche. Blood, 2018, 132, 2576-2576.   | 0.6 | 2         |

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|----|--|-----|-----------|
| 55 | Cohousing Male Mice with and without Segmental Bone Defects. Comparative Medicine, 2018, 68, 131-138.  | 0.4 | 5         |
| 56 | Lnk Deficiency Leads to TPO-Mediated Osteoclastogenesis and Increased Bone Mass Phenotype. Journal of Cellular Biochemistry, 2017, 118, 2231-2240.   | 1.2 | 9         |
| 57 | Erythropoietin stimulates murine and human fibroblast growth factor-23, revealing novel roles for bone and bone marrow. Haematologica, 2017, 102, e427-e430.   | 1.7 | 93        |
| 58 | Megakaryocytes Enhance Mesenchymal Stromal Cells Proliferation and Inhibit Differentiation. Journal of Cellular Biochemistry, 2017, , .  | 1.2 | 5         |
| 59 | Bibliometric Analysis of Female Authorship Trends and Collaboration Dynamics Over <i>JBMR</i> 's 30-Year History. Journal of Bone and Mineral Research, 2017, 32, 2405-2414.                                       | 3.1 | 23        |
| 60 | Fixation of whole mouse hindlimbs using NASA spaceflight fixation kit. Journal of Histotechnology, 2017, 40, 115-120.  | 0.2 | 0         |
| 61 | Osteomacs interact with megakaryocytes and osteoblasts to regulate murine hematopoietic stem cell function. Blood Advances, 2017, 1, 2520-2528.  | 2.5 | 41        |
| 62 | Attenuation of CXCR4/SDF-1 Axis in Bone Marrow Mesenchymal Stromal Cells Impairs Hematopoietic Niche Activity and Promotes Stem Cell Aging. Blood, 2017, 130, 92-92.   | 0.6 | 4         |
| 63 | Câ€Mpl Is Expressed on Osteoblasts and Osteoclasts and Is Important in Regulating Skeletal<br>Homeostasis. Journal of Cellular Biochemistry, 2016, 117, 959-969.   | 1.2 | 17        |
| 64 | Pyk2 and Megakaryocytes Regulate Osteoblast Differentiation and Migration Via Distinct and Overlapping Mechanisms. Journal of Cellular Biochemistry, 2016, 117, 1396-1406.   | 1.2 | 24        |
| 65 | Cell Adhesion Molecule CD166 Drives Malignant Progression and Osteolytic Disease in Multiple<br>Myeloma. Cancer Research, 2016, 76, 6901-6910.   | 0.4 | 26        |
| 66 | Calvariae-Resident Osteomacs That Are Phenotypically and Functionally Distinct from Marrow-Derived Macrophages Interact with Megakaryocytes to Regulate Hematopoietic Stem Cell Function. Blood, 2016, 128, 28-28. | 0.6 | 1         |
| 67 | Signaling Pathways Involved in Megakaryocyteâ€Mediated Proliferation of Osteoblast Lineage Cells.<br>Journal of Cellular Physiology, 2015, 230, 578-586.   | 2.0 | 14        |
| 68 | A Novel Role for Thrombopoietin in Regulating Osteoclast Development in Humans and Mice. Journal of Cellular Physiology, 2015, 230, 2142-2151.   | 2.0 | 13        |
| 69 | GATAâ€1 Deficiency Rescues Trabecular but not Cortical Bone in OPG Deficient Mice. Journal of Cellular Physiology, 2015, 230, 783-790.   | 2.0 | 15        |
| 70 | Surgical Fixation Hardware for Regeneration of Long Bone Segmental Defects: Translating Large Animal Model and Human Experiences. Clinical Reviews in Bone and Mineral Metabolism, 2015, 13, 222-231.              | 1.3 | 2         |
| 71 | Evolution of Bone Grafting: Bone Grafts and Tissue Engineering Strategies for Vascularized Bone Regeneration. Clinical Reviews in Bone and Mineral Metabolism, 2015, 13, 232-244.                                  | 1.3 | 66        |
| 72 | Modulation of hematopoietic progenitor cell fate in vitro by varying collagen oligomer matrix stiffness in the presence or absence of osteoblasts. Journal of Immunological Methods, 2015, 425, 108-113.           | 0.6 | 22        |

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|----|---|-----|------------|
| 73 | CD166 regulates human and murine hematopoietic stem cells and the hematopoietic niche. Blood, 2014, 124, 519-529.   | 0.6 | 61         |
| 74 | Tips and Techniques for Processing and Sectioning Undecalcified Murine Bone Specimens. Methods in Molecular Biology, 2014, 1130, 123-147.   | 0.4 | 8          |
| 75 | The Changing Balance Between Osteoblastogenesis and Adipogenesis in Aging and its Impact on Hematopoiesis. Current Osteoporosis Reports, 2013, 11, 99-106.  | 1.5 | <b>7</b> 5 |
| 76 | Hierarchical organization of osteoblasts reveals the significant role of CD166 in hematopoietic stem cell maintenance and function. Bone, 2013, 54, 58-67.  | 1.4 | 40         |
| 77 | A review of mouse critical size defect models in weight bearing bones. Bone, 2013, 55, 241-247.   | 1.4 | 41         |
| 78 | Pyk2 regulates megakaryocyte-induced increases in osteoblast number and bone formation. Journal of Bone and Mineral Research, 2013, 28, 1434-1445.  | 3.1 | 27         |
| 79 | CD166 and regulation of hematopoiesis. Current Opinion in Hematology, 2013, 20, 273-280.  | 1.2 | 17         |
| 80 | The effects of GATAâ€1 and NFâ€E2 deficiency on bone biomechanical, biochemical, and mineral properties. Journal of Cellular Physiology, 2013, 228, 1594-1600.  | 2.0 | 14         |
| 81 | Megakaryocytes Regulate Expression of Pyk2 Isoforms and Caspase-mediated Cleavage of Actin in Osteoblasts. Journal of Biological Chemistry, 2012, 287, 17257-17268.   | 1.6 | 23         |
| 82 | CD166 (ALCAM): A Functional Marker of Primitive Murine and Human Hematopoietic Stem Cells and Cellular Elements of Their Niche. Blood, 2012, 120, 640-640.  | 0.6 | 1          |
| 83 | Hierarchical Organization of Osteoblast Reveals the Significant Role of CD166 in Hematopoietic Stem Cell Maintenance and Function. Blood, 2012, 120, 215-215.   | 0.6 | O          |
| 84 | DMSO regulates osteoclast development in vitro. In Vitro Cellular and Developmental Biology - Animal, 2011, 47, 260-267.  | 0.7 | 8          |
| 85 | Hematopoietic Cell Regulation of Osteoblast Proliferation and Differentiation. Current Osteoporosis Reports, 2011, 9, 96-102.   | 1.5 | 20         |
| 86 | Impact of maturational status on the ability of osteoblasts to enhance the hematopoietic function of stem and progenitor cells. Journal of Bone and Mineral Research, 2011, 26, 1111-1121.                              | 3.1 | 36         |
| 87 | Immature and mature megakaryocytes enhance osteoblast proliferation and inhibit osteoclast formation. Journal of Cellular Biochemistry, 2010, 109, 774-781.   | 1.2 | 61         |
| 88 | Involvement of integrins α <sub>3</sub> β <sub>1</sub> and α <sub>5</sub> β <sub>1</sub> and glycoprotein llb in megakaryocyteâ€induced osteoblast proliferation. Journal of Cellular Biochemistry, 2010, 109, 927-932. | 1,2 | 46         |
| 89 | Impact of interactions of cellular components of the bone marrow microenvironment on hematopoietic stem and progenitor cell function. Blood, 2010, 115, 3239-3248.  | 0.6 | 115        |
| 90 | Osteoblast lineage cells expressing high levels of Runx2 enhance hematopoietic progenitor cell proliferation and function. Journal of Cellular Biochemistry, 2010, 111, 284-294.  | 1.2 | 58         |

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| 91  | Hierarchical Organization of Osteoblasts and Their Impact on Hematopoietic Stem Cell Maintenance and Function Blood, 2010, 116, 1611-1611.                          | 0.6 | 1         |
| 92  | Megakaryocyte-Bone Cell Interactions. Advances in Experimental Medicine and Biology, 2009, 658, 31-41.  | 0.8 | 15        |
| 93  | The role of gap junctions in megakaryocyte-mediated osteoblast proliferation and differentiation. Bone, 2009, 44, 80-86.  | 1.4 | 67        |
| 94  | The Impact of Developmental Stage of Osteoblasts and Collagen Fibril Matrix Properties On Hematopoietic Stem Cell Function Blood, 2009, 114, 3638-3638.             | 0.6 | 0         |
| 95  | Development of a femoral non-union model in the mouse. Injury, 2008, 39, 1119-1126.   | 0.7 | 49        |
| 96  | Human phenotypes associated with GATA-1 mutations. Gene, 2008, 427, 1-6.  | 1.0 | 89        |
| 97  | Megakaryocyte-mediated inhibition of osteoclast development. Bone, 2006, 39, 991-999.   | 1.4 | 78        |
| 98  | A reciprocal regulatory interaction between megakaryocytes, bone cells, and hematopoietic stem cells. Bone, 2006, 39, 978-984.                                      | 1.4 | 102       |
| 99  | The role of megakaryocytes in skeletal homeostasis and rheumatoid arthritis. Current Opinion in Rheumatology, 2006, 18, 405-410.                                    | 2.0 | 12        |
| 100 | Experiments with osteoblasts cultured under hypergravity conditions. Microgravity Science and Technology, 2004, 15, 28-34.  | 0.7 | 21        |
| 101 | Megakaryocyte-Osteoblast Interaction Revealed in Mice Deficient in Transcription Factors GATA-1 and NF-E2. Journal of Bone and Mineral Research, 2003, 19, 652-660. | 3.1 | 125       |
| 102 | OSTEOBLASTS SUBJECTED TO SPACEFLIGHT AND SIMULATED SPACE SHUTTLE LAUNCH CONDITIONS. In Vitro Cellular and Developmental Biology - Animal, 2003, 39, 454.            | 0.7 | 25        |
| 103 | Experiments with osteoblasts cultured under varying orientations with respect to the gravity vector. Cytotechnology, 2002, 39, 147-154.                             | 0.7 | 19        |