

# Petar D Milovanovic

## List of Publications by Year in descending order

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86  
papers

1,938  
citations

257101

24  
h-index

276539

41  
g-index

94  
all docs

94  
docs citations

94  
times ranked

2192  
citing authors

#	ARTICLE	IF	CITATIONS
1	Decrease in the osteocyte lacunar density accompanied by hypermineralized lacunar occlusion reveals failure and delay of remodeling in aged human bone. <i>Aging Cell</i> , 2010, 9, 1065-1075.	3.0	241
2	Osteocytic Canalicular Networks: Morphological Implications for Altered Mechanosensitivity. <i>ACS Nano</i> , 2013, 7, 7542-7551.	7.3	134
3	Bisphosphonate-osteoclasts: Changes in osteoclast morphology and function induced by antiresorptive nitrogen-containing bisphosphonate treatment in osteoporosis patients. <i>Bone</i> , 2014, 59, 37-43.	1.4	103
4	Multi-level characterization of human femoral cortices and their underlying osteocyte network reveal trends in quality of young, aged, osteoporotic and antiresorptive-treated bone. <i>Biomaterials</i> , 2015, 45, 46-55.	5.7	93
5	Micro-morphological properties of osteons reveal changes in cortical bone stability during aging, osteoporosis, and bisphosphonate treatment in women. <i>Osteoporosis International</i> , 2013, 24, 2671-2680.	1.3	73
6	Region-Specific Sex-Dependent Pattern of Age-Related Changes of Proximal Femoral Cancellous Bone and Its Implications on Differential Bone Fragility. <i>Calcified Tissue International</i> , 2010, 86, 192-201.	1.5	62
7	Nano-structural, compositional and micro-architectural signs of cortical bone fragility at the superolateral femoral neck in elderly hip fracture patients vs. healthy aged controls. <i>Experimental Gerontology</i> , 2014, 55, 19-28.	1.2	62
8	Severely Impaired Bone Material Quality in Chihuahua Zebrafish Resembles Classical Dominant Human Osteogenesis Imperfecta. <i>Journal of Bone and Mineral Research</i> , 2018, 33, 1489-1499.	3.1	61
9	Micro-structural basis for particular vulnerability of the superolateral neck trabecular bone in the postmenopausal women with hip fractures. <i>Bone</i> , 2012, 50, 63-68.	1.4	58
10	Age- and Sex-Specific Bone Structure Patterns Portend Bone Fragility in Radii and Tibiae in Relation to Osteodensitometry: A High-Resolution Peripheral Quantitative Computed Tomography Study in 385 Individuals. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2015, 70, 1269-1275.	1.7	50
11	The Formation of Calcified Nanospherites during Micropetrosis Represents a Unique Mineralization Mechanism in Aged Human Bone. <i>Small</i> , 2017, 13, 1602215.	5.2	49
12	Long-term Immobilization in Elderly Females Causes a Specific Pattern of Cortical Bone and Osteocyte Deterioration Different From Postmenopausal Osteoporosis. <i>Journal of Bone and Mineral Research</i> , 2020, 35, 1343-1351.	3.1	47
13	Age-related deterioration in trabecular bone mechanical properties at material level: Nanoindentation study of the femoral neck in women by using AFM. <i>Experimental Gerontology</i> , 2012, 47, 154-159.	1.2	46
14	Bone tissue aging affects mineralization of cement lines. <i>Bone</i> , 2018, 110, 187-193.	1.4	45
15	Porotic lesions in immature skeletons from Stara Torina, late medieval Serbia. <i>International Journal of Osteoarchaeology</i> , 2008, 18, 458-475.	0.6	44
16	Representing children in excavated cemeteries: the intrinsic preservation factors. <i>Antiquity</i> , 2011, 85, 250-262.	0.5	44
17	Nanostructure and mineral composition of trabecular bone in the lateral femoral neck: Implications for bone fragility in elderly women. <i>Acta Biomaterialia</i> , 2011, 7, 3446-3451.	4.1	40
18	Early bone tissue aging in human auditory ossicles is accompanied by excessive hypermineralization, osteocyte death and micropetrosis. <i>Scientific Reports</i> , 2018, 8, 1920.	1.6	40

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19	Immediate and Long-Term Porosity of Calcium Silicate-Based Sealers. <i>Journal of Endodontics</i> , 2020, 46, 515-523.	1.4	31
20	Inter-sex differences in structural properties of aging femora: implications on differential bone fragility: a cadaver study. <i>Journal of Bone and Mineral Metabolism</i> , 2011, 29, 449-457.	1.3	30
21	The role of CT analyses of the sternal end of the clavicle and the first costal cartilage in age estimation. <i>International Journal of Legal Medicine</i> , 2014, 128, 825-839.	1.2	29
22	Inter-site Variability of the Human Osteocyte Lacunar Network: Implications for Bone Quality. <i>Current Osteoporosis Reports</i> , 2019, 17, 105-115.	1.5	29
23	Enhanced trabecular micro-architecture of the femoral neck in hip osteoarthritis vs. healthy controls: a micro-computer tomography study in postmenopausal women. <i>International Orthopaedics</i> , 2013, 37, 21-26.	0.9	28
24	Individuals with type 2 diabetes mellitus show dimorphic and heterogeneous patterns of loss in femoral bone quality. <i>Bone</i> , 2020, 140, 115556.	1.4	28
25	Phenomenon of osteocyte lacunar mineralization: indicator of former osteocyte death and a novel marker of impaired bone quality?. <i>Endocrine Connections</i> , 2020, 9, R70-R80.	0.8	26
26	Bone microarchitecture at muscle attachment sites: The relationship between macroscopic scores of entheses and their cortical and trabecular microstructural design. <i>American Journal of Physical Anthropology</i> , 2015, 157, 81-93.	2.1	25
27	Skeletal age estimation based on medial clavicle—a test of the method reliability. <i>International Journal of Legal Medicine</i> , 2013, 127, 667-676.	1.2	24
28	Region-dependent patterns of trabecular bone growth in the human proximal femur: A study of 3D bone microarchitecture from early postnatal to late childhood period. <i>American Journal of Physical Anthropology</i> , 2017, 164, 281-291.	2.1	24
29	Nano-structural and compositional basis of devitalized tooth fragility. <i>Dental Materials</i> , 2014, 30, 476-486.	1.6	21
30	Age-dependence of power spectral density and fractal dimension of bone mineralized matrix in atomic force microscope topography images: potential correlates of bone tissue age and bone fragility in female femoral neck trabeculae. <i>Journal of Anatomy</i> , 2012, 221, 427-433.	0.9	19
31	Addition of a Fluoride-containing Radiopacifier Improves Micromechanical and Biological Characteristics of Modified Calcium Silicate Cements. <i>Journal of Endodontics</i> , 2015, 41, 2050-2057.	1.4	19
32	Inter-site variability of the osteocyte lacunar network in the cortical bone underpins fracture susceptibility of the superolateral femoral neck. <i>Bone</i> , 2018, 112, 187-193.	1.4	15
33	How the European eel ( <i>Anguilla anguilla</i> ) loses its skeletal framework across lifetime. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2016, 283, 20161550.	1.2	14
34	On the Origins of Fracture Toughness in Advanced Teleosts: How the Swordfish Sword's Bone Structure and Composition Allow for Slashing under Water to Kill or Stun Prey. <i>Advanced Science</i> , 2019, 6, 1900287.	5.6	14
35	Surface characterization of the cement for retention of implant supported dental prostheses: In vitro evaluation of cement roughness and surface free energy. <i>Applied Surface Science</i> , 2014, 311, 131-138.	3.1	13
36	Porotic paradox: distribution of cortical bone pore sizes at nano- and micro-levels in healthy vs. fragile human bone. <i>Journal of Materials Science: Materials in Medicine</i> , 2017, 28, 71.	1.7	13

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37	Dental maturity assessment in Serbian population: A comparison of Cameriere's European formula and Willems' method. <i>Forensic Science International</i> , 2018, 288, 331.e1-331.e5.	1.3	13
38	The Role of Footwear in the Pathogenesis of Hallux Valgus: A Proof-of-Concept Finite Element Analysis in Recent Humans and <i>Homo naledi</i> . <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 648.	2.0	13
39	Adolescent health in medieval Serbia: signs of infectious diseases and risk of trauma. <i>HOMO- Journal of Comparative Human Biology</i> , 2010, 61, 130-149.	0.3	12
40	Bone quality analysis of jaw bones in individuals with type 2 diabetes mellitus" post mortem anatomical and microstructural evaluation. <i>Clinical Oral Investigations</i> , 2021, 25, 4377-4400.	1.4	11
41	Morphological characteristics of the developing proximal femur: A biomechanical perspective. <i>Srpski Arhiv Za Celokupno Lekarstvo</i> , 2012, 140, 738-745.	0.1	11
42	Atomic Force Microscopy Characterization of the External Cortical Bone Surface in Young and Elderly Women: Potential Nanostructural Traces of Periosteal Bone Apposition During Aging. <i>Microscopy and Microanalysis</i> , 2013, 19, 1341-1349.	0.2	10
43	Moderate hyperhomocysteinemia induced by short-term dietary methionine overload alters bone microarchitecture and collagen features during growth. <i>Life Sciences</i> , 2017, 191, 9-16.	2.0	10
44	Subregional areal bone mineral density (aBMD) is a better predictor of heterogeneity in trabecular microstructure of vertebrae in young and aged women than subregional trabecular bone score (TBS). <i>Bone</i> , 2019, 122, 156-165.	1.4	10
45	Mechano-structural alteration in proximal femora of individuals with alcoholic liver disease: Implications for increased bone fragility. <i>Bone</i> , 2021, 150, 116020.	1.4	10
46	Microstructural properties of the mid-facial bones in relation to the distribution of occlusal loading. <i>Bone</i> , 2014, 68, 108-114.	1.4	9
47	Intracranial Arteriovenous Malformations as a Possible Cause of Endocranial Bone Lesions and Associated Neurological Disorder. <i>International Journal of Osteoarchaeology</i> , 2015, 25, 88-97.	0.6	9
48	Does the myocardial bridge protect the coronary from atherosclerosis? A comparison between the branches of the dual-left anterior descending coronary artery type 3: An autopsy study. <i>Atherosclerosis</i> , 2013, 227, 89-94.	0.4	8
49	3D Microarchitectural patterns of <i>Hyperostosis frontalis interna</i> : a micro-computed tomography study in aged women. <i>Journal of Anatomy</i> , 2016, 229, 673-680.	0.9	8
50	Collagen-induced arthritis in Dark Agouti rats as a model for study of immunological sexual dimorphisms in the human disease. <i>Experimental and Molecular Pathology</i> , 2018, 105, 10-22.	0.9	8
51	The micro-structural analysis of lumbar vertebrae in alcoholic liver cirrhosis. <i>Osteoporosis International</i> , 2020, 31, 2209-2217.	1.3	8
52	The severity of hepatic disorder is related to vertebral microstructure deterioration in cadaveric donors with liver cirrhosis. <i>Microscopy Research and Technique</i> , 2021, 84, 840-849.	1.2	8
53	Microstructure and wettability of root canal dentine and root canal filling materials after different chemical irrigation. <i>Applied Surface Science</i> , 2015, 355, 369-378.	3.1	7
54	OpenMandible: An open-source framework for highly realistic numerical modelling of lower mandible physiology. <i>Dental Materials</i> , 2021, 37, 612-624.	1.6	7

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55	Vascular Complications in Individuals with Type 2 Diabetes Mellitus Additionally Increase the Risk of Femoral Neck Fractures Due to Deteriorated Trabecular Microarchitecture. <i>Calcified Tissue International</i> , 2022, 110, 65-73.	1.5	7
56	Application of reference point indentation for micro-mechanical surface characterization of calcium silicate based dental materials. <i>Biomedical Microdevices</i> , 2016, 18, 25.	1.4	6
57	Basis of bone strength vs. bone fragility: A review of determinants of age-related hip fracture risk. <i>Srpski Arhiv Za Celokupno Lekarstvo</i> , 2013, 141, 548-552.	0.1	6
58	“Dangerous duo”: Chronic nicotine exposure intensifies diabetes mellitus-related deterioration in bone microstructure - An experimental study in rats. <i>Life Sciences</i> , 2018, 212, 102-108.	2.0	5
59	Photonic structures improve radiative heat exchange of <i>Rosalia alpina</i> (Coleoptera: Cerambycidae). <i>Journal of Thermal Biology</i> , 2018, 76, 126-138.	1.1	5
60	Age estimation in children based on open apices measurement in the Serbian population: Belgrade Age Formula (BAF). <i>Annals of Human Biology</i> , 2020, 47, 229-236.	0.4	5
61	Three-Dimensional Microstructural Basis for Differential Occurrence of Subcapital versus Basicervical Hip Fractures in Men. <i>Calcified Tissue International</i> , 2020, 107, 240-248.	1.5	5
62	The altered osteocytic expression of connexin 43 and sclerostin in human cadaveric donors with alcoholic liver cirrhosis: Potential treatment targets. <i>Journal of Anatomy</i> , 2022, 240, 1162-1173.	0.9	5
63	A microarchitectural assessment of the gluteal tuberosity suggests two possible patterns in enthesal changes. <i>American Journal of Physical Anthropology</i> , 2020, 172, 291-299.	2.1	4
64	Innervation of bones: Why it should not be neglected?. <i>Medicinski Podmladak</i> , 2018, 69, 25-32.	0.2	3
65	Issues in interstudy comparisons of bone microarchitecture. <i>International Orthopaedics</i> , 2013, 37, 2091-2092.	0.9	2
66	“Banding” esophagus: circumferential bruising due to ligature neck constriction or circumferential hypostasis due to rapid death?. <i>Forensic Science, Medicine, and Pathology</i> , 2015, 11, 143-144.	0.6	2
67	Association between regional heterogeneity in the mid-facial bone microarchitecture and increased fragility along Le Fort lines. <i>Dental Traumatology</i> , 2017, 33, 300-306.	0.8	2
68	Comparative Analysis of Femoral Macro- and Micromorphology in Males and Females With and Without Hyperostosis Frontalis Interna: A Cross-Sectional Cadaveric Study. <i>Calcified Tissue International</i> , 2020, 107, 464-473.	1.5	2
69	Micro-computed Tomography Study of Frontal Bones in Males and Females with Hyperostosis Frontalis Interna. <i>Calcified Tissue International</i> , 2020, 107, 345-352.	1.5	2
70	COVID-19 as a “Force Majeure” for Non-“COVID-19 Clinical and Translational Research. Comment on “Analysis of Scientific Publications During the Early Phase of the COVID-19 Pandemic: Topic Modeling Study”. <i>Journal of Medical Internet Research</i> , 2021, 23, e27937.	2.1	2
71	Expression of connexin-43 in surgical resections of primary tumor and lymph node metastases of squamous cell carcinoma and adenocarcinoma of the lung: a retrospective study. <i>PeerJ</i> , 2022, 10, e13055.	0.9	2
72	Micro-scale assessment of bone quality changes in adult cadaveric men with congestive hepatopathy. <i>Histochemistry and Cell Biology</i> , 2022, 158, 583-593.	0.8	2

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73	Biomimetics: On the Origins of Fracture Toughness in Advanced Teleosts: How the Swordfish Sword's Bone Structure and Composition Allow for Slashing under Water to Kill or Stun Prey (Adv. Sci.) Tj ETQq1 1 0.7843146BT /Overlock 10	1.4	1
74	Dental Age Estimation According to European Formula and Willems Method: Comparison Between Children With and Without Cleft Lip and Palate. Cleft Palate-Craniofacial Journal, 2021, 58, 612-618.	0.5	1
75	Dental age and skeletal maturity assessment in patients with cerebral palsy. European Journal of Oral Sciences, 2021, 129, e12780.	0.7	1
76	Mediators of Inflammation in Bone Physiology and Diseases. Mediators of Inflammation, 2022, 2022, 1-2.	1.4	1
77	An in vitro atomic force microscopic study of commercially available dental luting materials. Microscopy Research and Technique, 2013, 76, 924-930.	1.2	0
78	Mapping of cortical porosity and thickness along the femoral neck identifies candidate critical spots for hip fracture in older women. Bone Reports, 2021, 14, 100968.	0.2	0
79	Pronounced microarchitectural trabecular variations within the inferomedial femoral neck may potentially contribute to postoperative complication occurrence: A cadaveric study. Bone Reports, 2021, 14, 100967.	0.2	0
80	High-resolution three-dimensional microstructural analysis of cortex of the superolateral femoral neck in men reveals critical subregion. Bone Reports, 2021, 14, 100964.	0.2	0
81	Alcoholic liver disease-induced changes in microstructural and mechanical properties of the femoral neck: An autopsy study. Bone Reports, 2021, 14, 100804.	0.2	0
82	The banding phenomenon: injury or hypostasis?. Forensic Science, Medicine, and Pathology, 2021, 17, 534-539.	0.6	0
83	Read science news critically and look for original studies: An example of misleading headlines related to COVID-19 vaccines in mainstream media. Health Information Management Journal, 2021, , 183335832110600.	0.9	0
84	Microstructural alterations of superolateral femoral neck cortical bone in men with diabetes as a possible basis for fragility fractures: a cadaveric study. Bone Reports, 2022, 16, 101341.	0.2	0
85	The osteocyte lacunar network changes in alcoholic liver cirrhosis: an autopsy study. Bone Reports, 2022, 16, 101407.	0.2	0
86	Postmortem micro-scale assessment of congestive hepatopathy induced vertebral alterations. Bone Reports, 2022, 16, 101303.	0.2	0