

# T S Sampath Kumar

## List of Publications by Year in descending order

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Version: 2024-02-01

108  
papers

4,463  
citations

108046

37  
h-index

129628

63  
g-index

109  
all docs

109  
docs citations

109  
times ranked

6104  
citing authors

#	ARTICLE	IF	CITATIONS
1	Recent Progress in Surface Modification of Mg Alloys for Biodegradable Orthopedic Applications. <i>Frontiers in Materials</i> , 2022, 9, .	1.2	22
2	Eggshell Waste: A Gold Mine for Sustainable Bioceramics. <i>Journal of the Indian Institute of Science</i> , 2022, 102, 599-620.	0.9	6
3	Fabrication and evaluation of multifunctional agarose based electrospun scaffolds for cutaneous wound repairs. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2022, 16, 653-664.	1.3	5
4	Corrosion, stress corrosion cracking and corrosion fatigue behavior of magnesium alloy bioimplants. <i>Corrosion Reviews</i> , 2022, 40, 289-333.	1.0	12
5	Process optimization for the rapid conversion of calcite into hydroxyapatite microspheres for chromatographic applications. <i>Scientific Reports</i> , 2022, 12, .	1.6	5
6	Tailoring the Properties of Biodegradable Mg-Ca Alloy by Groove Pressing Technique. <i>Transactions of the Indian Institute of Metals</i> , 2021, 74, 791-798.	0.7	3
7	Odontogenic differentiation of inflamed dental pulp stem cells (IDPSCs) on polycaprolactone (PCL) nanofiber blended with hydroxyapatite. <i>Dental Materials Journal</i> , 2021, 40, 312-321.	0.8	7
8	Nanocarrier-based drug delivery systems for bone cancer therapy: a review. <i>Biomedical Materials (Bristol)</i> , 2021, 16, 044107.	1.7	15
9	Eggshell derived hydroxyapatite microspheres for chromatographic applications by a novel dissolution - precipitation method. <i>Ceramics International</i> , 2021, 47, 18575-18583.	2.3	16
10	Dimethylaminoethyl modified curdlan nanoparticles for targeted siRNA delivery to macrophages. <i>Materials Science and Engineering C</i> , 2020, 108, 110379.	3.8	9
11	Hydroxyapatite-dextran methacrylate core/shell hybrid nanocarriers for combinatorial drug therapy. <i>Journal of Materials Research</i> , 2020, 35, 2451-2465.	1.2	10
12	Combinational delivery of anticancer drugs for osteosarcoma treatment using electrospayed core shell nanocarriers. <i>Journal of Materials Science: Materials in Medicine</i> , 2020, 31, 44.	1.7	17
13	Evaluation of effect of two different functionalized nanoparticle photodynamic therapy on nanohardness of root dentin—An in vitro study. <i>Photodiagnosis and Photodynamic Therapy</i> , 2020, 31, 101856.	1.3	3
14	Modulation of biological properties by grain refinement and surface modification on titanium surfaces for implant-related infections. <i>Journal of Materials Science</i> , 2019, 54, 13265-13282.	1.7	15
15	Eggshell derived brushite bone cement with minimal inflammatory response and higher osteoconductive potential. <i>Journal of Materials Science: Materials in Medicine</i> , 2019, 30, 113.	1.7	20
16	Theranostic Calcium Phosphate Nanoparticles With Potential for Multimodal Imaging and Drug Delivery. <i>Frontiers in Bioengineering and Biotechnology</i> , 2019, 7, 126.	2.0	23
17	Drug loaded electrospun polymer/ceramic composite nanofibrous coatings on titanium for implant related infections. <i>Ceramics International</i> , 2019, 45, 18710-18720.	2.3	36
18	Curcumin Releasing Eggshell Derived Carbonated Apatite Nanocarriers for Combined Anti-Cancer, Anti-Inflammatory and Bone Regenerative Therapy. <i>Journal of Nanoscience and Nanotechnology</i> , 2019, 19, 6872-6880.	0.9	26

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19	Dual delivery of tuberculosis drugs via cyclodextrin conjugated curdlan nanoparticles to infected macrophages. <i>Carbohydrate Polymers</i> , 2019, 218, 53-62.	5.1	60
20	Effect of triple antibiotic loaded apatitic nanocarriers on <i>Enterococcus faecalis</i> biofilm – An In vitro study. <i>Journal of Drug Delivery Science and Technology</i> , 2019, 51, 499-505.	1.4	7
21	Hydroxyapatite-poly(vinyl alcohol) core-shell nanoparticles for dual delivery of methotrexate and gemcitabine for bone cancer treatment. <i>Journal of Drug Delivery Science and Technology</i> , 2019, 51, 629-638.	1.4	34
22	Electrospun PVA/AGAROSE Blends as Prospective Wound Healing Patches for Foot Ulcers. , 2019, , .		1
23	Bioactivity enhancement by Sr doped Zn-Ca-P coatings on biomedical magnesium alloy. <i>Journal of Magnesium and Alloys</i> , 2019, 7, 584-596.	5.5	39
24	Dual Delivery of Antibiotic and Antiresorptive Drugs by Hydroxyapatite-Chitosan Composite Nanocarrier for the Treatment of Osteomyelitis. <i>Springer Proceedings in Materials</i> , 2019, , 72-85.	0.1	0
25	Drug and ion releasing tetracalcium phosphate based dual action cement for regenerative treatment of infected bone defects. <i>Ceramics International</i> , 2018, 44, 9227-9235.	2.3	12
26	Antibacterial, anti-inflammatory, and bone-regenerative dual-drug-loaded calcium phosphate nanocarriers – in vitro and in vivo studies. <i>Drug Delivery and Translational Research</i> , 2018, 8, 1066-1077.	3.0	35
27	Dual nanofibrous bioactive coating and antimicrobial surface treatment for infection resistant titanium implants. <i>Progress in Organic Coatings</i> , 2018, 121, 112-119.	1.9	28
28	Osteogenic apatite particles by sol-gel assisted electrospinning. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2018, 106, 1941-1954.	1.6	7
29	Tailoring antibiotic release for the treatment of periodontal infrabony defects using bioactive gelatin-alginate/apatite nanocomposite films. <i>Journal of Drug Delivery Science and Technology</i> , 2018, 43, 57-64.	1.4	30
30	Electrospun PCL/HA coated friction stir processed AZ31/HA composites for degradable implant applications –. <i>Journal of Materials Processing Technology</i> , 2018, 252, 398-406.	3.1	59
31	Ceramic core with polymer corona hybrid nanocarrier for the treatment of osteosarcoma with co-delivery of protein and anti-cancer drug. <i>Nanotechnology</i> , 2018, 29, 015101.	1.3	17
32	Additive manufacturing technologies: an overview of challenges and perspective of using electrospinning. <i>Nanocomposites</i> , 2018, 4, 190-214.	2.2	28
33	Electrospun 3D Scaffolds for Tissue Regeneration. <i>Advances in Experimental Medicine and Biology</i> , 2018, 1078, 29-47.	0.8	11
34	Antibacterial and Bioactive Surface Modifications of Titanium Implants by PCL/TiO <sub>2</sub> Nanocomposite Coatings. <i>Nanomaterials</i> , 2018, 8, 860.	1.9	65
35	Silver Loaded Nanofibrous Curdlan Mat for Diabetic Wound Healing: An In Vitro and In Vivo Study. <i>Macromolecular Materials and Engineering</i> , 2018, 303, 1800234.	1.7	19
36	Development of Egg Shell Derived Carbonated Apatite Nanocarrier System for Drug Delivery. <i>Journal of Nanoscience and Nanotechnology</i> , 2018, 18, 2318-2324.	0.9	20

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37	Dentin remineralizing ability and enhanced antibacterial activity of strontium and hydroxyl ion co-releasing radiopaque hydroxyapatite cement. <i>Journal of Materials Science: Materials in Medicine</i> , 2017, 28, 95.	1.7	28
38	Nanochitosan modified glass ionomer cement with enhanced mechanical properties and fluoride release. <i>International Journal of Biological Macromolecules</i> , 2017, 104, 1860-1865.	3.6	33
39	Comparative evaluation of micron- and nano-sized intracanal medicaments on penetration and fracture resistance of root dentin – An in vitro study. <i>International Journal of Biological Macromolecules</i> , 2017, 104, 1866-1873.	3.6	30
40	Electrospun Cytocompatible Polycaprolactone Blend Composite with Enhanced Wettability for Bone Tissue Engineering. <i>Journal of Nanoscience and Nanotechnology</i> , 2017, 17, 2320-2328.	0.9	17
41	Electrospun Nanofibers of Curdlan (1,3 Glucan) Blend as a Potential Skin Scaffold Material. <i>Macromolecular Materials and Engineering</i> , 2017, 302, 1600417.	1.7	41
42	Tailoring Biodegradation of Fine Grained AZ31 Alloy Implants by Nanofibrous Coatings. <i>Materials Today: Proceedings</i> , 2017, 4, 6697-6703.	0.9	6
43	Electrospun 3D composite scaffolds for craniofacial critical size defects. <i>Journal of Materials Science: Materials in Medicine</i> , 2017, 28, 119.	1.7	8
44	Impact of Nanotechnology on 3D Bioprinting. <i>Journal of Bionanoscience</i> , 2017, 11, 1-6.	0.4	10
45	Bone Mineral-Like Nanoscale Amorphous Calcium Phosphate Derived from Egg Shells. <i>Journal of Bionanoscience</i> , 2017, 11, 297-300.	0.4	4
46	Egg shell derived apatite cement for the treatment of angular periodontal defects: A preliminary clinical and radiographic assessment. <i>Dental, Oral, and Craniofacial Research</i> , 2017, 4, .	0.1	10
47	Nano and ultra fine grained metallic biomaterials by severe plastic deformation techniques. <i>Materials Technology</i> , 2016, 31, 743-755.	1.5	19
48	Tailoring degradation of AZ31 alloy by surface pre-treatment and electrospun PCL fibrous coating. <i>Materials Science and Engineering C</i> , 2016, 65, 43-50.	3.8	65
49	Antibiotic delivery by nanobioceramics. <i>Therapeutic Delivery</i> , 2016, 7, 573-588.	1.2	12
50	Value Added Bioceramics: A Review of the Developments and Progress in India. <i>Key Engineering Materials</i> , 2016, 696, 3-8.	0.4	2
51	Eggshell-Derived Hydroxyapatite. <i>Journal of Craniofacial Surgery</i> , 2016, 27, 112-117.	0.3	34
52	Electrosprayed titania nanocups for protein delivery. <i>Colloids and Interface Science Communications</i> , 2016, 12, 17-20.	2.0	4
53	Tribological, electrochemical and in vitro biocompatibility properties of SiC reinforced composite coatings. <i>Materials and Design</i> , 2016, 95, 510-517.	3.3	32
54	In vitro and in vivo studies of biodegradable fine grained AZ31 magnesium alloy produced by equal channel angular pressing. <i>Materials Science and Engineering C</i> , 2016, 59, 356-367.	3.8	97

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55	Dual Mode Antibacterial Activity of Ion Substituted Calcium Phosphate Nanocarriers for Bone Infections. <i>Frontiers in Bioengineering and Biotechnology</i> , 2015, 3, 59.	2.0	26
56	Design of biocomposite materials for bone tissue regeneration. <i>Materials Science and Engineering C</i> , 2015, 57, 452-463.	3.8	239
57	Accelerated Self-Hardening Tetracalcium Phosphate Based Bone Cement with Enhanced Strength and Biological Behaviour. <i>Transactions of the Indian Institute of Metals</i> , 2015, 68, 299-304.	0.7	6
58	Acrylic cement formulations modified with calcium deficient apatite nanoparticles for orthopaedic applications. <i>Journal of Composite Materials</i> , 2015, 49, 2921-2933.	1.2	6
59	Effect of Processing Route and Working Temperature on Microstructure Evolution of AZ31 Magnesium Alloy During Equal Channel Angular Pressing. , 2014, 5, 841-846.		2
60	Electrospun Nanofibrous Polymer Coated Magnesium Alloy for Biodegradable Implant Applications. , 2014, 5, 817-823.		23
61	In situ synthesized TiBâ€TiN reinforced Ti6Al4V alloy composite coatings: Microstructure, tribological and in-vitro biocompatibility. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2014, 29, 259-271.	1.5	111
62	Friction stir processing of magnesiumâ€nanohydroxyapatite composites with controlled in vitro degradation behavior. <i>Materials Science and Engineering C</i> , 2014, 39, 315-324.	3.8	109
63	Nano-hydroxyapatite reinforced AZ31 magnesium alloy by friction stir processing: a solid state processing for biodegradable metal matrix composites. <i>Journal of Materials Science: Materials in Medicine</i> , 2014, 25, 975-988.	1.7	85
64	Processing and mechanical behavior of lamellar structured degradable magnesiumâ€hydroxyapatite implants. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2014, 40, 178-189.	1.5	91
65	Enhanced protein delivery by multi-ion containing eggshell derived apatitic-alginate composite nanocarriers. <i>Colloids and Surfaces B: Biointerfaces</i> , 2014, 123, 542-548.	2.5	25
66	Regenerative potential and anti-bacterial activity of tetracycline loaded apatitic nanocarriers for the treatment of periodontitis. <i>Biomedical Materials (Bristol)</i> , 2014, 9, 035002.	1.7	49
67	Accelerated Sonochemical Synthesis of Calcium Deficient Hydroxyapatite Nanoparticles: Structural and Morphological Evolution. <i>Journal of Biomaterials and Tissue Engineering</i> , 2014, 4, 295-299.	0.0	22
68	Cell-Laden Hydrogels for Tissue Engineering. <i>Journal of Biomaterials and Tissue Engineering</i> , 2014, 4, 507-535.	0.0	33
69	Eggshell derived hydroxyapatite as bone graft substitute in the healing of maxillary cystic bone defects: a preliminary report. <i>Journal of International Oral Health</i> , 2014, 6, 15-9.	0.0	27
70	Development of carbon nanotubes reinforced hydroxyapatite composite coatings on titanium by electrodeposition method. <i>Corrosion Science</i> , 2013, 73, 321-330.	3.0	102
71	Wettability and In Vitro Bioactivity Studies on Titanium Rods Processed by Equal Channel Angular Pressing. <i>Transactions of the Indian Institute of Metals</i> , 2013, 66, 299-304.	0.7	13
72	Role of biomineralization on the degradation of fine grained AZ31 magnesium alloy processed by groove pressing. <i>Materials Science and Engineering C</i> , 2013, 33, 1607-1615.	3.8	76

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73	Fabrication of Biomedical Implants using Laser Engineered Net Shaping (LENS <sup>®</sup> ). Transactions of the Indian Ceramic Society, 2013, 72, 169-174.	0.4	46
74	Degradation in Thermal Properties and Morphology of Polyetheretherketone-Alumina Composites Exposed to Gamma Radiation. Journal of Materials Engineering and Performance, 2012, 21, 1266-1274.	1.2	10
75	Strontium-Substituted Calcium Deficient Hydroxyapatite Nanoparticles: Synthesis, Characterization, and Antibacterial Properties. Journal of the American Ceramic Society, 2012, 95, 2700-2708.	1.9	130
76	Laser processing of in situ synthesized TiB <sub>2</sub> -TiN-reinforced Ti6Al4V alloy coatings. Scripta Materialia, 2012, 66, 578-581.	2.6	99
77	Radiation degradation in the mechanical properties of Polyetheretherketone-alumina composites. Journal of Nuclear Materials, 2012, 420, 338-341.	1.3	2
78	Effects of nanocrystalline calcium deficient hydroxyapatite incorporation in glass ionomer cements. Journal of the Mechanical Behavior of Biomedical Materials, 2012, 7, 69-76.	1.5	51
79	&lt;&gt;Vero&lt;&gt; Cell Viability and Human Osteoblast Cell Response to Electrospun Phase Controlled Titania Nanofibers. Journal of Biomaterials and Tissue Engineering, 2012, 2, 292-298.	0.0	9
80	Mineralization of pristine chitosan film through biomimetic process. International Journal of Biological Macromolecules, 2011, 49, 385-389.	3.6	37
81	Microstructure, mechanical and wear properties of laser processed SiC particle reinforced coatings on titanium. Surface and Coatings Technology, 2011, 205, 4366-4373.	2.2	57
82	Electrospun Polycaprolactone/Poly(1,4-butylene adipate-co-polycaprolactam) Blends: Potential Biodegradable Scaffold for Bone Tissue Regeneration. Journal of Biomaterials and Tissue Engineering, 2011, 1, 30-39.	0.0	47
83	Tailoring the bioactivity of commercially pure titanium by grain refinement using groove pressing. Materials Science and Engineering C, 2010, 30, 203-208.	3.8	44
84	In situ composite coating of titania-hydroxyapatite on commercially pure titanium by microwave processing. Surface and Coatings Technology, 2010, 204, 1755-1763.	2.2	28
85	Influence of microwave power, irradiation time and polymeric additions on synthesis of nanocrystalline hydroxyapatite. Materials Research Innovations, 2010, 14, 45-50.	1.0	13
86	Effect of deacetylation time on the preparation, properties and swelling behavior of chitosan films. Carbohydrate Polymers, 2009, 78, 767-772.	5.1	92
87	Synthesis and characterization of nanocrystalline apatites from eggshells at different Ca/P ratios. Biomedical Materials (Bristol), 2009, 4, 045010.	1.7	47
88	BCP ceramic microspheres as drug delivery carriers: synthesis, characterisation and doxycycline release. Journal of Materials Science: Materials in Medicine, 2008, 19, 283-290.	1.7	46
89	Mineralization of osteoblasts with electrospun collagen/hydroxyapatite nanofibers. Journal of Materials Science: Materials in Medicine, 2008, 19, 2039-2046.	1.7	166
90	Processing and properties of injectable porous apatitic cements. Journal of the Ceramic Society of Japan, 2008, 116, 105-107.	0.5	15

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91	Bioceramics coating on Ti-6Al-4V alloy by microwave processing. <i>Surface Engineering</i> , 2007, 23, 401-405.	1.1	7
92	Antibacterial nanosized silver substituted hydroxyapatite: Synthesis and characterization. <i>Journal of Biomedical Materials Research - Part A</i> , 2007, 80A, 581-591.	2.1	251
93	Biocomposite nanofibres and osteoblasts for bone tissue engineering. <i>Nanotechnology</i> , 2007, 18, 055101.	1.3	149
94	A novel route for synthesis of nanocrystalline hydroxyapatite from eggshell waste. <i>Journal of Materials Science: Materials in Medicine</i> , 2007, 18, 1735-1743.	1.7	163
95	Synthesis of nanocrystalline fluorinated hydroxyapatite by microwave processing and its in vitro dissolution study. <i>Bulletin of Materials Science</i> , 2006, 29, 611-615.	0.8	60
96	Influence of microwave power on nanosized hydroxyapatite particles. <i>Scripta Materialia</i> , 2006, 55, 175-178.	2.6	70
97	Biomimetic nanocomposites for bone graft applications. <i>Nanomedicine</i> , 2006, 1, 177-188.	1.7	79
98	Accelerated microwave processing of nanocrystalline hydroxyapatite. <i>Journal of Materials Science</i> , 2005, 40, 6319-6323.	1.7	102
99	MECHANOCHEMICAL SYNTHESIS OF NANOCRYSTALLINE FLUORINATED HYDROXYAPATITE. <i>International Journal of Nanoscience</i> , 2005, 04, 643-649.	0.4	10
100	Hydroxyl Carbonateapatite Hybrid Bone Composites Using Carbohydrate Polymer. <i>Journal of Composite Materials</i> , 2005, 39, 1159-1167.	1.2	12
101	Microwave accelerated synthesis of nanosized calcium deficient hydroxyapatite. <i>Journal of Materials Science: Materials in Medicine</i> , 2004, 15, 1279-1284.	1.7	116
102	Heat-deproteinated xenogeneic bone from slaughterhouse waste: Physico-chemical properties. <i>Bulletin of Materials Science</i> , 2003, 26, 523-528.	0.8	75
103	Microwave processing of functionally graded bioactive materials. <i>Materials Letters</i> , 2003, 57, 2716-2721.	1.3	27
104	Fluorinated bovine hydroxyapatite: preparation and characterization. <i>Materials Letters</i> , 2002, 57, 429-433.	1.3	60
105	Synthesis of carbonated calcium phosphate ceramics using microwave irradiation. <i>Biomaterials</i> , 2000, 21, 1623-1629.	5.7	90
106	Effect of Structure and Composition on Ibuprofen Drug Delivery by Calcium Phosphate Nanocarriers. <i>Key Engineering Materials</i> , 0, 529-530, 495-500.	0.4	3
107	Bioactive Grain Refined Magnesium by Friction Stir Processing. <i>Materials Science Forum</i> , 0, 710, 264-269.	0.3	28
108	Novel Strontium Doped Zinc Calcium Phosphate Conversion Coating on AZ31 Magnesium Alloy for Biomedical Applications. <i>Journal of Biomimetics, Biomaterials and Biomedical Engineering</i> , 0, 34, 57-67.	0.5	3