

# Kalpana S Katti

## List of Publications by Year in descending order

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154  
papers

5,338  
citations

66343

42  
h-index

95266

68  
g-index

159  
all docs

159  
docs citations

159  
times ranked

5107  
citing authors

#	ARTICLE	IF	CITATIONS
1	Nanoarchitectonics of a Microsphere-Based Scaffold for Modeling Neurodevelopment and Neurological Disease. ACS Applied Bio Materials, 2022, 5, 528-544.	4.6	4
2	A Coarse-Grained Model for the Mechanical Behavior of Na-Montmorillonite Clay. Langmuir, 2022, 38, 4859-4869.	3.5	9
3	On the Impacts of Flow on the Migration and Growth of Cancer Cells. , 2022, , .		0
4	Label-free discrimination of tumorigenesis stages using in vitro prostate cancer bone metastasis model by Raman imaging. Scientific Reports, 2022, 12, 8050.	3.3	6
5	Molecular mechanics of the swelling clay tactoid under compression, tension and shear. Applied Clay Science, 2021, 200, 105908.	5.2	13
6	Composite nanoclay-hydroxyapatite-polymer fiber scaffolds for bone tissue engineering manufactured using pressurized gyration. Composites Science and Technology, 2021, 202, 108598.	7.8	43
7	Mechanobiological evaluation of prostate cancer metastasis to bone using an in vitro prostate cancer testbed. Journal of Biomechanics, 2021, 114, 110142.	2.1	6
8	Nanostructured biomaterials for in vitro models of bone metastasis cancer. Current Opinion in Biomedical Engineering, 2021, 17, 100254.	3.4	9
9	Dissociation Mechanisms of G-actin Subunits Govern Deformation Response of Actin Filament. Biomacromolecules, 2021, 22, 907-917.	5.4	6
10	Evaluation of quasi-static and dynamic nanomechanical properties of bone-metastatic breast cancer cells using a nanoclay cancer testbed. Scientific Reports, 2021, 11, 3096.	3.3	7
11	Perfusion bioreactor enabled fluid-derived shear stress conditions for novel bone metastatic prostate cancer testbed. Biofabrication, 2021, 13, 035004.	7.1	16
12	An insight into quartz mineral interactions with kerogen in Green River oil shale. International Journal of Coal Geology, 2021, 238, 103729.	5.0	15
13	Differences in Interactions Within Viral Replication Complexes of SARS-CoV-2 (COVID-19) and SARS-CoV Coronaviruses Control RNA Replication Ability. Jom, 2021, 73, 1684-1695.	1.9	4
14	Binding of SARS-COV-2 (COVID-19) and SARS-COV to human ACE2: Identifying binding sites and consequences on ACE2 stiffness. Chemical Physics, 2021, 551, 111353.	1.9	5
15	Wnt/ $\beta$ -Catenin Signaling Pathway Regulates Osteogenesis for Breast Cancer Bone Metastasis: Experiments in an <i>In Vitro</i> Nanoclay Scaffold Cancer Testbed. ACS Biomaterials Science and Engineering, 2020, 6, 2600-2611.	5.2	30
16	Compression of Na <sup>+</sup> -Montmorillonite Swelling Clay Interlayer Is Influenced by Fluid Polarity: A Steered Molecular Dynamics Study. Langmuir, 2020, 36, 11742-11753.	3.5	15
17	Bone interface modulates drug resistance in breast cancer bone metastasis. Colloids and Surfaces B: Biointerfaces, 2020, 195, 111224.	5.0	14
18	Prostate Cancer Phenotype Influences Bone Mineralization at Metastasis: A Study Using an In Vitro Prostate Cancer Metastasis Testbed. JBMR Plus, 2020, 4, e10256.	2.7	14

#	ARTICLE	IF	CITATIONS
19	Modeling the Behavior of Organic Kerogen in the Proximity of Calcite Mineral by Molecular Dynamics Simulations. <i>Energy &amp; Fuels</i> , 2020, 34, 2849-2860.	5.1	18
20	Tissue-Engineered Interlocking Scaffold Blocks for the Regeneration of Bone. <i>Jom</i> , 2020, 72, 1443-1457.	1.9	9
21	Spectrochemical Probing of MicroRNA Duplex Using Spontaneous Raman Spectroscopy for Biosensing Applications. <i>Analytical Chemistry</i> , 2020, 92, 14423-14431.	6.5	1
22	Biomechanics of Cells as Potential Biomarkers for Diseases: A New Tool in <i>Mechanobiology</i> . , 2019, , 1-21.		3
23	Mechanics of amelogenin TRAP protein in the proximity of hydroxyapatite mineral is altered by interfacial water. <i>Chemical Physics</i> , 2019, 522, 104-111.	1.9	2
24	Tissue-engineered nanoclay-based 3D <i>in vitro</i> breast cancer model for studying breast cancer metastasis to bone. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2019, 13, 119-130.	2.7	30
25	An <i>in vitro</i> model of prostate cancer bone metastasis for highly metastatic and non-metastatic prostate cancer using nanoclay bone-mimetic scaffolds. <i>MRS Advances</i> , 2019, 4, 1207-1213.	0.9	11
26	Fourier transform infrared spectroscopy based spectral biomarkers of metastasized breast cancer progression. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2019, 208, 85-96.	3.9	40
27	<i>In vitro</i> design of mesenchymal to epithelial transition of prostate cancer metastasis using 3D nanoclay bone-mimetic scaffolds. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2018, 12, 727-737.	2.7	23
28	The role of fluid polarity in the swelling of sodium-montmorillonite clay: A molecular dynamics and Fourier transform infrared spectroscopy study. <i>Journal of Rock Mechanics and Geotechnical Engineering</i> , 2018, 10, 1133-1144.	8.1	19
29	Nuclear Localizing Peptide-Conjugated, Redox-Sensitive Polymersomes for Delivering Curcumin and Doxorubicin to Pancreatic Cancer Microtumors. <i>Molecular Pharmaceutics</i> , 2017, 14, 1916-1928.	4.6	44
30	Cancer cell mechanics with altered cytoskeletal behavior and substrate effects: A 3D finite element modeling study. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2017, 76, 125-134.	3.1	23
31	Modeling molecular interactions of sodium montmorillonite clay with 3D kerogen models. <i>Fuel</i> , 2017, 199, 641-652.	6.4	30
32	Multiscale Models of Degradation and Healing of Bone Tissue Engineering Nanocomposite Scaffolds. <i>Journal of Nanomechanics &amp; Micromechanics</i> , 2017, 7, .	1.4	18
33	Modeling the Nanoscale Kerogen Inclusions in Green River Oil Shale. , 2017, , .		1
34	Evaluation of Cancer Tumors in 3D Porous Bone Mimetic Scaffolds. , 2017, , .		2
35	Modelling clay-fluid interactions in montmorillonite clays. <i>Environmental Geotechnics</i> , 2017, 4, 322-338.	2.3	14
36	Sequential culture on biomimetic nanoclay scaffolds forms three-dimensional tumoroids. <i>Journal of Biomedical Materials Research - Part A</i> , 2016, 104, 1591-1602.	4.0	22

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37	Microstructural and Photoacoustic Infrared Spectroscopic Studies of Human Cortical Bone with Osteogenesis Imperfecta. <i>Jom</i> , 2016, 68, 1116-1127.	1.9	8
38	Anisotropic properties of human cortical bone with osteogenesis imperfecta. <i>Biomechanics and Modeling in Mechanobiology</i> , 2016, 15, 155-167.	2.8	12
39	Probing electronic structure of biomineralized hydroxyapatite inside nanoclay galleries. <i>Micron</i> , 2016, 90, 78-86.	2.2	9
40	On-site SEM and nanomechanical properties of human OI bone. <i>Bioinspired, Biomimetic and Nanobiomaterials</i> , 2016, 5, 106-120.	0.9	5
41	Nanoscale Morphology of Kerogen and In Situ Nanomechanical Properties of Green River Oil Shale. <i>Journal of Nanomechanics &amp; Micromechanics</i> , 2016, 6, .	1.4	50
42	Dynamic nanomechanical behaviour of healthy and OI human cortical bone. <i>Bioinspired, Biomimetic and Nanobiomaterials</i> , 2015, 4, 15-25.	0.9	4
43	Vesicular delivery of crystalline calcium minerals to ECM in biomineralized nanoclay composites. <i>Materials Research Express</i> , 2015, 2, 045401.	1.6	22
44	Molecular modeling of initiation of interlayer swelling in Na <sup>+</sup> montmorillonite expansive clay. <i>Canadian Geotechnical Journal</i> , 2015, 52, 1385-1395.	2.8	33
45	Carbon nanotube proximity influences rice DNA. <i>Chemical Physics</i> , 2015, 455, 17-22.	1.9	20
46	Evaluating Molecular Interactions in Polycaprolactone-Biomineralized Hydroxyapatite Nanocomposites using Steered Molecular Dynamics. <i>Jom</i> , 2015, 67, 733-743.	1.9	13
47	Evolution of Molecular Interactions in the Interlayer of Na-Montmorillonite Swelling Clay with Increasing Hydration. <i>International Journal of Geomechanics</i> , 2015, 15, .	2.7	32
48	Biomineralized hydroxyapatite nanoclay composite scaffolds with polycaprolactone for stem cell-based bone tissue engineering. <i>Journal of Biomedical Materials Research - Part A</i> , 2015, 103, 2077-2101.	4.0	71
49	Molecular interactions in biomineralized hydroxyapatite amino acid modified nanoclay: In silico design of bone biomaterials. <i>Materials Science and Engineering C</i> , 2015, 46, 207-217.	7.3	28
50	The Roles of Cellular Nanomechanics in Cancer. <i>Medicinal Research Reviews</i> , 2015, 35, 198-223.	10.5	34
51	Multiscale Model of Collagen Fibril in Bone: Elastic Response. <i>Journal of Engineering Mechanics - ASCE</i> , 2014, 140, 454-461.	2.9	13
52	Microstructure, Spectroscopic Studies and Nanomechanical Properties of Human Cortical Bone with Osteogenesis Imperfecta. <i>Materials Research Society Symposia Proceedings</i> , 2014, 1621, 163-168.	0.1	0
53	Multifunctional polymersomes for cytosolic delivery of gemcitabine and doxorubicin to cancer cells. <i>Biomaterials</i> , 2014, 35, 6482-6497.	11.4	81
54	pH-Triggered Echogenicity and Contents Release from Liposomes. <i>Molecular Pharmaceutics</i> , 2014, 11, 4059-4068.	4.6	31

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55	MMP-9 Responsive PEG Cleavable Nanovesicles for Efficient Delivery of Chemotherapeutics to Pancreatic Cancer. <i>Molecular Pharmaceutics</i> , 2014, 11, 2390-2399.	4.6	91
56	Engineering Physical Properties of Asphalt Binders through Nanoclay-Asphalt Interactions. <i>Journal of Materials in Civil Engineering</i> , 2014, 26, .	2.9	72
57	Molecular interactions of kerogen moieties with Na-montmorillonite: An experimental and modeling study. <i>Fuel</i> , 2014, 130, 34-45.	6.4	24
58	Photoacoustic FTIR spectroscopic study of undisturbed human cortical bone. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2013, 103, 25-37.	3.9	30
59	Nanoclays mediate stem cell differentiation and mineralized ECM formation on biopolymer scaffolds. <i>Journal of Biomedical Materials Research - Part A</i> , 2013, 101A, 2644-2660.	4.0	66
60	Polymer-Coated Echogenic Lipid Nanoparticles with Dual Release Triggers. <i>Biomacromolecules</i> , 2013, 14, 841-853.	5.4	32
61	FTIR Investigation of Molecular Interactions in Swelling Clays and their Role on Swelling and Other Macroscopic Properties. , 2013, , .		0
62	An Insight into Molecular Scale Interactions and In-situ Nanomechanical Properties of Kerogen in Green River Oil Shale. , 2013, , .		15
63	Molecular Modeling of Early Stage of Swelling in Na-Montmorillonite Clay. , 2013, , .		0
64	Role of Polymer Interactions with Clays and Modifiers on Nanomechanical Properties and Crystallinity in Polymer Clay Nanocomposites. <i>Journal of Nanomaterials</i> , 2012, 2012, 1-15.	2.7	14
65	In vitro measurement of attenuation and nonlinear scattering from echogenic liposomes. <i>Ultrasonics</i> , 2012, 52, 962-969.	3.9	29
66	Structural Hierarchy Controls Deformation Behavior of Collagen. <i>Biomacromolecules</i> , 2012, 13, 2562-2569.	5.4	29
67	Insight into Role of Clay-Fluid Molecular Interactions on Permeability and Consolidation Behavior of Na-Montmorillonite Swelling Clay. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2012, 138, 138-146.	3.0	42
68	An in situ FTIR step-scan photoacoustic investigation of kerogen and minerals in oil shale. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2012, 89, 105-113.	3.9	79
69	Collagen Mechanics: Role of Structural Hierarchy. , 2012, , .		0
70	Steered Molecular Dynamics Study of Mechanical Response of Full Length and Short Collagen Molecules. <i>Journal of Nanomechanics &amp; Micromechanics</i> , 2011, 1, 104-110.	1.4	37
71	Effects of entrapment on nucleic acid content, cell morphology, cell surface property, and stress of pure cultures commonly found in biological wastewater treatment. <i>Applied Microbiology and Biotechnology</i> , 2011, 92, 407-418.	3.6	9
72	Bone nodules on chitosan-polygalacturonic acid-hydroxyapatite nanocomposite films mimic hierarchy of natural bone. <i>Acta Biomaterialia</i> , 2011, 7, 1173-1183.	8.3	39

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73	In situ mineralized hydroxyapatite on amino acid modified nanoclays as novel bone biomaterials. <i>Materials Science and Engineering C</i> , 2011, 31, 1017-1029.	7.3	66
74	Experiments in Nanomechanical Properties of Live Osteoblast Cells and Cell-Biomaterial Interface. <i>Journal of Nanotechnology in Engineering and Medicine</i> , 2011, 2, .	0.8	16
75	Directional dependence of hydroxyapatite-collagen interactions on mechanics of collagen. <i>Journal of Biomechanics</i> , 2010, 43, 1723-1730.	2.1	53
76	In Situ Swelling Behavior of Chitosan-Polygalacturonic Acid/Hydroxyapatite Nanocomposites in Cell Culture Media. <i>International Journal of Polymer Science</i> , 2010, 2010, 1-12.	2.7	9
77	Mechanics of Collagen in the Human Bone: Role of Collagen-Hydroxyapatite Interactions. <i>Materials Research Society Symposia Proceedings</i> , 2010, 1274, 1.	0.1	1
78	Nanoclay Based Composite Scaffolds for Bone Tissue Engineering Applications. <i>Journal of Nanotechnology in Engineering and Medicine</i> , 2010, 1, .	0.8	84
79	Use of unnatural amino acids for design of novel organomodified clays as components of nanocomposite biomaterials. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2010, 368, 1963-1980.	3.4	62
80	Osteoblast adhesion, proliferation and growth on polyelectrolyte complex-hydroxyapatite nanocomposites. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2010, 368, 2083-2097.	3.4	49
81	Tailoring Crystallinity and Nanomechanical Properties of Clay Polymer Nanocomposites: A Molecular Dynamics Study. <i>International Journal for Multiscale Computational Engineering</i> , 2010, 8, 561-584.	1.2	6
82	Biopolymer Polyelectrolyte Complex Nanocomposites for Bone Tissue Engineering. , 2009, , .		0
83	Influence of backbone chain length and functional groups of organic modifiers on crystallinity and nanomechanical properties of intercalated clay-polycaprolactam nanocomposites. <i>International Journal of Nanotechnology</i> , 2009, 6, 468.	0.2	18
84	Mechanisms of Load-Deformation Behavior of Molecular Collagen in Hydroxyapatite-Tropocollagen Molecular System: Steered Molecular Dynamics Study. <i>Journal of Engineering Mechanics - ASCE</i> , 2009, 135, 413-421.	2.9	51
85	Nanomechanics of Surface Modified Nanohydroxyapatite Particulates Used in Biomaterials. <i>Journal of Engineering Mechanics - ASCE</i> , 2009, 135, 468-478.	2.9	28
86	Multiscale modeling of swelling clays: A computational and experimental approach. <i>KSCE Journal of Civil Engineering</i> , 2009, 13, 243-255.	1.9	57
87	Polyelectrolyte-complex nanostructured fibrous scaffolds for tissue engineering. <i>Materials Science and Engineering C</i> , 2009, 29, 2079-2084.	7.3	40
88	Nature of organic fluid-montmorillonite interactions: An FTIR spectroscopic study. <i>Journal of Colloid and Interface Science</i> , 2009, 337, 97-105.	9.4	83
89	Molecular interactions of degradable and non-degradable polymers with hydroxyapatite influence mechanics of polymer-hydroxyapatite nanocomposite biomaterials. <i>International Journal of Nanotechnology</i> , 2009, 6, 511.	0.2	15
90	Characterizing Biointerfaces and Biosurfaces in Biomaterials Design. , 2009, , 178-204.		0

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91	Experimental investigation of nanomechanics of the mineral-protein interface in nacre. <i>Mechanics Research Communications</i> , 2008, 35, 17-23.	1.8	64
92	Effect of Biopolymers on Structure of Hydroxyapatite and Interfacial Interactions in Biomimetically Synthesized Hydroxyapatite/Biopolymer Nanocomposites. <i>Annals of Biomedical Engineering</i> , 2008, 36, 1024-1032.	2.5	30
93	The role of interfacial interactions on the crystallinity and nanomechanical properties of clay-polymer nanocomposites: A molecular dynamics study. <i>Journal of Applied Polymer Science</i> , 2008, 107, 3137-3148.	2.6	43
94	Role of coordinated metal ions on the orientation of phthalocyanine based coatings. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2008, 70, 1180-1186.	3.9	65
95	Mechanical response and multilevel structure of biomimetic hydroxyapatite/polygalacturonic/chitosan nanocomposites. <i>Materials Science and Engineering C</i> , 2008, 28, 399-405.	7.3	55
96	Molecular Hydraulic Properties of Montmorillonite: A Polarized Fourier Transform Infrared Spectroscopic Study. <i>Applied Spectroscopy</i> , 2008, 62, 1303-1313.	2.2	34
97	Synthesis and characterization of a novel chitosan/montmorillonite/hydroxyapatite nanocomposite for bone tissue engineering. <i>Biomedical Materials (Bristol)</i> , 2008, 3, 034122.	3.3	215
98	Altered Phase Model for Polymer Clay Nanocomposites. <i>Langmuir</i> , 2008, 24, 5599-5607.	3.5	63
99	Mineral and Protein-Bound Water and Latching Action Control Mechanical Behavior at Protein-Mineral Interfaces in Biological Nanocomposites. <i>Journal of Nanomaterials</i> , 2008, 2008, 1-8.	2.7	16
100	Characterization of Highly Luminescent $\text{LaPO}_4 \cdot \text{Eu}^{3+} / \text{LaPO}_4$ One-Dimensional Core/Shell Heterostructures. <i>Journal of Nanoscience and Nanotechnology</i> , 2008, 8, 1266-1271.	0.9	15
101	Molecular Interactions Alter Clay and Polymer Structure in Polymer Clay Nanocomposites. <i>Journal of Nanoscience and Nanotechnology</i> , 2008, 8, 1638-1657.	0.9	11
102	Influence of Mineral on the Load Deformation Behavior of Polymer in Hydroxyapatite-Polyacrylic Acid Nanocomposite Biomaterials: A Steered Molecular Dynamics Study. <i>Journal of Nanoscience and Nanotechnology</i> , 2008, 8, 2075-2084.	0.9	6
103	Molecular interactions alter clay and polymer structure in polymer clay nanocomposites. <i>Journal of Nanoscience and Nanotechnology</i> , 2008, 8, 1638-57.	0.9	4
104	Modeling the Evolution of Montmorillonite Clay Particulate Structure: A Discrete Element Modeling Study. , 2007, , .		1
105	Mineral Proximity Influences Mechanical Response of Proteins in Biological Mineral-Protein Hybrid Systems. <i>Biomacromolecules</i> , 2007, 8, 851-856.	5.4	85
106	Molecular modeling of the mechanical behavior and interactions in dry and slightly hydrated sodium montmorillonite interlayer. <i>Canadian Geotechnical Journal</i> , 2007, 44, 425-435.	2.8	50
107	Effect of organic modifiers on dynamic and static nanomechanical properties and crystallinity of intercalated clay-polycaprolactam nanocomposites. <i>Journal of Applied Polymer Science</i> , 2007, 105, 790-802.	2.6	39
108	Probing molecular interactions in bone biomaterials: Through molecular dynamics and Fourier transform infrared spectroscopy. <i>Materials Science and Engineering C</i> , 2007, 27, 352-371.	7.3	41

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109	Molecular dynamics simulation of hydroxyapatite/polyacrylic acid interfaces. <i>Polymer</i> , 2007, 48, 664-674.	3.8	172
110	Nature of water in nacre: A 2D Fourier transform infrared spectroscopic study. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2007, 67, 784-788.	3.9	51
111	Mechanics of molecular collagen is influenced by hydroxyapatite in natural bone. <i>Journal of Materials Science</i> , 2007, 42, 8795-8803.	3.7	89
112	A Molecular Model for $\mu$ -Caprolactam-Based Intercalated Polymer Clay Nanocomposite: Integrating Modeling and Experiments. <i>Langmuir</i> , 2006, 22, 7738-7747.	3.5	47
113	Relationship of Swelling and Swelling Pressure on Silica/Water Interactions in Montmorillonite. <i>Langmuir</i> , 2006, 22, 532-537.	3.5	59
114	Why is nacre so tough and strong?. <i>Materials Science and Engineering C</i> , 2006, 26, 1317-1324.	7.3	132
115	Molecular interactions in intercalated organically modified clay and clay/polycaprolactam nanocomposites: Experiments and modeling. <i>Polymer</i> , 2006, 47, 403-414.	3.8	147
116	Insight into molecular interactions between constituents in polymer clay nanocomposites. <i>Polymer</i> , 2006, 47, 5196-5205.	3.8	66
117	Photoacoustic FTIR spectroscopic study of undisturbed nacre from red abalone. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2006, 64, 1051-1057.	3.9	30
118	Experimental investigation of interfaces in hydroxyapatite/polyacrylic acid/polycaprolactone composites using photoacoustic FTIR spectroscopy. <i>Journal of Biomedical Materials Research - Part A</i> , 2006, 77A, 59-66.	4.0	48
119	Bioactivity in in situ hydroxyapatite/polycaprolactone composites. <i>Journal of Biomedical Materials Research - Part A</i> , 2006, 78A, 772-780.	4.0	62
120	Investigating the Interfacial Interactions Between Organic and Inorganic Phases and Their Influence on the Mechanics of Organic Phase in Natural Bone. <i>Materials Research Society Symposia Proceedings</i> , 2006, 975, 1.	0.1	2
121	Nanomechanical properties of nacre. <i>Journal of Materials Research</i> , 2006, 21, 1237-1242.	2.6	110
122	Time Dependent Nanomechanical Response of Nacre. <i>Materials Research Society Symposia Proceedings</i> , 2006, 975, 1.	0.1	1
123	Biopolymer Polyelectrolyte Complex Hydroxyapatite Composites for Bone Tissue Engineering. <i>Materials Research Society Symposia Proceedings</i> , 2006, 975, 1.	0.1	0
124	Influence of Mineral-Polymer Interactions on Molecular Mechanics of Polymer in Composite Bone Biomaterials. <i>Materials Research Society Symposia Proceedings</i> , 2006, 978, .	0.1	0
125	Impact of $\beta$ -Sheet Conformations on the Mechanical Response of Protein in Biocomposites. <i>Materials and Manufacturing Processes</i> , 2006, 21, 676-682.	4.7	9
126	Dynamic nanomechanical response of nacre. <i>Journal of Materials Research</i> , 2006, 21, 2045-2051.	2.6	81



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127	Static and Dynamic Mechanical Behavior of Hydroxyapatite-Polyacrylic Acid Composites Under Simulated Body Fluid. <i>American Journal of Biochemistry and Biotechnology</i> , 2006, 2, 73-79.	0.4	19
128	Platelet interlocks are the key to toughness and strength in nacre. <i>Journal of Materials Research</i> , 2005, 20, 1097-1100.	2.6	181
129	Mechanical Properties of Biological Nanocomposite Nacre: Multiscale Modeling and Experiments on Nacre from Red Abalone. <i>Materials Research Society Symposia Proceedings</i> , 2005, 898, 1.	0.1	3
130	Evolution of Mechanical Response of Sodium Montmorillonite Interlayer with Increasing Hydration by Molecular Dynamics. <i>Langmuir</i> , 2005, 21, 8069-8076.	3.5	83
131	Modeling the response of pyrophyllite interlayer to applied stress using steered molecular dynamics. <i>Clays and Clay Minerals</i> , 2005, 53, 171-178.	1.3	84
132	Mechanical Properties of the Sodium Montmorillonite Interlayer Intercalated with Amino Acids. <i>Biomacromolecules</i> , 2005, 6, 3276-3282.	5.4	78
133	Computational Mechanics Routes to Explore the Origin of Mechanical Properties in a Biological Nanocomposite: Nacre. <i>Materials Research Society Symposia Proceedings</i> , 2004, 844, 1.	0.1	1
134	Influence of Protein Structures on Mechanical Response. <i>Materials Research Society Symposia Proceedings</i> , 2004, 844, 1.	0.1	0
135	Effect of Molecular Interactions at Polymer-Mineral Interfaces on Mechanical Response. <i>Materials Research Society Symposia Proceedings</i> , 2004, 844, 1.	0.1	0
136	Mechanical Properties of Biomimetic Composites for Bone Tissue Engineering. <i>Materials Research Society Symposia Proceedings</i> , 2004, 844, 1.	0.1	1
137	Evaluation of Deformation Mechanisms at Mineral-Protein Composite Interface Using Steered Molecular Dynamics Simulations. <i>Materials Research Society Symposia Proceedings</i> , 2004, 844, 1.	0.1	0
138	Biomaterials in total joint replacement. <i>Colloids and Surfaces B: Biointerfaces</i> , 2004, 39, 133-142.	5.0	437
139	Conductivity model and photoacoustic FT-IR surface depth profiling of heterogeneous polymers. <i>Polymer</i> , 2003, 44, 3319-3325.	3.8	14
140	Role of nanostructure on mechanical properties of nacre. , 2003, , 1734-1737.		0
141	Dopant Effect on Local Dielectric Properties in Barium Titanate Based Electroceramics Determined by Transmission EELS. <i>Journal of the American Ceramic Society</i> , 2002, 85, 2236-2243.	3.8	9
142	Effects of Nanostructure on Bulk Mechanical Properties of Nacre - 3D Finite Element Modeling of the Segmented/Layered Biocomposite. <i>Materials Research Society Symposia Proceedings</i> , 2001, 677, 781.	0.1	3
143	Role of Clay-Solvent Inter and Intraparticle Interactions on Swelling Characteristics of Montmorillonite Nano-Meso-Micro Scale Particulate Systems. <i>Materials Research Society Symposia Proceedings</i> , 2001, 704, 9141.	0.1	3
144	In situ Mineralization of Hydroxyapatite for a Molecular Control of Mechanical Responses in Hydroxyapatite-Polymer Composites for Bone Replacement. <i>Materials Research Society Symposia Proceedings</i> , 2001, 711, 1.	0.1	5

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145	3D finite element modeling of mechanical response in nacre-based hybrid nanocomposites. Computational and Theoretical Polymer Science, 2001, 11, 397-404.	1.1	122
146	Title is missing!. Journal of Materials Science, 2001, 36, 1411-1417.	3.7	81
147	Effect of carbon black on adhesion to plastics in solventborne 2K polyurethanes. Journal of Coatings Technology, 2000, 72, 35-44.	0.7	4
148	Low-loss Electron Energy-loss Spectroscopy and Dielectric Function of Biological and Geological Polymorphs of CaCO <sub>3</sub> . Microscopy and Microanalysis, 1999, 5, 358-364.	0.4	18
149	Local Dielectric Function Of Biogenic and Geological Polymorphs of CaCO <sub>3</sub> Via Transmission Eels. Microscopy and Microanalysis, 1998, 4, 782-783.	0.4	0
150	Determination of local high-frequency dielectric function during the cubic-to-tetragonal phase transformation in barium titanate. Journal of Materials Research, 1997, 12, 1582-1588.	2.6	5
151	A Novel Technique for Determining Local Dielectric Function During Ferroelectric to Paraelectric Phase Transformation in Barium Titanate with a Transmission Eels. Materials Research Society Symposia Proceedings, 1995, 404, 101.	0.1	0
152	Low Loss Transmission Electron Spectroscopic Studies in Donor Doped BaTiO <sub>3</sub> . Materials Research Society Symposia Proceedings, 1995, 411, 191.	0.1	0
153	Dynamic Behavior of Twins In BaTiO <sub>3</sub> . Materials Research Society Symposia Proceedings, 1994, 357, 121.	0.1	0
154	Quantum structural parameters for electron- and hole-carrying copper oxide superconductors. Physical Review B, 1992, 45, 10155-10157.	3.2	3