Hermann Ehrlich

List of Publications by Year in Descending Order

236 papers	6,749 citations	45 h-index	75 g-index
243 ext. papers	7,799 ext. citations	4.5 avg, IF	6.08 L-index

#	Paper	IF	Citations
236	Polysaccharide Stalks in Didymosphenia geminata Diatom: Real World Applications and Strategies to Combat Its Spread. *Polysaccharides*, **2022**, 3, 83-94	3	
235	Patentology of chitinous biomaterials. Part I: Chitin.. *Carbohydrate Polymers*, **2022**, 282, 119102	10.3	3
234	Arrested in Glass: Actin within Sophisticated Architectures of Biosilica in Sponges.. *Advanced Science*, **2022**, e2105059	13.6	3
233	A Short Overview: Marine Resources as Potential Interventions for the Omicron SARS-CoV-2 Variant. *Covid*, **2022**, 2, 501-512		
232	Evaluation of electrodes composed of europium tungstate/reduced graphene oxide nanocomposite for use as supercapacitors. *Surfaces and Interfaces*, **2022**, 102002	4.1	1
231	Insights into the structure and morphogenesis of the giant basal spicule of the glass sponge Monorhaphis chuni. *Frontiers in Zoology*, **2021**, 18, 58	2.8	2
230	A new electrochemical aptasensor based on gold/nitrogen-doped carbon nano-onions for the detection of Staphylococcus aureus. *Electrochimica Acta*, **2021**, 403, 139633	6.7	8
229	Potential Biomedical Applications of Collagen Filaments derived from the Marine Demosponges (Schmidt, 1864) and (Schmidt, 1862). *Marine Drugs*, **2021**, 19,	6	4
228	Global diversity and distribution of Lamippidae copepods symbiotic on Octocorallia. *Symbiosis*, **2021**, 83, 265-277	3	2
227	Highly efficient sunitinib release from pH-responsive mHPMC@Chitosan core-shell nanoparticles. *Carbohydrate Polymers*, **2021**, 258, 117719	10.3	11
226	Thermal decomposition behaviour and numerical fitting for the pyrolysis kinetics of 3D spongin-based scaffolds. The classic approach. *Polymer Testing*, **2021**, 97, 107148	4.5	4
225	Extreme Biomimetics: Designing of the First Nanostructured 3D Spongin-Atacamite Composite and its Application. *Advanced Materials*, **2021**, 33, e2101682	24	7
224	The Anti-Viral Applications of Marine Resources for COVID-19 Treatment: An Overview. *Marine Drugs*, **2021**, 19,	6	6
223	Progress in chitin analytics. *Carbohydrate Polymers*, **2021**, 252, 117204	10.3	41
222	Didymo and Its Polysaccharide Stalks: Beneficial to the Environment or Not?. *Polysaccharides*, **2021**, 2, 69-79	3	2
221	Forced Biomineralization: A Review. *Biomimetics*, **2021**, 6,	3.7	8
220	Adsorption of Cationic Dyes on a Magnetic 3D Spongin Scaffold with Nano-Sized FeO Cores. *Marine Drugs*, **2021**, 19,	6	3

219	Application of polysaccharide biopolymers as natural adsorbent in sample preparation. *Critical Reviews in Food Science and Nutrition*, **2021**, 1-28	11.5	2
218	Marine biomimetics: bromotyrosines loaded chitinous skeleton as source of antibacterial agents. *Applied Physics A: Materials Science and Processing*, **2021**, 127, 15	2.6	10
217	Anti-Tumor Activity vs. Normal Cell Toxicity: Therapeutic Potential of the Bromotyrosines Aerothionin and Homoaerothionin In Vitro. *Marine Drugs*, **2020**, 18,	6	8
216	Functionalization of 3D Chitinous Skeletal Scaffolds of Sponge Origin Using Silver Nanoparticles and Their Antibacterial Properties. *Marine Drugs*, **2020**, 18,	6	4
215	Preparation of FeO/SiO/TiO/CeVO Nanocomposites: Investigation of Photocatalytic Effects on Organic Pollutants, Bacterial Environments, and New Potential Therapeutic Candidate Against Cancer Cells. *Frontiers in Pharmacology*, **2020**, 11, 192	5.6	14
214	Electrochemical Approach for Isolation of Chitin from the Skeleton of the Black Coral sp. (Antipatharia). *Marine Drugs*, **2020**, 18,	6	6
213	Biosignatures in Subsurface Filamentous Fabrics (SFF) from the Deccan Volcanic Province, India. *Minerals (Basel, Switzerland)*, **2020**, 10, 540	2.4	7
212	Identification and first insights into the structure of chitin from the endemic freshwater demosponge Ochridaspongia rotunda (Arndt, 1937). *International Journal of Biological Macromolecules*, **2020**, 162, 1187-1194	7.9	5
211	Modern scaffolding strategies based on naturally pre-fabricated 3D biomaterials of poriferan origin. *Applied Physics A: Materials Science and Processing*, **2020**, 126, 1	2.6	25
210	In vivo biomimetic calcification of selected organic scaffolds using snail shell regeneration: a new methodological approach. *Applied Physics A: Materials Science and Processing*, **2020**, 126, 1	2.6	6
209	3D Chitin Scaffolds of Marine Demosponge Origin for Biomimetic Mollusk Hemolymph-Associated Biomineralization. *Marine Drugs*, **2020**, 18,	6	30
208	A modified sensitive carbon paste electrode for 5-fluorouracil based using a composite of praseodymium erbium tungstate. *Microchemical Journal*, **2020**, 154, 104654	4.8	5
207	Naturally pre-designed biomaterials: Spider molting cuticle as a functional crude oil sorbent. *Journal of Environmental Management*, **2020**, 261, 110218	7.9	7
206	Electrochemical method for isolation of chitinous 3D scaffolds from cultivated Aplysina aerophoba marine demosponge and its biomimetic application. *Applied Physics A: Materials Science and Processing*, **2020**, 126, 1	2.6	10
205	3D Chitin Scaffolds from the Marine Demosponge as a Support for Laccase Immobilization and Its Use in the Removal of Pharmaceuticals. *Biomolecules*, **2020**, 10,	5.9	13
204	Marine biomaterials: Biomimetic and pharmacological potential of cultivated Aplysina aerophoba marine demosponge. *Materials Science and Engineering C*, **2020**, 109, 110566	8.3	33
203	Progress in Modern Marine Biomaterials Research. *Marine Drugs*, **2020**, 18,	6	32
202	Macrobiomineralogy: Insights and Enigmas in Giant Whale Bones and Perspectives for Bioinspired Materials Science. *ACS Biomaterials Science and Engineering*, **2020**, 6, 5357-5367	5.5	7

201	1H NMR spectroscopy study of structural water in rehydrated biocomposite of Spongilla lacustris freshwater demosponge origin. *Applied Physics A: Materials Science and Processing*, **2020**, 126, 1	2.6	1
200	Extreme biomineralization: the case of the hypermineralized ear bone of gray whale (Eschrichtius robustus). *Applied Physics A: Materials Science and Processing*, **2020**, 126, 1	2.6	3
199	Conchixes: organic scaffolds which resemble the size and shapes of mollusks shells, their isolation and potential multifunctional applications. *Applied Physics A: Materials Science and Processing*, **2020**, 126, 1	2.6	7
198	Synthesis, characterization and DNA binding studies of a new ibuprofen-platinum(II) complex. *Journal of Biomolecular Structure and Dynamics*, **2020**, 38, 1119-1129	3.6	6
197	Hexactinellida from the Perth Canyon, Eastern Indian Ocean, with descriptions of five new species. *Zootaxa*, **2019**, 4664, zootaxa.4664.1.2	0.5	3
196	Extreme biomimetics: Preservation of molecular detail in centimeter-scale samples of biological meshes laid down by sponges. *Science Advances*, **2019**, 5, eaax2805	14.3	38
195	Spider Chitin. The biomimetic potential and applications of Caribena versicolor tubular chitin. *Carbohydrate Polymers*, **2019**, 226, 115301	10.3	26
194	Effect of Gd3+-, Pr3+- or Sm3+-substituted cobalt□inc ferrite on photodegradation of methyl orange and cytotoxicity tests. *Journal of Rare Earths*, **2019**, 37, 1288-1295	3.7	44
193	Deposits of iron oxides in the human globus pallidus. *Open Physics*, **2019**, 17, 291-298	1.3	2
192	Supercritical fluid extraction of essential oils. *TrAC - Trends in Analytical Chemistry*, **2019**, 118, 182-193	14.6	81
191	A nanocomposite consisting of reduced graphene oxide and electropolymerized □-cyclodextrin for voltammetric sensing of levofloxacin. *Mikrochimica Acta*, **2019**, 186, 438	5.8	21
190	Express Method for Isolation of Ready-to-Use 3D Chitin Scaffolds from (Aplysineidae: Verongiida) Demosponge. *Marine Drugs*, **2019**, 17,	6	48
189	Synthesis and Supercapacitor Application of Cerium Tungstate Nanostructure. *ChemistrySelect*, **2019**, 4, 2862-2867	1.8	9
188	New family and genus for Dendrilla-like sponges with characters of Verongiida. Part I redescription of Dendrilla lacunosa Hentschel 1912, diagnosis of the new family Ernstillidae and Ernstilla n. g.. *Zoologischer Anzeiger*, **2019**, 280, 14-20	1.1	12
187	New family and genus of a Dendrilla-like sponge with characters of Verongiida. Part II. Discovery of chitin in the skeleton of Ernstilla lacunosa. *Zoologischer Anzeiger*, **2019**, 280, 21-29	1.1	18
186	New Source of 3D Chitin Scaffolds: The Red Sea Demosponge (Pseudoceratinidae, Verongiida). *Marine Drugs*, **2019**, 17,	6	31
185	Chitinous Scaffolds from Marine Sponges for Tissue Engineering. *Springer Series in Biomaterials Science and Engineering*, **2019**, 285-307	0.6	1
184	Investigation of the synergic effect of silver on the photodegradation behavior of copper chromite nanostructures. *Journal of Materials Science: Materials in Electronics*, **2019**, 30, 13994-14006	2.1	5

183	Naturally Prefabricated Marine Biomaterials: Isolation and Applications of Flat Chitinous 3D Scaffolds from (Demospongiae: Verongiida). *International Journal of Molecular Sciences*, **2019**, 20,	6.3	27
182	Marine Biological Materials of Invertebrate Origin. *Biologically-inspired Systems*, **2019**,	0.7	11
181	Spider Chitin: An Ultrafast Microwave-Assisted Method for Chitin Isolation from Spider Molt Cuticle. *Molecules*, **2019**, 24,	4.8	24
180	Naturally Drug-Loaded Chitin: Isolation and Applications. *Marine Drugs*, **2019**, 17,	6	26
179	Sponge Biosilica- Perfectionism in Glass. *Biologically-inspired Systems*, **2019**, 87-118	0.7	
178	Living Bone Implants of Bamboo Corals Origin. *Biologically-inspired Systems*, **2019**, 127-131	0.7	
177	Extreme Biomimetics. *Biologically-inspired Systems*, **2019**, 311-319	0.7	
176	Biominerals. *Biologically-inspired Systems*, **2019**, 21-44	0.7	
175	Antipathin. *Biologically-inspired Systems*, **2019**, 185-192	0.7	
174	The Circle: Biomineralization-Demineralization-Remineralization in Nature. *Biologically-inspired Systems*, **2019**, 53-65	0.7	
173	Biomineralization. *Biologically-inspired Systems*, **2019**, 45-51	0.7	
172	Resilin. *Biologically-inspired Systems*, **2019**, 229-233	0.7	
171	Adhesion Systems in Echinodermata. *Biologically-inspired Systems*, **2019**, 235-241	0.7	
170	Chitin-Protein-Based Composites. *Biologically-inspired Systems*, **2019**, 263-274	0.7	
169	Adhesive Gels of Marine Gastropods (Mollusca) Origin. *Biologically-inspired Systems*, **2019**, 243-246	0.7	
168	Spicular Structures in Molluscs. *Biologically-inspired Systems*, **2019**, 133-157	0.7	
167	Chitin. *Biologically-inspired Systems*, **2019**, 277-294	0.7	
166	Abductin. *Biologically-inspired Systems*, **2019**, 225-228	0.7	

165	Epiloque. *Biologically-inspired Systems*, **2019**, 321-326	0.7	
164	Hierarchical Biological Materials. *Biologically-inspired Systems*, **2019**, 69-80	0.7	
163	Rubber-Like Bioelastomers of Marine Origin. *Biologically-inspired Systems*, **2019**, 193-201	0.7	
162	Gorgonin. *Biologically-inspired Systems*, **2019**, 173-184	0.7	0
161	Biomaterials and Biological Materials. *Biologically-inspired Systems*, **2019**, 3-18	0.7	
160	Capsular Bioelastomers of Whelks. *Biologically-inspired Systems*, **2019**, 203-209	0.7	
159	Collagens from Marine Invertebrates. *Biologically-inspired Systems*, **2019**, 295-308	0.7	
158	Interspace Mineralization Within Bilayered Organic Matrix of Deep-Sea Bamboo Coral (Anthozoa: Gorgonacea: Isididae). *Biologically-inspired Systems*, **2019**, 119-126	0.7	
157	Halogenated Biocomposites. *Biologically-inspired Systems*, **2019**, 255-262	0.7	
156	Biocements. *Biologically-inspired Systems*, **2019**, 247-254	0.7	
155	Byssus: From Inspiration to Development of Novel Composites. *Biologically-inspired Systems*, **2019**, 211-224	0.7	0
154	Paleodyction- Enigmatic Honeycomb Structure. *Biologically-inspired Systems*, **2019**, 81-85	0.7	1
153	Enigmatic Structural Protein Spongin. *Biologically-inspired Systems*, **2019**, 161-172	0.7	2
152	Methods of Isolating Chitin from Sponges (Porifera) **2019**, 35-59		1
151	Hydrothermal synthesis of multifunctional TiO2-ZnO oxide systems with desired antibacterial and photocatalytic properties. *Applied Surface Science*, **2019**, 463, 791-801	6.7	43
150	A theoretical study of two novel Schiff bases as inhibitors of carbon steel corrosion in acidic medium. *Applied Physics A: Materials Science and Processing*, **2019**, 125, 1	2.6	17
149	Synthesis and characterization of MnWO4/TmVO4 ternary nano-hybrids by an ultrasonic method for enhanced photocatalytic activity in the degradation of organic dyes. *Materials Letters*, **2019**, 238, 159-162	3.3	70
148	A Comparative Computational Investigation of Phosgene Adsorption on (XY)12 (X = Al, B and Y = N, P) Nanoclusters: DFT Investigations. *Journal of Cluster Science*, **2019**, 30, 203-218	3	24

147	The demosponge Pseudoceratina purpurea as a new source of fibrous chitin. *International Journal of Biological Macromolecules*, **2018**, 112, 1021-1028	7.9	28
146	Iron(III) phthalocyanine supported on a spongin scaffold as an advanced photocatalyst in a highly efficient removal process of halophenols and bisphenol A. *Journal of Hazardous Materials*, **2018**, 347, 78-88	12.8	41
145	Tailored synthesis of Sm2O3 and Eu2O3 doped ZrO2 nanoparticles: photodegradation of p-nitrophenol in water. *Journal of Materials Science: Materials in Electronics*, **2018**, 29, 11081-11089	2.1	2
144	Sonochemical synthesis of terbium tungstate for developing high power supercapacitors with enhanced energy densities. *Ultrasonics Sonochemistry*, **2018**, 45, 189-196	8.9	35
143	Extreme biomimetics: A carbonized 3D spongin scaffold as a novel support for nanostructured manganese oxide(IV) and its electrochemical applications. *Nano Research*, **2018**, 11, 4199-4214	10	38
142	The effect of operational parameters on the biodegradation of bisphenols by Trametes versicolor laccase immobilized on Hippospongia communis spongin scaffolds. *Science of the Total Environment*, **2018**, 615, 784-795	10.2	109
141	Anti-Tumorigenic and Anti-Metastatic Activity of the Sponge-Derived Marine Drugs Aeroplysinin-1 and Isofistularin-3 against Pheochromocytoma In Vitro. *Marine Drugs*, **2018**, 16,	6	28
140	First Report on Chitin in a Non-Verongiid Marine Demosponge: The Mycale euplectellioides Case. *Marine Drugs*, **2018**, 16,	6	23
139	Collagens of Poriferan Origin. *Marine Drugs*, **2018**, 16,	6	52
138	Marine Spongin: Naturally Prefabricated 3D Scaffold-Based Biomaterial. *Marine Drugs*, **2018**, 16,	6	53
137	Discovery of chitin in skeletons of non-verongiid Red Sea demosponges. *PLoS ONE*, **2018**, 13, e0195803	3.7	24
136	Multispectroscopic and molecular modeling studies on the interaction of copper-ibuprofenate complex with bovine serum albumin (BSA). *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2018**, 203, 510-521	4.4	24
135	Biosilica as a source for inspiration in biological materials science. *American Mineralogist*, **2018**, 103, 665-691	2.9	45
134	Chitin of Poriferan Origin as a Unique Biological Material **2018**, 821-854		2
133	Development of electrochemical sensor for sensitive determination of oxazepam based on silver-platinum core□shell nanoparticles supported on graphene. *Journal of Electroanalytical Chemistry*, **2018**, 823, 61-66	4.1	53
132	Chitin of poriferan origin and the bioelectrometallurgy of copper/copper oxide. *International Journal of Biological Macromolecules*, **2017**, 104, 1626-1632	7.9	40
131	Isolation and identification of chitin from heavy mineralized skeleton of Suberea clavata (Verongida: Demospongiae: Porifera) marine demosponge. *International Journal of Biological Macromolecules*, **2017**, 104, 1706-1712	7.9	38
130	miRNA-mediated expression switch of cell adhesion genes driven by microcirculation in chip. *Biochip Journal*, **2017**, 11, 262-269	4	8

129	Novel chitin scaffolds derived from marine sponge Ianthella basta for tissue engineering approaches based on human mesenchymal stromal cells: Biocompatibility and cryopreservation. *International Journal of Biological Macromolecules*, **2017**, 104, 1955-1965	7.9	60
128	3D chitinous scaffolds derived from cultivated marine demosponge Aplysina aerophoba for tissue engineering approaches based on human mesenchymal stromal cells. *International Journal of Biological Macromolecules*, **2017**, 104, 1966-1974	7.9	49
127	Extreme biomimetic approach for synthesis of nanocrystalline chitin-(Ti,Zr)O2 multiphase composites. *Materials Chemistry and Physics*, **2017**, 188, 115-124	4.4	29
126	On chemistry of α-chitin. *Carbohydrate Polymers*, **2017**, 176, 177-186	10.3	151
125	Adhesive Stalks of Diatom Didymosphenia geminata as a Novel Biological Adsorbent for Hazardous Metals Removal. *Clean - Soil, Air, Water*, **2017**, 45, 1600678	1.6	10
124	Treatment of model solutions and wastewater containing selected hazardous metal ions using a chitin/lignin hybrid material as an effective sorbent. *Journal of Environmental Management*, **2017**, 204, 300-310	7.9	36
123	Psychrophiles as Sources for Bioinspiration in Biomineralization and Biological Materials Science **2017**, 1-51		2
122	Immobilization of Titanium(IV) Oxide onto 3D Spongin Scaffolds of Marine Sponge Origin According to Extreme Biomimetics Principles for Removal of C.I. Basic Blue 9. *Biomimetics*, **2017**, 2,	3.7	25
121	Spongin-Based Scaffolds from Hippospongia communis Demosponge as an Effective Support for Lipase Immobilization. *Catalysts*, **2017**, 7, 147	4	29
120	Anthocyanin dye conjugated with Hippospongia communis marine demosponge skeleton and its antiradical activity. *Dyes and Pigments*, **2016**, 134, 541-552	4.6	23
119	Supercontinuum Generation in Naturally Occurring Glass Sponges Spicules. *Advanced Optical Materials*, **2016**, 4, 1608-1613	8.1	34
118	Functionalization of organically modified silica with gold nanoparticles in the presence of lignosulfonate. *International Journal of Biological Macromolecules*, **2016**, 85, 74-81	7.9	25
117	A novel chitosan/sponge chitin origin material as a membrane for supercapacitors – preparation and characterization. *RSC Advances*, **2016**, 6, 4007-4013	3.7	55
116	Cryosensitivity of Mesenchymal Stromal Cells Cryopreserved Within Marine Sponge Ianthella basta Skeleton-Based Carriers. *Problems of Cryobiology and Cryomedicine*, **2016**, 26, 13-23	0.4	4
115	Introduction to the Global Scenario of Marine Sponge Research **2016**, 1-23		0
114	Global Constraints, Prospects, and Perspectives of Marine Sponge Research **2016**, 25-35		
113	Biomedical Applications of Marine Sponge Collagens **2016**, 373-381		1
112	Candida antarctica Lipase B Immobilized onto Chitin Conjugated with POSS Compounds: Useful Tool for Rapeseed Oil Conversion. *International Journal of Molecular Sciences*, **2016**, 17,	6.3	13

111	Sodium Copper Chlorophyllin Immobilization onto Hippospongia communis Marine Demosponge Skeleton and Its Antibacterial Activity. *International Journal of Molecular Sciences*, **2016**, 17,	6.3	14
110	Multiphase Biomineralization: Enigmatic Invasive Siliceous Diatoms Produce Crystalline Calcite. *Advanced Functional Materials*, **2016**, 26, 2503-2510	15.6	30
109	Marine sponge skeleton photosensitized by copper phthalocyanine: A catalyst for Rhodamine B degradation. *Open Chemistry*, **2016**, 14, 243-254	1.6	21
108	Marine Invertebrates of Boka Kotorska Bay Unique Sources for Bioinspired Materials Science. *Handbook of Environmental Chemistry*, **2016**, 313-334	0.8	5
107	Solvothermal synthesis of hydrophobic chitin-polyhedral oligomeric silsesquioxane (POSS) nanocomposites. *International Journal of Biological Macromolecules*, **2015**, 78, 224-9	7.9	34
106	Octacalcium phosphate - a metastable mineral phase controls the evolution of scaffold forming proteins. *Journal of Materials Chemistry B*, **2015**, 3, 5318-5329	7.3	35
105	Extreme biomimetic approach for developing novel chitin-GeO2 nanocomposites with photoluminescent properties. *Nano Research*, **2015**, 8, 2288-2301	10	63
104	Insight into bio-metal interface formation in vacuo: interplay of S-layer protein with copper and iron. *Scientific Reports*, **2015**, 5, 8710	4.9	14
103	Novel nanostructured hematite–spongin composite developed using an extreme biomimetic approach. *RSC Advances*, **2015**, 5, 79031-79040	3.7	57
102	Biological Materials of Marine Origin. *Biologically-inspired Systems*, **2015**,	0.7	7
101	Chitin-lignin material as a novel matrix for enzyme immobilization. *Marine Drugs*, **2015**, 13, 2424-46	6	54
100	Poriferan Chitin as a Versatile Template for Extreme Biomimetics. *Polymers*, **2015**, 7, 235-265	4.5	151
99	Marine Collagens. *Biologically-inspired Systems*, **2015**, 321-341	0.7	1
98	Biocomposites and Mineralized Tissues. *Biologically-inspired Systems*, **2015**, 91-210	0.7	0
97	Adsorption of C.I. Natural Red 4 onto Spongin Skeleton of Marine Demosponge. *Materials*, **2014**, 8, 96-116	3.5	29
96	Chitin and chitosan in selected biomedical applications. *Progress in Polymer Science*, **2014**, 39, 1644-1667	29.6	645
95	Synthesis of nanostructured chitin–hematite composites under extreme biomimetic conditions. *RSC Advances*, **2014**, 4, 61743-61752	3.7	49
94	Deposition of silver nanoparticles on organically-modified silica in the presence of lignosulfonate. *RSC Advances*, **2014**, 4, 52476-52484	3.7	22

93	Silica/lignosulfonate hybrid materials: Preparation and characterization. *Open Chemistry*, **2014**, 12, 719-735	1.6	24
92	Identification of chitin in 200-million-year-old gastropod egg capsules. *Paleobiology*, **2014**, 40, 529-540	2.6	33
91	Discovery of a living coral reef in the coastal waters of Iraq. *Scientific Reports*, **2014**, 4, 4250	4.9	20
90	Metabolic influence of psychrophilic diatoms on travertines at the Huanglong Natural Scenic District of China. *International Journal of Environmental Research and Public Health*, **2014**, 11, 13084-96	4.6	7
89	Identification and first insights into the structure and biosynthesis of chitin from the freshwater sponge Spongilla lacustris. *Journal of Structural Biology*, **2013**, 183, 474-483	3.4	71
88	Poriferan chitin as a template for hydrothermal zirconia deposition. *Frontiers of Materials Science*, **2013**, 7, 248-260	2.5	63
87	Brominated skeletal components of the marine demosponges, Aplysina cavernicola and Ianthella basta: analytical and biochemical investigations. *Marine Drugs*, **2013**, 11, 1271-87	6	21
86	An extreme biomimetic approach: hydrothermal synthesis of β-chitin/ZnO nanostructured composites. *Journal of Materials Chemistry B*, **2013**, 1, 6469-6476	7.3	82
85	Isolation and identification of chitin in three-dimensional skeleton of Aplysina fistularis marine sponge. *International Journal of Biological Macromolecules*, **2013**, 62, 94-100	7.9	80
84	Preparation of chitin-silica composites by in vitro silicification of two-dimensional Ianthella basta demosponge chitinous scaffolds under modified Stöber conditions. *Materials Science and Engineering C*, **2013**, 33, 3935-41	8.3	61
83	Isolation and identification of the microalgal symbiont from primmorphs of the endemic freshwater sponge Lubomirskia baicalensis (Lubomirskiidae, Porifera). *European Journal of Phycology*, **2013**, 48, 497-508	2.2	12
82	Chitin-based renewable materials from marine sponges for uranium adsorption. *Carbohydrate Polymers*, **2013**, 92, 712-8	10.3	70
81	Extreme Biomimetics: formation of zirconium dioxide nanophase using chitinous scaffolds under hydrothermal conditions. *Journal of Materials Chemistry B*, **2013**, 1, 5092-5099	7.3	72
80	First report on chitinous holdfast in sponges (Porifera). *Proceedings of the Royal Society B: Biological Sciences*, **2013**, 280, 20130339	4.4	36
79	Preparation and Characterization of Multifunctional Chitin/Lignin Materials. *Journal of Nanomaterials*, **2013**, 2013, 1-13	3.2	31
78	PROSPECTS FOR APPLICATION OF Aplysinidae FAMILY MARINE SPONGE SKELETONS AND MESENCHYMAL STROMAL CELLS IN TISSUE ENGINEERING. *Biotechnologia Acta*, **2013**, 6, 115-121	0.3	5
77	Isolation and identification of chitin in the black coral Parantipathes larix (Anthozoa: Cnidaria). *International Journal of Biological Macromolecules*, **2012**, 51, 129-37	7.9	66
76	Three-dimensional structure of the shell plate assembly of the chiton Tonicella marmorea and its biomechanical consequences. *Journal of Structural Biology*, **2012**, 177, 314-28	3.4	53

75	Integrative taxonomy and molecular phylogeny of genus Aplysina (Demospongiae: Verongida) from Mexican Pacific. *PLoS ONE*, **2012**, 7, e42049	3.7	39
74	Biomimetic Silicification of Fibrous Chitin from Diatoms. *Chemistry of Materials*, **2011**, 23, 2973-2978	9.6	70
73	Calcite Reinforced Silica–Silica Joints in the Biocomposite Skeleton of Deep-Sea Glass Sponges. *Advanced Functional Materials*, **2011**, 21, 3473-3481	15.6	34
72	Revision of Aspidoscopulia Reiswig, 2002 (Porifera: Hexactinellida: Farreidae) with description of two new species. *Zootaxa*, **2011**, 2883, 1	0.5	8
71	Simple method for preparation of nanostructurally organized spines of sand dollar Scaphechinus mirabilis (Agassiz, 1863). *Marine Biotechnology*, **2011**, 13, 402-10	3.4	1
70	Mineralization of the metre-long biosilica structures of glass sponges is templated on hydroxylated collagen. *Nature Chemistry*, **2010**, 2, 1084-8	17.6	132
69	Discrimination between cells of murine and human origin in xenotransplants by species specific genomic in situ hybridization. *Xenotransplantation*, **2010**, 17, 153-9	2.8	43
68	Insights into Chemistry of Biological Materials: Newly Discovered Silica-Aragonite-Chitin Biocomposites in Demosponges. *Chemistry of Materials*, **2010**, 22, 1462-1471	9.6	104
67	Trichodina Sucker Disk. *Biologically-inspired Systems*, **2010**, 359-363	0.7	
66	Sand Dollar Spines. *Biologically-inspired Systems*, **2010**, 201-210	0.7	
65	Foraminifera. *Biologically-inspired Systems*, **2010**, 455-464	0.7	
64	Polychaete Worms: From Tube Builders to Glueomics. *Biologically-inspired Systems*, **2010**, 465-482	0.7	
63	Three-dimensional chitin-based scaffolds from Verongida sponges (Demospongiae: Porifera). Part I. Isolation and identification of chitin. *International Journal of Biological Macromolecules*, **2010**, 47, 132-40	7.9	128
62	Three-dimensional chitin-based scaffolds from Verongida sponges (Demospongiae: Porifera). Part II: Biomimetic potential and applications. *International Journal of Biological Macromolecules*, **2010**, 47, 141-5	7.9	98
61	Biomaterials and Biological Materials, Common Definitions, History, and Classification. *Biologically-inspired Systems*, **2010**, 3-22	0.7	1
60	Chitin and collagen as universal and alternative templates in biomineralization. *International Geology Review*, **2010**, 52, 661-699	2.3	249
59	Modern views on desilicification: biosilica and abiotic silica dissolution in natural and artificial environments. *Chemical Reviews*, **2010**, 110, 4656-89	68.1	176
58	Spongin. *Biologically-inspired Systems*, **2010**, 245-256	0.7	2

57	Self-Made Biological Materials of Protozoans. *Biologically-inspired Systems*, **2010**, 445-454	0.7	
56	Biological Materials of Marine Origin. *Biologically-inspired Systems*, **2010**,	0.7	48
55	Carboxymethylation of the fibrillar collagen with respect to formation of hydroxyapatite. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2010**, 92, 542-51	3.5	16
54	Spatially resolved determination of the structure and composition of diatom cell walls by Raman and FTIR imaging. *Analytical and Bioanalytical Chemistry*, **2010**, 398, 509-17	4.4	35
53	Investigation of nanoorganized biomaterials of marine origin. *Arabian Journal of Chemistry*, **2010**, 3, 27-32	3.9	8
52	The Spines of Sand Dollar Scaphechinus mirabilis (Agassiz 1863): Analytical and Structural Study. *Journal of Advanced Microscopy Research*, **2010**, 5, 100-109		7
51	Bamboo Corals as Living Bone Implants. *Biologically-inspired Systems*, **2010**, 195-199	0.7	1
50	Halogenated Biocomposites. *Biologically-inspired Systems*, **2010**, 379-390	0.7	1
49	Multiphase Biomineralization. *Biologically-inspired Systems*, **2010**, 103-122	0.7	1
48	Hierarchical Biological Materials. *Biologically-inspired Systems*, **2010**, 125-136	0.7	3
47	Suctorian Protozoa. *Biologically-inspired Systems*, **2010**, 351-357	0.7	
46	Marine Collagens. *Biologically-inspired Systems*, **2010**, 427-441	0.7	
45	BiomineralizationDemineralizationRemineralization Phenomena in Nature. *Biologically-inspired Systems*, **2010**, 59-101	0.7	1
44	Adhesive Gels from Marine Gastropods (Mollusca). *Biologically-inspired Systems*, **2010**, 335-340	0.7	
43	Rubber-Like Bioelastomers of Marine Origin. *Biologically-inspired Systems*, **2010**, 279-288	0.7	
42	Biomineralization. *Biologically-inspired Systems*, **2010**, 51-57	0.7	
41	Adhesion Systems in Echinodermata. *Biologically-inspired Systems*, **2010**, 327-334	0.7	
40	Gorgonin. *Biologically-inspired Systems*, **2010**, 257-270	0.7	

39	Biominerals. *Biologically-inspired Systems*, **2010**, 25-50	0.7	2
38	Suction in Molluscs. *Biologically-inspired Systems*, **2010**, 371-377	0.7	
37	Capsular Bioelastomers of Whelks. *Biologically-inspired Systems*, **2010**, 289-297	0.7	
36	Resilin. *Biologically-inspired Systems*, **2010**, 323-326	0.7	
35	Molluscs Spicules. *Biologically-inspired Systems*, **2010**, 211-242	0.7	
34	Chitin Protein-Based Composites. *Biologically-inspired Systems*, **2010**, 391-405	0.7	
33	Phenomenon of Interspace Mineralization in the Bilayered Organic Matrix of Deep-Sea Bamboo Coral (Anthozoa: Gorgonacea: Isididae). *Biologically-inspired Systems*, **2010**, 187-194	0.7	
32	Peculiarities of the Structural Organization of the Glass Sponges (Hexactinellida) Skeletons. *Biologically-inspired Systems*, **2010**, 143-185	0.7	
31	Chitin. *Biologically-inspired Systems*, **2010**, 409-425	0.7	
30	Byssus: From Inspiration to Development of Novel Biomaterials. *Biologically-inspired Systems*, **2010**, 299-317	3.7	
29	Barnacle Cements. *Biologically-inspired Systems*, **2010**, 341-348	0.7	
28	Paleodictyon Honeycomb Structure. *Biologically-inspired Systems*, **2010**, 137-141	0.7	0
27	Life in Extreme Environments: From Bacteria to Diatoms. *Biologically-inspired Systems*, **2010**, 485-498	0.7	
26	Giardia Suction. *Biologically-inspired Systems*, **2010**, 365-369	0.7	
25	Abductin. *Biologically-inspired Systems*, **2010**, 319-322	0.7	
24	Chitin-basierte organische Netzwerke ein integraler Bestandteil des Zellwandbiosilicates der Diatomee Thalassiosira pseudonana. *Angewandte Chemie*, **2009**, 121, 9904-9907	3.6	7
23	Chitin-based organic networks: an integral part of cell wall biosilica in the diatom Thalassiosira pseudonana. *Angewandte Chemie - International Edition*, **2009**, 48, 9724-7	16.4	197
22	Mineralization of biomimetically carboxymethylated collagen fibrils in a model dual membrane diffusion system. *Journal of Membrane Science*, **2009**, 326, 254-259	9.6	20

21	Principles of demineralization: modern strategies for the isolation of organic frameworks. Part II. Decalcification. *Micron*, **2009**, 40, 169-93	2.3	82
20	Chitin-based scaffolds are an integral part of the skeleton of the marine demosponge Ianthella basta. *Journal of Structural Biology*, **2009**, 168, 539-47	3.4	133
19	Modification of collagen in vitro with respect to formation of Nepsilon-carboxymethyllysine. *International Journal of Biological Macromolecules*, **2009**, 44, 51-6	7.9	33
18	Nanostructural Organization of Naturally Occurring Composites Part I: Silica-Collagen-Based Biocomposites. *Journal of Nanomaterials*, **2008**, 2008, 1-8	3.2	20
17	Nanostructural Organization of Naturally Occurring Composites Part II: Silica-Chitin-Based Biocomposites. *Journal of Nanomaterials*, **2008**, 2008, 1-8	3.2	32
16	Electron holography of biological samples. *Micron*, **2008**, 39, 229-56	2.3	35
15	Principles of demineralization: modern strategies for the isolation of organic frameworks. Part I. Common definitions and history. *Micron*, **2008**, 39, 1062-91	2.3	60
14	A Novel Biomimetic Hybrid Material Made of Silicified Collagen: Perspectives for Bone Replacement. *Advanced Engineering Materials*, **2007**, 9, 1061-1068	3.5	77
13	First evidence of chitin as a component of the skeletal fibers of marine sponges. Part I. Verongidae (demospongia: Porifera). *Journal of Experimental Zoology Part B: Molecular and Developmental Evolution*, **2007**, 308, 347-56	1.8	186
12	First evidence of the presence of chitin in skeletons of marine sponges. Part II. Glass sponges (Hexactinellida: Porifera). *Journal of Experimental Zoology Part B: Molecular and Developmental Evolution*, **2007**, 308, 473-83	1.8	125
11	Ultrastructural studies on the collagen of the marine sponge Chondrosia reniformis Nardo. *Biomacromolecules*, **2007**, 8, 3452-7	6.9	85
10	Biomimetically inspired hybrid materials based on silicified collagen. *International Journal of Materials Research*, **2007**, 98, 603-608	0.5	51
9	Temperature dependence of electric conductivity of bamboo coral skeleton and glass sponge spicules, the marine origin biomaterials. *Journal of Non-Crystalline Solids*, **2007**, 353, 4497-4500	3.9	4
8	Chitosan membrane as a template for hydroxyapatite crystal growth in a model dual membrane diffusion system. *Journal of Membrane Science*, **2006**, 273, 124-128	9.6	59
7	Biomaterial structure in deep-sea bamboo coral (Anthozoa: Gorgonacea: Isididae): perspectives for the development of bone implants and templates for tissue engineering. *Materialwissenschaft Und Werkstofftechnik*, **2006**, 37, 552-557	0.9	44
6	A modern approach to demineralization of spicules in glass sponges (Porifera: Hexactinellida) for the purpose of extraction and examination of the protein matrix. *Russian Journal of Marine Biology*, **2006**, 32, 186-193	0.7	33
5	Hydroxyapatite Crystal Growth on Modified Collagen I-Templates in a Model Dual Membrane Diffusion System. *Zeitschrift Fur Anorganische Und Allgemeine Chemie*, **2005**, 631, 1825-1830	1.3	16
4	Demineralisation von natürlichen Silikat-basierten Biomaterialien: Neue Strategie zur Isolation organischer Gerüststrukturen. *BIOmaterialien: Offizielles Organ Der Deutschen Gesellschaft Fuer Biomaterialien*, **2005**, 6,		19

3	Sensitivity of finite Markov chains under perturbation. *Statistics and Probability Letters*, **1993**, 17, 163-168	8.6	38
2	Collagen: A Huge Matrix in Glass Sponge Flexible Spicules of the Meter-Long Hyalonema sieboldi22-41		1
1	Application of polysaccharide-based biopolymers as supports in photocatalytic treatment of water and wastewater: a review. *Environmental Chemistry Letters*,	13.3	0