Hermann Ehrlich

Prof. Dr. rer. nat. habil

Hermann Ehrlich (07.04.1957) after the defense of the PhD thesis (1984) served as a postdoctoral researcher at Max-Bergmann Centre of Biomaterials and Institute of Materials Science in Dresden. After successful habilitation in 2011 at Christian-Albrechts University in Kiel he holds a W3 Heisenberg full professor position at the Institute of Experimental Physics at the TU Bergakademie Freiberg. His research is focused on marine biomaterials, biominerals, biocomposites and biomimetics. Using biochemical, cellular, molecular, and analytical approaches, he and his co-workers, for the first time, discovered and characterized chitin and novel hydroxylated collagen in the skeletal formations of marine sponges. During last ten years, he has published over 100 peer-reviewed articles, thirteen book chapters, two monographs and additionally holding six patents. Being the corresponding author, Hermann Ehrlich published his papers in such high impact journals as *Nature Chemistry*, *Scientific Reports*, *Chemical Reviews*, *Advanced Functional Materials*, *Chemistry of Materials* etc. In recent times, together with members of his team, he published various scientific discoveries in the field of biological materials, for example:

- Discovery of chitin in marine horn and glass sponges (2007, 2008), as well as in fresh water sponges (2013)
- Discovery of chitin in cell walls of diatoms (2009)
- Discovery of new collagen type in spicules of glass sponges (2010)
- Discovery of chitin silicate aragonite as well as silicate calcite biocomposite in the skeletons of marine sponges (2010, 2011)
- Discovery of the world's oldest (505 MYR) thus far known chitin (2013)
- Discovery of a living coral reef in Iraq (2014)
- Discovery of calcification in siliceous stalked diatoms (2016)
- Discovery of supercontinuum generation in glass sponge spicules (2016)

He represented numerous invited and keynote lectures at Columbia University, at Yale University, at Harvard University, at Massachusetts Institute of Technology as well. H. Ehrlich is the editorial board member of the international journals such as "*Scientific Reports*", "*Frontiers in Materials Science*", "*Journal of Chitin and Chitosan Science",* "*Marine Drugs*", "*Austin Chemical Engineering*", and "*Biomimetics*". He is editor of the special issues "*Marine Biomaterials*" of the journal "*Marine Drugs*", and "*Frontiers of Marine Biomaterials*" of the journal "*International Journal of Molecular Sciences*". He was elected to be the Chief-chairman of the 12th *International Symposium on Biomineralization* "BIOMIN'12" that took place in August 2013 in Freiberg, Germany. Recently, H. Ehrlich has been nominated for Gottfried Wilhelm Leibniz-Prize 2015.

Researcher ID (https://www.scopus.com/authid/detail.uri?authorId=55722706100; Scopus):

***h*-index = 29**
Sum of the Times Cited: 2462;
Average Citations per Article: 24.45
Cumulative impact factor: 447.

SCIENTIFIC AREA

- Biomineralization
- Biomaterials
- Marine Biotechnology
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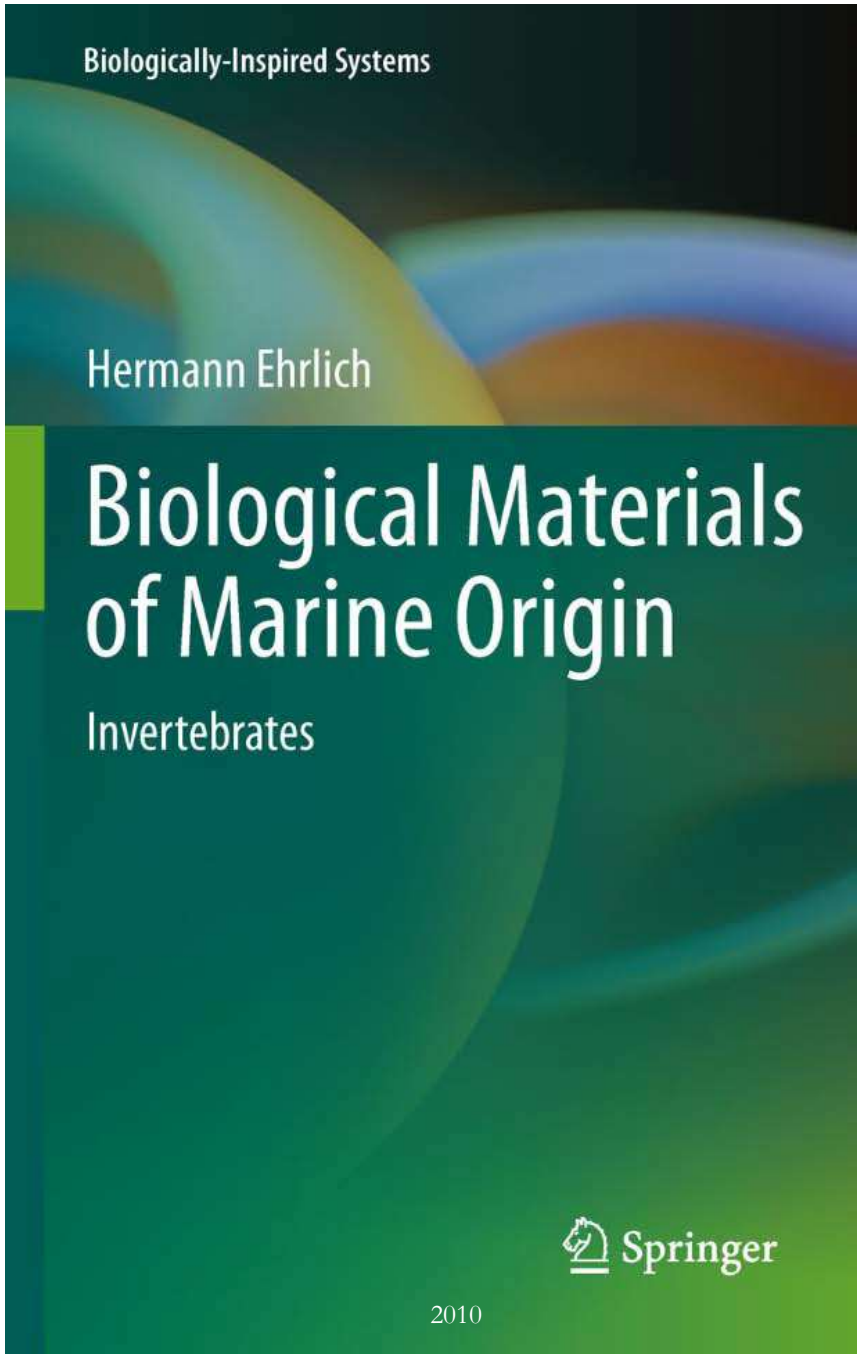
Websites:
http://tu-freiberg.de/exphys/biomineralogy-and-extreme-biomimetics
www.brommarin.com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Biological Materials of Marine Origin
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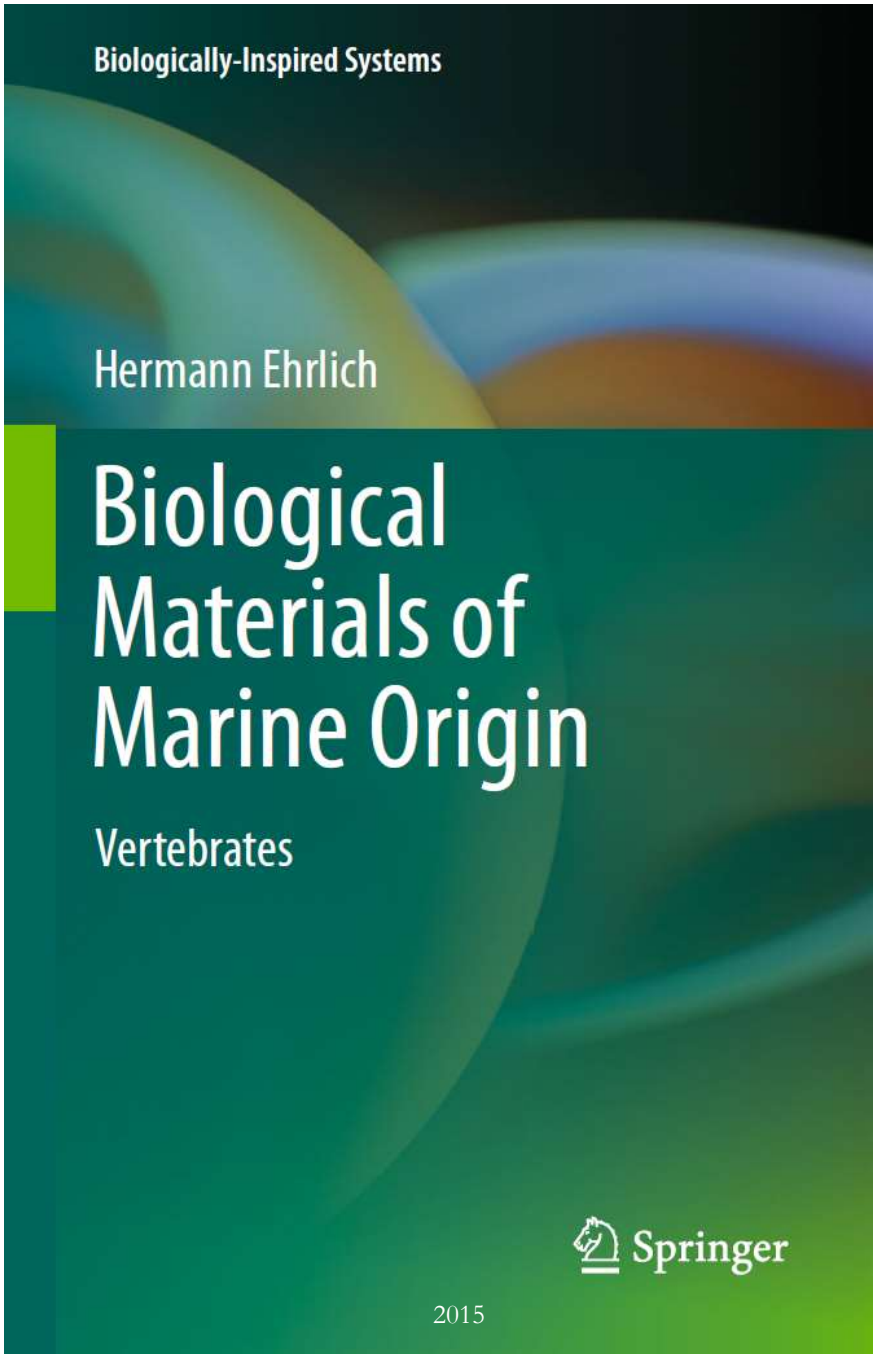
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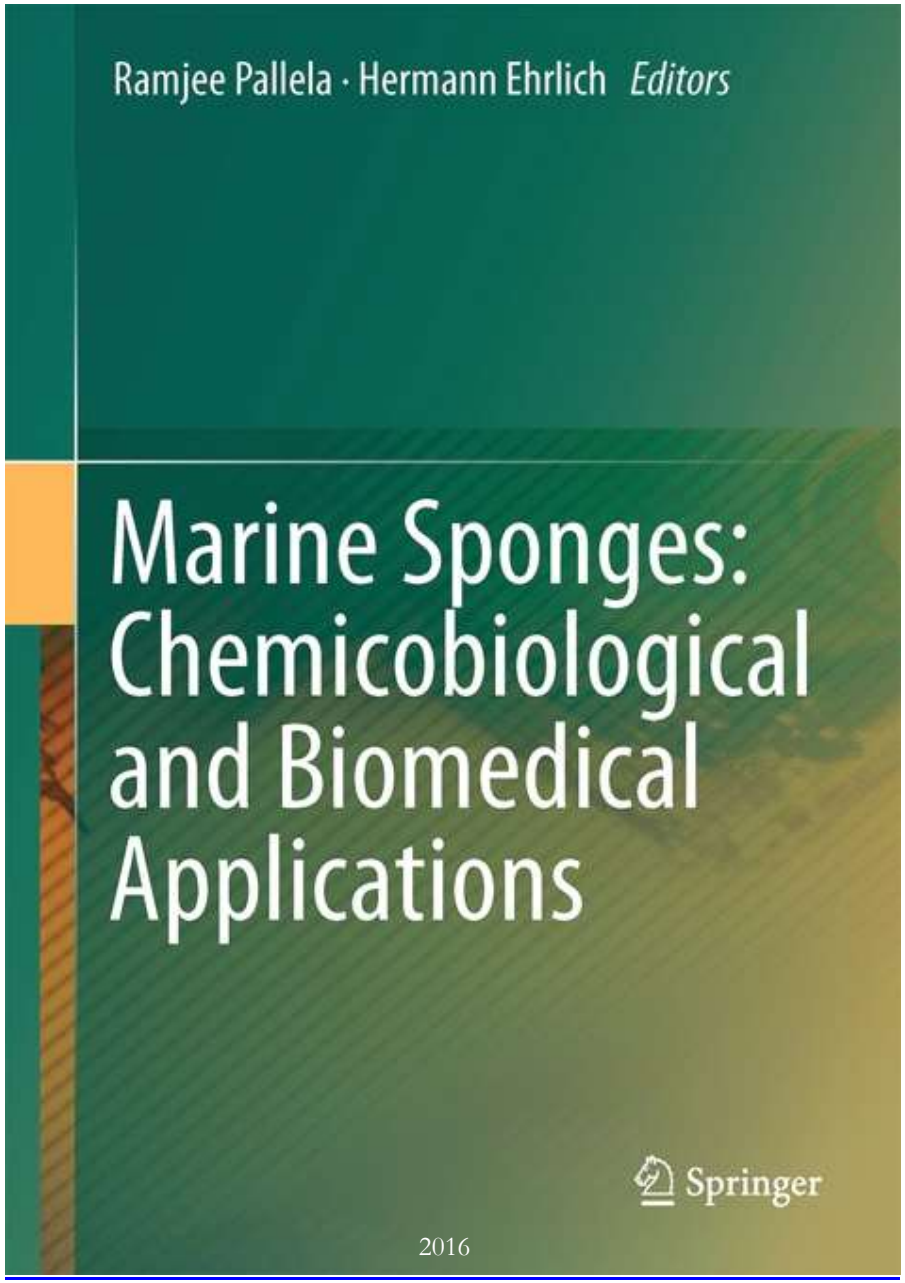
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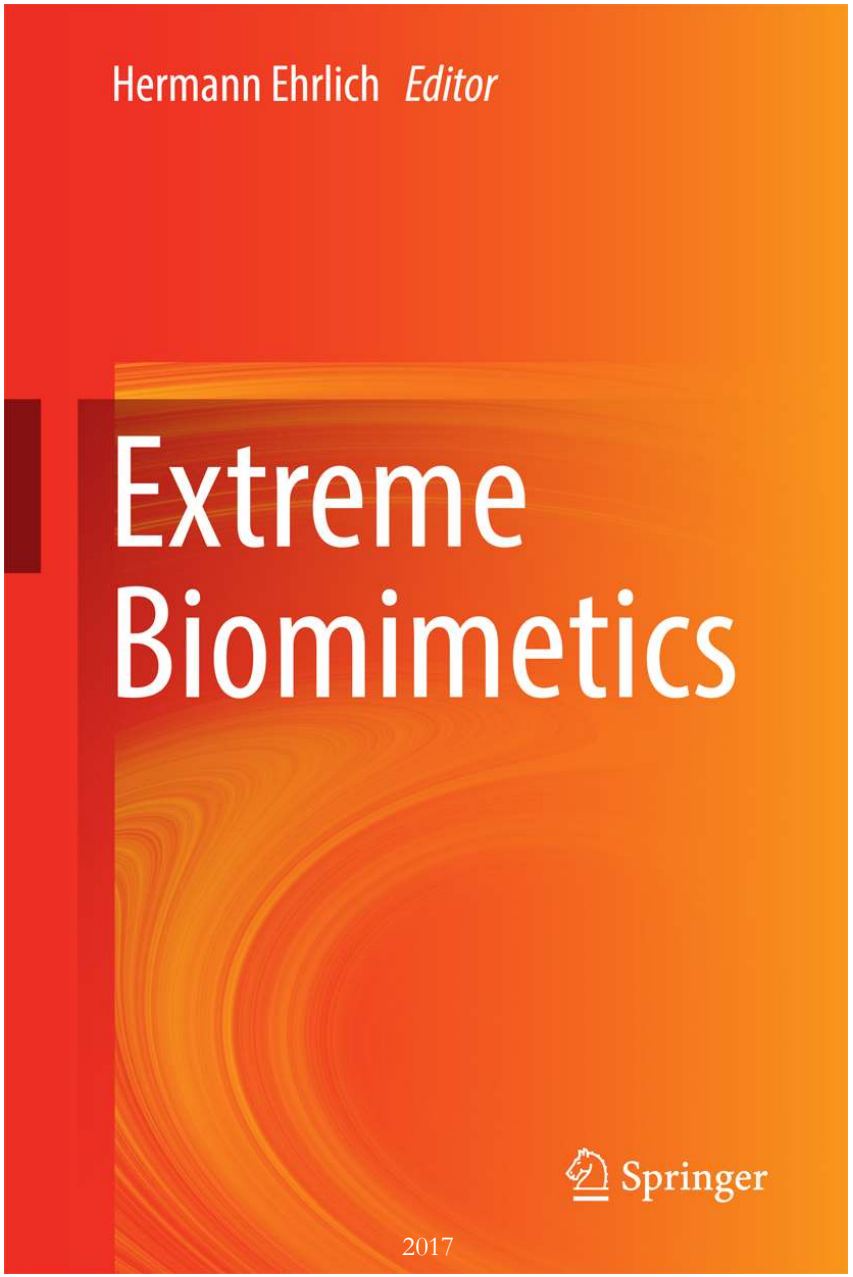
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