

eBook Information

Self-Propelled Janus Particles

D.J. Fisher

Monograph / PDF eBook DRM Free

Design and operation of Janus particles have a great potential for applications in fields such as environmental remediation, electronic engineering, bio-imaging, bio-sensing, drug delivery and other biomedical tasks.

Keyword: Janus Particles, Bio-imaging, Bio-sensing, Drug Delivery, Environmental Remediation, Electronic Engineering, Asymmetrical Colloidal Particles, Catalysis-propelled Particles, Nanoscale Engines, Chemical Asymmetry, Self-propulsion, Diffusiophoresis, Electrophoresis, Thermophoresis, Bubble Generation, External Propulsion, Radiation Effects, Electric Field, Magnetic Field, Gravitaxis, Barrier Effects

ISBN 13: 978-1-64490-119-9, **Publication Date:** 2021 (2/15/2021)

Direct URL: <https://www.mrforum.com/product/self-propelled-janus-particles>

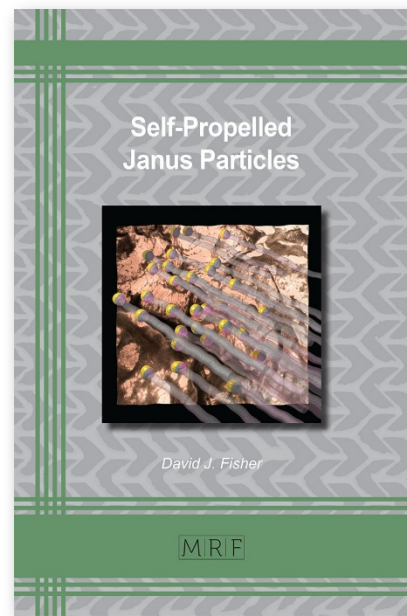
126 pages, PDF eBook DRM Free, USD 95.00

Materials Research Foundations Vol. 93 / **BISAC:** TEC021000 / **BIC/Thema:** TGM

Imprint: Materials Research Forum LLC, *Publisher's sales rights are Worldwide*

Summary:

Design and operation of Janus particles have a great potential for applications in fields such as environmental remediation, electronic engineering, bio-imaging, bio-sensing, drug delivery and other biomedical tasks. Current research aims to imitate the molecular motors of biological systems by creating micro- and nano-scale particles which can exploit chemical energy so as to produce directional motion. The assembling of self-propelled particles and their movement can be controlled by using external fields, especially magnetic fields. The book references 332 original resources and includes their direct web link for in-depth reading.



Print Book Information

Self-Propelled Janus Particles

D.J. Fisher

Monograph / color print, paperback

Design and operation of Janus particles have a great potential for applications in fields such as environmental remediation, electronic engineering, bio-imaging, bio-sensing, drug delivery and other biomedical tasks.

Keyword: Janus Particles, Bio-imaging, Bio-sensing, Drug Delivery, Environmental Remediation, Electronic Engineering, Asymmetrical Colloidal Particles, Catalysis-propelled Particles, Nanoscale Engines, Chemical Asymmetry, Self-propulsion, Diffusiophoresis, Electrophoresis, Thermophoresis, Bubble Generation, External Propulsion, Radiation Effects, Electric Field, Magnetic Field, Gravitaxis, Barrier Effects

ISBN 13: 978-1-64490-118-2, **Publication Date:** 2021 (2/15/2021)

Direct URL: <https://www.mrforum.com/product/self-propelled-janus-particles>

126 pages, color print, paperback, USD 95.00

Materials Research Foundations Vol. 93 / **BISAC:** TEC021000 / **BIC/Thema:** TGM

Imprint: Materials Research Forum LLC, *Publisher's sales rights are Worldwide*

Summary:

Design and operation of Janus particles have a great potential for applications in fields such as environmental remediation, electronic engineering, bio-imaging, bio-sensing, drug delivery and other biomedical tasks. Current research aims to imitate the molecular motors of biological systems by creating micro- and nano-scale particles which can exploit chemical energy so as to produce directional motion. The assembling of self-propelled particles and their movement can be controlled by using external fields, especially magnetic fields. The book references 332 original resources and includes their direct web link for in-depth reading.

