



## ASSEMBLY AND PRINTING OF MICRO AND NANO OBJECTS

By Tobias Kraus

Cuvillier Verlag Sep 2007, 2007. Taschenbuch. Condition: Neu. Neuware - Materials can be fabricated using particles as building blocks. Particles from various substances can thus be introduced into normally incompatible matrices, the unique properties of very small particles can be exploited, and different properties of different particles can be combined by mixing them in a material. Even very small particles are readily synthesized with high quality using modern chemical methods. Size ranges and material combinations that are usually difficult to attain can thus be achieved easily. In contrast to other methods, particle-based approaches allow us to fabricate regular structures at very small scales. The arrangement of particles in such structures is possible via self-assembly, which often is the only economical approach for small particle sizes. This work shows that certain conditions have to be fulfilled for self-assembly to be useful in technological applications. A concept is suggested that meets these requirements by combining templated self-assembly with adhesion-based particle handling. Using these methods, particles with diameters between 100  $\mu\text{m}$  and 60 nm are assembled, transferred, and integrated on standard substrates without predefined surface structures. This produces materials with particles that retain their specific activities. Metal-coated microbeads provide electrical contact to semiconductors. Precisely arranged...

DOWNLOAD



READ ONLINE

[ 2.3 MB ]

### Reviews

*I just started out looking over this ebook. it was writtern extremely perfectly and useful. You are going to like the way the blogger publish this book.*  
-- **Micaela Kutch**

*This pdf is really gripping and fascinating. It is actually full of knowledge and wisdom I am just delighted to tell you that this is the very best pdf i have got study during my very own daily life and might be he finest pdf for actually.*  
-- **Ms. Althea Kassulke DDS**

## Related eBooks



### [The Preschool Inclusion Toolbox: How to Build and Lead a High-Quality Program](#)

Brookes Publishing Co, United States, 2015. Paperback. Book Condition: New. 274 x 213 mm. Language: English . Brand New Book. Filled with tips, tools, and strategies, this book is the comprehensive, practical toolbox preschool administrators need to implement early childhood inclusion through...



### [Self Esteem for Women: 10 Principles for Building Self Confidence and How to Be Happy in Life \(Free Living, Happy Life, Overcoming Fear, Beauty Secrets, Self Concept\)](#)

Createspace, United States, 2015. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.Self Esteem for Women 10 Principles for building self confidence and how to be happy in life (free living, happy...



### [Daddyteller: How to Be a Hero to Your Kids and Teach Them What s Really by Telling Them One Simple Story at a Time](#)

Createspace, United States, 2013. Paperback. Book Condition: New. 214 x 149 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.You have the power, Dad, to influence and educate your child. You can teach your child about a virtue or...



### [No Friends?: How to Make Friends Fast and Keep Them](#)

Createspace, United States, 2014. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.Do You Have NO Friends? Are you tired of not having any friend and being lonely all the time...



### [Games with Books : 28 of the Best Childrens Books and How to Use Them to Help Your Child Learn - From Preschool to Third Grade](#)

Book Condition: Brand New. Book Condition: Brand New.



### [Games with Books : Twenty-Eight of the Best Childrens Books and How to Use Them to Help Your Child Learn - from Preschool to Third Grade](#)

Book Condition: Brand New. Book Condition: Brand New.