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Review Summary; for full text:
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ON THE WEB THIS WEEK
>> Science Podcast
This week’s show features the abundance and diversity of bacterial vesicles in the world’s oceans and a roundup of stories from our daily news site.
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The immune system’s response to a mutant protein produced by an incipient cancer may help to explain an autoimmune disease.

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J. S. Krauser et al.
Long-lived oscillations of the internal state of a trapped fermionic potassium-40 gas occur within a single spatial mode.

160 Performing Mathematical Operations with Metamaterials
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An approach is described whereby metamaterials can be designed to perform a suite of mathematical functions.

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L. Liu et al.
The orientation of a growing boron nitride film is determined by its graphene template and not the underlying substrate.

167 Self-Accelerating CO Sorption in a Soft Nanoporous Crystal
H. Sato et al.
A soft nanoporous crystalline solid exhibits self-accelerating, selective carbon monoxide adsorption.

171 Transient Water Vapor at Europa’s South Pole
L. Roth et al.
Hubble Space Telescope images of Jupiter’s moon Europa reveal emission consistent with transient water vapor plumes.

174 Strong Sensitivity of Pine Island Ice-Shelf Melting to Climatic Variability
P. Dutrieux et al.
Colder surface ocean waters decreased the rate of melting under the Pine Island Glacier ice shelf in 2012.

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186 Progenitor Outgrowth from the Niche in Drosophila Trachea Is Guided by FGF from Decaying Branches
F. Chen and M. A. Krasnow
Progenitor cells in flies form new trachea by following an embryonic inducer reactivated in decaying branches.

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B. E. Johnson et al.
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193 Single-Cell RNA-Seq Reveals Dynamic, Random Monoallelic Gene Expression in Mammalian Cells
Q. Deng et al.
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Larval zebrafish show more refined musculature control than expected.

200 Apical Abscission Alters Cell Polarity and Dismantles the Primary Cilium During Neurogenesis
R. M. Das and K. G. Storey
During vertebrate neuronal development, the apical membrane is shed, allowing further differentiation.

204 Internalization of Salmonella by Macrophages Induces Formation of Nonreplicating Persisters
S. Helaine et al.
Upon internalization, intracellular Salmonella choose between replication or a form of quiescence known as persistence.
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