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These windmills are so tiny, you could fit 10 of them on a grain of rice | Grist (<http://todayeco.com/pages/22037994-these-windmills-are-so-tiny-you-could-fit-10-of-them-on-a>)

grist.org (<http://todayeco.com/sites/grist.org>) 13 Jan '14, 12pm (Mon, 13 Jan 2014 18:36:50 GMT)

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These windmills are so tiny, you could fit 10 of them on a grain of rice



The gospel about windmills is that bigger is better. And there are advantages to building bigger windmills: As they grow, the energy they produce increases exponentially, because physics. But two researchers at UT-Arlington went the other way, and made micro windmills so small they're "a tenth the size of a grain of rice," Raw Story says . When a windmill is that tiny, wind comes easy — you could just wave your hand over these things and the movement in the air would send them spinning. Here's how the researchers imagine this would work : "Imagine that they can be cheaply made on the surfaces of portable electronics," Chiao said, "so you can place

them on a sleeve for your smart phone. When the phone is out of battery power, all you need to do is to put on the sleeve, wave the phone in the air for a few minutes and you can use the phone again." We want this to happen becau...

Full article: <http://grist.org/list/these-windmills-are-so-tiny-you-cou...> (<http://grist.org/list/these-windmills-are-so-tiny-you-could-fit-10-of-them-on-a-grain-of-rice/>)

Tweets



@RachelBeeGee (<http://twitter.com/RachelBeeGee>) »
(<http://twitter.com/1944578048/status/425773258252640256>) 21 Jan '14, 5pm (Tue, 21 Jan 2014 23:33:49 GMT)

hand-talkers, the new power plants“@grist: Could your smartphone run on these tiny windmills one day? [link] (<http://todayeco.com/pages/22037994-these-windmills-are-so-tiny-you-could-fit-10-of-them-on-a>)”



@Riglo (<http://twitter.com/Riglo>) » (<http://twitter.com/17959325/status/425499763887575040>) 20 Jan '14, 11pm (Tue, 21 Jan 2014 05:27:03 GMT)

Grist website, "These windmills are so tiny, you could fit 10 of them on a grain of rice": [link] (<http://todayeco.com/pages/22037994-these-windmills-are-so-tiny-you-could-fit-10-of-them-on-a>)



@6SigmaProEngr (<http://twitter.com/6SigmaProEngr>) »
(<http://twitter.com/223023690/status/425482708341784576>) 20 Jan '14, 10pm (Tue, 21 Jan 2014 04:19:17 GMT)

RT @Sannri: Could your smartphone run on these tiny windmills one day? [link] (<http://todayeco.com/pages/22037994-these-windmills-are-so-tiny-you-could-fit-10-of-them-on-a>) via @grist



@Jamiejhagen (<http://twitter.com/Jamiejhagen>) »
(<http://twitter.com/306506766/status/425382904789622784>) 20 Jan '14, 3pm (Mon, 20 Jan 2014 21:42:42 GMT)

I would like that very much! “@grist: Could your smartphone run on these tiny windmills one day? [link] (<http://todayeco.com/pages/22037994-these-windmills-are-so-tiny-you-could-fit-10-of-them-on-a>)”



@grist (<http://twitter.com/grist>) » (<http://twitter.com/7215512/status/425374447525437440>) 20 Jan '14, 3pm (Mon, 20 Jan 2014 21:09:06 GMT)

Could your smartphone run on these tiny windmills one day? [link] (<http://todayeco.com/pages/22037994-these-windmills-are-so-tiny-you-could-fit-10-of-them-on-a>)



@Solarecstasy_pl (http://twitter.com/Solarecstasy_pl) »
(<http://twitter.com/364254176/status/424123172653649920>) 17 Jan '14, 4am (Fri, 17 Jan 2014 10:16:58 GMT)

wiatrak wielkości ziarenka od ryżu... [link] (<http://todayeco.com/pages/22037994-these-windmills-are-so-tiny-you-could-fit-10-of-them-on-a>)



@climateliaisons (<http://twitter.com/climateliaisons>) »
(<http://twitter.com/1543768212/status/423455932153344000>) 15 Jan '14, 8am (Wed, 15 Jan 2014 14:05:36 GMT)

We like wind, in all shapes and sizes! [link] (<http://todayeco.com/pages/22037994-these-windmills-are-so-tiny-you-could-fit-10-of-them-on-a>)



@KateWolfenden (<http://twitter.com/KateWolfenden>) »
(<http://twitter.com/627189723/status/423394941725704192>) 15 Jan '14, 4am (Wed, 15 Jan 2014 10:03:15 GMT)

Awesome discover of the day: [link] (<http://todayeco.com/pages/22037994-these-windmills-are-so-tiny-you-could-fit-10-of-them-on-a>)



@cpeggers (<http://twitter.com/cpeggers>) » (<http://twitter.com/21608078/status/423246736925016064>) 14 Jan '14, 6pm (Wed, 15 Jan 2014 00:14:20 GMT)
Tiny Teeny Windmills ... [link] (<http://todayeco.com/pages/22037994-these-windmills-are-so-tiny-you-could-fit-10-of-them-on-a>)



@marklaventure (<http://twitter.com/marklaventure>) »
(<http://twitter.com/352579799/status/423150156931145729>) 14 Jan '14, 11am (Tue, 14 Jan 2014 17:50:33 GMT)

RT @Design4Change: One day your smartphone could be charged by these tiny windmills [link] (<http://todayeco.com/pages/22037994-these-windmills-are-so-tiny-you-could-fit-10-of-them-on-a>)



@BusesAreBridges (<http://twitter.com/BusesAreBridges>) »
(<http://twitter.com/2277706938/status/423099704894050304>) 14 Jan '14, 8am (Tue, 14 Jan 2014 14:30:05 GMT)

RT @AlleghenyFront: Tiny bubbles, tiny houses, tiny...windmills? To power your cellphone in the future [link] (<http://todayeco.com/pages/22037994-these-windmills-are-so-tiny-you-could-fit-10-of-them-on-a>) via @grist



@AlleghenyFront (<http://twitter.com/AlleghenyFront>) »
(<http://twitter.com/26259268/status/423098593520529409>) 14 Jan '14, 8am (Tue, 14 Jan 2014 14:25:40 GMT)

Tiny bubbles, tiny houses, tiny...windmills? To power your cellphone in the future [link] (<http://todayeco.com/pages/22037994-these-windmills-are-so-tiny-you-could-fit-10-of-them-on-a>) via @grist



@greenami1 (<http://twitter.com/greenami1>) »
(<http://twitter.com/1175665782/status/423009114063904768>) 14 Jan '14, 2am (Tue, 14 Jan 2014 08:30:06 GMT)

Eureka! #Windmolens 10x kleiner dan een rijstkorrel. Nu nog een #nano Don Quixote: [link] (<http://todayeco.com/pages/22037994-these-windmills-are-so-tiny-you-could-fit-10-of-them-on-a>) #micro #windmills #renewables



@TCImarketplace (<http://twitter.com/TCImarketplace>) »
(<http://twitter.com/630044749/status/423007874441568256>) 14 Jan '14, 2am (Tue, 14 Jan 2014 08:25:11 GMT)

In the future, your phone could be powered by these mini windmills: [link] (<http://todayeco.com/pages/22037994-these-windmills-are-so-tiny-you-could-fit-10-of-them-on-a>)

@pmagn (<http://twitter.com/pmagn>) » (<http://twitter.com/27049579/status/422957807122399232>) 13 Jan '14, 11pm



(Tue, 14 Jan 2014 05:06:14 GMT)

RT @ClimateActionBC: These windmills are so tiny, you could fit 10 of them on a grain of rice [link]
(<http://todayeco.com/pages/22037994-these-windmills-are-so-tiny-you-could-fit-10-of-them-on-a>)



@Climateshifters (<http://twitter.com/Climateshifters>) »

(<http://twitter.com/2259492908/status/422955705461911552>) 13 Jan '14, 10pm (Tue, 14 Jan 2014 04:57:53 GMT)

RT @shapeshiftdream: Bigger is not necessarily better #renewables #wind [link]
(<http://todayeco.com/pages/22037994-these-windmills-are-so-tiny-you-could-fit-10-of-them-on-a>)



@shapeshiftdream (<http://twitter.com/shapeshiftdream>) »

(<http://twitter.com/288018590/status/422953242796896256>) 13 Jan '14, 10pm (Tue, 14 Jan 2014 04:48:05 GMT)

Bigger is not necessarily better #renewables #wind [link] (<http://todayeco.com/pages/22037994-these-windmills-are-so-tiny-you-could-fit-10-of-them-on-a>)



@endhunger1of52 (<http://twitter.com/endhunger1of52>) »

(<http://twitter.com/21803859/status/422946833996853248>) 13 Jan '14, 10pm (Tue, 14 Jan 2014 04:22:37 GMT)

Re-think everything. [link] (<http://todayeco.com/pages/22037994-these-windmills-are-so-tiny-you-could-fit-10-of-them-on-a>)



@grist (<http://twitter.com/grist>) » (<http://twitter.com/7215512/status/422930319600136192>) 13 Jan '14, 9pm (Tue, 14 Jan 2014 03:17:00 GMT)

One day your smartphone could be charged by these tiny windmills [link]

(<http://todayeco.com/pages/22037994-these-windmills-are-so-tiny-you-could-fit-10-of-them-on-a>)



@OlivPi (<http://twitter.com/OlivPi>) » (<http://twitter.com/1355537244/status/422915351735959552>) 13 Jan '14, 8pm (Tue, 14 Jan 2014 02:17:31 GMT)

“@susearth: These windmills are so tiny, you could fit 10 of them on a grain of rice [link]
(<http://todayeco.com/pages/22037994-these-windmills-are-so-tiny-you-could-fit-10-of-them-on-a>)” #lol



@dameocrat (<http://twitter.com/dameocrat>) » (<http://twitter.com/26559205/status/422910742849781760>) 13 Jan '14, 7pm (Tue, 14 Jan 2014 01:59:13 GMT)

RT @susearth: These windmills are so tiny, you could fit 10 of them on a grain of rice [link]

(<http://todayeco.com/pages/22037994-these-windmills-are-so-tiny-you-could-fit-10-of-them-on-a>)



@TSRJournal (<http://twitter.com/TSRJournal>) »

(<http://twitter.com/210976445/status/422871633980715008>) 13 Jan '14, 5pm (Mon, 13 Jan 2014 23:23:48 GMT)

Windmills tenth the size of rice! [link] (<http://todayeco.com/pages/22037994-these-windmills-are-so-tiny-you-could-fit-10-of-them-on-a>)



@Natureology (<http://twitter.com/Natureology>) »

(<http://twitter.com/284477321/status/422833480326975488>) 13 Jan '14, 2pm (Mon, 13 Jan 2014 20:52:12 GMT)

#cleantech: These windmills are so tiny, you could fit 10 of them on a grain of rice [link]
(<http://todayeco.com/pages/22037994-these-windmills-are-so-tiny-you-could-fit-10-of-them-on-a>)"



@TheresaLoe (<http://twitter.com/TheresaLoe>) »
(<http://twitter.com/16271209/status/422809193541038081>) 13 Jan '14, 1pm (Mon, 13 Jan 2014 19:15:41 GMT)

Whoa! RT @grist: These windmills are so tiny, you could fit 10 of them on a grain of rice [link]
(<http://todayeco.com/pages/22037994-these-windmills-are-so-tiny-you-could-fit-10-of-them-on-a>)



@Barnett_MTU (http://twitter.com/Barnett_MTU) »
(<http://twitter.com/1488010970/status/422803261016391680>) 13 Jan '14, 12pm (Mon, 13 Jan 2014 18:52:07 GMT)

Micro-windmills to power your iPhone? [link] (<http://todayeco.com/pages/22037994-these-windmills-are-so-tiny-you-could-fit-10-of-them-on-a>)



@GroenWerkt (<http://twitter.com/GroenWerkt>) »
(<http://twitter.com/105269852/status/422802350202290176>) 13 Jan '14, 12pm (Mon, 13 Jan 2014 18:48:30 GMT)

#grist These windmills are so tiny, you could fit 10 of them on a grain of rice #mlfeeds: Just wave your hand,... [link]
(<http://todayeco.com/pages/22037994-these-windmills-are-so-tiny-you-could-fit-10-of-them-on-a>)



@gogreenhbcus (<http://twitter.com/gogreenhbcus>) »
(<http://twitter.com/2164632696/status/422799451271749632>) 13 Jan '14, 12pm (Mon, 13 Jan 2014 18:36:59 GMT)

RT @grist: These windmills are so tiny, you could fit 10 of them on a grain of rice [link]
(<http://todayeco.com/pages/22037994-these-windmills-are-so-tiny-you-could-fit-10-of-them-on-a>)



@grist (<http://twitter.com/grist>) » (<http://twitter.com/7215512/status/422799416882638848>) 13 Jan '14, 12pm (Mon, 13 Jan 2014 18:36:50 GMT)

These windmills are so tiny, you could fit 10 of them on a grain of rice [link]
(<http://todayeco.com/pages/22037994-these-windmills-are-so-tiny-you-could-fit-10-of-them-on-a>)



@DoorOfCellar (<http://twitter.com/DoorOfCellar>) »
(<http://twitter.com/259088924/status/422802191104356352>) 13 Jan '14, 12pm (Mon, 13 Jan 2014 18:47:52 GMT)

RT @grist: These windmills are so tiny, you could fit 10 of them on a grain of rice [link]
(<http://todayeco.com/pages/22037994-these-windmills-are-so-tiny-you-could-fit-10-of-them-on-a>)



@drnewbold (<http://twitter.com/drnewbold>) » (<http://twitter.com/24311134/status/422801352587083776>) 13 Jan '14, 12pm (Mon, 13 Jan 2014 18:44:32 GMT)

RT @grist: These windmills are so tiny, you could fit 10 of them on a grain of rice [link]
(<http://todayeco.com/pages/22037994-these-windmills-are-so-tiny-you-could-fit-10-of-them-on-a>)



@CBPStrategies (<http://twitter.com/CBPStrategies>) »
(<http://twitter.com/1134880476/status/422801028954595328>) 13 Jan '14, 12pm (Mon, 13 Jan 2014 18:43:15 GMT)

RT @grist: These windmills are so tiny, you could fit 10 of them on a grain of rice [link]
(<http://todayeco.com/pages/22037994-these-windmills-are-so-tiny-you-could-fit-10-of-them-on-a>)



@BillNigh (<http://twitter.com/BillNigh>) » (<http://twitter.com/15797425/status/422800864756002816>) 13 Jan '14, 12pm (Mon, 13 Jan 2014 18:42:36 GMT)

RT @grist: These windmills are so tiny, you could fit 10 of them on a grain of rice [link]
(<http://todayeco.com/pages/22037994-these-windmills-are-so-tiny-you-could-fit-10-of-them-on-a>)



@livenyclife (<http://twitter.com/livenyclife>) » (<http://twitter.com/1120709312/status/422800562422571008>) 13 Jan '14, 12pm (Mon, 13 Jan 2014 18:41:24 GMT)

RT @grist: These windmills are so tiny, you could fit 10 of them on a grain of rice [link]
(<http://todayeco.com/pages/22037994-these-windmills-are-so-tiny-you-could-fit-10-of-them-on-a>)



@Fikov58 (<http://twitter.com/Fikov58>) » (<http://twitter.com/331954542/status/422799940445020160>) 13 Jan '14, 12pm (Mon, 13 Jan 2014 18:38:55 GMT)

RT @grist: These windmills are so tiny, you could fit 10 of them on a grain of rice [link]
(<http://todayeco.com/pages/22037994-these-windmills-are-so-tiny-you-could-fit-10-of-them-on-a>)



(<http://todayeco.com/pages/22019360-micro-windmills-could-one-day-charge-cell-phones>)

Micro-windmills could one day charge cell phones
(<http://todayeco.com/pages/22019360-micro-windmills-could-one-day-charge-cell-phones>)

treehugger.com (<http://todayeco.com/sites/treehugger.com>) 13 Jan '14, 6am (Mon, 13 Jan 2014 12:09:26 GMT)

Recently it seems like there has been a rash of renewable energy ideas for charging our gadgets , especially our cell phon...

A Smart Sensor Basketball & 9 Other Cool CES Ga...
(<http://eesage.com/pages/21987359-2014-ces-cool-gadgets-for-fit-fashion-ee-times>)

eetimes.com (<http://eesage.com/sites/eetimes.com>) 12 Jan '14, 11am (Sun, 12 Jan 2014 17:30:06 GMT)

MADISON, Wis. — For technology companies to showcase the power of multiple sensors and low-power wireless chips, there is ...

I have just added a review on Wee Nam Kee Haina...
(<http://sglinks.com/food/pages/22031506-wee-nam-kee-hainanese-chicken-rice-restaurant-user-review>)

hungrygowhere.com (<http://sglinks.com/food/sites/hungrygowhere.com>) 13 Jan '14, 12pm (Mon, 13 Jan 2014 18:14:18 GMT)

I was going through the reviews and one of them mentioned "pristine eatery". Fair enough, that review was done 2 years bac...

Life of a Rice Delivery Man (<http://sglinks.com/food/pages/21788989-life-of-a-rice-delivery-man>)

makansutra.com (<http://sglinks.com/food/sites/makansutra.com>) 7 Jan '14, 7pm (Wed, 08 Jan 2014 01:17:09 GMT)

Every day at work, they come face to face with Indians, Malays and Chinese, but he speaks only speaking Mandarin and Hokki...

Rationalising Rice: In the effort to rationalis...
(<http://bmalaysia.com/pages/22203333-rationalising-rice>)

bigdogdotcom.wordpress.com (<http://bmalaysia.com/sites/bigdogdotcom.wordpress.com>) 17 Jan '14, 10am (Fri, 17 Jan 2014 16:16:56 GMT)

In the effort to rationalise the price of raw paddy as part of the exercise to minimise the impact of wholesale cartels an...

Against the Grain: Louis Kazan, a furniture man...
(<http://luxuryfeed.com/pages/22142284-against-the-grain-home-and-design-robb-report-the-global>)

robbreport.com (<http://luxuryfeed.com/sites/robbreport.com>) 16 Jan '14, 3am (Thu, 16 Jan 2014 09:26:06 GMT)

Louis Kazan, a furniture manufacturer that has been producing contemporary designs in Brazil's largest city for more than ...



(<http://buildingfree.com/pages/21999547-downsizing-in-a-unique-tiny-home>)

Downsizing in a Unique Tiny Home
(<http://buildingfree.com/pages/21999547-downsizing-in-a-unique-tiny-home>)

jetsongreen.com (<http://buildingfree.com/sites/jetsongreen.com>) 12 Jan '14, 6pm (Mon, 13 Jan 2014 00:16:19 GMT)

When Phoenix and her 24-year old son decided to downsize they opted to move into 2 joined tiny houses built by Jeff and Br...

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