

Archival Journal Publications and Book Chapters

- Nikhil Koratkar has 98 archival journal papers and four book chapters published and in-press.
- > 1900 Citations (www.scopus.com) as of May 05, 2012 with an H-index of 22.
- Nikhil Koratkar's publications include one paper in **Nature (Impact Factor: 36.1)**, two in **Nature Materials (Impact Factor: 29.89)**, four in **Nano Letters (Impact Factor: 12.18)**, three in **Advanced Materials (Impact factor: 10.85)**, three in **ACS Nano (Impact Factor: 9.85)**, one in **Advanced Functional Materials (Impact Factor: 8.5)**, one in **Physical Review Letters (Impact Factor: 7.62)**, six in **Small (Impact Factor: 7.33)** and twelve in Applied Physics Letters (Impact Factor: 3.82).
- Nikhil Koratkar is the **Corresponding Author** on all of his publications in Nature, Nature Materials, Nano Letters, Advanced Materials and Advanced Functional Materials. He is also the corresponding author on 2 out of 3 ACS Nano papers, 5 out of 6 Small papers and 11 out of 12 Applied Physics Letters papers.

Book Chapters:

Zuankai Wang, Nikhil Koratkar. "Understanding and Controlling Wetting Phenomena at the Micro and Nanoscales" in Nano-structured Thin Films and Surfaces, *Wiley-VCH* (2010). ISBN-10: 3-527-32155-1

Nikhil Koratkar, Jonghwan Suhr. "Mechanical Damping in Nanocomposites" in Encyclopedia of Nanoscience and Nanotechnology, *American Scientific Publishers* (2011), Edited by H. S. Nalwa, Volume 16: Pages (127-146), ISBN:1-58883-165-5.

Iti Srivastava, Mohammad A. Rafiee, Fazel Yavari, Javad Rafiee and Nikhil Koratkar, "Epoxy Nanocomposites – Graphene a promising filler" in Graphene Based Polymer Nanocomposites, Edited by Prithu Mukhopadhyay and Rakesh Gupta, *CRC Press*, book in-press (2012).

Rahul Krishnan, Rahul Mukherjee, Toh-Ming Lu and Nikhil Koratkar, "Nano-engineered Silicon Anodes for Lithium-Ion Rechargeable Batteries" in Nanotechnology for Li-ion Batteries, Edited by David Lockwood, *Springer*, book in-press (2012).

Journal Papers:

1997-2001

1. N. Koratkar, and I. Chopra, "Wind tunnel testing of a Mach-scaled rotor model with trailing-edge flaps", *Smart Materials and Structures*, Vol. 10, No. 1, pp. 1-14, (2001).
2. N. Koratkar, and I. Chopra, "Analysis and testing of a Mach-scaled rotor with trailing-edge flaps", *AIAA Journal*, Vol. 38, No. 7, pp. 1113-1124, (2000).
3. N. Koratkar, and I. Chopra, "Analysis and testing of a Froude-scaled helicopter rotor with piezoelectric bender actuated trailing-edge flaps", *Intelligent Material Systems & Structures*, Vol. 8, No. 7, pp. 553-630, (1997).

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6. N. Koratkar, and I. Chopra, "Open-loop hover testing of a smart rotor model", *AIAA Journal*, Vol. 40, No. 8, pp. 1495-1502, (2002).

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8. N. Koratkar, B. Wei and P. Ajayan, "Multifunctional structural reinforcement featuring carbon nanotube films", *Composites Science and Technology*, Vol. 63, No. 11, pp. 1525-1531, (2003).
9. W. Zhang, J. Kim and N. Koratkar, "Energy-absorbent composites featuring embedded shape memory alloys" *Smart Materials and Structures*, Vol. 12, pp. 642-646, (2003).
10. J. Kim, Z. Rusak, and N. Koratkar, "Small-scale airfoil aerodynamic efficiency improvement by surface temperature and heat transfer" *AIAA Journal*, Vol. 41, No. 11, pp. 2105-2113, (2003).

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12. N. Koratkar, A. Modi, J. Kim, B. Wei, R. Vajtai, S. Talapatra and P. Ajayan, "Mobility of carbon nanotubes in high electric fields," *Journal of Nanoscience and Nanotechnology*, Vol. 4, No. 1/2, pp. 69-71, (2004).
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14. N. Koratkar, "Nanoscale field ionization sensors- a review", *International Journal of Nanoscience*, Vol. 4, pp. 945-949 (2005).
15. J. Suhr, N. Koratkar, P. Keblinski and P. Ajayan, "Viscoelasticity in carbon nanotube composites," **Nature Materials**, Vol. 4, pp. 134-137, (2005). **Cited 147 times**
16. N. Koratkar, J. Suhr, A. Joshi, R. Kane, L. Schadler, P. Ajayan, and S. Bartolucci, "Characterizing energy dissipation in single-walled carbon nanotube polycarbonate composites", *Applied Physics Letters*, Vol. 87, No. 6, 063102 (2005). **Cited 43 times**
17. J. Kim and N. Koratkar, "Feasibility study to develop a Mach-scaled swashplateless rotor model," *Smart Materials and Structures*, Vol. 14, No. 1, pp. 79-86, (2005).
18. J. Kim and N. Koratkar, "Effect of unsteady blade pitching motion on aerodynamic performance of micro-rotorcraft," *Journal of Aircraft*, Vol. 42, No. 4, pp. 874-881, (2005).
19. J. Nelson and N. Koratkar, "Eng. Note: Effect of miniaturized Gurney flaps on aerodynamic performance of micro-scale rotors," *Journal of Aircraft*, Vol. 42, No. 2, pp. 557-561, (2005).

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29. P. Ajayan, J. Suhr and N. Koratkar, "Utilizing interfaces in carbon nanotube reinforced polymer composites for structural damping", *Journal of Materials Science* 41, 7824-7829 (2006).

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