



DAFTAR PUSTAKA

- Abou-Chebl, A. (2004) ‘Cerebrovascular intervention’, in Bhatt, D. L. (ed.) *Guide to Peripheral and Cerebrovascular Intervention*. London: Remedica Publishing, pp. 169–217.
- Agrawal, C. M., Haas, K. F., Leopold, D. A. and Clark, H. G. (1992) ‘Evaluation of poly(L-lactic acid) as a material for intravascular polymeric stents’, *Biomaterials*, 13(3), pp. 176–182. doi: 10.1016/0142-9612(92)90068-Y.
- Alfonso, F. and Fernandez, C. (2011) ‘Second-Generation Drug-Eluting Stents Moving the Field Forward*’, *Journal of the American College of Cardiology*. Elsevier Inc., 58(1), pp. 26–29. doi: 10.1016/j.jacc.2011.03.013.
- de Almeida, S. F. M. and Neto, Z. dos S. N. (1994) ‘Effect of void content on the strength of composite laminates’, *Composite Structures*, 28(2), pp. 139–148. doi: 10.1016/0263-8223(94)90044-2.
- Andrzejewska, E. (2001) ‘Photopolymerization kinetics of multifunctional monomers’, 26, pp. 605–665.
- Ang, H. Y., Huang, Y. Y., Lim, S. T., Wong, P., Joner, M. and Foin, N. (2017) ‘Mechanical behavior of polymer-based vs. metallic-based bioresorbable stents’, *Journal of Thoracic Disease*, pp. 1–12. doi: 10.21037/jtd.2017.06.30.
- Arao, Y. and Kubouchi, M. (2015) ‘High-rate production of few-layer graphene by high-power probe sonication’, *Carbon*. Elsevier Ltd, 95, pp. 802–808. doi: 10.1016/j.carbon.2015.08.108.
- ASTM (2002) ‘Standard Test Method for Tensile Properties of Thin Plastic Sheeting’, *ASTM Standards*.
- Auricchio, F., Conti, M., Beule, M. De, Santis, G. De and Verhegge, B. (2011) ‘Carotid artery stenting simulation : From patient-specific images to finite element analysis’, *Medical Engineering and Physics*. Elsevier Ltd., 33(3), pp. 281–289. doi: 10.1016/j.medengphy.2010.10.011.
- Bagheri, A. and Jin, J. (2019) ‘Photopolymerization in 3D Printing’, *ACS Applied Polymer Materials*, 1(4), pp. 593–611. doi: 10.1021/acsapm.8b00165.
- Banerjee, C. and Chimowitz, M. I. (2017) ‘Stroke Caused by Atherosclerosis of the Major Intracranial Arteries’, *Circulation Research*. Elsevier Inc., 120(3), pp. 502–513. doi: 10.1161/CIRCRESAHA.116.308441.
- Bang, J. S., Oh, C. W., Jung, C., Park, S. Q., Hwang, K. J., Kang, H. S., Han, M. H., Lee, S. H., Chung, Y. S. and Kwon, O. K. (2010) ‘Intracranial stent placement for recanalization of acute cerebrovascular occlusion in 32 patients’, *American Journal of Neuroradiology*, 31(7), pp. 1222–1225. doi:



10.3174/ajnr.A2055.

- Bangalore, S., Toklu, B., Amoroso, N., Fusaro, M., Kumar, S., Hannan, E. L., Faxon, D. P. and Feit, F. (2013) ‘Bare metal stents, durable polymer drug eluting stents, and biodegradable polymer drug eluting stents for coronary artery disease: mixed treatment comparison meta-analysis’, *Bmj*, 347(nov08 1), pp. f6625–f6625. doi: 10.1136/bmj.f6625.
- Bártolo, P. J. (2011) ‘Stereolithographic Processes’, in Bártolo, P. J. (ed.) *Stereolithography: Materials, Processes and Applications*. Springer, pp. 1–36. doi: 10.1007/978-0-387-92904-0.
- Barwich, S., Khan, U. and Coleman, J. N. (2013) ‘A technique to pretreat graphite which allows the rapid dispersion of defect-free graphene in solvents at high concentration’, *Journal of Physical Chemistry C*, 117(37), pp. 19212–19218. doi: 10.1021/jp4047006.
- De Benedetti, E. and Urban, P. (2006) ‘Coronary stenting: why size matters’, *Heart*, 93(12), pp. 1500–1501. doi: 10.1136/hrt.2006.113860.
- Bennett, J. (2017) ‘Measuring UV curing parameters of commercial photopolymers used in additive manufacturing’, *Additive Manufacturing*. Elsevier B.V., 18, pp. 203–212. doi: 10.1016/j.addma.2017.10.009.
- Bennett, M. R. (2003) ‘In-Stent Restenosis: Pathology and Implications for the Development of drug eluting stents’.
- Bentzon, J. F., Otsuka, F., Virmani, R. and Falk, E. (2014) ‘Mechanisms of plaque formation and rupture’, *Circulation Research*, 114(12), pp. 1852–1866. doi: 10.1161/CIRCRESAHA.114.302721.
- Bhatt, D. L. (ed.) (2004) ‘Guide to peripheral and cerebrovascular intervention’, in *Guide to Peripheral and Cerebrovascular Intervention*. Remedica Publishing, p. 277.
- Boland, E. L., Shine, R., Kelly, N., Sweeney, C. A. and McHugh, P. E. (2016) ‘A Review of Material Degradation Modelling for the Analysis and Design of Bioabsorbable Stents’, *Annals of Biomedical Engineering*, 44(2), pp. 341–356. doi: 10.1007/s10439-015-1413-5.
- Bos, D., Van Der Rijk, M. J. M., Geeraedts, T. E. A., Hofman, A., Krestin, G. P., Witteman, J. C. M., Van Der Lugt, A., Ikram, M. A. and Vernooij, M. W. (2012) ‘Intracranial carotid artery atherosclerosis: Prevalence and risk factors in the general population’, *Stroke*, 43(7), pp. 1878–1884. doi: 10.1161/STROKEAHA.111.648667.
- Boston Scientific (2005) ‘Wingspan™ Stent System with Gateway™ PTA Balloon Catheter’, pp. 1–12. doi: 10.3758/BF03206045.



- Briguori, C., Sarais, C., Pagnotta, P., Liistro, F., Montorfano, M., Chieffo, A., Sgura, F., Corvaja, N., Albiero, R., Stankovic, G., Toutoutzas, C., Bonizzoni, E., Di Mario, C. and Colombo, A. (2002) 'In-stent restenosis in small coronary arteries: Impact of strut thickness', *Journal of the American College of Cardiology*. Elsevier Masson SAS, 40(3), pp. 403–409. doi: 10.1016/S0735-1097(02)01989-7.
- Bruckmann, H., Ringelstein, E. B., Buchner, H. and Zeumer, H. (1986) 'Percutaneous transluminal angioplasty of the vertebral artery .', *Journal of Neurology*, 233, pp. 336–339.
- Buccheri, D., Piraino, D., Andolina, G. and Cortese, B. (2016) 'Understanding and managing in-stent restenosis : a review of clinical data , from pathogenesis to treatment', *Journal of Thoracic Disease*, 8(3), pp. 1150–1162. doi: 10.21037/jtd.2016.10.93.
- Byrne, R. A., Joner, M. and Kastrati, A. (2015) 'Clinical update Stent thrombosis and restenosis : what have we learned and where are we going ? The Andreas Gruntzig Lecture ESC 2014', *European Heart Journal*, 36(April 1986), pp. 3320–3331. doi: 10.1093/eurheartj/ehv511.
- Byrne, R. A., Stone, G. W., Ormiston, J. and Kastrati, A. (2017) 'Coronary balloon angioplasty, stents, and scaffolds', *The Lancet*. Elsevier Ltd, 390(10096), pp. 781–792. doi: 10.1016/S0140-6736(17)31927-X.
- Cabrera, M. S., Sanders, B., Goor, O. J. G. M., Driessen-Mol, A., Oomens, C. W. J. and Baaijens, F. P. T. (2017) 'Computationally Designed 3D Printed Self-Expandable Polymer Stents with Biodegradation Capacity for Minimally Invasive Heart Valve Implantation : A Proof-of-Concept Study', *3D Printing and Additive Manufacturing*, 4(1), pp. 19–29. doi: 10.1089/3dp.2016.0052.
- Cataldi, P., Bayer, I. S., Nanni, G., Athanassiou, A., Bonaccorso, F., Pellegrini, V., Esau, A., Ricciardella, F., Artyukhin, S., Tronche, M. and Gogotsi, Y. (2016) 'Effect of graphene nano-platelet morphology on the elastic modulus of soft and hard biopolymers', *Carbon*. Elsevier Ltd, 109, pp. 331–339. doi: 10.1016/j.carbon.2016.08.026.
- Cheng, Y. and Chen, F. (2017) 'Preparation and characterization of photocured poly (ϵ -caprolactone) diacrylate / poly (ethylene glycol) diacrylate / chitosan for photopolymerization-type 3D printing tissue engineering scaffold application', *Materials Science & Engineering C*. Elsevier B.V., 81, pp. 66–73. doi: 10.1016/j.msec.2017.07.025.
- Chiastra, C., Migliavacca, F., Martínez, M. Á. and Malvè, M. (2014) 'On the necessity of modelling fluid-structure interaction for stented coronary arteries', *Journal of the Mechanical Behavior of Biomedical Materials*, 34, pp. 217–230. doi: 10.1016/j.jmbbm.2014.02.009.
- Chimowitz, M. I. et al. (2011) 'Stenting versus Aggressive Medical Therapy for



- Intracranial Arterial Stenosis', *The New England Journal of Medicine*, 365, pp. 993–1003.
- Chung, D. (2016) 'A review of exfoliated graphite', *Journal of Material Science*, 51, pp. 554–568.
- Cobos, M., González, B., Fernández, M. J. and Fernández, M. D. (2017) 'Chitosan-graphene oxide nanocomposites: Effect of graphene oxide nanosheets and glycerol plasticizer on thermal and mechanical properties', *Journal of Applied Polymer Science*, 134(30), pp. 1–14. doi: 10.1002/app.45092.
- Cobos, M., González, B., Fernández, M. J. and Fernández, M. D. (2018) 'Study on the effect of graphene and glycerol plasticizer on the properties of chitosan-graphene nanocomposites via in situ green chemical reduction of graphene oxide', *International Journal of Biological Macromolecules*. Elsevier B.V., 114, pp. 599–613. doi: 10.1016/j.ijbiomac.2018.03.129.
- Corbel, S., Dufaud, O. and Roques-Carmes, T. (2011) 'Materials for Stereolithography', in Bártolo, P. J. (ed.) *Stereolithography: Materials, Processes and Applications*. Springer, pp. 141–159. doi: 10.1007/978-0-387-92904-0.
- Croisier, F. and Jérôme, C. (2013) 'Chitosan-based biomaterials for tissue engineering', *European Polymer Journal*, 49(4), pp. 780–792. doi: 10.1016/j.eurpolymj.2012.12.009.
- Daniele, M. (2015) 'Graphene in neurosurgery : the beginning of a new era', 10, pp. 615–625.
- Dargazanli, C., Mantilla, D., Wiesspeiner, U., Ayrignac, X. and Costalat, V. (2017) 'Intracranial stenting after the Wingspan withdrawal in France: Clinical experience using a low profile coronary stent', *Journal of Neuroradiology*, 44(2), pp. 165–167. doi: 10.1016/j.neurad.2016.12.007.
- Debandi, M. V., Bernal, C. and Francois, N. J. (2017) 'Development of Biodegradable Films Based on Chitosan/Glycerol Blends Suitable for Biomedical Applications', *Journal of Tissue Science & Engineering*, 07(03). doi: 10.4172/2157-7552.1000187.
- Debusschere, N. (2016) *Finite element modeling of biodegradable stents*. Universiteit Gent.
- Departemen Kesehatan Republik Indonesia (2013) *Riset Kesehatan Dasar 2013*. Jakarta.
- Donnell, M. J. O., Xavier, D., Liu, L., Zhang, H., Chin, S. L., Rao-melacini, P., Rangarajan, S., Islam, S., Ardila, S. C. and Foscal, L. (2010) 'Risk factors for ischaemic and intracerebral haemorrhagic stroke in 22 countries (the INTERSTROKE study): a case-control study', *Lancet*, 376, pp. 112–123. doi:



10.1016/S0140-6736(10)60834-3.

- Drira, Z. (2009) *Investigation of the Mechanical Properties of Poly (Ethylene Glycol) Diacrylate by Nanoindentation*. Virginia Commonwealth University.
- Dromerick, A. W. (2004) ‘Prevention and Treatment of Ischemic Stroke’, *Blue Books of Practical Neurology*, 29(3), pp. 377–391. doi: 10.1016/S1877-3419(09)70094-7.
- Duerig, T. W., Tolomeo, D. E. and Wholey, M. (2000) ‘An overview of superelastic stent design’, *Minimally invasive therapy & allied technologies : MITAT : official journal of the Society for Minimally Invasive Therapy*, 9(3–4), pp. 235–246. doi: 10.4028/www.scientific.net/MSF.394-395.1.
- Durge, R., Kshirsagar, R. V and Tambe, P. (2014) ‘Effect of sonication energy on the yield of graphene nanosheets by liquid-phase exfoliation of graphite’, *Procedia Engineering*. Elsevier B.V., 97, pp. 1457–1465. doi: 10.1016/j.proeng.2014.12.429.
- Eckert, B. (2016) ‘Intracranial Stenting in Germany’, *Clinical Neuroradiology*, 26(4), pp. 387–389. doi: 10.1007/s00062-016-0550-z.
- Encyclopædia Britannica (2017) *Coronary Stent*. Available at: <https://www.britannica.com/science/coronary-stent#/media/1/1279517/95218> (Accessed: 4 March 2017).
- Ezzati, M., Vander Hoorn, S., Lawes, C. M. M., Leach, R., James, W. P. T., Lopez, A. D., Rodgers, A. and Murray, C. J. L. (2005) ‘Rethinking the “diseases of affluence” paradigm: Global patterns of nutritional risks in relation to economic development’, *PLoS Medicine*, 2(5), pp. 0404–0412. doi: 10.1371/journal.pmed.0020133.
- FDA (2015) *Narrowed Indications for Use for the Stryker Wingspan Stent System: FDA Safety Communication*, www.fda.gov. Available at: <https://www.fda.gov/MedicalDevices/Safety/AlertsandNotices/ucm3146>.
- Feigin, V. L., Norrving, B. and Mensah, G. A. (2017) ‘Global Burden of Stroke’, *Circulation Research*, 120(3), pp. 439–448. doi: 10.1161/CIRCRESAHA.116.308413.
- Feng, Z., Li, Y., Xin, C., Tang, D., Xiong, W. and Zhang, H. (2019) ‘Fabrication of Graphene-Reinforced Nanocomposites with Improved Fracture Toughness in Net Shape for Complex 3D Structures via Digital Light Processing’, *Journal of Carbon Research*, 5(25), pp. 1–16. doi: 10.3390/c5020025.
- Fogarotto, F. (2010) *Finite Element Analysis of Coronary Artery Stenting*. Università degli Studi di Pavia.
- Foin, N., Lee, R. D., Torii, R., Guitierrez-Chico, J. L., Mattesini, A., Nijjer, S., Sen,



- S., Petraco, R., Davies, J. E., Di Mario, C., Joner, M., Virmani, R. and Wong, P. (2014) ‘Impact of stent strut design in metallic stents and biodegradable scaffolds’, *International Journal of Cardiology*. Elsevier Ireland Ltd, 177(3), pp. 800–808. doi: 10.1016/j.ijcard.2014.09.143.
- Fortier, A., Gullapalli, V. and Mirshams, R. A. (2014) ‘Review of biomechanical studies of arteries and their effect on stent performance’, *IJC Heart & Vessels*. The Authors, 4, pp. 12–18. doi: 10.1016/j.ijchv.2014.04.007.
- Garlotta, D. (2002) ‘A Literature Review of Poly (Lactic Acid)’, *Journal of Polymers and the Environment*, 9(2), pp. 63–84. doi: 10.1023/A:1020200822435.
- Geim, A. K. and Novoselov, K. S. (2007) ‘The rise of graphene’, *Nature Materials*, 6(3), pp. 183–191. doi: 10.1038/nmat1849.
- Gideon, V., Kumar, P. and Mathew, L. (2009) ‘Finite element analysis of a percutaneous aortic valve stent design’, *Trends in Biomaterials and Artificial Organs*, 23(1), pp. 16–20. doi: 10.4236/health.2009.11002.
- Ginsztler, J., Major, L., Puskás, Z., Koós, M., Dobránszky, J., Giese, M., Szabó, B. and Albrecht, K. (2007) ‘Development and Manufacturing of Coronary Stents in Hungary’, *Materials Science Forum*, 537–538, pp. 631–638. doi: 10.4028/www.scientific.net/msf.537-538.631.
- Gonzalez, G., Chiappone, A., Roppolo, I., Fantino, E., Bertana, V., Perrucci, F., Scaltrito, L., Pirri, F. and Sangermano, M. (2017) ‘Development of 3D printable formulations containing CNT with enhanced electrical properties’, *Polymer*. Elsevier Ltd, 109, pp. 246–253. doi: 10.1016/j.polymer.2016.12.051.
- Grabow, N., Schlun, M., Sternberg, K., Hakansson, N., Kramer, S. and Schmitz, K.-P. (2005) ‘Mechanical Properties of Laser Cut Poly(L-Lactide) Micro-Specimens: Implications for Stent Design, Manufacture, and Sterilization’, *Journal of Biomechanical Engineering*, 127(1), pp. 25–31. doi: 10.1115/1.1835349.
- Guerra, A. J. and Ciurana, J. (2017) ‘Effect of fibre laser process on in-vitro degradation rate of a polycaprolactone stent a novel degradation study method’, *Polymer Degradation and Stability*. Elsevier Ltd, 142, pp. 42–49. doi: 10.1016/j.polymdegradstab.2017.05.028.
- Hamilton, A. J., Kim, H., Nagaraj, A., Mun, J., Yan, L. L., Roth, S. I., Mcpherson, D. D. and Chandran, K. B. (2005) ‘Regional material property alterations in porcine femoral arteries with atheroma development \$’, 38, pp. 2354–2364. doi: 10.1016/j.jbiomech.2004.10.018.
- Harrigan, M. R. and Deveikis, J. P. (2013) *Handbook of Cerebrovascular Disease and Neurointerventional Technique*. 2nd edn. Humana Press. doi: 10.1007/978-1-61779-946-4.



Heartandstroke.ca (2017) *What is stroke?* Available at: <http://www.heartandstroke.ca/stroke/what-is-stroke> (Accessed: 3 March 2017).

Heller, C., Schwentenwein, M., Varga, F., Liska, R. and Stampfl, J. (2009) ‘Biocompatible and biodegradable photopolymers for microstereolithography’, in *the 5th International Congress on Laser Advanced Materials Processing*, pp. 1–5.

Hernandez, Y. et al. (2008) ‘High-yield production of graphene by liquid-phase exfoliation of graphite’, *Nature Nanotechnology*, 3(9), pp. 563–568. doi: 10.1038/nnano.2008.215.

Holzapfel, G. A. (2006) ‘Determination of material models for arterial walls from uniaxial extension tests and histological structure’, *Journal of Theoretical Biology*, 238(2), pp. 290–302. doi: 10.1016/j.jtbi.2005.05.006.

Holzapfel, G. A., Mulvihill, J. J., Cunnane, E. M. and Walsh, M. T. (2014) ‘Computational approaches for analyzing the mechanics of atherosclerotic plaques : A review’, *Journal of Biomechanics*. Elsevier, 47(4), pp. 859–869. doi: 10.1016/j.jbiomech.2014.01.011.

Holzapfel, G. A., Sommer, G. and Regitnig, P. (2004) ‘Anisotropic Mechanical Properties of Tissue Components in Human Atherosclerotic Plaques’, *Journal of Biomechanical Engineering*, 126(5), p. 657. doi: 10.1115/1.1800557.

Holzapfel, G. A., Stadler, M. and Gasser, T. C. (2005) ‘Changes in the mechanical environment of stenotic arteries during interaction with stents: computational assessment of parametric stent designs.’, *Journal of Biomechanical Engineering*, 127(1), pp. 166–180. doi: 10.1115/1.1835362.

Hsiao, H.-M., Lee, K.-H., Liao, Y.-C. and Cheng, Y.-C. (2012) ‘Cardiovascular stent design and wall shear stress distribution in coronary stented arteries’, *Micro & Nano Letters*, 7(5), pp. 430–433. doi: 10.1049/mnl.2011.0590.

Huang, B., Cheng, G., Deng, C. and Zou, H. (2013) ‘Investigation on some properties of renshapeTM SL7545 type photosensitive resin and its application for stereolithography material’, *Applied Mechanics and Materials*, 252, pp. 220–223. doi: 10.4028/www.scientific.net/AMM.252.220.

Hussain, M. S. and Gupta, R. (2012) ‘Intracranial Intervention’, in Bhatt, D. L. (ed.) *Peripheral and Cerebrovascular intervention*. New York: Humana Press, p. 247. doi: 10.1007/978-1-60327-965-9.

Ilman, K. A. and Herliansyah, M. K. (2017) ‘The effect of electropolishing parameter on 316L stainless steel surface roughness for coronary stent application’, *Proceedings - 2017 7th International Annual Engineering Seminar, InAES 2017*, pp. 2–7. doi: 10.1109/INAES.2017.8068568.



- Indolfi, C., De Rosa, S. and Colombo, A. (2016) 'Bioresorbable vascular scaffolds — basic concepts and clinical outcome', *Nature Reviews Cardiology*. Nature Publishing Group, 13(12), pp. 719–729. doi: 10.1038/nrcardio.2016.151.
- Iqbal, J., Gunn, J. and Serruys, P. W. (2013) 'Coronary stents : historical development , current status and future directions', *British Medical Bulletin*, 106(1), pp. 193–211. doi: 10.1093/bmb/ldt009.
- Ismail, M. D., Ahmad, W. A. W., Leschke, M., Waliszewski, M., Boxberger, M., Abidin, I. Z. and Zuhdi, A. S. M. (2016) 'The outcomes of patients with very small coronary artery disease treated with thin strut cobalt chromium bare metal stents: an observational study', *SpringerPlus*. Springer International Publishing, 5(1). doi: 10.1186/s40064-016-3350-7.
- Janus, J., Fauxpoint, G., Arntz, Y., Pelletier, H. and Etienne, O. (2010) 'Surface roughness and morphology of three nanocomposites after two different polishing treatments by a multitechnique approach', *Dental Materials*. The Academy of Dental Materials, 26(5), pp. 416–425. doi: 10.1016/j.dental.2009.09.014.
- Jia, H., Gu, S. Y. and Chang, K. (2018) '3D printed self-expandable vascular stents from biodegradable shape memory polymer', *Advances in Polymer Technology*, 37(8), pp. 3222–3228. doi: 10.1002/adv.22091.
- Jiang, F., Yu, Y., Wang, Y., Feng, A. and Song, L. (2017) 'A novel synthesis route of graphene via microwave assisted intercalation-exfoliation of graphite', *Materials Letters*. Elsevier B.V., 200, pp. 39–42. doi: 10.1016/j.matlet.2017.04.048.
- Jung, S. C., Kim, H. S., Choi, C., Kim, S. J., Lee, D. H., Suh, D. C., Kwon, S. U., Kang, D. and Kim, J. S. (2016) 'Quantitative Analysis Using High-Resolution 3T MRI in Acute Intracranial Artery Dissection ABSTRACT Quantitative measurements , as well as qualitative characterizations , of the vessel walls', pp. 1–6. doi: 10.1111/jon.12357.
- Kastrati, A., Mehilli, J., Dirschinger, J., Dotzer, F., Schühlen, H., Neumann, F.-J., Fleckenstein, M., Pfafferott, C., Seyfarth, M. and Schömig, A. (2001) 'Intracoronary Stenting and Angiographic Results: Strut Thickness Effect on Restenosis Outcome (ISAR-STEREO) Trial', *Circulation*, 103, pp. 2816–2821.
- Kementerian Kesehatan Republik Indonesia (2019) *Laporan Nasional RISKESDAS 2018*. Jakarta.
- Khalilimeybodi, A., Alishzadeh Khoei, A. and Sharif-Kashani, B. (2019) 'Future Balloon-Expandable Stents: High or Low-Strength Materials?', *Cardiovascular Engineering and Technology*, (3). doi: 10.1007/s13239-019-00450-1.



- Khan, U., Neill, A. O., Lotya, M., De, S. and Coleman, J. N. (2010) ‘High-Concentration Solvent Exfoliation of Graphene’, (7), pp. 864–871. doi: 10.1002/smll.200902066.
- Khan, U., Porwal, H., Neill, A. O., Nawaz, K., May, P. and Coleman, J. N. (2011) ‘Solvent-Exfoliated Graphene at Extremely High Concentration’, pp. 9077–9082. doi: 10.1021/la201797h.
- Khurana, R. and Teal, P. (2009) ‘Carotid Artery Stenosis Prevalence and Medical Therapy’, in Saw, J. (ed.) *Carotid Artery Stenting: The Basics*. Humana Press, pp. 3–19. doi: 10.1007/978-1-60327-314-5.
- Kim, T., Lee, J. and Lee, K. H. (2016) ‘Full graphitization of amorphous carbon by microwave heating’, *RSC Advances*. Royal Society of Chemistry, 6(29), pp. 24667–24674. doi: 10.1039/c6ra01989g.
- Koenen, R. R. and Weber, C. (2013) ‘Chemokines and Their Receptors as Therapeutic Targets in Atherosclerosis’, in Weber, C. and Soehnlein, O. (eds) *Atherosclerosis, Treatment and Prevention*. Pan Stanford Publishing, pp. 1–30.
- Kok, W. E. M., Peters, R. J., Pasterkamp, G., Van Liebergen, R. A., Piek, J. J., Koch, K. T. and Visser, C. A. (2001) ‘Early lumen diameter loss after percutaneous transluminal coronary angioplasty is related to coronary plaque burden: A role for viscous plaque properties in early lumen diameter loss’, *International Journal of Cardiac Imaging*, 17(2), pp. 111–121. doi: 10.1023/A:1010615503672.
- Kokubo, T. (1990) ‘Surface Chemistry of Bioactive Glass-Ceramics’, *Journal of Non-Crystalline Solids*, 120, pp. 138–151.
- Koskinen, S. M., Soinne, L., Valanne, L. and Silvennoinen, H. (2014) ‘The normal internal carotid artery : a CTA study’.
- Kuilla, T., Bhadra, S., Yao, D., Kim, N. H., Bose, S. and Lee, J. H. (2010) ‘Recent advances in graphene based polymer composites’, *Progress in Polymer Science*. Elsevier Ltd, 35(11), pp. 1350–1375. doi: 10.1016/j.progpolymsci.2010.07.005.
- Kwon, D. Y., Kim, J. Il, Kim, D. Y., Kang, H. J., Lee, B., Lee, K. W. and Kim, M. S. (2012) ‘Biodegradable stent’, 2012(April), pp. 208–216.
- Lee, K. S. and Lee, J. H. (2019) ‘Hybrid Thermal Recovery Using Low-Salinity and Smart Waterflood’, *Hybrid Enhanced Oil Recovery using Smart Waterflooding*, pp. 129–135. doi: 10.1016/b978-0-12-816776-2.00006-4.
- Lee, M. W., Wang, T. Y. and Tsai, J. L. (2016) ‘Mechanical properties of nanocomposites with functionalized graphene’, *Journal of Composite Materials*, 50(27), pp. 3779–3789. doi: 10.1177/0021998315625788.



- Lee, R. T., Grodzinsky, A. J., Frank, E. H., Kamm, R. D. and Schoen, F. J. (1991) ‘Structure-Dependent Dynamic Mechanical Behavior of Fibrous Caps From Human Atherosclerotic Plaques’, *Circulation*, 83, pp. 1764–1771.
- Liao, K., Lin, Y., Macosko, C. and Haynes, C. (2011) ‘Cytotoxicity of graphene oxide and graphene in human erythrocytes and skin fibroblasts’, *ACS Applied Materials & Interfaces*, 3(7), pp. 2607–2615. doi: 10.1021/am200428v.
- Ligon-Auer, S. C., Schwentenwein, M., Gorsche, C., Stampfl, J. and Liska, R. (2016) ‘Toughening of photo-curable polymer networks: A review’, *Polymer Chemistry*, 7(2), pp. 257–286. doi: 10.1039/c5py01631b.
- Ligon, S. C., Liska, R., Stampf, J., Gurr, M., Mülhaupt, R., Stampf, J., Gurr, M. and Mülhaupt, R. (2017) ‘Polymers for 3D Printing and Customized Additive Manufacturing’, *Chemical Reviews*, 117(15), pp. 10212–10290. doi: 10.1021/acs.chemrev.7b00074.
- van Lith, R., Baker, E., Ware, H., Yang, J., Farsheed, A. C., Sun, C. and Ameer, G. (2016) ‘3D-Printing Strong High-Resolution Antioxidant Bioresorbable Vascular Stents’, *Advanced Materials Technologies*, 1(9), pp. 1–7. doi: 10.1002/admt.201600138.
- Liu, J., Cui, L. and Losic, D. (2013) ‘Graphene and graphene oxide as new nanocarriers for drug delivery applications’, *Acta Biomaterialia*. Acta Materialia Inc., 9(12), pp. 9243–9257. doi: 10.1016/j.actbio.2013.08.016.
- Loree, H. M., Grodzinsky, A. J., Park, S. Y., Gibson, L. J. and Lee, R. T. (1994) ‘Static Circumferential Tangential Modulus Tissue’, *Journal of Biomechanics*, 27(2), pp. 195–204.
- Lou, Z., Yang, W. J. and Stein, P. D. (1993) ‘Errors in the estimation of arterial wall shear rates that result from curve fitting of velocity profiles’, *Journal of Biomechanics*, 26(4–5), pp. 383–390. doi: 10.1016/0021-9290(93)90002-V.
- Manapat, J. Z., Chen, Q., Ye, P. and Advincula, R. C. (2017) ‘3D Printing of Polymer Nanocomposites via Stereolithography’, *Macromolecular Materials and Engineering*, 302(1600553), pp. 1–13. doi: 10.1002/mame.201600553.
- Mani, G., Feldman, M. D., Patel, D. and Agrawal, C. M. (2007) ‘Coronary stents: A materials perspective’, *Biomaterials*, 28(9), pp. 1689–1710. doi: 10.1016/j.biomaterials.2006.11.042.
- Markert, M. S. and Miller, M. (2011) ‘SAS Global Forum 2011 Statistics and Data Analysis Race / Ethnic Differences in Carotid Stiffness and Diameter Using PROC GLM SAS Global Forum 2011 Statistics and Data Analysis’, pp. 1–10.
- Martinez, A. W. and Chaikof, E. L. (2012) ‘Microfabrication and Nanotechnology in Stent Design’, *Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology*, 76(October 2009), pp. 211–220. doi: 10.1007/s11103-



011-9767-z.Plastid.

- Marwah, O. M. F., Yahaya, N. F., Darsani, A., Mohamad, E. J., Haq, R. H. A., Johar, M. A. and Othman, M. H. (2019) 'Investigation for Shrinkage Deformation in the Desktop 3D Printer Process by Using DOE Approach of the ABS Materials', *Journal of Physics: Conference Series*, 1150(1), pp. 0–7. doi: 10.1088/1742-6596/1150/1/012038.
- Mayoclinic.org (2017) Coronary artery disease. Available at: <https://www.mayoclinic.org/diseases-conditions/coronary-artery-disease/symptoms-causes/syc-20350613>.
- Mazighi, M. and Abou-Chebl, A. (2007) 'Stenting and prevention of ischemic stroke.', *Current drug targets*, 8(7), pp. 867–873. doi: 10.2174/138945007781077445.
- Mazzoccoli, J. P. (2008) *Properties of poly(ethylene glycol) diacrylate blends and acoustically focused multilayered biocomposites developed for tissue engineering applications*. Case Western Reserve University.
- Mendes-Felipe, C., Oliveira, J., Etxebarria, I., Vilas-Vilela, J. L. and Lanceros-Mendez, S. (2019) 'State-of-the-Art and Future Challenges of UV Curable Polymer-Based Smart Materials for Printing Technologies', *Advanced Materials Technologies*, 4(3), pp. 1–16. doi: 10.1002/admt.201800618.
- Meyer, J. C., Geim, A. K., Katsnelson, M. I., Novoselov, K. S., Booth, T. J. and Roth, S. (2007) 'The structure of suspended graphene sheets', 446(March). doi: 10.1038/nature05545.
- Michler, G. H. and Von Schmeling, H. H. K. B. (2013) 'The physics and micro-mechanics of nano-voids and nano-particles in polymer combinations', *Polymer*. Elsevier Ltd, 54(13), pp. 3131–3144. doi: 10.1016/j.polymer.2013.03.035.
- Migliavacca, F., Petrini, L., Colombo, M., Auricchio, F. and Pietrabissa, R. (2002) 'Mechanical behavior of coronary stents investigated through the finite element method.', *Journal of Biomechanics*, 35(6), pp. 803–811. doi: 10.1016/S0021-9290(02)00033-7.
- Misra, S. K., Ostadhossein, F., Babu, R., Kus, J., Tankasala, D., Sutrisno, A., Walsh, K. A., Bromfield, C. R. and Pan, D. (2017) '3D-Printed Multidrug-Eluting Stent from Graphene-Nanoplatelet-Doped Biodegradable Polymer Composite', *Advanced Healthcare Materials*, pp. 1–14. doi: 10.1002/adhm.201700008.
- Montgomery, D. C. (2012) *Design and Analysis of Experiments*. Eighth, *Design*. Eighth. New Jersey: John Wiley & Sons, Inc. doi: 10.1198/tech.2006.s372.
- Moore, S. S., O'Sullivan, K. J. and Verdecchia, F. (2016) 'Shrinking the Supply



- Chain for Implantable Coronary Stent Devices', *Annals of Biomedical Engineering*, 44(2), pp. 497–507. doi: 10.1007/s10439-015-1471-8.
- Muhammad, N. (2012) *Laser Micromachining of Coronary Stents for Medical Applications*. University of Manchester.
- Muramatsu, T., Onuma, Y., Zhang, Y. J., Bourantas, C. V., Kharlamov, A., Diletti, R., Farooq, V., Gogas, B. D., Garg, S., Garcia-Garcia, H. M., Ozaki, Y. and Serruys, P. W. (2013) 'Progress in treatment by percutaneous coronary intervention: the stent of the future', *Revista espanola de cardiologia (English ed.)*, 66(6), pp. 483–496. doi: 10.1016/j.rec.2012.12.009.
- Mytych, J. and Wnuk, M. (2013) 'Nanoparticle Technology as a Double-Edged Sword: Cytotoxic, Genotoxic and Epigenetic Effects on Living Cells', *Journal of Biomaterials and Nanobiotechnology*, 4(January), pp. 53–63. doi: <http://dx.doi.org/10.4236/jbnb.2013.41008>.
- Nadgorny, M. and Ameli, A. (2018) 'Functional Polymers and Nanocomposites for 3D Printing of Smart Structures and Devices', *ACS Applied Materials & Interfaces*. American Chemical Society, 10, pp. 17489–17507. doi: 10.1021/acsami.8b01786.
- Naebe, M., Wang, J., Amini, A., Khayyam, H., Hameed, N., Li, L. H., Chen, Y. and Fox, B. (2014) 'Mechanical Property and Structure of Covalent Functionalised Graphene/Epoxy Nanocomposites', *Scientific Reports*, 4, pp. 1–7. doi: 10.1038/srep04375.
- Nakagawa, D., Shojima, M., Yoshino, M., Kin, T., Imai, H., Nomura, S., Saito, T., Nakatomi, H., Oyama, H. and Saito, N. (2016) 'Wall-to-lumen ratio of intracranial arteries measured by indocyanine green angiography.', *Asian journal of neurosurgery*, 11(4), pp. 361–364. doi: 10.4103/1793-5482.175637.
- Ofrad, M. R. K. A., Sasi, A. G. I., Ounis, H. F. Y., Han, R. C. C., Inton, D. P. H., Ukhova, G. S., Uraglia, G. M. L. A. M., Ee, R. T. L. and Amm, R. D. K. (2004) 'Characterization of the Atherosclerotic Carotid Bifurcation Using MRI, Finite Element Modeling, and Histology', 32(7), pp. 932–946.
- Openstax (2013) 'The Cardiovascular System: Blood Vessels and Circulation', in *Anatomy & Physiology*. 25 April 2. Openstax, p. 1426.
- Ou, L., Song, B., Liang, H., Liu, J., Feng, X., Deng, B., Sun, T. and Shao, L. (2016) 'Toxicity of graphene-family nanoparticles: a general review of the origins and mechanisms', *Particle and Fibre Toxicology*. Particle and Fibre Toxicology, 13(57), pp. 1–24. doi: 10.1186/s12989-016-0168-y.
- Owolabi, M. O., Agunloye, A. M. and Ogunniyi, A. (2014) 'The relationship of flow velocities to vessel diameters differs between extracranial carotid and vertebral arteries of stroke patients', *Journal of Clinical Ultrasound*, 42(1), pp. 16–23. doi: 10.1002/jcu.22053.



- Papageorgiou, D. G., Kinloch, I. A. and Young, R. J. (2015) ‘Graphene/elastomer nanocomposites’, *Carbon*. The Authors, 95, pp. 460–484. doi: 10.1016/j.carbon.2015.08.055.
- Papageorgiou, D. G., Kinloch, I. A. and Young, R. J. (2017) ‘Mechanical properties of graphene and graphene-based nanocomposites’, *Progress in Materials Science*. The Authors, 90, pp. 75–127. doi: 10.1016/j.pmatsci.2017.07.004.
- Papaioannou, T. G. and Stefanidis, C. (2005) ‘Vascular Wall Shear Stress: Basic Principles and Methods’, *Hellenic J Cardiol*, 46, pp. 9–15.
- Pauck, R. G. and Reddy, B. D. (2015) ‘Computational analysis of the radial mechanical performance of PLLA coronary artery stents’, *Medical Engineering and Physics*. Institute of Physics and Engineering in Medicine, 37(1), pp. 7–12. doi: 10.1016/j.medengphy.2014.09.014.
- Phan, T. G., Beare, R. J., Jolley, D., Das, G., Ren, M., Wong, K., Chong, W., Sinnott, M. D., Hilton, J. E. and Srikanth, V. (2012) ‘Carotid artery anatomy and geometry as risk factors for carotid atherosclerotic disease’, *Stroke*, 43(6), pp. 1596–1601. doi: 10.1161/STROKEAHA.111.645499.
- Pinto, A. M., Cabral, J., Tanaka, D. A. P., Mendes, A. M. and Magalhaes, F. D. (2013) ‘Effect of incorporation of graphene oxide and graphene nanoplatelets on mechanical and gas permeability properties of poly(lactic acid) films’, *Polymer International*, 62(1), pp. 33–40. doi: 10.1002/pi.4290.
- Pinto, A. M., Moreira, S., Gonçalves, I. C., Gama, F. M., Mendes, A. M. and Magalhães, F. D. (2013) ‘Biocompatibility of poly(lactic acid) with incorporated graphene-based materials’, *Colloids and Surfaces B: Biointerfaces*, 104, pp. 229–238. doi: 10.1016/j.colsurfb.2012.12.006.
- Podila, R. et al. (2013) ‘Graphene coatings for enhanced hemo-compatibility of nitinol stents’, *RSC Adv.*, 3(6), pp. 1660–1665. doi: 10.1039/C2RA23073A.
- Prabhakaran, P. and Lee, K.-S. (2019) ‘Photo-polymerization’, in Mazumder, M. A. J., H., S., and A. A.-A. (eds) *Functional Polymers, Polymers and Polymeric Composites: A Reference Series*. Springer Nature Switzerland AG, pp. 1–53. doi: https://doi.org/10.1007/978-3-319-92067-2_1-1.
- Putz, K. W., Compton, O. C., Palmeri, M. J., Nguyen, S. B. T. and Brinson, L. C. (2010) ‘High-nanofiller-content graphene oxide-polymer nanocomposites via vacuum-assisted self-assembly’, *Advanced Functional Materials*, 20(19), pp. 3322–3329. doi: 10.1002/adfm.201000723.
- Quan, H., Zhang, T., Xu, H., Luo, S., Nie, J. and Zhu, X. (2020) ‘Photo-curing 3D printing technique and its challenges’, *Bioactive Materials*. Elsevier, 5(1), pp. 110–115. doi: 10.1016/j.bioactmat.2019.12.003.
- Qureshi, A. I. and Caplan, L. R. (2013) ‘Intracranial atherosclerosis’, *The Lancet*.



- Elsevier Ltd, 6736(13), pp. 1–15. doi: 10.1016/S0140-6736(13)61088-0.
- Ramot, Y., Haim-zada, M., Domb, A. J. and Nyska, A. (2016) ‘Biocompatibility and safety of PLA and its copolymers’, *Advanced Drug Delivery Reviews*. Elsevier B.V., 107, pp. 153–162. doi: 10.1016/j.addr.2016.03.012.
- Reddy, K. S. (2002) ‘Cardiovascular diseases in the developing countries: dimensions, determinants, dynamics and directions for public health action’, *Public Health Nutrition*, 5(1(A)), pp. 231–237. doi: 10.1079/PHN2001298.
- Robicsek, F., Roush, T. S., Cook, J. W. and Reames, M. K. (2004) ‘From Hippocrates to Palmaz-Schatz , The History of Carotid Surgery’, 397, pp. 389–397. doi: 10.1016/j.ejvs.2004.01.004.
- Roguin, A. (2011) ‘Stent: The man and word behind the coronary metal prosthesis’, *Circulation: Cardiovascular Interventions*, 4(2), pp. 206–209. doi: 10.1161/CIRCINTERVENTIONS.110.960872.
- Roopan, S. M. and Madhumitha, G. (2016) ‘Biodegradable Polymer-Loaded Nanoparticles: An Overview of Synthesis and Biomedical Applications’, in Thakur, V. K. and Thakur, M. K. (eds) *Handbook of Sustainable Polymers: Structure and Chemistry*. First. Florida: CRC Press, pp. 625–678.
- Rouf, T. B. and Kokini, J. L. (2016) ‘Biodegradable biopolymer – graphene nanocomposites’, *Journal of Materials Science*. Springer US, 51(22), pp. 9915–9945. doi: 10.1007/s10853-016-0238-4.
- Sadatomo, T., Yuki, K. and Migita, K. (2013) ‘Differences between middle cerebral artery bifurcations with normal anatomy and those with aneurysms’, pp. 437–445. doi: 10.1007/s10143-013-0450-5.
- Sandoval, J. H., Wicker, R. B., Sandoval, J. H. and Wicker, R. B. (2006) ‘Functionalizing stereolithography resins : effects of dispersed multi-walled carbon nanotubes on physical properties’, *Rapid Prototyping Journal*, 12(5), pp. 292–303. doi: 10.1108/13552540610707059.
- Sangiorgi, G., Melzi, G., Agostoni, P., Cola, C., Clementi, F., Romitelli, P., Virmani, R. and Colombo, A. (2007) ‘Engineering aspects of stents design and their translation into clinical practice’, *Annali dell'Istituto Superiore di Sanita*, 43(1), pp. 89–100.
- Schiavone, A., Zhao, L. G. and Abdel-Wahab, A. A. (2014) ‘Effects of material, coating, design and plaque composition on stent deployment inside a stenotic artery - Finite element simulation’, *Materials Science and Engineering C*. Elsevier B.V., 42, pp. 479–488. doi: 10.1016/j.msec.2014.05.057.
- Schmidleithner, C. and Kalaskar, D. M. (2018) ‘Stereolithography’, in *3D Printing*. Intechopen, pp. 3–22. doi: 10.5772/intechopen.78147.



- Schmitt, L., Grabow, N., Lehmann, U., Eschenburg, C., Sternberg, K. and Schmitz, K. P. (2012) ‘Impact of polymer/drug coatings on the biomechanical performance of self-expanding peripheral drug-eluting stents’, *Biomedizinische Technik*, 57(SUPPL. 1 TRACK-S), pp. 28–29. doi: 10.1515/bmt-2012-4357.
- Schreiber, S. J., Gottschalk, S., Weih, M., Villringer, A. and Valdueza, M. (2000) ‘Assessment of Blood Flow Velocity and Diameter of the Middle Cerebral Artery during the Acetazolamide Provocation Test by Use of Transcranial Doppler Sonography and MR Imaging’, (August), pp. 1207–1211.
- Serrador, J. M., Picot, P. A., Rutt, B. K., Shoemaker, J. K. and Bondar, R. L. (2000) ‘MRI Measures of Middle Cerebral Artery Diameter in Conscious Humans During Simulated Orthostasis’, pp. 1672–1679.
- Serruys, P. W., Ormiston, J. A., Onuma, Y., Regar, E., Gonzalo, N., Garcia-Garcia, H. M., Nieman, K., Bruining, N., Dorange, C., Miquel-Hébert, K., Veldhof, S., Webster, M., Thuesen, L. and Dudek, D. (2009) ‘A bioabsorbable everolimus-eluting coronary stent system (ABSORB): 2-year outcomes and results from multiple imaging methods’, *The Lancet*. Elsevier Ltd, 373(9667), pp. 897–910. doi: 10.1016/S0140-6736(09)60325-1.
- Sha, L., Chen, Zhaofeng, Chen, Zhou, Zhang, A. and Yang, Z. (2016) ‘Polylactic Acid Based Nanocomposites : Promising Safe and Biodegradable Materials in Biomedical Field’, *International Journal of Polymer Science*, 2016, pp. 1–11. doi: 10.1155/2016/6869154.
- Shen, Z., Yu, L., Wei, M., Ye, H., Shen, Zhiqiang, Yu, Le, Wei, Mei and Li, Y. (2018) ‘Manipulating nanoparticle transport within blood flow through external forces : an exemplar of mechanics in nanomedicine’.
- Shenzen Anycubic Technology (2020) ‘User Manual: Photon Zero’.
- Shokrieh, M., Esmkhani, M., Shahverdi, H. and Vahedi, F. (2013) ‘Effect of graphene nanosheets (GNS) and graphite nanoplatelets (GNP) on the Mechanical properties of epoxy nanocomposites’, *Science of Advanced Materials*, 5, pp. 260–266.
- Shtein, M., Nadiv, R., Lachman, N., Daniel Wagner, H. and Regev, O. (2013) ‘Fracture behavior of nanotube-polymer composites: Insights on surface roughness and failure mechanism’, *Composites Science and Technology*. Elsevier Ltd, 87, pp. 157–163. doi: 10.1016/j.compscitech.2013.07.016.
- Silva, G. S., Korosetz, W. J., González, R. Gilberto and Schwamm, Lee H. (2011) ‘Causes of Ischemic Stroke’, in González, R.G., Hirsch, J. A., Lev, M. H., Schaefer, P. W., and Schwamm, L.H. (eds) *Acute Ischemic Stroke*. 2nd edn. Berlin Heidelberg: Springer-Verlag, pp. 25–42. doi: 10.1007/978-3-642-12751-9_2.



- Smith, R. J., Lotya, M. and Coleman, J. N. (2010) ‘The importance of repulsive potential barriers for the dispersion of graphene using surfactants’, *New Journal of Physics*, 12(125008). doi: 10.1088/1367-2630/12/12/125008.
- Sojitra, P., Engineer, C., Kothwala, D., Raval, A., Kotadia, H. and Mehta, G. (2010) ‘Electropolishing of 316LVM stainless steel cardiovascular stents: An investigation of material removal, surface roughness and corrosion behaviour’, *Trends in Biomaterials and Artificial Organs*, 23(3), pp. 115–121.
- Stepak, B., Antończak, A. J., Bartkowiak-Jowsa, M., Filipiak, J., Pezowicz, C. and Abramski, K. M. (2014) ‘Fabrication of a polymer-based biodegradable stent using a CO₂ laser’, *Archives of Civil and Mechanical Engineering*, 14(2), pp. 317–326. doi: 10.1016/j.acme.2013.08.005.
- Steyrer, B., Neubauer, P., Liska, R. and Stampfl, J. (2017) ‘Visible light photoinitiator for 3D-printing of tough methacrylate resins’, *Materials*, 10(12), pp. 1–11. doi: 10.3390/ma10121445.
- Szymańska, E. and Winnicka, K. (2015) ‘Stability of chitosan - A challenge for pharmaceutical and biomedical applications’, *Marine Drugs*, 13(4), pp. 1819–1846. doi: 10.3390/md13041819.
- Tas, A. C. (2014) ‘The use of physiological solutions or media in calcium phosphate synthesis and processing’, *Acta Biomaterialia*, 10, pp. 1771–1792.
- Teng, Z., Tang, D., Zheng, J., Woodard, P. K. and Hoffman, A. H. (2009) ‘An experimental study on the ultimate strength of the adventitia and media of human atherosclerotic carotid arteries in circumferential and axial directions’, *Journal of Biomechanics*. Elsevier, 42(15), pp. 2535–2539. doi: 10.1016/j.jbiomech.2009.07.009.
- Tontowi, A. E., Pratama, I., Hariawan, H., Rinastiti, M. and Siswomihardjo, W. (2016) ‘Strength and displacement of open cell designs of coronary stent in responding of various inflated pressures’, *Proceedings - 2015 4th International Conference on Instrumentation, Communications, Information Technology and Biomedical Engineering, ICICI-BME 2015*, pp. 18–21. doi: 10.1109/ICICI-BME.2015.7401307.
- Uzcategui, A. C., Muralidharan, A., Ferguson, V. L., Bryant, S. J. and McLeod, R. R. (2018) ‘Understanding and Improving Mechanical Properties in 3D printed Parts Using a Dual-Cure Acrylate-Based Resin for Stereolithography’, *Advanced Engineering Materials*, 20(12), pp. 139–148. doi: 10.1002/adem.201800876.Understanding.
- Valdueza, J. M., Balzer, J. O., Villringer, A., Vogl, T. J., Kutter, R. and Einhäupl, K. M. (1997) ‘Changes in blood flow velocity and diameter of the middle cerebral artery during hyperventilation: Assessment with MR and Transcranial Doppler sonography’, *American Journal of Neuroradiology*, 18(10), pp. 1929–1934.



- Varrla, E., Paton, K. R., Backes, C., Harvey, A., Smith, R. J. and Coleman, J. N. (2014) ‘Turbulence-assisted shear exfoliation of graphene using household detergent and a kitchen blender’, *Nanoscale*. Royal Society of Chemistry, 6, pp. 11810–11819. doi: 10.1039/C4NR03560G.
- Verbree, J., Bronzwaer, A. G. T., Ghariq, E., Versluis, M. J., Daemen, M. J. A. P., Buchem, M. A. Van, Dahan, A., Lieshout, J. J. Van and Osch, M. J. P. Van (2014) ‘Assessment of middle cerebral artery diameter during hypocapnia and hypercapnia in humans using ultra-high-field MRI’, pp. 1084–1089. doi: 10.1152/japplphysiol.00651.2014.
- Virmani, R., Kolodgie, F. D., Burke, A. P., Farb, A. and Schwartz, S. M. (2000) ‘Lessons From Sudden Coronary Death’, pp. 1262–1275.
- Visnovsk, P., Gelhi, M. L., Cantoni, R., Cattaneo, E., Cattaneo, E., Gu, F., Schubert, R. and Mo, U. (2001) ‘Biodegradable Polymer’, 52(1), pp. 371–375.
- Vrselja, Z., Brkic, H., Mrdenovic, S., Radic, R. and Curic, G. (2014) ‘Function of Circle of Willis’, *Journal of Cerebral Blood Flow & Metabolism*. Nature Publishing Group, 34(4), pp. 578–584. doi: 10.1038/jcbfm.2014.7.
- Wajid, A. S., Ahmed, H. S. T., Das, S., Irin, F., Jankowski, A. F. and Green, M. J. (2012) ‘High-Performance Pristine Graphene / Epoxy Composites With Enhanced Mechanical and Electrical Properties’, *Macromolecular Materials and Engineering*, pp. 1–9. doi: 10.1002/mame.201200043.
- Wan, C. and Chen, B. (2012) ‘Reinforcement and interphase of polymer/graphene oxide nanocomposites’, *Journal of Materials Chemistry*, 22(8), p. 3637. doi: 10.1039/c2jm15062j.
- Wang, Q., Fang, G., Zhao, Y., Wang, G. and Cai, T. (2017) ‘Computational and experimental investigation into mechanical performances of Poly-L-Lactide Acid (PLLA) coronary stents’, *Journal of the Mechanical Behavior of Biomedical Materials*. Elsevier, 65, pp. 415–427. doi: 10.1016/j.jmbbm.2016.08.033.
- Wang, X., Jiang, M., Zhou, Z., Gou, J. and Hui, D. (2017) ‘3D printing of polymer matrix composites : A review and prospective’, *Composites Part B*. Elsevier Ltd, 110, pp. 442–458. doi: 10.1016/j.compositesb.2016.11.034.
- Wang, X. and Zhang, L. (2019) ‘Green and facile production of high-quality graphene from graphite by the combination of hydroxyl radicals and electrical exfoliation in different electrolyte systems’, *RSC Advances*. Royal Society of Chemistry, 9(7), pp. 3693–3703. doi: 10.1039/c8ra09752f.
- Ware, H. O. T., Farsheed, A. C., Akar, B., Duan, C., Chen, X., Ameer, G. and Sun, C. (2018) ‘High-speed on-demand 3D printed bioresorbable vascular scaffolds’, *Materials Today Chemistry*. Elsevier Ltd, 7, pp. 25–34. doi: 10.1016/j.mtchem.2017.10.002.



- Ware, H. O. T., Farsheed, A. C., van Lith, R., Baker, E., Ameer, G. and Sun, C. (2017) ‘Process development for high-resolution 3D-printing of bioresorbable vascular stents’, 10115, p. 101150N. doi: 10.1117/12.2252856.
- Wayangankar, S. A. and Ellis, S. G. (2015) ‘Bioresorbable Stents: Is This Where We Are Headed?’, *Progress in Cardiovascular Diseases*. Elsevier Inc., 58(3), pp. 342–355. doi: 10.1016/j.pcad.2015.08.011.
- WHO (2014) *Global status report on noncommunicable diseases 2014*. Geneva: WHO Press.
- Wong, L. K. S. (2006) ‘Global burden of intracranial atherosclerosis’, *International Journal of Stroke*, 1(August), pp. 158–159.
- Yang, X., Tu, Y., Li, L., Shang, S. and Tao, X. (2010) ‘Well-Dispersed Chitosan/Graphene Oxide Nanocomposites’, *Applied Materials & Interfaces*, 2(6), pp. 1707–1713. doi: 10.1021/am100222m.
- Yi, M. and Shen, Z. (2014) ‘Kitchen blender for producing high-quality few-layer graphene’, *Carbon*. Elsevier Ltd, 78, pp. 622–626. doi: 10.1016/j.carbon.2014.07.035.
- Yi, M., Shen, Z., Zhang, X. and Ma, S. (2012) ‘Vessel diameter and liquid height dependent sonication-assisted production of few-layer graphene’, *Journal of Materials Science*, 47(23), pp. 8234–8244. doi: 10.1007/s10853-012-6720-8.
- Yoon, D. and Cheong, H. (2012) ‘Raman Spectroscopy for Characterization of Graphene’, in Kumar, C. S. S. R. (ed.) *Raman Spectroscopy for Nanomaterials Characterization*. Springer Berlin Heidelberg, pp. 191–214. doi: https://doi.org/10.1007/978-3-642-20620-7_9.
- Yoon, N. K., Awad, A.-W., Kalani, M. Y. S., Taussky, P. and Park, M. S. (2017) ‘Stent technology in ischemic stroke’, *Neurosurgical Focus*. American Association of Neurological Surgeons, 42(4), p. E11. doi: 10.3171/2017.1.FOCUS16507.
- Yusuf, S., Ôunpuu, S. and Anand, S. (2002) ‘The Global Epidemic of Atherosclerotic Cardiovascular Disease’, 11(suppl 2), pp. 3–8. doi: 10.1159/000066416.
- Zaidat, O. O., Fitzsimmons, B.-F., Britton, K. W., Wang, Z., Killer-Oberpfalzer, M., Wakhloo, A., Gupta, R., Kirshner, H., Megerian, J. T., Lesko, J. and Pitzer, P. (2015) ‘Effect of a Balloon-Expandable Intracranial Stent vs Medical Therapy on Risk of Stroke in Patients With Symptomatic Intracranial Stenosis The VISSIT Randomized Clinical Trial’, *American Medical Association*, 53226(12), pp. 1240–1248. doi: 10.1001/jama.2015.1693.
- Zarins, C. K., Giddens, D. P., Bharadvaj, B. K., Sottiurai, V. S., Mabon, R. F. and Glagov, S. (1983) ‘Carotid Bifurcation Atherosclerosis Quantitative



Correlation of Plaque Localization with Flow Velocity Profiles and Wall Shear Stress', *Circulation Research*, 53(4), pp. 502–515. doi: 10.1161/01.RES.53.4.502.

Zhang, C. (2015) 'Biodegradable Polyesters: Synthesis, Properties, Applications', in Fakirov, S. (ed.) *Biodegradable Polymers*. Weinheim, Germany: Wiley-VCH, pp. 1–24.

Zhu, W., Tringale, K. R., Woller, S. A., You, S., Johnson, S., Shen, H., Schimelman, J., Whitney, M., Steinauer, J., Xu, W., Yaksh, T. L., Nguyen, Q. T. and Chen, S. (2018) 'Rapid continuous 3D printing of customizable peripheral nerve guidance conduits', *Materials Today*. Elsevier Ltd, 21(9), pp. 951–959. doi: 10.1016/j.mattod.2018.04.001.

Zhu, X. J., Du, B., Lou, X., Hui, F. K., Ma, L., Zheng, B. W., Jin, M., Wang, C. X. and Jiang, W. J. (2013) 'Morphologic characteristics of atherosclerotic middle cerebral arteries on 3T high-resolution MRI', *American Journal of Neuroradiology*, 34(9), pp. 1717–1722. doi: 10.3174/ajnr.A3573.

Zhuang, H., Zheng, J. P., Gao, H. and Yao, K. De (2007) 'In vitro biodegradation and biocompatibility of gelatin / montmorillonite-chitosan intercalated nanocomposite', *Journal of Materials Science: Materials in Medicine*, 18, pp. 951–957. doi: 10.1007/s10856-006-0093-y.