

Research Articles & Publications:

- 1) Karthikeyan Subramani, Mark A Birch. ***'Fabrication of Poly (ethylene glycol) micropatterns with osteoinductive growth factors and evaluation of effects on bone cell activity and function'***, Biomedical Materials (BMM), 2006, Vol 1, pages 144 – 154.
- 2) Karthikeyan Subramani. ***'Applications of Nanotechnology in drug delivery systems for the treatment of cancer and diabetes'***, International Journal of Nanotechnology (IJNT) 2006, Vol 3 Issue 4, pages 557 – 580.
- 3) Karthikeyan Subramani, Mark A Birch. ***'Fabrication of Poly (ethylene glycol) micropatterns with osteoinductive growth factors and evaluation of effects on bone cell activity and function'***, Starget, 2006, Vol 03, pages 34 – 39.
- 4) Karthikeyan Subramani, Ameen Khraisat, Anne George. ***'Self-assembly of proteins and peptides and their applications in bionanotechnology'***, Current Nanoscience (CNANO), 2008, Vol 4, pages 201 - 207.
- 5) David M Shafer, Karthikeyan Subramani. ***'Immediate Loading of Dental Implants: An Academic Oral and Maxillofacial Surgeon's Perspective'***, Forum Implantologicum, 2008, Vol 4, Issue 2, pages 110 – 112.
- 6) Karthikeyan Subramani, Mark A Birch. ***'Micropatterning of poly (ethylene glycol)-diacrylate (PEG-DA) hydrogel by Soft-photolithography for analysis of cell-biomaterial interactions'***, Journal of Biomimetics, Biomaterials, and Tissue Engineering (JBBTE), 2009, Vol 2, pages 3 – 14.
- 7) Karthikeyan Subramani, Ronald E Jung, Aart Molenberg, Christoph HF Hammerle. ***'Biofilm on Dental Implants-A review of the literature'***, International Journal of Oral and Maxillofacial Implants (IJOMI), 2009, Vol 24, pages 616 – 626.
- 8) Karthikeyan Subramani, Hossein Hosseinkhani, Ameen Khraisat, Mohsen Hosseinkhani, Yashwant Pathak. ***'Targeting Nanoparticles as Drug Delivery Systems for Cancer Treatment'***, Current Nanoscience (CNANO) 2009, Vol 5 Issue 2, pages 135-140.
- 9) Karthikeyan Subramani. ***'A RasMol study of the Mechanism of Inhibition of Cysteine Endopeptidase Enzyme Papain'***, Current Proteomics, 2009, Vol 6 Issue 3, pages 198-202.
- 10) Mahmoudi M, Hosseinkhani H, Hosseinkhani M, Boutry S, Simchi A, Journeay WS, Karthikeyan Subramani, Laurent S. ***'Magnetic Resonance Imaging Tracking of Stem Cells in Vivo Using Iron Oxide Nanoparticles as a Tool for the Advancement of Clinical Regenerative Medicine'***, Chemical Reviews 2011, Vol 111 Issue 2, pages 253-280.
- 11) Ronald E Jung, Vladimir Kokovic, Milan Jurisic, Duygu Yaman, Karthikeyan Subramani, Franz E Weber. ***'Guided bone regeneration with a synthetic biodegradable membrane. A comparative study in dogs'***, Clinical Oral Implants Research 2011, Vol 22 Issue 8, pages 802-807.
- 12) Karthikeyan Subramani. ***'Titanium surface modification techniques for implant fabrication – From microscale to nanoscale'*** Journal of

Biomimetics, Biomaterials, and Tissue Engineering (JBBTE), 2010, Vol 5, pages 39 – 56.

- 13) Ameen Khraisat, Firas Alsoleihat, **Karthikeyan Subramani**, Sahar T. Taha, Mohammad A. Al-Rabab'ah, Zaid B. Al-Bitar. ***Hypocone Reduction and Carabelli's Traits in Contemporary Jordanians and the Association between Carabelli's Trait and the Dimensions of the Maxillary First Permanent Molar***, Collegium Antropologicum 35 (2011) 1, pages 73–78.
- 14) Daniel S Thoma, **Karthikeyan Subramani**, Aart Molenberg, Franz E Weber, Hans Ulrich Luder, NJ Pongnarisorn, Christoph HF Hammerle, Ronald E Jung. ***Evaluation of biodegradation, soft tissue attachment and bone regeneration for various polyethylene glycol hydrogels and guided bone regeneration membranes: A histomorphometric study in rabbits***. Clinical Oral Implant Research journal 2011, Vol 22(11), pages 1247-54.
- 15) Hossein Hosseinkhani, Mohsen Hosseinkhani, Yi-Ru Chen, **Karthikeyan Subramani**, Abraham J Domb, ***Innovative technology of engineering magnetic DNA nanoparticles for gene therapy***, International Journal of Nanotechnology (IJNT) 2011, Vol 8 Issue 8/9, pages 724 – 735.
- 16) Mohsen Hosseinkhani, Hossein Hosseinkhani, Yi-Ru Chen, **Karthikeyan Subramani**, Abraham J Domb, ***In vitro physicochemical evaluation of DNA nanoparticles***, International Journal of Nanotechnology (IJNT) 2011, Vol 8 Issue 8/9, pages 736 – 748.
- 17) **Karthikeyan Subramani**, Daniel Wismeijer. ***Decontamination of titanium implant surface and re-osseointegration to treat peri-implantitis: a literature review*** International Journal of Oral and Maxillofacial Implants (IJOMI) 2012, Vol 27(5), pages 1043-54.
- 18) **Karthikeyan Subramani**, Reji Mathew, Hossein Hosseinkhani, Mohsen Hosseinkhani. ***Bone regeneration around dental implants as a treatment for peri-implantitis: A review of the literature*** Journal of Biomimetics, Biomaterials, and Tissue Engineering (JBBTE) 2011, Vol. 11, pages 21-33.
- 19) A Khraisat, F Alsoleihat, **Karthikeyan Subramani**, M A. Al-Rabab'ah, M K. Al-Omiri, I Abu-Tahun. ***Multiple Lingual Cusps Trait on Mandibular Premolars and Hypoconulid Reduction Trait on Mandibular First Molar in Living Jordanian Population. Intra- and Inter-trait Interactions***, Coll Antropol 2013 Vol. 37 Issue 3 885-894.

Book Editor:

1) **Karthikeyan Subramani (1st Editor)** & Waqar Ahmed (2nd Editor) ***Emerging Nanotechnologies in Dentistry: Processes, Materials and Applications***, Elsevier. Foreword by: Sir. Harold W Kroto (1996 Nobel Laureate in Chemistry) (December 2011). ISBN: 978-1-4557-7862-1.

2) **Karthikeyan Subramani (1st Editor)**, James K. Hartsfield (2nd Editor) & Waqar Ahmed (3rd Editor) ***Nanobiomaterials in Clinical Dentistry***, Elsevier. (December 2012). ISBN: 13: 978-1-4557-3127-5.

Book Chapters:

- 1) **Karthikeyan Subramani**, Hossein Hosseinkhani, Mohsen Hosseinkhani, Shuguang Zhang. '*Self-assembly of nanomaterials for engineering cell microenvironment*' in 'Micro- and Nanoengineering of the Cell Microenvironment: Technologies and Applications'. Pages 279-294, Artech house publications, Boston, USA. (ISBN No: 978-1-59693-148-0).
- 2) **Karthikeyan Subramani**. '*Soft-photolithography technique of microfabrication*' in 'Emerging Nanotechnologies for Manufacturing'. Pages 261-276, William Andrew Publishers, (ISBN No: 978-0-08-094763-1).
- 3) **Karthikeyan Subramani**. '*Nanoparticulate Drug Delivery Systems (NPDDS) for the Treatment of Diabetes*' in Drug Delivery Nanoparticles Formulation and Characterization, 2nd Edition 2009, pages 115-123, Informa Healthcare.
- 4) **Karthikeyan Subramani**. '*Nanoparticulate Drug Delivery Systems (NPDDS) for Cancer Treatment: Targeting Nanoparticles, a Novel Approach*' in Drug Delivery Nanoparticles Formulation and Characterization, 2nd Edition 2009, pages 57-69, Informa Healthcare.
- 5) **Karthikeyan Subramani**. '*Titanium nanotubes for implant applications and antibacterial drug delivery*' in Advances in Nanotechnology and Applications: Volume 1, 2009, pages 94 – 104, CENTERA, Louisville, KY USA. (ISBN No: 1-4392-5489-3).
- 6) **Karthikeyan Subramani**. '*Nanoparticles for drug delivery, imaging and gene therapy*' delivery' in Advances in Nanotechnology and Applications: Volume 2, 2011, pages 109-120, CENTERA, Louisville, KY USA.
- 7) **Karthikeyan Subramani**, Waqar Ahmed. '*Nanotechnology and the future of Dentistry*' in 'Emerging Nanotechnologies in Dentistry: Processes, Materials and Applications', pages 1-14, Elsevier. (December 2011). ISBN: 978-1-4557-7862-1
- 8) E. G. Mota, **Karthikeyan Subramani**. '*Nanotechnology in operative dentistry: a perspective approach of history, mechanical behavior and clinical application*' in 'Emerging Nanotechnologies in Dentistry: Processes, Materials and Applications', pages 49-69, Elsevier. (December 2011). ISBN: 978-1-4557-7862-1
- 9) **Karthikeyan Subramani**. '*Titanium surface modification techniques for dental implants – From microscale to nanoscale*' in 'Emerging Nanotechnologies in Dentistry: Processes, Materials and Applications', pages 85-102, Elsevier. (December 2011). ISBN: 978-1-4557-7862-1
- 10) **Karthikeyan Subramani**. '*Titanium nanotubes as carriers of osteogenic growth factors and antibacterial drugs for applications in dental implantology*' in 'Emerging Nanotechnologies in Dentistry: Processes, Materials and Applications', Elsevier. Pages 103-111, Elsevier (December 2011). ISBN: 978-1-4557-7862-1
- 11) **Karthikeyan Subramani**. '*Fabrication of PEG hydrogel micropatterns by Soft-photolithography and PEG hydrogel as Guided Bone Regeneration membrane in dental implantology*' in 'Emerging Nanotechnologies in Dentistry: Processes, Materials and Applications',

pages 171-181, Elsevier. (December 2011). ISBN: 978-1-4557-7862-1

- 12) **Karthikeyan Subramani. 'Self-assembly of Proteins and Peptides and their applications in Bionanotechnology and Dentistry'** in 'Emerging Nanotechnologies in Dentistry: Processes, Materials and Applications', pages 209-224, Elsevier. (December 2011). ISBN: 978-1-4557-7862-1
- 13) Hossein Hosseinkhani, Mohsen Hosseinkhani, **Karthikeyan Subramani. 'Bone regeneration using self-assembled nanoparticle based scaffolds'** in 'Emerging Nanotechnologies in Dentistry: Processes, Materials and Applications', pages 225-237, Elsevier. (December 2011). ISBN: 978-1-4557-7862-1
- 14) Waqar Ahmed, **Karthikeyan Subramani. 'Surface engineering of Dental Tools with diamond for improved life and performance'** in 'Emerging Nanotechnologies in Dentistry: Processes, Materials and Applications', pages 239-272, Elsevier. (December 2011). ISBN: 978-1-4557-7862-1
- 15) **Karthikeyan Subramani. 'Nanoparticulate Drug Delivery Systems for Oral Cancer treatment'** in 'Emerging Nanotechnologies in Dentistry: Processes, Materials and Applications', pages 333-345, Elsevier. (December 2011). ISBN: 978-1-4557-7862-1
- 16) Abdelbary Elhissi, Waqar Ahmed, V. R. Dhanak and **Karthikeyan Subramani. 'Carbon nanotubes in cancer therapy and drug delivery'** in 'Emerging Nanotechnologies in Dentistry: Processes, Materials and Applications', pages 347-363, Elsevier. (December 2011). ISBN: 978-1-4557-7862-1
- 17) Manjula Mehta, **Karthikeyan Subramani. 'Nanodiagnostics in Microbiology and Dentistry'** in 'Emerging Nanotechnologies in Dentistry: Processes, Materials and Applications', pages 365-390, Elsevier. (December 2011). ISBN: 978-1-4557-7862-1
- 18) Navdeep Kaur, **Karthikeyan Subramani, Yashwant Pathak. 'Antibody mediated drug delivery systems: A general review and applications'** in 'Antibody mediated drug delivery systems ' (Wiley and Sons, NY) (May 2012) Edited by Dr Yashwant Pathak and Dr Simon Benita. ISBN: 978-0-470-61281-1.
- 19) Waqar Ahmed, Abdelbary Elhissi and **Karthikeyan Subramani. 'Introduction to Nanotechnology'** in 'Nanobiomaterials in Clinical Dentistry', Pages 3-16, Elsevier. (December 2012). ISBN: 978-1-4557-3127-5
- 20) **Karthikeyan Subramani, Sarandeep Huja, G. Thomas Kluemper, Lorri Morford, James K. Hartsfield Jr. 'Nanotechnology in Orthodontics—1: The Past, Present, and a Perspective of the Future'** in 'Nanobiomaterials in Clinical Dentistry', Pages 231-247, Elsevier. (December 2012). ISBN: 978-1-4557-3127-5
- 21) Qing Cai, **Karthikeyan Subramani, Reji Mathew, Xiaoping Yang. 'Carbon Nanomaterials for Implant Dentistry and Bone Tissue Engineering'** in 'Nanobiomaterials in Clinical Dentistry', Pages 359-388, Elsevier. (December 2012). ISBN: 978-1-4557-3127-5