

# CURRICULUM VITAE

## Raman Vedarajan, PhD

Scientist

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## Education

- Jan 2002 – Jun 2006* **Anna University, Chennai**  
Doctor of Philosophy, Electrochemical Surface Modification, Morphological Investigation, Electrochemistry, Chennai, Tamil Nadu, India
- Aug 2000 – Aug 2001* **Anna University, Chennai**  
Master of Philosophy, Materials, Coatings, Electrochemistry Chennai, Tamil Nadu, India
- Apr 1998 – Mar 2000* **Sri Sathya Sai Institute of Higher Learning**  
Master of Science, Chemistry  
Puttaparthi, Andhra Pradesh, India
- Apr 1995 – Mar 1998* **Sri Sathya Sai Institute of Higher Learning**  
Bachelor of Science (Hon's), Chemistry  
Puttaparthi, Andhra Pradesh, India

## Research Experience

- Aug 2017 – present* **Scientist**  
International Advanced Research Centre for Powder Metallurgy and New Materials, Center for Fuel Cell Technology  
India
- May 2012 – Jul 2017* **Professor (Assistant)**  
Japan Advanced Institute of Science and Technology, School of Materials Science (JAIST)  
Komatsu, Japan

- Apr 2010 – Apr 2012* **Scientist**  
International Advanced Research Centre for Powder Metallurgy and New  
Materials,  
Chennai, Tamil Nadu, India
- Nov 2009 – Mar 2010* **PostDoc Fellow**  
Nagoya University, Graduate of Bio-Agricultural Sciences  
Japan
- Oct 2006 – Oct 2009* **PostDoc Fellow**  
National Institute for Materials Science, Research Center for Strategic  
Materials  
Tsukuba, Ibaraki, Japan
- Apr 2004 – Mar 2006* **International Exchange Researcher**  
Osaka University, Department of Materials and Manufacturing Science  
Suita, Ōsaka, Japan

## Interests & Activities

*Interests* Solid State Electrochemistry, Polymer Electrolyte Membrane Fuel Cell,  
Organic-inorganic hybrid Materials Chemistry, Corrosion, Surface  
Modification

## Awards & Grants

1. MEXT-MHRD – Japanese Government Scholarship Exchange Fellow 2004 – 2006, Osaka University Japan.
2. Co-Investigator of India-Japan Co-operative Science Program – JSPS-DST Collaborative Research between JAIST, Japan and Center For Fuel Cell Technology, ARCI, India – Project entitled “Organoboron organic- inorganic hybrids as solid electrolyte for Li batteries with graphene based anodes” (2013-2015)
3. Member of Toyota National Project [TherMAT (NEDO)]

## Technology Transfer

1. Synthesis of electrocatalyst for fuel cell application to Las Engineers & Consultants Pvt. Ltd; March 11<sup>th</sup>, 2022

## Patents

1. Japanese Patent No: 2013-231393  
Inventor : Noriyoshi MATSUMI, RamanVEDARAJAN, Rajashekar Badam
2. Japanese Patent No:2014-048015  
Inventor : Noriyoshi MATSUMI, Raman VEDARAJAN, Kamiya JAIN  
Masaki WATANABE, Mamoru ISHIKIRIYAMA
3. Japanese Patent No:2014-046765  
Inventor : Noriyoshi MATSUMI, Raman VEDARAJAN, Puhup PUNEET
4. Japanese Patent No:2014-187671  
Inventor : Noriyoshi MATSUMI, Raman VEDARAJAN, Shoto IKEDA
5. Japanese Patent No:2014-178542  
Inventor : Noriyoshi MATSUMI, Raman VEDARAJAN, Surabhi GUPTA, Kamiya JAIN,  
Masaki WATANABE, Mamoru ISHIKIRIYAMA
6. US Patent: WATER VAPOR ADSORPTION-DESORPTION MATERIAL AND METHOD FOR MEASURING LCST BEHAVIOR Publication date: 2016/03/03 Application Number:14/842490  
Inventors: Masaki WATANABE, Mamoru ISHIKIRIYAMA, Noriyoshi MATSUMI, Raman VEDARAJAN, Surabhi GUPTA, Kamiya JAIN

## Book Chapters

1. Microstructure of the Rust Formed on Si-Al Bearing Ultrafine-Grained Weathering Steel, Microstructure and Texture in Steels, ISBN 978-1-84882-453-9. Springer London, (2009) 431
2. Atmospheric corrosion resistance of stainless steel in saline environment, Advances in Stainless Steels, By Ra, Baldev, et al. (Eds.) (45)(2009) 647.
3. Pitchaimuthu Sudhagar, Nitish Roy, Raman Vedarajan, AnithaDevadoss, Chiaki Terashima, Kazuya Nakata, Akira Fujishima: *Hydrogen and CO<sub>2</sub> Reduction Reactions: Mechanisms and Catalysts*. Photoelectrochemical Solar Fuel Production, 04/2016: pages 105-160; , ISBN: 978-3-319-29639-5, DOI:10.1007/978-3-319-29641-8\_3
4. Energy Materials and Energy Harvesting September 2020 DOI:10.1201/9780429298035-5 In book: Functional and Smart Materials
5. Advanced nanocatalysts for fuel-cell technologies January 2020 DOI: 10.1016/B978-0-12-819355-6.00006-6 In book: Nanomaterials for Sustainable Energy and Environmental Remediation
6. Multiphase Flow its Application in Water Management and Harvesting in Fuel Cells; January 2019; DOI: 10.1007/978-981-13-3256-2 10 In book: Two-Phase Flow for Automotive and Power Generation Sectors
7. TMCs/Polymer Composite Electrocatalysts for I-Mediated Dye-Sensitized Solar Cells; September 2018; DOI: 10.1002/9783527813636.ch10, In book: Counter Electrodes for Dye-sensitized and Perovskite Solar Cells

## Journal Publications

1. P. Sreeraj, Raman Vedarajan, N. Rajalakshmi, Venkatasailanathan Ramadesigan, Screening of recycled membrane with crystallinity as a fundamental property 2021, International Journal of Hydrogen Energy 46 (24); 10.1016/j.ijhydene.2021.01.098
2. Rajashekar Badam, Raman Vedarajan, Kazuki Okaya, Noriyoshi Matsumi Ionic Liquid Mediated Decoration of Pt Nanoparticles on Graphene and Its Electrocatalytic Characteristics March 2021, Journal of the Electrochemical Society 168 (3); 10.1149/1945-7111/abee5a
3. Perna Joshi, Raman Vedarajan, Anjiah Sheelam, Noriyoshi Matsumi An all solid-state Li ion battery composed of low molecular weight crystalline electrolyte February 2020 RSC Advances 10(15):8780-8789 DOI: 10.1039/C9RA09559D
4. T. Ramesh, Raman Vedarajan, N. Rajalakshmi, Ram Gopal Reddy Lekkala; Dynamic electrochemical impedance spectroscopy as a rapid screening tool for supercapacitor electrode materials; January 2020; Journal of Materials Science: Materials in Electronics 31(2):1-10 DOI: 10.1007/s10854-019-02686-y
5. Sai Gourang Patnaik, Raman Vedarajan, Noriyoshi Matsumi, Rational design of a BIAN-based multi-functional additive for higher durability and performance of  $\text{LiMn}_{1/3}\text{Ni}_{1/3}\text{Co}_{1/3}\text{O}_2$  cathodes; June 2019 Molecular Systems Design & Engineering 4(4) DOI: 10.1039/c9me00046a
6. In situ sol-gel preparation of ZrO<sub>2</sub> in nano-composite polymer electrolyte of PVDF-HFP/MG49 for lithium-ion polymer battery; LeeTian Khoo, Lee Mark Lee, Nur Hasyareeda Hassan, Raman Vedarajan, Azizan Ahmad; June 2019 Journal of Sol-Gel Science and Technology 90(6) DOI: 10.1007/s10971-019-04936-1
7. Santhosh Bukka, Rajashekar Badam, Raman Vedarajan, Noriyoshi Matsumi; Photo-generation of ultra-small Pt nanoparticles on carbon-titanium dioxide nanotube composites: A novel strategy for efficient ORR activity with low Pt content; February 2019 International Journal of Hydrogen Energy 44(10) DOI: 10.1016/j.ijhydene.2019.01.004
8. Aniruddha Nag, Asif Ali, Ankit Singh, Ramna Vedarajan, Tatsuo Kaneko; boronated polybenzimidazole for composite electrolyte design of highly ion conductive pseudo solid-state ion gel electrolytes with high Li-transference number; December 2018, Journal of Materials Chemistry A 7(9) DOI: 10.1039/C8TA10476J
9. Santhosh Bukka, Yuhei Umehara, Koichi Higashimine, Rajashekar Badam, Raman Vedarajan, Noriyoshi Matsumi: *Ultrafast electrochemical deposition of core shell metal nanoparticles on TiO<sub>2</sub> nano tubes for electrocatalytic applications*. Materials Research Express 08/2018; DOI:10.1088/2053-1591/aadc82
10. Puhup Puneet, Raman Vedarajan, Noriyoshi Matsumi: *Electrochemical evaluation of the rapid self-healing behavior of poly(borosiloxane) and its use for corrosion protection of metals*. Electrochemistry Communications 05/2018; 93., DOI:10.1016/j.elecom. 2018.05.022
11. Kumar Sai Smaran, Rajashekar Badam, Raman Vedarajan, Noriyoshi Matsumi: *Flame-retardant properties of in situ sol-gel synthesized inorganic borosilicate/silicate polymer scaffold matrix comprising ionic liquid*. Frontiers in Energy 04/2018; DOI:10.1007/s11708-018-0554-2
12. D Bauer, AJ Roberts, CL Starkey, R Vedarajan, DJL Brett, PR Shearing, N Matsumi, JA Darr: *TiO<sub>2</sub>/MoO<sub>2</sub> Nanocomposite as Anode Materials for High Power Li-ion Batteries with Exceptional Capacity*. International journal of electrochemical science 04/2018; 13(5).
13. Sudip Mandal, Raman Vedarajan, Noriyoshi Matsumi, Kothandaraman Ramanujam: *Computational Investigation of the Influence of  $\pi$ - Bridge Conjugation Order of Thiophene and Thiazole Units in Triphenylamine Based Dyes in Dye Sensitized Solar Cells*. ChemistrySelect 03/2018; 3(13)., DOI:10.1002/slct.201702882

14. Sai Gourang Patnaik, Raman Vedarajan, Noriyoshi Matsumi: *BIAN Based Electroactive Polymer with Defined Active Centers as Metal-Free Electrocatalysts for Oxygen Reduction Reaction (ORR) in Aqueous and Nonaqueous Media*. 03/2018;, DOI:10.1021/acsam.7b00293
15. Jagadeeswari Sivanadanam, Ramesh Mukkamala, Sudip Mandal, Raman Vedarajan, Noriyoshi Matsumi, Indrapal Singh Aidhen, Kothandaraman Ramanujam: *Exploring the role of the spacers and acceptors on the triphenylamine-based dyes for dye-sensitized solar cells*. International Journal of Hydrogen Energy 01/2018; 43(9)., DOI:10.1016/j.ijhydene.2017.10.183
16. Purna Joshi, Katsuhito Iwai, Sai Gourang Patnaik, Raman Vedarajan, Noriyoshi Matsumi: *Reduction of Charge-Transfer Resistance via Artificial SEI Formation Using Electropolymerization of Borylated Thiophene Monomer on Graphite Anodes*. Journal of The Electrochemical Society 01/2018; 165(3):A493-A500., DOI:10.1149/2.0141803jes
17. Raman Vedarajan, Naoki Tomida, Noriyoshi Matsumi: *Metal Free Composite Electrodes for Hydrogen Evolution Reaction*. Materials today: proceedings 12/2017; 4(4):5116-5121., DOI:10.1016/j.matpr.2017.05.016
18. Rajashekar Badam, Raman Vedarajan, Noriyoshi Matsumi: *3D-polythiophene foam on a TiO<sub>2</sub> nanotube array as a substrate for photogenerated Pt nanoparticles as an advanced catalyst for the oxygen reduction reaction*. Polymer Journal 12/2017;, DOI:10.1038/s41428-017-0005-7
19. Rajashekar Badam, Purna Joshi, Raman Vedarajan, Rajalakshmi Natarajan, Noriyoshi Matsumi: *Few-Layered MoS<sub>2</sub>/Acetylene Black Composite as an Efficient Anode Material for Lithium-Ion Batteries*. Nanoscale Research Letters 10/2017; 12(1):555., DOI:10.1186/s11671-017-2322-3
20. Sai Gourang Patnaik, Raman Vedarajan, Noriyoshi Matsumi: *BIAN based functional diimine polymer binder for high performance Li ion batteries*. Journal of Materials Chemistry A 08/2017; 5(5)., DOI:10.1039/C7TA03843G
21. Pradeep Kumar Badiya, Sai Gourang Patnaik, Venkatesh Srinivasan, Narendra Reddy, Chelli Sai Manohar, Raman Vedarajan, Noriyoshi Matsumi, Siva Kumar Belliraj, Sai Sathish Ramamurthy: *Ag-Protein Plasmonic Architectures for Surface Plasmon-Coupled Emission Enhancements and Fabry-Perot Mode-Coupled Directional Fluorescence Emission*. Chemical Physics Letters 07/2017; 685., DOI:10.1016/j.cplett.2017.07.056
22. Raman Vedarajan, Kento Matsui, Emari Tamaru, Jyoti Dhankhar, Toshihiro Takekawa, Noriyoshi Matsumi: *Ionic liquid/boric ester binary electrolytes with unusually high lithium transference number*. Electrochemistry Communications 06/2017; 81., DOI:10.1016/j.elecom.2017.06.019
23. Ankit Singh, Raman Vedarajan, Noriyoshi Matsumi: *Modified Metal Organic Frameworks (MOFs)/Ionic Liquid Matrices for Efficient Charge Storage*. Journal of The Electrochemical Society 01/2017; 164(8):H5169-H5174., DOI:10.1149/2.0191708jes
24. Rajashekar Badam, Raman Vedarajan, Kazuki Okaya, Koichi Matsutani, Noriyoshi Matsumi: *Sacrificial Reducing Agent Free Photo-Generation of Platinum Nano Particle over Carbon/TiO<sub>2</sub> for Highly Efficient Oxygen Reduction Reaction OPEN*. Scientific Reports 12/2016; 6(37006)., DOI:10.1038/srep37006
25. Puhup Puneet, Raman Vedarajan, Noriyoshi Matsumi: *Alternating Poly(borosiloxane) for Solid State Ultrasensitivity Toward Fluoride Ions in Aqueous Media*. 09/2016; 1(10)., DOI:10.1021/acssensors.6b00346
26. Maidhily Manikandan, Raman Vedarajan, Rajesh Kodiyath, Hideki Abe, Shigenori Ueda, Arivuoli Dakshnamoorthy, Natarajan Rajalakshmi, Kaveripatnam S Dhathathreyan, Gubbala V Ramesh: *Pt Decorated Free-Standing TiO<sub>2</sub> Nanotube Arrays: Highly Active and Durable Electrocatalyst*

- for Oxygen Reduction and Methanol Oxidation Reactions. *Journal of Nanoscience and Nanotechnology* 08/2016; 16(8):8269-8278., DOI:10.1166/jnn.2016.11772
27. PuhupPuneet, Raman Vedarajan, NoriyoshiMatsumi:  *$\sigma$ -p Conjugated Copolymers via Dehydrocoupling Polymerization of Phenylsilane and Mesitylborane*. *Polymer Chemistry* 05/2016; 7(25)., DOI:10.1039/C6PY00205F
  28. Kamiya Jain, Raman Vedarajan, Masaki Watanabe, Mamoru Ishikiriyama, NoriyoshiMatsumi: *Tunable LCST behavior of poly(N-isopropylacrylamide/ionic liquid) copolymers*. *Polymer Chemistry* 10/2015; 6(38)., DOI:10.1039/C5PY00998G
  29. Kumar Sai Smaran, Prerna Joshi, Raman Vedarajan, NoriyoshiMatsumi: *Optimisation of Potential Boundaries with Dynamic Electrochemical Impedance Spectroscopy for an Anodic Half-Cell Based on Organic-Inorganic Hybrid Electrolytes*. *ChemElectroChem* 10/2015; 2(12)., DOI:10.1002/celec.201500372
  30. Toshiyasu Nishimura, Raman Vedarajan: *Epoxy polymer coating to prevent the corrosion of aluminum nanoparticles*. *Polymers for Advanced Technologies* 09/2015; 27(6):n/a-n/a., DOI:10.1002/pat.3694
  31. Prerna Joshi, Raman Vedarajan, NoriyoshiMatsumi: *Crystalline Low Molecular Weight Cyclic Organoboron Compound for Efficient Solid State Lithium Ion Transport*. *Chemical Communications* 08/2015; 51(81)., DOI:10.1039/C5CC04753F
  32. Rajashekar B, Raman Vedarajan, NoriyoshiMatsumi: *Platinum Decorated Functionalized Defective Acetylene Black; A Promising Cathode Material For Oxygen Reduction Reaction*. *Chemical Communications* 05/2015; 51(48)., DOI:10.1039/C5CC02235E
  33. L Tiankhon, N H Hassan, M Y A Rahman, R Vedarajan, N Matsumi, A Ahmad: *One-pot synthesis nano-hybrid ZrO<sub>2</sub>-TiO<sub>2</sub> fillers in 49% poly(methyl methacrylate) grafted natural rubber (MG49) based nano-composite polymer electrolyte for lithium ion battery application*. *Solid State Ionics* 03/2015; 276., DOI:10.1016/j.ssi.2015.03.034
  34. NoriyoshiMatsumi, Yoshiyuki Toyota, Prerna Joshi, PuhupPuneet, Raman Vedarajan, Toshihiro Takekawa: *Boric Ester-Type Molten Salt via Dehydrocoupling Reaction*. *International Journal of Molecular Sciences* 11/2014; 15(11):21080-9., DOI:10.3390/ijms151121080
  35. Raman Vedarajan, Shoto Ikeda, NoriyoshiMatsumi: *Electrochemical characterization of TiO<sub>2</sub>/WO<sub>x</sub> nanotubes for photocatalytic application*. *Nanoscale Research Letters* 10/2014; 9(1):573., DOI:10.1186/1556-276X-9-573
  36. Raman Vedarajan, Makoto Ogawa, NoriyoshiMatsumi: *Lithium ion conductive behavior of TiO<sub>2</sub> nanotube/ionic liquid matrices*. *Nanoscale Research Letters* 10/2014; 9(1):539., DOI:10.1186/1556-276X-9-539
  37. Raman Vedarajan, Yasuhiro Hosono, NoriyoshiMatsumi: *Conjugated polycarbazole-boron complex as a colorimetric fluoride ion sensor*. *Solid State Ionics* 09/2014; 262:795-800., DOI:10.1016/j.ssi.2013.09.062
  38. Toshiyasu Nishimura, Raman Vedarajan: *Corrosion Prevention of Aluminum Nanoparticles by a Polyurethane Coating*. *Materials* 06/2014; 7(6):4710-4722., DOI:10.3390/ma7064710
  39. Kumar Sai Smaran, Raman Vedarajan, NoriyoshiMatsumi: *Design of organic-inorganic hybrid ion-gel electrolytes composed of borosilicate and allylimidazolium type ionic liquids*. *International Journal of Hydrogen Energy* 02/2014; 39(6):2936-2942., DOI:10.1016/j.ijhydene.2013.05.124
  40. MohanaMarimuthu, MuruganVeerapandian, SubramaniamRamasundaram, Seok Won Hong, P. Sudhagar, Srinivasan Nagarajan, Raman Vedarajan, Eisuke Ito, Sanghyo Kim, Kyusik Yun, Yong Soo Kang: *Sodium functionalized graphene oxide coated titanium plates for improved corrosion resistance and cell viability*. *Applied Surface Science* 02/2014; 293:124-131., DOI:10.1016/j.apsusc.2013.12.114

41. S. Nagarajan, P. Sudhagar, Raman Vedarajan, Woohyung Cho, K. S. Dhathathreyan, Yong Soo. Kang: *A PEDOT-reinforced exfoliated graphite composite as a Pt- and TCO-free flexible counter electrode for polymer electrolyte dye-sensitized solar cells*. 01/2013; 1(4-4):1048-1054., DOI:10.1039/c2ta00091a
42. Srinivasan Nagarajan, Marimuthu Mohana, Pitchaimuthu Sudhagar, Raman Vedarajan, Toshiyasu Nishimura, Sanghyo Kim, Yong Soo Kang, Nallaiyan Rajendran: *Nanocomposite Coatings on Biomedical Grade Stainless Steel for Improved Corrosion Resistance and Biocompatibility*. ACS Applied Materials & Interfaces 09/2012; 4(10):5134-41., DOI:10.1021/am301559r
43. B. P. Vinayan, Rupali Nagar, Raman Vedarajan, N. Rajalakshmi, K. S. Dhathathreyan, S. Ramaprabhu: *Synthesis of graphene-multiwalled carbon nanotubes hybrid nanostructure by strengthened electrostatic interaction and its lithium ion battery application*. Journal of Materials Chemistry 04/2012; 22(19):9949-9956., DOI:10.1039/C2JM16294F
44. BP Vinayan, Rupali Nagar, Raman Vedarajan, N. Rajalakshmi, KS Dhathathreyan, S Ramaprabhu: *Synthesis of graphene-multiwalled carbon nanotubes hybrid nanostructure by strengthened electrostatic interaction and its lithium ion battery application*. Journal of Materials Chemistry 01/2012;
45. S Tamilselvi, Raman Vedarajan, N Rajendran: *Surface modification of titanium by chemical and thermal methods - Electrochemical impedance spectroscopic studies*. Corrosion Engineering Science and Technology 06/2011; 46(4):585-591., DOI:10.1179/147842209X12590591256936
46. G. Mohan Kumar, Raman Vedarajan, Jin Kawakita, P Ilanchezhian, R Jayavel: *Fabrication of polypyrrole/ZnCoO nanohybrid systems for solar cell applications*. Dalton Transactions 09/2010; 39(35):8325-30., DOI:10.1039/c0dt00167h
47. Raman Vedarajan, Toshiyasu Nishimura: *Corrosion analysis and monitoring of the environmental factors for the deterioration of chromium-bearing reinforcing steel in mortar*. Journal of Solid State Electrochemistry 08/2010; 14(8):1457-1464., DOI:10.1007/s10008-009-0949-4
48. S. Nagarajan, Raman Vedarajan, N. Rajendran: *Evaluation of passive film behaviour of super austenitic stainless steels at different potential regions using dynamic electrochemical impedance spectroscopy*. Journal of Solid State Electrochemistry 07/2010; 14(7):1197-1204., DOI:10.1007/s10008-009-0948-5
49. Seshachalam Udayakumar, Hye-Lim Shim, Raman Vedarajan, Dae-Won Park: *The complete optimization of ionic liquid-functionalized porous amorphous silica under one-pot synthesis conditions*. Microporous and Mesoporous Materials 04/2010; 129(1-2-129):149-155., DOI:10.1016/j.micromeso.2009.09.010
50. Toshiyasu Nishimura, Raman Vedarajan: *Corrosion behavior of reinforcing steel in concrete for nuclear facilities exposed in high chloride and low pH environment*. Journal of Nuclear Materials 02/2010; 397(1):101-108., DOI:10.1016/j.jnucmat.2009.12.015
51. S. Tamilselvi, Raman Vedarajan, N. Rajendran: *Evaluation of corrosion behavior of surface modified Ti-6Al-4V ELI alloy in hanks solution*. Journal of Applied Electrochemistry 02/2010; 40(2):285-293., DOI:10.1007/s10800-009-9972-5
52. S. Nagarajan, Raman Vedarajan, N. Rajendran: *Synthesis and electrochemical characterization of porous niobium oxide coated 316L SS for orthopedic applications*. Materials Chemistry and Physics 02/2010; 119(3-119):363-366., DOI:10.1016/j.matchemphys.2009.10.033
53. Seshachalam Udayakumar, Raman Vedarajan, Hye-Lim Shim, Dae-Won Park: *Cycloaddition of carbon dioxide for commercially-imperative cyclic carbonates using ionic liquid-functionalized porous amorphous silica*. Applied Catalysis A General 10/2009; 368(1-2):97-104., DOI:10.1016/j.apcata.2009.08.015

54. Shinji Fujimoto, Raman Vedarajan, Hiroaki Tsuchiya: *Surface modification of  $\beta$ -Type titanium alloy by electrochemical potential pulse polarization*. Journal of Physics Conference Series 06/2009; 165(1):012007., DOI:10.1088/1742-6596/165/1/012007
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57. Raman Vedarajan, T. Nishimura: *Microstructure of the Rust Formed on SiAl Bearing Ultrafine-Grained Weathering Steel*. DOI:10.1007/978-1-84882-454-6\_27
58. Raman Vedarajan, S. Tamilselvi, N. Rajendran: *Evaluation of effective biocides for SRB to control microbiologically influenced corrosion*. Materials and Corrosion 04/2008; 59(4):329 - 334., DOI:10.1002/maco.200804103
59. A.P. Srikanth, Raman Vedarajan, S. Tamilselvi, S. Nanjundan, N. Rajendran: *Electropolymerization and corrosion protection of polyaniline and its copolymer on carbon steel*. Anti-Corrosion Methods and Materials 01/2008; 55(1):3-9., DOI:10.1108/00035590810842762
60. M Karthega, Raman Vedarajan, NRajendran: *Influence of potential on the electrochemical behaviour of  $\beta$  titanium alloys in Hank's solution*. ActaBiomaterialia 12/2007; 3(6):1019-23., DOI:10.1016/j.actbio.2007.02.009
61. Raman Vedarajan, S. Tamilselvi, N. Rajendran: *Electrochemical Impedance Spectroscopic Characterization of Titanium During Alkali Treatment and Apatite Growth in Simulated Body Fluid*. ElectrochimicaActa 09/2007; 52(26):7418-7424., DOI:10.1016/j.electacta.2007.06.040
62. P. Srikanth, T.G. Sunitha, Raman Vedarajan, S. Nanjundan, N. Rajendran: *Synthesis, characterization and corrosion protection properties of poly( N-(acryloyloxymethyl) benzotriazole- co-glycidyl methacrylate) coatings on mild steel*. Materials Chemistry and Physics 06/2007; 103(2):241-247., DOI:10.1016/j.matchemphys.2007.02.021
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64. Raman Vedarajan, S. Nagarajan, N. Rajendran: *Electrochemical impedance spectroscopic characterisation of passive film formed over  $\beta$  Ti-29Nb-13Ta-4.6Zr alloy*. Electrochemistry Communications 08/2006; 8(8):1309-1314., DOI:10.1016/j.elecom.2006.06.004
65. Raman Vedarajan, S. Tamilselvi, S. Nanjundan, N. Rajendran: *Electrochemical behaviour of titanium and titanium alloy in artificial saliva*. Trends in Biomaterials and Artificial Organs 01/2005; 18(2):137-140.
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67. S. Gokul Lakshmi, Raman Vedarajan, N. Rajendran, M.A.K. Babi, D. Arivuoli: *In vitro corrosion behaviour of plasma nitrided Ti-6Al-7Nb orthopaedic alloy in Hanks solution*. Science and Technology of Advanced Materials 09/2003; 4(5):415-418., DOI:10.1016/j.stam.2003.09.005