

Full List of Peer-Reviewed Publications

1. Parmanand Ahirwar, Veronika Kozlovskaya, Bhavitavya Nijampatnam, Edwin M. Rojas, Piyasuda Pukkanasut, Daniel Inman, Maksim Dolmat, Anna C. Law, Norbert Schormann, Champion Deivanayagam, Gregory J. Harber, Suzanne M. Michalek, Hui Wu, Eugenia Kharlampieva and **Sadanandan E. Velu**, Hydrogel encapsulated biofilm inhibitors abrogate the cariogenic activity of *Streptococcus mutans*, **Journal of Medicinal Chemistry**, Article ASAP (**2023**), DOI: 10.1021/acs.jmedchem.3c00272.
2. Piyasuda Pukkanasut, Jason Whitt, Rachael Guenter, Shannon E Lynch, Carlos Gallegos, Margarita Jacaranda Rosendo-Pineda, Juan Carlos Gomora, Herbert Chen, Diana Lin, Anna Sorace, Renata Jaskula-Sztul and **Sadanandan E. Velu**, Voltage-gated Sodium Channel NaV1.7 Inhibitors with Potent Anticancer Activities in Medullary Thyroid Cancer Cells, **Cancers**, 15(10), 2806 (**2023**), PubMed PMCID: PMC10216335, DOI: 10.3390/cancers15102806.
3. Osbaldo Lopez-Charcas, Lucile Poisson, Oumnia Benouna, Roxane Lemoine, Stéphanie Chadet, Adrien Pétreau, Widad Lahlou, Serge Guyétant, Mehdi Ouaissi, Piyasuda Pukkanasut, Shilpa Dutta, **Sadanandan E Velu**, Pierre Besson, Driffa Moussata, and Sébastien Roger, Voltage-Gated Sodium Channel NaV1.5 Controls NHE-1-Dependent Invasive Properties in Colon Cancer Cells, **Cancers**, 15: 46 (**2023**), PubMed PMID: 36612049, PubMed PMCID: PMC9817685, DOI: 10.3390/cancers15010046.
4. Cuijuan Han, Alireza Khodadadi-Jamayran, Adam H. Lorch, Qi Jin, Valentina Serafin, Ping Zhu, Yuliya Politanska, Limin Sun, Blanca T. Gutierrez-Diaz, Marina V. Pryzhkova, Hiam Abdala-Valencia, Elizabeth Thomas Bartom, Barbara Buldini, Giuseppe Basso, **Sadanandan E. Velu**, Kavitha Sarma, Basil B. Mattamana, Byoung-Kyu Cho, Rebecca C. Obeng, Young Ah Goo, Philip W. Jordan, Aristotelis Tsirigos, Yalu Zhou, Panagiotis Ntziachristos, SF3B1 homeostasis is critical for survival and therapeutic response in T cell leukemia, **Science Advances**, 8, eabj8357 (**2022**), PubMed PMID: 35061527, PubMed PMCID: PMC8782448, DOI: 10.1126/sciadv.abj8357.
5. Zekiye Ceren Arituluk, Jesse Horne, Bishnu Adhikari, Jeffrey Steltzner, Shomit Mansur, Parmanand Ahirwar, **Sadanandan E. Velu**, Nora E. Gray, Lukasz M. Ciesla and Yuping Bao, Identification of TrkB Binders from Complex Matrices Using a Magnetic Drug Screening Nanoplatfrom, **ACS Applied Bio Materials**, 4: 6244–6255 (**2021**), DOI: 10.1021/acsabm.1c00552.
6. Chandni Desai, Jon Thomason, Jordan Kohlmeyer, Anna Reissetter, Parmanand Ahirwar, Khadijeh Jahanseir, Mariah Leidinger, Georgina Ofori-Amanfo, Karen Fritch, **Sadanandan E. Velu**, Patrick Breheny, Dawn Quelle, and Munir Tanas, Prognostic and therapeutic value of the Hippo pathway, RABL6A, and p53-MDM2 axes in sarcomas, Submitted to **Oncotarget**, 12: 740-755 (**2021**), PubMed PMID: 33889298, PubMed PMCID: PMC8057271, DOI: 10.18632/oncotarget.27928.
7. Bhavitavya Nijampatnam, Parmanand Ahirwar, Piyasuda Pukkanasut, Holly Womack, Luke Casals, Hua Zhang, Xia Cai, Suzanne M. Michalek, Hui Wu, and **Sadanandan E. Velu**, Discovery of Potent Inhibitors of Streptococcus mutans Biofilm with Antivirulence Activity, **ACS Medicinal Chemistry Letters**, 12 (1): 48–55 (**2021**), PubMed PMID: 33488963, PubMed PMCID: PMC7812604, DOI: 10.1021/acsmedchemlett.0c00373.
8. Michiel van Gent, Adrian Reich, **Sadanandan E. Velu**, and Michaela U. Gack, Nonsense-mediated decay controls the reactivation of the oncogenic herpesviruses EBV and KSHV, **PLoS Biology**, 19(2): e3001097 (**2021**), PubMed PMID: 33596193, DOI: 10.1371/journal.pbio.3001097.
9. Osbaldo Lopez-Charcas, Piyasuda Pukkanasut, **Sadanandan E. Velu**, William J. Brackenbury, Tim G. Hales, Pierre Besson, Juan Carlos Gomora, Sebastien Roger, Pharmacological and nutritional targeting of voltage-gated sodium channels in the treatment of cancers, **iScience**, 24: 102270 (**2021**), PubMed PMID: 33817575, PubMed PMCID: PMC8010468, DOI: 10.1016/j.isci.2021.102270.
10. Zviadi Aburjania, Jason D Whitt, Samuel Jang, Dwayaja H Nadkarni, Herbert Chen, J Bart Rose, **Sadanandan E Velu** (Co-corresponding author) and Renata Jaskula-Sztul, Synthetic

Makaluvamine Analogs Decrease c-Kit Expression and Are Cytotoxic to Neuroendocrine Tumor Cells, **Molecules**, 25 (21): 4940 (2020), PubMed PMID: 33114525; PubMed PMCID: PMC7663375. DOI: 10.3390/molecules25214940.

11. Jaden Cowan, Mohammad Shadab, Dwayaja H. Nadkarni, Kailash KC, **Sadanandan E. Velu** (Co-corresponding author) and Nabiha Yusuf, A Novel Marine Natural Product Derived Pyrroloiminoquinone with Potent Activity against Skin Cancer Cells, **Marine Drugs**, 17, 1-12 (2019), PubMed PMID: 31357586, PubMed PMCID: PMC6722685, DOI: 10.3390/md17080443.
12. Wei Wang, Jianwen Cheng, Jiang-Jiang Qin, Bo Hu, Xin Li, Bhavitavya Nijampatnam, **Sadanandan E. Velu**, Jia Fan, Xin-Rong Yang, Ruiwen Zhang, MDM2-NFAT1 Dual Inhibitor, MA242: Effective against Hepatocellular Carcinoma, Independent of p53, **Cancer Letters**, 459: 156-167 (2019), PubMed PMID: 31181320, PubMed PMCID: PMC6650270, DOI: 10.1016/j.canlet.2019.114429.
13. Wei Wang, Jiang-Jiang Qin, Sukesh Voruganti, Bhavitavya Nijampatnam, **Sadanandan E. Velu**, Ke-He Ruan, Ming Hu, Jianwei Zhou and Ruiwen Zhang, Discovery and Characterization of Dual Inhibitors of MDM2 and NFAT1 for Pancreatic Cancer Therapy, **Cancer Research**, 78(19): 5656-5667 (2018), DOI: 10.1158/0008-5472.CAN-17-3939.
14. Sandeep Balu Shelar, Eun-Hee Shim, Garrett J. Brinkley, Anirban Kundu, Francesca Carobbio, Tyler Poston, Jubilee Tan, Vishwas Parekh, Daniel Benson, David K. Crossman, Phillip J. Buckhaults, Dinesh Rakheja, Richard Kirkman, Yusuke Sato, Seishi Ogawa, Shilpa Dutta, **Sadanandan E. Velu**, Ethan Emberley, Alison Pan, Jason Chen, Tony Huang, Devin Absher, Anja Becker, Conrad Kunick, Sunil Sudarshan, Biochemical and Epigenetic Insights into L-2-Hydroxyglutarate, a Potential Therapeutic Target in Renal Cancer, **Clinical Cancer Research**, 24(24): 6433-6446 (2018), DOI: 10.1158/1078-0432.CCR-18-1727.
15. Bhavitavya Nijampatnam, Hua Zhang, Xia Cai, Suzanne M. Michalek, Hui Wu and **Sadanandan E. Velu**, Inhibition of *Streptococcus mutans* Biofilms by the Natural Stilbene Piceatannol Through the Inhibition of Glucosyltransferases, **ACS Omega** 3 (7), pp 8378-8385 (2018). PubMed PMID: 30087944, PubMed PMCID: PMC6072251, DOI: 10.1021/acsomega.8b00367.
16. Sandeep Balu Shelar, Eun-hee Shim, Garrett Brinkley, Anirban Kundu, Hyeyoung Nam, Francesca Carobbio, Tyler Poston, Jubilee Tan, Daniel Benson, Dinesh Rakheja, Richard Kirkman, Yusuke Sato, Seishi Ogawa, Shilpa Dutta, **Sadanandan E. Velu**, David Crossman, Anja Becker, Conrad Kunick and Sunil Sudarshan, Abstract 5482: L-2HG/ L2HGDH Axis as therapeutic target for kidney cancer, **Cancer Research**, 78(13 Supplement): 5482-5482 (2018), DOI: 10.1158/1538-7445.AM2018-5482.
17. Shilpa Dutta, Samuel Tanner, Frédéric Gradek, Virginie Driffort, Sébastien Roger, Katri Selander and **Sadanandan E. Velu** (Co-corresponding author), Wayne Brouillette, Discovery and Evaluation of nNav1.5 Sodium Channel Blockers with Potent Cell Invasion Inhibitory Activity in Breast Cancer Cells, **Bioorganic and Medicinal Chemistry**, 26, 2428-2436 (2018). PubMed PMID: 29673714, PubMed PMCID: PMC5935567, DOI: doi.org/10.1016/j.bmc.2018.04.003.
18. Jeffrey W. McDonald, John E. Miller, Minjee Kim and **Sadanandan E. Velu**, An expedient synthesis of murrayaquinone A via a novel oxidative free radical reaction, **Tetrahedron Letters**, 59, 550-553 (2018). PubMed PMID: 29736091, PubMed PMCID: PMC5935454, DOI: 10.1016/j.tetlet.2018.01.007.
19. Qiong Zhang, Bhavitavya Nijampatnam, Zhang Hua, Thao Nguyen, Jing Zou, Xia Cai, Suzanne M. Michalek, **Sadanandan E. Velu** (Co-corresponding author) and Hui Wu, Structure-Based Discovery of Small Molecule Inhibitors of Cariogenic Virulence, **Scientific Reports**, 7, 1-10 (2017). PubMed PMID: 28729722, PubMed PMCID: PMC5519559, DOI: 10.1038/s41598-017-06168-1.
20. Bing Xue, Wei Wang, Jiang-Jiang Qin, Bhavitavya Nijampatnam, Srinivasan Murugesan, Veronika Kozlovskaya, Ruiwen Zhang, **Sadanandan E. Velu** (Co-corresponding author) and Eugenia Kharlampieva, Highly efficient delivery of potent anticancer iminoquinone derivative by multilayer hydrogel cubes, **Acta Biomaterialia**, 58, 386-398 (2017). PubMed PMID: 28583901, PubMed PMCID: PMC5736006, DOI: 10.1016/j.actbio.2017.06.004.

21. Jouko Sandholm, Jaakko Lehtimäki, Tamiko Ishizu, **Sadanandan E. Velu**, Jeremy Clark, Pirkko Härkönen, Arja Jukkola-Vuorinen, Alekski Schrey, Kevin W. Harris, Johanna M. Tuomela and Katri S. Selander, Toll- like receptor 9 expression is associated with breast cancer sensitivity to the growth inhibitory effects of bisphosphonates *in vitro* and *in vivo*, **Oncotarget**, 7, 87373-87389 (2016). PubMed PMID: 27888633, PubMed PMCID: PMC5349995, DOI: 10.18632/oncotarget.13570.
22. Bhavitavya Nijampatnam, Luke Casals, Ruowen Zheng, Hui Wu and **Sadanandan E. Velu**, Hydroxychalcone inhibitors of Streptococcus mutans glucosyl transferases and biofilms as potential anticaries agents, **Bioorganic & Medicinal Chemistry Letters**, 26, 3508-13 (2016). PubMed PMID: 27371109, PubMed PMCID: PMC5207028, DOI: 10.1016/j.bmcl.2016.06.033.
23. M. Ryan Smith, Praveen K. Vayalil, Fen Zhou, Gloria A. Benavides, Reena R. Beggs, Hafez Golzarian, Bhavitavya Nijampatnam, Patsy G. Oliver, Robin A.J. Smith, Michael P. Murphy, **Sadanandan E. Velu** and Aimee Landar, Mitochondrial thiol modification by a targeted electrophile inhibits metabolism in breast adenocarcinoma cells by inhibiting enzyme activity and protein levels, **Redox Biology**, 8, 136-48 (2016). PubMed PMID: 26774751, PubMed PMCID: PMC4732023, DOI: 10.1016/j.redox.2016.01.002.
24. Su Xu, Bhavitavya Nijampatnam, Shilpa Dutta and **Sadanandan E. Velu**, Cyanobacterial Metabolite Calothrixins: Recent Advances in the Synthesis and Biological Evaluation, **Marine Drugs**, 14, 1-21 (2016). PubMed PMID: 26771620, PubMed PMCID: PMC4728514, DOI: 10.3390/md14010017.
25. Wei Wang, Bhavitavya Nijampatnam, **Sadanandan E. Velu** and Ruiwen Zhang, Discovery and Development of Synthetic Tricyclic Pyrroloquinone Alkaloid Analogs for Human Cancer Therapy, **Frontiers of Chemical Science and Engineering**, 10, 1-15 (2016). PubMed PMID: NA, PubMed PMCID: NA, DOI: 10.1007/s11705-016-1562-6.
26. Annette Ehrhardt, W. Joon Chung, Louise C. Pyle, Wei Wang, Krzysztof Nowotarski, Cory M. Mulvihill, Mohabir Ramjeesingh, Jeong Hong, **Sadanandan E. Velu**, Hal A. Lewis, Shane Atwell, Steve Aller, Christine E. Bear, Gergely L. Lukacs, Kevin L. Kirk, and Eric J. Sorscher, Channel Gating Regulation by the Cystic Fibrosis Transmembrane Conductance Regulator (CFTR) First Cytosolic Loop, **Journal of Biological Chemistry**, 291, 1854-65 (2016). PubMed PMID: 26627831, PubMed PMCID: PMC4722463, DOI: 10.1074/jbc.M115.704809.
27. Matthew Ryan Smith, Praveen K Vayalil, Fen Zhou, Gloria A Benavides, Reena Beggs, Hafez Golzarian, Bhavitavya Nijampatnam, Patsy G Oliver, Robin A J Smith, Michael P Murphy, **Sadanandan E Velu** and Aimee Landar, 342 - Mitochondrial Protein Thiols Control Metabolism by Modulating Activity and Levels of Key Metabolic Enzymes, **Free Radical Biology and Medicine**, 87, S152 (2015). PubMed PMID: NA, PubMed PMCID: NA, DOI: NA.
28. Tripti Singh, Nirzari A. Gupta, Su Xu, Ram Prasad, **Sadanandan E. Velu** and Santosh K. Katiyar, Honokiol inhibits the growth of head and neck squamous cell carcinoma by targeting and firm binding with epidermal growth factor receptor, **Oncotarget**, 6, 21268-21282 (2015). PubMed PMID: 26020804, PubMed PMCID: PMC4673264, DOI: 10.18632/oncotarget.4178.
29. Tripti Singh, Su Xu, Sadanandan E. Velu and Santosh K. Katiyar, Abstract 5386: Calothrixin a, a metabolite from calothrix cyanobacteria, inhibits class i histone deacetylases leading to suppression of cell growth and induction of apoptosis in human melanoma cells, **Cancer Research**, 75, 5386 (2015). PubMed PMID: NA, PubMed PMCID: NA, DOI: NA.
30. Bhavitavya Nijampatnam, Shilpa Dutta and **Sadanandan E. Velu**, Recent developments in the isolation, synthesis, and bioactivities of bispyrroloquinone alkaloids of marine origin, **Chinese Journal of Natural Medicines**, 13, 561-577 (2015). PubMed PMID: NA, PubMed PMCID: PMC4710477, DOI: 10.1016/S1875-5364(15)30052-2.
31. Qiong Zhang, Thao Nguyen, Megan McMichael, **Sadanandan E. Velu**, Jing Zou, Xuedong Zhou and Hui Wu, New Small Molecule Inhibitors of Dihydrofolate Reductase inhibit Streptococcus mutans, **International Journal of Antimicrobial Agents**, 46, 174-182 (2015). PubMed PMID: 26022931, PubMed PMCID: PMC4509821, DOI: 10.1016/j.ijantimicag.2015.03.015.
32. 54. Praveen K. Vayalil, Joo-Yeun Oh, Fen Zhou, Anne R. Diers, M. Ryan Smith, Hafez Golzarian,

- Patsy G. Oliver, Robin A. J. Smith, Michael P. Murphy, **Sadanandan E. Velu** and Aimee Landar, A Novel Class of Mitochondria-Targeted Soft Electrophiles Modifies Mitochondrial Proteins and Inhibits Mitochondrial Metabolism in Breast Cancer Cells through Redox Mechanisms, *PLOS ONE*, 10 (3):e0120460 (2015). PubMed PMID: 25785718, PubMed PMCID: PMC4364723, DOI: 10.1371/journal.pone.0120460.
33. Jun-Xian Yu, Sukesh Voruganti, Dan-Dan Li, Jiang-Jiang Qin, Subhasree Nag, Su Xu, **Sadanandan E. Velu**, Wei Wang and Ruiwen Zhang, Development and validation of an HPLC-MS/MS analytical method for quantitative analysis of TCBA-TPQ, a novel anticancer makaluvamine analog, and application in a pharmacokinetic study in rats, *Chinese Journal of Natural Medicines*, 13, 554-560 (2015). PubMed PMID: 26233847, PubMed PMCID: PMC4716806, DOI: 10.1016/S1875-5364(15)30051-0.
 34. M Ryan Smith, Fen Zhou, Praveen Vayalil Kumar, Reena Beggs, **Sadanandan E. Velu**, Aimee Landar and Michael Murphy, 315 - Metabolic Reprogramming by a Mitochondria-Targeted Electrophile in Breast Cancer Cells, *Free Radical Biology and Medicine*, 76, S132 (2014). PubMed PMID: NA, PubMed PMCID: NA, DOI: NA.
 35. Eun-Hee Shim, Carolina B. Livi, Dinesh Rakheja, Jubilee Tan, Daniel Benson, Vishwas Parekh, Eun-Young Kho, Arindam P Ghosh, Richard Kirkman, **Sadanandan E. Velu**, Shilpa Dutta, Balachandra Chenna, Shane L. Rea, Robert J. Mishur, Qiuhua Li, Teresa L Johnson-Pais, Lining Guo, Sejong Bae, Shi Wei, Karen Block and Sunil Sudarshan, L-2-Hydroxyglutarate: An Epigenetic Modifier and Putative Oncometabolite in Renal Cancer, *Cancer Discovery*, 11, 1290-1298 (2014). PubMed PMID: 25182153, PubMed PMCID: PMC4286872, DOI: 10.1158/2159-8290.CD-13-0696.
 36. Bhavitavya Nijampatnam, Dwayaja H. Nadkarni, Hui Wu and **Sadanandan E. Velu**, Antibacterial and Antibiofilm Activities of Makaluvamine Analogs, *Microorganisms*, 2, 128-139 (2014). PubMed PMID: 25767719, PubMed PMCID: PMC4354892, DOI: 10.3390/microorganisms2030128.
 37. Su Xu, Thao Nguyen, Irene Pomilio, Maria C. Vitale and **Sadanandan E. Velu**, Total Synthesis of Calothrixins A and B via Oxidative Radical Reaction of Cyclohexenone with Aminophenanthridinedione, *Tetrahedron*, 70, 5928-5933 (2014). PubMed PMID: 25663720, PubMed PMCID: PMC4313744, DOI: 10.1016/j.tet.2014.06.021.
 38. Eun-Hee Shim, Carolina B. Livi, John Knight, Ross P. Holmes, Dinesh Rakheja, **Sadanandan E. Velu**, Eun-Young Kho, Balachandra Chenna, Shane L. Rea, Daniel Benson, Richard Kirkman, Arindam Ghosh, Qiuhua Li, Sejong Bae, Shi Wei, Karen L. Block and Sunil Sudarshan, abstract LB-131: Elevated (L) -2-hydroxyglutarate promotes loss of 5-hydroxymethylcytosine in clear cell renal cancer, *Cancer Research*, 74 (19 Supplement): p. LB-131(2014). PubMed PMID: NA, PubMed PMCID: NA, DOI: NA.
 39. Thao Nguyen, Dwayaja Nadkarni, Shilpa Dutta, Su Xu, Sanghun Kim, Srinivasan Murugesan and **Sadanandan E. Velu**, Synthesis of Pyrroloquinones via a CAN Mediated Oxidative FreeRadical Reaction of 1,3-Dicarbonyl Compounds with Aminoquinones, *Journal of Chemistry*, 1-12 (2013). PubMed PMID: 25705550, PubMed PMCID: PMC4332705, DOI: 10.1155/2013/262580.
 40. Dwayaja H. Nadkarni, Srinivasan Murugesan and **Sadanandan E. Velu**, Total synthesis of zyzzyanones A- D, *Tetrahedron*, 69, 4105-4113 (2013). PubMed PMID: 23956468, PubMed PMCID: PMC3743451, DOI: 10.1016/j.tet.2013.03.052.
 41. Kim M. Keeling, Dan Wang, Yanying Dai, Srinivasan Murugesan, Balachandra Chenna, Jeremy Clark, Valery Belakhov, Jeyakumar Kandasamy, **Sadanandan E. Velu**, Timor Baasov and David M. Bedwell, Attenuation of Nonsense-Mediated mRNA Decay Enhances In Vivo Nonsense Suppression, *PLOS ONE*, 8, e60478 (2013). PubMed PMID: 23593225, PubMed PMCID: PMC3622682, DOI: 10.1371/journal.pone.0060478.
 42. John S. Jarboe, Shilpa Dutta, **Sadanandan E. Velu** and Christopher D. Willey, Mini-Review: Bmx Kinase Inhibitors for Cancer Therapy; *Recent Patents on Anti-Cancer Drug Discovery*, 8, 228-238 (2013). PubMed PMID: NA, PubMed PMCID: NA, DOI: NA.
 43. Deng Chen, Wei Wang, Ming-Hai Wang, Hui Wang, Srinivasan Murugesan, Dwayaja H. Nadkarni, **Sadanandan E. Velu** and Ruiwen Zhang; Identification of the ZAK-MKK4-JNK-TGF β Signaling

- Pathway Is a Molecular Target for Novel Synthetic Iminoquinone Analog BA-TPQ in Breast Cancer Cells, **Current Cancer Drug Targets**, 13, 651-660 (2013). PubMed PMID: 23607596, PubMed PMCID: NA, DOI: 10.2174/15680096113139990040.
44. Subhasree Nag, Dwayaja H. Nadkarni, Jiang-Jiang Qin, Sukesh Voruganti, Thao Nguyen, Su Xu, Wei Wang, Hui Wang, **Sadanandan E. Velu** and Ruiwen Zhang, Anticancer Activity and Molecular Mechanisms of Action of Makaluvamines and Analogues, **Molecular and Cellular Pharmacology**, 4, 69-81 (2012). PubMed PMID: NA, PubMed PMCID: NA, DOI: 10.4255/mcpharmacol.12.07.
 45. Xiangrong Zhang, Hongxia Xu, Xu Zhang, Sukesh Voruganti, Srinivasan Murugesan, Dwayaja H. Nadkarni, **Sadanandan E. Velu**, Ming-Hai Wang, Wei Wang and Ruiwen Zhang, Preclinical Evaluation of Anticancer Efficacy and Pharmacological Properties of FBA-TPQ, a Novel Synthetic Makaluvamine Analog, **Marine Drugs**, 10, 1138-1155 (2012). PubMed PMID: 22822362, PubMed PMCID: PMC3397457, DOI: 10.3390/md10051138.
 46. Megan McMichael, Thao Nguyen, Tory Saunders, Paul Lee, Norbert Schormann, Debasish Chattopadhyay and **Sadanandan E. Velu**, Structure Based Design of Inhibitors of *Trypanosoma cruzi* DHFR as Potential Therapeutic Agents for Chagas' Disease, **Inquiro**, 5, 54-59 (2011). PubMed PMID: NA, PubMed PMCID: NA, DOI: NA.
 47. Tao Chen, Yi Xu, He Guo, Yanling Liu, Pingting Hu, Xinying Yang, Xiaoguang Li, Shichao Ge1, **Sadanandan E. Velu**, Dwayaja H. Nadkarni, Wei Wang, Ruiwen Zhang and Hui Wang, Experimental Therapy of Ovarian Cancer with Synthetic Makaluvamine Analog: In Vitro and In Vivo Anticancer Activity and Molecular Mechanisms of Action, **PLOS ONE**, 6 (6): e20729 (2011). PubMed PMID: 21673964, PubMed PMCID: PMC3108973, DOI: 10.1371/journal.pone.0020729.
 48. John T. Anderson, Meiqin Zeng, Qian Li, Ryan Stapley, Doyle Ray Moore II, Balachandra Chenna, Naomi Fineberg, Jaroslaw Zmijewski, Isam-Eldin Eltoum, Gene P Siegal, Amit Gaggar, Stephen Barnes, **Sadanandan E. Velu**, Victor J. Thannickal, Edward Abraham, Rakesh P. Patel, Jack R. Lancaster, David D. Chaplin, Mark T. Dransfield and Jessy S. Deshane; Elevated levels of NO are localized to distal airways in asthma, **Free Radical Biology and Medicine**, 50, 1679 – 1688 (2011). PubMed PMID: 21419218, PubMed PMCID: PMC3124865, DOI: 10.1016/j.freeradbiomed.2011.03.015.
 49. Haibo Li, Scharri J. Ezell, Wei Wang, Hongxia Xu, Elizabeth R. Rayburn, Xu Zhang, Evrim Gurpinar, Xinyi Yang, Charnell I. Sommers, **Sadanandan E. Velu** and Ruiwen Zhang, Development and validation of an HPLC method for quantitation of BA-TPQ, a novel iminoquinone anticancer agent, and an initial pharmacokinetic study in mice, **Biomedical Chromatography**, 25, 628 – 634 (2011). PubMed PMID: 20845374, PubMed PMCID: PMC3769168, DOI: 10.1002/bmc.1498.
 50. Bala Chandra Chenna, Jason R. King, Bidhan A. Shinkre, Amanda Glover, Aaron L. Lucius and **Sadanandan E. Velu**, Synthesis and structure activity relationship studies of novel Staphylococcus aureus Sortase A inhibitors, **European Journal of Medicinal Chemistry**, 45, 3572 – 3761 (2010). PubMed PMID: 20541848, PubMed PMCID: PMC4346195, DOI: 10.1016/j.ejmech.2010.05.024.
 51. Wei Wang, Elizabeth R. Rayburn, **Sadanandan E. Velu**, Deng Chen, Dwayaja H. Nadkarni, Srinivasan Murugesan, Dongquan Chen, and Ruiwen Zhang, A novel synthetic iminoquinone, BA-TPQ, as an anti- breast cancer agent: *in vitro* and *in vivo* activity and mechanisms of action, **Breast Cancer Research and Treatment**, 123, 321 – 331 (2010). PubMed PMID: 19936915, PubMed PMCID: PMC3769174, DOI: 10.1007/s10549-009-0638-0.
 52. Scharri J. Ezell, Haibo Li, Hongxia Xu, Xiangrong Zhang, Evrim Gurpinar, Xu Zhang, Elizabeth R. Rayburn, Charnell I. Sommers, Xinyi Yang, **Sadanandan E. Velu**, Wei Wang and Ruiwen Zhang , Preclinical Pharmacology of BA-TPQ, a Novel Synthetic Iminoquinone Anticancer Agent, **Marine Drugs**, 8, 2129 – 2141 (2010). PubMed PMID: 20714427, PubMed PMCID: PMC2920546, DOI: 10.3390/md8072129.
 53. Norbert Schormann, **Sadanandan E. Velu**, Srinivasan Murugesan, Olga Senkovich, Kiera Walker, Bala C. Chenna, Bidhan Shinkre, Amar Desai, and Debasish Chattopadhyay, Synthesis and

- characterization of potent inhibitors of *Trypanosoma cruzi* dihydrofolate reductase, **Bioorganic and Medicinal Chemistry**, 18, 4056 – 4066 (2010). PubMed PMID: 20452776, PubMed PMCID: NA, DOI: 10.1016/j.bmc.2010.04.020.
54. Feng Wang, Scharri J. Ezell, Yong Zhang, Wei Wang, Elizabeth R. Rayburn, Dwayaja H. Nadkarni, Srinivasan Murugesan, **Sadanandan E. Velu**, and Ruiwen Zhang, FBA-TPQ, a novel marine-derived compound as experimental therapy for prostate cancer, **Investigational New Drugs**, 28, 234 – 241 (2010). PubMed PMID: 19274441, PubMed PMCID: NA, DOI: 10.1007/s10637-009-9232-x.
 55. Srinivasan Murugesan, Dwayaja H. Nadkarni and **Sadanandan E. Velu**, A facile synthesis of bispyrroloquinone and bispyrroloiminoquinone ring system of marine alkaloids, **Tetrahedron Letters**, 50, 3074 – 3076 (2009). PubMed PMID: 25698845, PubMed PMCID: PMC4331033, DOI: 10.1016/j.tetlet.2009.04.021.
 56. Dwayaja H. Nadkarni, Feng Wang, Wei Wang, Elizabeth R. Rayburn, Scharri J. Ezell, Srinivasan Murugesan, **Sadanandan E. Velu** (Co-corresponding author), and Ruiwen Zhang, Synthesis and *in vitro* anti-cancer activity of novel 1, 3, 4, 8-tetrahydropyrrolo [4, 3, 2-de]quinolin-8(1H)-one alkaloid analogues, **Medicinal Chemistry**, 5, 227 – 236 (2009). PubMed PMID: 19442212. PubMed PMCID: NA, DOI: 10.2174/157340609788185873.
 57. Wei Wang, **Sadanandan E. Velu**, Dwayaja H. Nadkarni, Srinivasan Murugesan, Elizabeth R. Rayburn, and Ruiwen Zhang, *In vitro* and *in vivo* anti-cancer activity of novel synthetic makaluvamine analogues, **Clinical Cancer Research**, 15, 3511 – 3518 (2009). PubMed PMID: 19451594, PubMed PMCID: PMC3769181, DOI: 10.1158/1078-0432.CCR-08-2689.
 58. Sebyung Kang, Liyuan Mou, **Sadanandan E. Velu**, Wayne J. Brouillette, and Peter E. Prevelige Jr., Synthesis of biotin tagged chemical cross-linkers and their applications for mass spectrometry, **Rapid Communications in Mass Spectrometry**, 23, 1719 – 1726 (2009). PubMed PMID: 19412923, PubMed PMCID: PMC2748246, DOI: 10.1002/rcm.4066.
 59. Yun J. Lee, Jason R. King, Bala Chandra Chenna, Samuel B. Owens Jr., Jason L. Freeman, Gary M. Gray and **Sadanandan E. Velu**, Synthesis and the crystal structure of (*E*)-2-(7-(3-(thiophen-2-yl)acrylamido)-2,3-dihydro-5-oxobenz[e][1,4]oxazepin-1(5H)-yl)ethyl acetate, **Journal of Chemical Crystallography**, 39, 902 - 907 (2009). PubMed PMID: NA, PubMed PMCID: NA, DOI: NA.
 60. Swayamprabha P. Patel, Dwayaja H. Nadkarni, Srinivasan Murugesan, Jason R. King and **Sadanandan E. Velu**, Azide mediated detosylation of *N*-tosylpyrroloiminoquinones and *N*-tosylindole-4,7-quinones, **Synlett**, 2864 – 2868 (2008). PubMed PMID: NA, PubMed PMCID: NA, DOI: 10.1055/s-0028-1083570.
 61. Hui Liu, Liming Fan, Bidhan Shinkre, **Sadanandan E. Velu**, Donald Buchsbaum, and Kevin Raisch, Treatment of breast cancer cell line, MCF-7, with a novel topoisomerase II inhibitor, **Cancer Research**, 68, 779 (2008). PubMed PMID: NA, PubMed PMCID: NA, DOI: NA.
 62. Norbert Schormann, Olga Senkovich, K. Walker, D.L. Wright, A.C. Anderson, A. Rosowsky, Subramanian Ananthan, Bidhan Shinkre, **Sadanandan E. Velu**, Debasish Chattopadhyay, Structure-based approach to pharmacophore identification, *in silico* screening and 3D-QSAR studies for inhibitors of *Trypanosoma cruzi* DHFR function, **Proteins: Structure, Function, and Bioinformatics**, 73, 889 – 901 (2008). PubMed PMID: 18536013, PubMed PMCID: NA, DOI: 10.1002/prot.22115.
 63. Bidhan A. Shinkre, Kevin P. Raisch, Liming Fan, **Sadanandan E. Velu**, Synthesis and Antiproliferative Activity of Benzyl and Phenethyl Analogs of Makaluvamines, **Bioorganic and Medicinal Chemistry**, 16, 2541 – 2549 (2008), PubMed PMID: 18093835, PubMed PMCID: NA, DOI: 10.1016/j.bmc.2007.11.051.
 64. Bidhan A. Shinkre, Dwayaja H. Nadkarni, Samuel B. Owens Jr., Gary M. Gray and **Sadanandan E. Velu**, Synthesis of *E* isomer and crystal structures of *E* & *Z* isomers of 3-(2,5-dimethoxyphenyl)-2-(4-methoxyphenyl)acrylonitrile, **Journal of Chemical Crystallography**, 38, 205 – 209 (2008). PubMed PMID: NA, PubMed PMCID: NA, DOI: NA.

65. Bala Chandra Chenna, Bidhan A. Shinkre, Shwetha Patel, Samuel B. Owens Jr., Gary M. Gray and **Sadanandan E. Velu**, Synthesis, separation and crystal structures of *E* and *Z* isomers of 3-(2,5-dimethoxyphenyl)-2-(4-methoxyphenyl)acrylic acid, ***Journal of Chemical Crystallography***, *38*, 189 – 194 (2008). PubMed PMID: NA, PubMed PMCID: NA, DOI: NA.
66. Bala Chandra Chenna, Bidhan A. Shinkre, Jason R. King, Aaron L. Lucius, Sthanam V. L. Narayana and **Sadanandan E. Velu**, Identification of Novel Inhibitors of Bacterial Surface Enzyme Staphylococcus aureus Sortase A, ***Bioorganic and Medicinal Chemistry Letters***, *18*, 380 – 385 (2008). PubMed PMID: 18023345, PubMed PMCID: NA, DOI: 10.1016/j.bmcl.2007.10.051.
67. **Sadanandan E. Velu**, Liyuan Mou, Chi-Hao Luan, Zhengrong W. Yang, Lawrence J. DeLucas, Christie G. Brouillette, and Wayne J. Brouillette, Antibacterial NAD Synthetase Inhibitors: Amide- and Ether-Linked Tethered Dimers with α -Amino Acid End Groups, ***Journal of Medicinal Chemistry***, *50*, 2612 – 2621 (2007). PubMed PMID: 17489580, PubMed PMCID: NA, DOI: 10.1021/jm061349l.
68. Bidhan A. Shinkre and **Sadanandan E. Velu**, Total Synthesis of Secobatzelline B, ***Synthetic Communications***, *37*, 2399-2409 (2007). PubMed PMID: NA, PubMed PMCID: NA, DOI: org/10.1080/00397910701410954.
69. Bidhan A. Shinkre, Kevin P. Raisch, Liming Fan and **Sadanandan E. Velu**, Analogs of the marine alkaloid makaluvamines: Synthesis, topoisomerase II inhibition and anticancer activity, ***Bioorganic and Medicinal Chemistry Letters***, *17*, 2890 – 2893 (2007). PubMed PMID: 17368022, PubMed PMCID: PMC2706148, DOI: 10.1016/j.bmcl.2007.02.065.
70. **Sadanandan E. Velu**, Chi-Hao Luan, Lawrence J. DeLucas, Christie Brouillette and Wayne J. Brouillette, Tethered Dimer Inhibitors of NAD Synthetase: Parallel Synthesis of an Aryl-Substituted SAR Library, ***Journal of Combinatorial Chemistry***, *7*, 898 – 904, (2005). PubMed PMID: 16283799, PubMed PMCID: NA, DOI: 10.1021/cc050063j.
71. Wayne J. Brouillette, Saroj N. Bajpai, Shoukath Ali, **Sadanandan E. Velu**, Venkatram R. Atigadda, Barbara S. Lommer, James B. Finley, Ming Luo and Gillian M. Air, Pyrrolidinobenzoic Acid Inhibitors of Influenza Virus Neuraminidase: Modifications of Essential Pyrrolidinone Ring Substituents, ***Bioorganic and Medicinal Chemistry***, *11*, 2739 (2003). PubMed PMID: 12788348, PubMed PMCID: NA, DOI: org/10.1016/S0968-0896(03)00271-2.
72. **Sadanandan E. Velu**, Wayne J. Brouillette, Water Cristofoli, Gabriel Garcia, Christie Brouillette, Milton Pierson, Chi-Hao Luan, Lawrence J. DeLucas, Tethered Dimers as NAD Synthetase Inhibitors with Antibacterial Activity, ***Journal of Medicinal Chemistry***, *46*, 3371 (2003). PubMed PMID: 12852767, PubMed PMCID: NA, DOI: 10.1021/jm030003x.
73. Karl R. Dieter, Kai Lu and **Sadanandan E. Velu**, Conjugate addition reactions of α -Aminoalkylcuprates with α,β -Alkenyl-, α,β -Alkynyl-, α,β - γ,δ -dienyl Carboxylic Acid Derivatives, Nitriles and Sulfoxides, ***Journal of Organic Chemistry***, *65*, 8715 (2000). PubMed PMID: 11112594, PubMed PMCID: NA, DOI: 10.1021/jo0056038.
74. Karl R. Dieter, **Sadanandan E. Velu** and Lois E. Nice, Regioselective control in the reactions of α -aminoalkylcuprates with allylic substrates, ***Synlett***, 1114 (1997). PubMed PMID: NA, PubMed PMCID: NA, DOI: 10.1055/s-1997-1544.
75. Karl R. Dieter and **Sadanandan E. Velu**, α -Aminoalkylcuprates prepared from soluble copper (I) salts: Conjugate additions to α,β -unsaturated carboxylic acid derivatives, ***Journal of Organic Chemistry***, *62*, 3798 (1997). PubMed PMID: NA, PubMed PMCID: NA, DOI: 10.1021/jo970443u.
76. Karl R. Dieter, **Sadanandan E. Velu** and Lois E. Nice, Oxidation of α,β -enones and alkenes with oxone and sodium halides: A convenient laboratory preparation of chlorine and bromine, ***Tetrahedron Letters***, *37*, 2377 (1996). PubMed PMID: NA, PubMed PMCID: NA, DOI: 10.1016/0040-4039(96)00295-X.
77. Yvette A. Jackson, Adil. D. Billimoria, **Sadanandan E. Velu** and Michael P. Cava, Regioselective Amination of indole-4,7-quinones, ***Journal of Organic Chemistry***, *60*, 3543 – 3545 (1995).

PubMed PMID: NA, PubMed PMCID: NA, DOI: 10.1021/j000116a049

78. **Sadanandan E. Velu**, Sasi K. Pillai, Lakshmikantham, M. V., Adil. D. Billimoria, Shane J. Culpepper and Michael P. Cava, Efficient Synthesis of the Marine Alkaloids Makaluvamine D and Discorhabdin C: 4,6,7- trimethoxy indole approach, **Journal of Organic Chemistry**, 60, 1800 – 1805, (1995). PubMed PMID: NA, PubMed PMCID: NA, DOI: 10.1021/j000111a043.
79. Sivaraman J. Subramanian, K., Velmurugan D., Subramanian E., and **Sadanandan E. Velu**, 2- [2- (4- methoxyphenyl) -1- (phenylsulfonyl)vinyl] -3- phenylthioindole, **Acta Crystallographica**, C50, 789 – 791 (1994). PubMed PMID: NA, PubMed PMCID: NA, DOI: NA.
80. Sivaraman J. Subramanian K., Velmurugan D., Subramanian E., and **Sadanandan E. Velu**, 2-(3,4- methylenedioxyphenyl) -1- (phenylsulfonyl)vinyl] -3- phenylthioindole, **Acta Crystallographica**, C50, 787 – 789 (1994). PubMed PMID: NA, PubMed PMCID: NA, DOI: NA.
81. James P. Parakka, **Sadanandan E. Velu** and Michael P. Cava, A Novel o-Quinodimethane Tandem Diels- Alder Reaction, **Journal of Organic Chemistry**, 59, 4308 (1994). PubMed PMID: NA, PubMed PMCID: NA, DOI: 10.1021/j000094a051.
82. Sivaraman, J. Subramanian, K., Velmurugan, D., Subramanian, E., and **Sadanandan E. Velu**, 2-[1- Phenylsulfonyl -2- (3,4,5-trimethoxyphenyl) vinyl] -3- phenylthioindole, **Acta Crystallographica**, C50, 784 – 787 (1994). PubMed PMID: NA, PubMed PMCID: NA, DOI: NA.
83. **Sadanandan E. Velu**, Vedachalam, M. V. and Srinivasan, P. C., 2-Alkyl indoles via Wittig Olefination of Indole-2-aldehyde, **Indian Journal of Chemistry**, 32B, 481 (1993). PubMed PMID: NA, PubMed PMCID: NA, DOI: NA.
84. **Sadanandan E. Velu** and Michael P. Cava, Total Synthesis of Damirone A and Damirone B, **Tetrahedron Letters**, 34, 2405 (1993). PubMed PMID: NA, PubMed PMCID: NA, DOI: org/10.1016/j.tet.2012.09.034.
85. **Sadanandan E. Velu** and Srinivasan, P. C., Synthesis of 2-Alkyl indoles via Sulfones, **Synthesis**, 648 – 650 (1992). PubMed PMID: NA, PubMed PMCID: NA, DOI: 10.1055/s-1992-26188.