CITATION REPORT List of articles citing

Crystal structure of the RNA-dependent RNA polymerase from hepatitis C virus reveals a fully encircled active site

DOI: 10.1038/13305 Nature Structural Biology, 1999, 6, 937-43.

Source: https://exaly.com/paper-pdf/30407453/citation-report.pdf

Version: 2024-04-28

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

#	Paper	IF	Citations
659	Paper Alert. 1999 , 7, R301-R306		
658	A mutant of Sindbis virus that is resistant to pyrazofurin encodes an altered RNA polymerase. 2000 , 272, 61-71		18
657	Internal and 3ŒNA initiation by Qbeta replicase directed by CCA boxes. 2000 , 271, 363-70		11
656	Interaction between zucchini yellow mosaic potyvirus RNA-dependent RNA polymerase and host poly-(A) binding protein. 2000 , 275, 433-43		50
655	New drugs for hepatitis C virus (HCV). 2000 , 14, 293-305		4
654	Virus-specific cofactor requirement and chimeric hepatitis C virus/GB virus B nonstructural protein 3. 2000 , 74, 4291-301		38
653	Mechanism of action of a pestivirus antiviral compound. 2000 , 97, 7981-6		94
652	Poliovirus RNA-dependent RNA polymerase (3Dpol): structural, biochemical, and biological analysis of conserved structural motifs A and B. 2000 , 275, 25523-32		97
651	Recent developments in hepatitis C antiviral research 1999 - 2000. 2000 , 10, 1201-1220		6
650	Replication of hepatitis C virus. 2000 , 81, 1631-48		486
649	I Molecular biology of hepatitis C virus. 2000 , 2, 1-I		5
648	Genome of human hepatitis C virus (HCV): gene organization, sequence diversity, and variation. 2000 , 5, 129-51		82
647	Template/primer requirements and single nucleotide incorporation by hepatitis C virus nonstructural protein 5B polymerase. 2000 , 74, 9134-43		105
646	Poliovirus RNA-dependent RNA polymerase (3D(pol)). Assembly of stable, elongation-competent complexes by using a symmetrical primer-template substrate (sym/sub). 2000 , 275, 5329-36		123
645	Specificity and mechanism analysis of hepatitis C virus RNA-dependent RNA polymerase. 2000 , 377, 12	9-34	25
644	De novo synthesis of RNA by the dengue virus RNA-dependent RNA polymerase exhibits temperature dependence at the initiation but not elongation phase. 2001 , 276, 39926-37		236
643	Chapter 12. Non-HIV antiviral agents. 2001 , 36, 119-128		

(2001-2001)

642	Recent advances in the molecular biology of hepatitis C virus. 2001 , 313, 451-64	156
641	Characterization of monoclonal antibodies that specifically recognize the palm subdomain of hepatitis C virus nonstructural protein 5B polymerase. 2001 , 75, 179-87	5
640	Issues in HIV/Hepatitis C Co-infection. 2001 , 3, 131-136	2
639	Intracellular hepatitis C virus RNA-dependent RNA polymerase activity. 2001 , 146, 1553-70	5
638	Emerging therapies for hepatitis C virus infection. 2001 , 6, 13-42	58
637	A novel mechanism to ensure terminal initiation by hepatitis C virus NS5B polymerase. 2001 , 285, 6-11	171
636	De novo initiation of viral RNA-dependent RNA synthesis. 2001 , 287, 251-60	181
635	A structural basis for processivity. 2001 , 10, 1699-711	186
634	Nomenclature for antiviral-resistant human hepatitis B virus mutations in the polymerase region. 2001 , 33, 751-7	313
633	Mutational analysis of the structure and functions of hepatitis C virus RNA-dependent RNA polymerase. 2001 , 33, 728-37	48
632	Oligomeric structures of poliovirus polymerase are important for function. 2001 , 20, 1153-63	117
631	The active sites of the influenza cap-dependent endonuclease are on different polymerase subunits. 2001 , 20, 2078-86	138
630	A mechanism for initiating RNA-dependent RNA polymerization. 2001, 410, 235-40	432
629	Novel cell culture systems for the hepatitis C virus. 2001 , 52, 1-17	157
628	DNA structure and aspartate 276 influence nucleotide binding to human DNA polymerase beta. Implication for the identity of the rate-limiting conformational change. 2001 , 276, 3408-16	134
627	Determinants for membrane association of the hepatitis C virus RNA-dependent RNA polymerase. 2001 , 276, 44052-63	161
626	Hepatitis C virus RNA-dependent RNA polymerase (NS5B) as a mediator of the antiviral activity of ribavirin. 2001 , 276, 46094-8	220
625	Design, high-level expression, purification and characterization of soluble fragments of the hepatitis C virus NS3 RNA helicase suitable for NMR-based drug discovery methods and mechanistic studies. 2001 , 14, 573-82	6

624	Resistance of hepatitis B virus to antiviral drugs: current aspects and directions for future investigation. 2001 , 12, 1-35	87
623	Experimental and emerging therapies for chronic hepatitis C virus infection. 2001 , 10, 1457-69	6
622	Comparisons among the larger genome segments of six nodaviruses and their encoded RNA replicases. 2001 , 82, 1855-1866	52
621	Comparison of turnip crinkle virus RNA-dependent RNA polymerase preparations expressed in Escherichia coli or derived from infected plants. 2002 , 76, 1707-17	65
620	Fine mapping of the subunit binding sites of influenza virus RNA polymerase. 2002, 46, 167-75	81
619	Modulation of hepatitis C virus RNA-dependent RNA polymerase activity by structure-based site-directed mutagenesis. 2002 , 277, 38838-46	51
618	Identification and biological characterization of heterocyclic inhibitors of the hepatitis C virus RNA-dependent RNA polymerase. 2002 , 277, 38322-7	171
617	Mechanism of de novo initiation by the hepatitis C virus RNA-dependent RNA polymerase: role of divalent metals. 2002 , 76, 12513-25	82
616	Selection of 3@template bases and initiating nucleotides by hepatitis C virus NS5B RNA-dependent RNA polymerase. 2002 , 76, 7030-9	52
615	Promoter/origin structure of the complementary strand of hepatitis C virus genome. 2002 , 277, 28700-5	15
615	Oligomerization and cooperative RNA synthesis activity of hepatitis C virus RNA-dependent RNA polymerase. 2002 , 76, 3865-72	15
	Oligomerization and cooperative RNA synthesis activity of hepatitis C virus RNA-dependent RNA	
614	Oligomerization and cooperative RNA synthesis activity of hepatitis C virus RNA-dependent RNA polymerase. 2002 , 76, 3865-72 Structural analysis of the hepatitis C virus RNA polymerase in complex with ribonucleotides. 2002 ,	129
614	Oligomerization and cooperative RNA synthesis activity of hepatitis C virus RNA-dependent RNA polymerase. 2002 , 76, 3865-72 Structural analysis of the hepatitis C virus RNA polymerase in complex with ribonucleotides. 2002 , 76, 3482-92	129 325
614 613 612	Oligomerization and cooperative RNA synthesis activity of hepatitis C virus RNA-dependent RNA polymerase. 2002, 76, 3865-72 Structural analysis of the hepatitis C virus RNA polymerase in complex with ribonucleotides. 2002, 76, 3482-92 Cell-free replication of the hepatitis C virus subgenomic replicon. 2002, 76, 12001-7 Alphavirus minus-strand RNA synthesis: identification of a role for Arg183 of the nsP4 polymerase.	129 325 74
614613612611	Oligomerization and cooperative RNA synthesis activity of hepatitis C virus RNA-dependent RNA polymerase. 2002, 76, 3865-72 Structural analysis of the hepatitis C virus RNA polymerase in complex with ribonucleotides. 2002, 76, 3482-92 Cell-free replication of the hepatitis C virus subgenomic replicon. 2002, 76, 12001-7 Alphavirus minus-strand RNA synthesis: identification of a role for Arg183 of the nsP4 polymerase. 2002, 76, 8632-40 Crystal structures of active and inactive conformations of a caliciviral RNA-dependent RNA	129 325 74 20
614613612611610	Oligomerization and cooperative RNA synthesis activity of hepatitis C virus RNA-dependent RNA polymerase. 2002, 76, 3865-72 Structural analysis of the hepatitis C virus RNA polymerase in complex with ribonucleotides. 2002, 76, 3482-92 Cell-free replication of the hepatitis C virus subgenomic replicon. 2002, 76, 12001-7 Alphavirus minus-strand RNA synthesis: identification of a role for Arg183 of the nsP4 polymerase. 2002, 76, 8632-40 Crystal structures of active and inactive conformations of a caliciviral RNA-dependent RNA polymerase. 2002, 277, 1381-7 Selection of RNA aptamers that are specific and high-affinity ligands of the hepatitis C virus	129 325 74 20

(2002-2002)

606	Functional properties of a monoclonal antibody inhibiting the hepatitis C virus RNA-dependent RNA polymerase. 2002 , 277, 593-601	42
605	The Molecular Biology of Hepatitis C Virus. 2002 , 81-108	6
604	Bacteriophage phi 6 RNA-dependent RNA polymerase: molecular details of initiating nucleic acid synthesis without primer. 2002 , 277, 17117-24	53
603	Modulation of the hepatitis C virus RNA-dependent RNA polymerase activity by the non-structural (NS) 3 helicase and the NS4B membrane protein. 2002 , 277, 45670-9	120
602	Kinetic analysis of C-terminally truncated RNA-dependent RNA polymerase of hepatitis C virus. 2002 , 290, 1188-94	17
601	Application of structural biology tools in the study of viral hepatitis and the design of antiviral therapy. 2002 , 123, 1350-63	5
600	RNA-dependent RNA polymerases, viruses, and RNA silencing. 2002 , 296, 1270-3	344
599	Viral RNA-directed Polymerases: Structure and Function Relationships. 2002 , 57-88	
598	RNA synthesis in a cagestructural studies of reovirus polymerase lambda3. 2002 , 111, 733-45	285
597	Simplified normal mode analysis of conformational transitions in DNA-dependent polymerases: the elastic network model. 2002 , 320, 1011-24	228
596	The palm subdomain-based active site is internally permuted in viral RNA-dependent RNA polymerases of an ancient lineage. 2002 , 324, 47-62	171
595	HCV RNA-dependent RNA polymerase as a target for antiviral development. 2002 , 2, 534-40	43
594	Hepatitis C: molecular virology and antiviral targets. 2002 , 8, 476-82	43
593	References. 2002 , 177-248	
592	Identification of B cell epitopes of hepatitis C virus RNA dependent RNA polymerase. 2002, 104, 1-8	2
591	Hepatitis C virus core protein binds to a C-terminal region of NS5B RNA polymerase. 2002 , 22, 297-306	14
590	The essential role of C-terminal residues in regulating the activity of hepatitis C virus RNA-dependent RNA polymerase. 2002 , 1601, 38-48	56
589	Core promoter for initiation of Cucumber mosaic virus subgenomic RNA4A. 2002 , 3, 43-52	17

588	Mechanisms of drug resistance and novel approaches to therapy for chronic hepatitis C. 2002 , 17 Suppl 3, S351-9	2
587	Advances in hepatitis C: what is coming in the next 5 years?. 2002 , 17, 442-7	11
586	Protein-protein interactions as targets for antiviral chemotherapy. 2002 , 12, 239-62	60
585	Hepatitis C therapeutics: current status and emerging strategies. 2002 , 1, 867-81	165
584	Birnavirus VP1 proteins form a distinct subgroup of RNA-dependent RNA polymerases lacking a GDD motif. 2002 , 296, 241-50	41
583	Mutations in NS5B polymerase of hepatitis C virus: impacts on in vitro enzymatic activity and viral RNA replication in the subgenomic replicon cell culture. 2002 , 297, 298-306	48
582	New therapeutic strategies for hepatitis C. 2002 , 35, 224-31	118
581	Analysis of mutant NS5B proteins encoded by isolates from chimpanzees chronically infected following clonal HCV RNA inoculation. 2003 , 317, 65-72	5
580	Identification of RNA ligands that bind hepatitis C virus polymerase selectively and inhibit its RNA synthesis from the natural viral RNA templates. 2003 , 307, 301-16	39
579	Identification of constrained peptides that bind to and preferentially inhibit the activity of the hepatitis C viral RNA-dependent RNA polymerase. 2003 , 313, 158-69	8
578	Approaching a new era for hepatitis C virus therapy: inhibitors of the NS3-4A serine protease and the NS5B RNA-dependent RNA polymerase. 2003 , 58, 1-16	172
577	Identification of a Ribavirin-resistant NS5B mutation of hepatitis C virus during ribavirin monotherapy. 2003 , 38, 869-878	165
576	Current therapy and new molecular approaches to antiviral treatment and prevention of hepatitis C. 2003 , 13, 361-71	57
575	New therapies on the horizon for hepatitis C: are we close?. 2003 , 7, 211-42, xi	30
574	Structural biology of hepatitis C virus. 2003 , 7, 1-21, vii	32
573	Substrate complexes of hepatitis C virus RNA polymerase (HC-J4): structural evidence for nucleotide import and de-novo initiation. 2003 , 326, 1025-35	136
572	Multiple interactions within the hepatitis C virus RNA polymerase repress primer-dependent RNA synthesis. 2003 , 330, 675-85	46
571	Prospects for antiviral therapy. 2003 , 61, 511-53	15

(2003-2003)

570	Non-nucleoside analogue inhibitors bind to an allosteric site on HCV NS5B polymerase. Crystal structures and mechanism of inhibition. 2003 , 278, 9489-95		155
569	Hepatitis C virus genetic variability: pathogenic and clinical implications. 2003, 7, 45-66		165
568	Selection of DNA aptamers that bind the RNA-dependent RNA polymerase of hepatitis C virus and inhibit viral RNA synthesis in vitro. 2003 , 13, 455-63		41
567	Characterization of the metal ion binding properties of the hepatitis C virus RNA polymerase. 2003 , 278, 3868-75		36
566	Characterization of the RNA-binding domains in the replicase proteins of tomato bushy stunt virus. 2003 , 77, 9244-58		104
565	Significance in replication of the terminal nucleotides of the flavivirus genome. 2003 , 77, 10623-9		70
564	Hepatitis C virus therapies: current treatments, targets and future perspectives. 2003, 14, 1-21		40
563	Molecular model of SARS coronavirus polymerase: implications for biochemical functions and drug design. <i>Nucleic Acids Research</i> , 2003 , 31, 7117-30	20.1	135
562	Identification of a C-terminal regulatory motif in hepatitis C virus RNA-dependent RNA polymerase: structural and biochemical analysis. 2003 , 77, 9020-8		46
561	Mechanism of action and antiviral activity of benzimidazole-based allosteric inhibitors of the hepatitis C virus RNA-dependent RNA polymerase. 2003 , 77, 13225-31		189
560	Initial binding of the broad spectrum antiviral nucleoside ribavirin to the hepatitis C virus RNA polymerase. 2003 , 278, 52471-8		34
559	Hepatitis C virus. 2003 , 127-171		
558	Biochemical properties of full-length hepatitis C virus RNA-dependent RNA polymerase expressed in insect cells. 2003 , 35, 475-85		2
557	Direct interaction between nucleolin and hepatitis C virus NS5B. 2003 , 278, 5109-15		46
556	Protein-protein interactions between hepatitis C virus nonstructural proteins. 2003, 77, 5401-14		156
555	Promising candidates for the treatment of chronic hepatitis C. 2003 , 12, 1269-80		16
554	A structural and primary sequence comparison of the viral RNA-dependent RNA polymerases. <i>Nucleic Acids Research</i> , 2003 , 31, 1821-9	20.1	217
553	Cytochrome P4502D6(193-212): a new immunodominant epitope and target of virus/self cross-reactivity in liver kidney microsomal autoantibody type 1-positive liver disease. 2003 , 170, 1481-9		160

552	Crystallographic identification of a noncompetitive inhibitor binding site on the hepatitis C virus NS5B RNA polymerase enzyme. 2003 , 77, 7575-81	149
551	Enhancer-like activity of a brome mosaic virus RNA promoter. 2003 , 77, 1830-9	27
550	Antiviral Agents. 2003,	
549	Structural folds of viral proteins. 2003 , 64, 125-96	34
548	Recent developments in target identification against hepatitis C virus. 2004, 8, 295-307	7
547	Specific inhibitors of HCV polymerase identified using an NS5B with lower affinity for template/primer substrate. <i>Nucleic Acids Research</i> , 2004 , 32, 422-31	68
546	18. THE MOLECULAR VIROLOGY OF HEPATITIS C VIRUS. 2004 , 455-495	
545	Molecular virology of hepatitis C virus. 2004 , 67-85	10
544	Crystal structure of norwalk virus polymerase reveals the carboxyl terminus in the active site cleft. 2004 , 279, 16638-45	100
543	cis-acting RNA signals in the NS5B C-terminal coding sequence of the hepatitis C virus genome. 2004 , 78, 10865-77	76
542	3D structure of the influenza virus polymerase complex: localization of subunit domains. 2004 , 101, 308-13	107
541	Membrane association of the RNA-dependent RNA polymerase is essential for hepatitis C virus RNA replication. 2004 , 78, 13278-84	110
540	Characterization of the inhibition of hepatitis C virus RNA replication by nonnucleosides. 2004 , 78, 938-46	118
539	Inhibition of hepatitis C virus replication by arsenic trioxide. 2004 , 48, 2876-82	29
538	Elongation of synthetic RNA templates by hepatitis C virus NS5B polymerase. 2004, 279, 10738-46	3
537	Protein kinase C-related kinase 2 regulates hepatitis C virus RNA polymerase function by phosphorylation. 2004 , 279, 50031-41	63
536	Involvement of a bovine viral diarrhea virus NS5B locus in virion assembly. 2004 , 78, 9612-23	21
535	Effect of metal ion binding on the structural stability of the hepatitis C virus RNA polymerase. 2004 , 279, 49755-61	18

Mutational Analysis of Hepatitis C Virus NS5B in the Subgenomic Replicon Cell Culture. 2004, 279, 25474-82 5 534 Initiation of viral RNA-dependent RNA polymerization. 2004, 85, 1077-1093 128 533 A cis-acting replication element in the sequence encoding the NS5B RNA-dependent RNA 184 532 polymerase is required for hepatitis C virus RNA replication. 2004, 78, 1352-66 Polymorphisms of NS5B protein relates to early clearance of hepatitis C virus by interferon plus 10 531 ribavirin: a pilot study. **2004**, 11, 225-35 A primer on the molecular virology of hepatitis C. Liver International, 2004, 24, 519-25 530 7.9 19 Structural basis for proteolysis-dependent activation of the poliovirus RNA-dependent RNA 529 199 polymerase. **2004**, 23, 3462-71 The structural basis for RNA specificity and Ca2+ inhibition of an RNA-dependent RNA polymerase. 528 32 2004, 12, 307-16 The crystal structure of the RNA-dependent RNA polymerase from human rhinovirus: a dual 91 527 function target for common cold antiviral therapy. 2004, 12, 1533-44 Sequence analysis of L RNA of Lassa virus. 2004, 318, 153-68 85 526 Effect of mutation in the hepatitis C virus nonstructural 5B region on HCV replication. 2004, 39, 449-54 525 HCV NS5B polymerase-bound conformation of a soluble sulfonamide inhibitor by 2D transferred 524 9 NOESY. 2004, 14, 5333-7 Structural biology of hepatitis C virus. 2004, 39, 5-19 523 495 Hepatitis C. Development of new drugs and clinical trials: promises and pitfalls. Summary of an 522 51 AASLD hepatitis single topic conference, Chicago, IL, February 27-March 1, 2003. 2004, 39, 554-67 Plasmon-waveguide resonance spectroscopy applied to three potential drug targets: 521 5 cyclooxygenase-2, hepatitis C virus RNA polymerase and integrin alpha V beta 3. 2004, 36, 711-9 The monoethyl ester of meconic acid is an active site inhibitor of HCV NS5B RNA-dependent RNA 520 50 polymerase. 2004, 14, 3257-61 Active site inhibitors of HCV NS5B polymerase. The development and pharmacophore of 519 40 2-thienyl-5,6-dihydroxypyrimidine-4-carboxylic acid. 2004, 14, 5085-8 Structure of foot-and-mouth disease virus RNA-dependent RNA polymerase and its complex with a 518 180 template-primer RNA. 2004, 279, 47212-21 The structure of the RNA-dependent RNA polymerase from bovine viral diarrhea virus establishes 517 190 the role of GTP in de novo initiation. 2004, 101, 4425-30

516	Poliovirus RNA-dependent RNA polymerase (3Dpol): kinetic, thermodynamic, and structural analysis of ribonucleotide selection. 2004 , 43, 5149-58	67
515	Novel insights into hepatitis C virus replication and persistence. 2004 , 63, 71-180	218
514	Comparisons of the M1 genome segments and encoded mu2 proteins of different reovirus isolates. 2004 , 1, 6	40
513	Orthoreovirus and Aquareovirus core proteins: conserved enzymatic surfaces, but not protein-protein interfaces. 2004 , 101, 15-28	41
512	RNA-dependent RNA polymerases of dsRNA bacteriophages. 2004 , 101, 45-55	33
511	Excision of incorporated nucleotide analogue chain-terminators can diminish their inhibitory effects on viral RNA-dependent RNA polymerases. 2004 , 337, 1-14	27
510	HCV antiviral resistance: the impact of in vitro studies on the development of antiviral agents targeting the viral NS5B polymerase. 2005 , 16, 225-45	52
509	Mutations in the NS5B region of the hepatitis C virus genome correlate with clinical outcomes of interferon-alpha plus ribavirin combination therapy. 2005 , 20, 1401-9	35
508	Viral load change and sequential evolution of entire hepatitis C virus genome in Irish recipients of single source-contaminated anti-D immunoglobulin*. 2005 , 12, 594-603	10
507	Host sphingolipid biosynthesis as a target for hepatitis C virus therapy. 2005 , 1, 333-7	150
506	Viral and cellular RNA helicases as antiviral targets. 2005 , 4, 845-53	168
505	Challenges and successes in developing new therapies for hepatitis C. 2005 , 436, 953-60	370
504	Mutations in the nonstructural region 5B of hepatitis C virus genotype 1b: their relation to viral load, response to interferon, and the nonstructural region 5A. 2005 , 75, 504-12	17
503	L protein, the RNA-dependent RNA polymerase of hantaviruses. 2005 , 150, 533-56	46
502	Interdomain communication in hepatitis C virus polymerase abolished by small molecule inhibitors bound to a novel allosteric site. 2005 , 280, 29765-70	139
501	Crystal structure of complete rhinovirus RNA polymerase suggests front loading of protein primer. 2005 , 79, 277-88	53
500	Kelp fly virus: a novel group of insect picorna-like viruses as defined by genome sequence analysis and a distinctive virion structure. 2005 , 79, 13385-98	21
499	Functional analysis of RNA binding by the hepatitis C virus RNA-dependent RNA polymerase. 2005 , 280, 38011-9	35

(2006-2005)

498	Remote site control of an active site fidelity checkpoint in a viral RNA-dependent RNA polymerase. 2005 , 280, 25706-16	141
497	Binding site characterization and resistance to a class of non-nucleoside inhibitors of the hepatitis C virus NS5B polymerase. 2005 , 280, 39260-7	109
496	Recombinant viral RdRps can initiate RNA synthesis from circular templates. 2006 , 12, 303-12	22
495	Repair of the tRNA-like CCA sequence in a multipartite positive-strand RNA virus. 2005, 79, 1417-27	27
494	Mutagenesis analysis of the rGTP-specific binding site of hepatitis C virus RNA-dependent RNA polymerase. 2005 , 79, 11607-17	29
493	Genetic and biochemical evidence for an oligomeric structure of the functional L polymerase of the prototypic arenavirus lymphocytic choriomeningitis virus. 2005 , 79, 7262-8	47
492	Back-priming mode of phi6 RNA-dependent RNA polymerase. 2005 , 86, 521-526	25
491	Down-regulation of the retinoblastoma tumor suppressor by the hepatitis C virus NS5B RNA-dependent RNA polymerase. 2005 , 102, 18159-64	113
490	A relaxed discrimination of 260-methyl-GTP relative to GTP between de novo and Elongative RNA synthesis by the hepatitis C RNA-dependent RNA polymerase NS5B. 2005 , 280, 6359-68	33
489	Mutations conferring resistance to a hepatitis C virus (HCV) RNA-dependent RNA polymerase inhibitor alone or in combination with an HCV serine protease inhibitor in vitro. 2005 , 49, 4305-14	117
488	A highly efficient, asymmetric synthesis of benzothiadiazine-substituted tetramic acids: potent inhibitors of hepatitis C virus RNA-dependent RNA polymerase. 2005 , 7, 5521-4	35
487	Crystal structures of the RNA-dependent RNA polymerase genotype 2a of hepatitis C virus reveal two conformations and suggest mechanisms of inhibition by non-nucleoside inhibitors. 2005 , 280, 18202-10	162
486	Novel therapies for hepatitis C virus based on lessons from virology. 2005 , 3, S86-8	2
485	Development and preliminary optimization of indole-N-acetamide inhibitors of hepatitis C virus NS5B polymerase. 2005 , 48, 1314-7	88
484	Molecular virology of the hepatitis C virus: implication for novel therapies. 2005 , 9, 353-69, v	5
483	Quasispecies: Concept and Implications for Virology. 2006 ,	43
482	Hepatitis C virus population dynamics during infection. 2006 , 299, 261-84	88
481	Molecular virology of the hepatitis C virus: implication for novel therapies. 2006 , 20, 81-98	1

480	Replication and Pathogenesis of Hepatitis C Virus. 2006 , 125-147	1
479	Selection and characterization of replicon variants dually resistant to thumb- and palm-binding nonnucleoside polymerase inhibitors of the hepatitis C virus. 2006 , 80, 6146-54	127
478	Hepatitis C virus: virology and experimental systems. 2006 , 10, 773-91	4
477	Propagation of hepatitis C virus infection: Elucidating targets for therapeutic intervention. 2006 , 3, 471-477	
476	Beyond interferon and ribavirin: Antiviral therapies for hepatitis C virus. 2006 , 3, 211-220	2
475	Novel inhibitors of hepatitis C virus RNA-dependent RNA polymerases. 2006 , 357, 1051-7	40
474	Non-nucleoside inhibitors binding to hepatitis C virus NS5B polymerase reveal a novel mechanism of inhibition. 2006 , 361, 33-45	75
473	Molecular virology of hepatitis C virus (HCV): 2006 update. 2006 , 3, 29-34	58
472	Resistance of hepatitis C virus to the host antiviral response. 2006 , 1, 89-98	3
471	Parallels among positive-strand RNA viruses, reverse-transcribing viruses and double-stranded RNA viruses. 2006 , 4, 371-82	217
47°	The phi29 DNA polymerase:protein-primer structure suggests a model for the initiation to elongation transition. 2006 , 25, 1335-43	77
469	A novel, highly selective inhibitor of pestivirus replication that targets the viral RNA-dependent RNA polymerase. 2006 , 80, 149-60	7 ²
468	Comparative mechanistic studies of de novo RNA synthesis by flavivirus RNA-dependent RNA polymerases. 2006 , 351, 145-58	98
467	A comparison of viral RNA-dependent RNA polymerases. 2006 , 16, 27-34	188
466	The structure of bovine viral diarrhea virus RNA-dependent RNA polymerase and its amino-terminal domain. 2006 , 14, 1107-13	56
465	Antiviral therapy targeting viral polymerase. 2006 , 12, 1339-55	44
464	The structure of an RNAi polymerase links RNA silencing and transcription. 2006 , 4, e434	70
463	Mutations in the palm region of a plus-strand RNA virus polymerase result in attenuated phenotype. 2006 , 87, 3631-3636	2

(2007-2006)

462	The C-terminal hydrophobic domain of hepatitis C virus RNA polymerase NS5B can be replaced with a heterologous domain of poliovirus protein 3A. 2006 , 80, 11343-54	7
461	Hepatitis C virus nonstructural 5B protein regulates tumor necrosis factor alpha signaling through effects on cellular IkappaB kinase. 2006 , 26, 3048-59	38
460	Molecular mechanism of a thumb domain hepatitis C virus nonnucleoside RNA-dependent RNA polymerase inhibitor. 2006 , 50, 4103-13	54
459	General catalytic deficiency of hepatitis C virus RNA polymerase with an S282T mutation and mutually exclusive resistance towards 20modified nucleotide analogues. 2006 , 50, 4161-9	80
458	From structure to function: new insights into hepatitis C virus RNA replication. 2006, 281, 9833-6	153
457	High-affinity aptamers to subtype 3a hepatitis C virus polymerase display genotypic specificity. 2006 , 50, 3019-27	43
456	Characterization of the N-terminal domain of classical swine fever virus RNA-dependent RNA polymerase. 2006 , 87, 347-356	27
455	Control of template positioning during de novo initiation of RNA synthesis by the bovine viral diarrhea virus NS5B polymerase. 2006 , 281, 24991-8	13
454	Structure and function of RNA replication. 2006 , 60, 305-26	50
453	Docking and binding mode analysis of aryl diketoacids (ADK) at the active site of HCV RNA-dependent RNA polymerase. 2006 , 32, 1131-1138	8
452	Structural and functional characterization of sapovirus RNA-dependent RNA polymerase. 2007, 81, 1858-71	58
451	Characterization of hepatitis C virus subgenomic replicon resistance to cyclosporine in vitro. 2007 , 81, 5829-40	83
450	High resolution footprinting of the hepatitis C virus polymerase NS5B in complex with RNA. 2007 , 282, 16907-16	18
449	Hepatitis C virus induces E6AP-dependent degradation of the retinoblastoma protein. 2007 , 3, 1335-47	107
448	Crystal structure of the dengue virus RNA-dependent RNA polymerase catalytic domain at 1.85-angstrom resolution. 2007 , 81, 4753-65	331
447	The structure of a birnavirus polymerase reveals a distinct active site topology. 2007 , 104, 7385-90	93
446	Binding-site identification and genotypic profiling of hepatitis C virus polymerase inhibitors. 2007 , 81, 6909-19	65
445	Crystal structure of the RNA polymerase domain of the West Nile virus non-structural protein 5. 2007 , 282, 10678-89	197

444	Stabilization of poliovirus polymerase by NTP binding and fingers-thumb interactions. 2007 , 366, 1459-74	54
443	Mechanism for de novo RNA synthesis and initiating nucleotide specificity by t7 RNA polymerase. 2007 , 370, 256-68	51
442	Viral proteomics. 2007 , 71, 398-411	103
441	Step length measurementtheory and simulation for tethered bead constant-force single molecule assay. 2007 , 93, 795-805	10
440	Hepatitis C virus proteins. World Journal of Gastroenterology, 2007 , 13, 2406-15 5.6	113
439	Replication of hepatitis C virus. 2007 , 5, 453-63	1049
438	Significance of the C-terminal amino acid residue in mengovirus RNA-dependent RNA polymerase. 2007 , 365, 79-91	9
437	Novel protease and polymerase inhibitors for the treatment of hepatitis C virus infection. 2007 , 16, 1171-8	1 24
436	The hepatitis C virus life cycle as a target for new antiviral therapies. 2007 , 132, 1979-98	254
435	Hepatitis C viral life cycle. 2007 , 59, 1200-12	103
434	Advances in the development of new therapeutic agents targeting the NS3-4A serine protease or the NS5B RNA-dependent RNA polymerase of the hepatitis C virus. 2007 , 59, 1242-62	123
433	Specific targeted antiviral therapy for hepatitis C. 2007 , 9, 5-13	17
432	Functional characterization of fingers subdomain-specific monoclonal antibodies inhibiting the hepatitis C virus RNA-dependent RNA polymerase. 2008 , 283, 24089-102	7
431	Inhibition of hepatitis C virus (HCV) RNA polymerase by DNA aptamers: mechanism of inhibition of in vitro RNA synthesis and effect on HCV-infected cells. 2008 , 52, 2097-110	34
430	Identification and characterization of coumestans as novel HCV NS5B polymerase inhibitors. Nucleic Acids Research, 2008, 36, 1482-96	1 84
429	Emerging drugs for hepatitis C. 2008 , 13, 1-19	39
428	Monoclonal antibody recognizing N-terminal epitope of hepatitis C virus nonstructural 5B inhibits viral RNA replication. 2008 , 15, 305-13	4
427	Development of plaque assays for hepatitis C virus-JFH1 strain and isolation of mutants with enhanced cytopathogenicity and replication capacity. 2008 , 371, 71-85	36

426	The flavivirus polymerase as a target for drug discovery. 2008 , 80, 23-35		141
425	Understanding the molecular basis of HBV drug resistance by molecular modeling. 2008 , 80, 339-53		31
424	Mechanism for coordinated RNA packaging and genome replication by rotavirus polymerase VP1. 2008 , 16, 1678-88		130
423	3D jigsaw puzzle in rotavirus assembly. 2008 , 16, 1601-2		1
422	Cutting the gordian knot-development and biological relevance of hepatitis C virus cell culture systems. 2008 , 71, 51-133		79
421	RNA Interference. 2008,		3
420	RNA template-mediated inhibition of hepatitis C virus RNA-dependent RNA polymerase activity. 2008 , 470, 146-52		8
419	Challenges in modern drug discovery: a case study of boceprevir, an HCV protease inhibitor for the treatment of hepatitis C virus infection. 2008 , 41, 50-9		196
418	Recent progress in the development of selected hepatitis C virus NS3.4A protease and NS5B polymerase inhibitors. 2008 , 8, 522-31		104
417	Novel hepatitis C drugs in current trials. 2008 , 12, 529-55, viii		17
416	Development of intergenotypic chimeric replicons to determine the broad-spectrum antiviral activities of hepatitis C virus polymerase inhibitors. 2008 , 52, 3523-31		47
415	Mutational evidence for a structural model of the Lassa virus RNA polymerase domain and identification of two residues, Gly1394 and Asp1395, that are critical for transcription but not replication of the genome. 2008 , 82, 10207-17		36
414	High-resolution functional profiling of hepatitis C virus genome. 2008 , 4, e1000182		42
413	A locking mechanism regulates RNA synthesis and host protein interaction by the hepatitis C virus polymerase. 2008 , 283, 20535-46		58
412	Nontemplated terminal nucleotidyltransferase activity of double-stranded RNA bacteriophage phi6 RNA-dependent RNA polymerase. 2008 , 82, 9254-64		18
411	Hepatitis C virus NS5B polymerase exhibits distinct nucleotide requirements for initiation and elongation. 2008 , 283, 33893-901		29
410	Formation of an RNA polymerase II preinitiation complex on an RNA promoter derived from the hepatitis delta virus RNA genome. <i>Nucleic Acids Research</i> , 2008 , 36, 5201-11	20.1	25
409	Pegylated interferon 2a and 2b in combination with ribavirin for the treatment of chronic hepatitis C in HIV infected patients. 2008 , 4, 789-96		6

Hepatitis C Virus Genetics and the Discovery of Mechanism-Based Inhibitors of the NS3/4A 408 Protease and NS5B Polymerase. 2008, 63-93 Slow binding inhibition and mechanism of resistance of non-nucleoside polymerase inhibitors of 407 72 hepatitis C virus. 2009, 284, 15517-29 The flavivirus NS5 protein is a true RNA guanylyltransferase that catalyzes a two-step reaction to 406 162 form the RNA cap structure. **2009**, 15, 2340-50 Progress towards improving antiviral therapy for hepatitis C with hepatitis C virus polymerase 405 73 inhibitors. Part I: Nucleoside analogues. 2009, 18, 709-25 The active form of the norovirus RNA-dependent RNA polymerase is a homodimer with cooperative 46 404 activity. 2009, 90, 281-291 Structural and functional analysis of hepatitis C virus strain JFH1 polymerase. 2009, 83, 11926-39 65 402 New therapies for hepatitis C virus infection. 2009, 48, 313-20 133 401 RNA-dependent RNA polymerases from Flaviviridae. 2009, 19, 746-51 66 A novel HCV NS3 protease mutation selected by combination treatment of the protease inhibitor 16 400 boceprevir and NS5B polymerase inhibitors. 2009, 84, 178-84 HCV796: A selective nonstructural protein 5B polymerase inhibitor with potent anti-hepatitis C virus activity in vitro, in mice with chimeric human livers, and in humans infected with hepatitis C 118 399 virus. 2009, 49, 745-52 Mutations in the hepatitis C virus polymerase that increase RNA binding can confer resistance to 398 23 cyclosporine A. 2009, 50, 25-33 Antiviral effects of the interferon-induced protein guanylate binding protein 1 and its interaction 111 397 with the hepatitis C virus NS5B protein. 2009, 50, 1727-37 Antiviral and cytotoxic activities of aminoarylazo compounds and aryltriazene derivatives. 396 61 3.4 Bioorganic and Medicinal Chemistry, 2009, 17, 4425-40 Review article: investigational agents for chronic hepatitis C. 2009, 29, 689-705 395 32 Evidence for action of ribavirin through the hepatitis C virus RNA polymerase. 2009, 16, 595-604 8 394 Protease and polymerase inhibitors for the treatment of hepatitis C. Liver International, 2009, 29 61 393 7.9 Suppl 1, 57-67 Metal ion-binding studies highlight important differences between flaviviral RNA polymerases. 392 5 2009, 1794, 50-60 Identification of novel inhibitors of HCV RNA-dependent RNA polymerase by pharmacophore-based virtual screening and in vitro evaluation. Bioorganic and Medicinal Chemistry, 28 391 3.4 **2009**, 17, 2975-82

390	3-Hydroxyisoquinolines as inhibitors of HCV NS5b RNA-dependent RNA polymerase. 2009 , 19, 410-4	38
389	Preparation and handling of hepatitis C viral proteins NS3 and NS5B for structural studies. 2009 , 510, 111-24	
388	Hepatitis C: recent successes and continuing challenges in the development of improved treatment modalities. 2009 , 9, 537-44	45
387	Cell culture-adaptive mutations in the NS5B gene of hepatitis C virus with delayed replication and reduced cytotoxicity. 2009 , 144, 107-16	11
386	Structural basis for resistance of the genotype 2b hepatitis C virus NS5B polymerase to site A non-nucleoside inhibitors. 2009 , 390, 1048-59	16
385	Coronavirus N protein N-terminal domain (NTD) specifically binds the transcriptional regulatory sequence (TRS) and melts TRS-cTRS RNA duplexes. 2009 , 394, 544-57	99
384	Hepatitis C Virus Genome Replication. 2009 , 61-88	2
383	RNA Virus Polymerases. 2009 , 383-401	3
382	Viral RNA Polymerase Inhibitors. 2009 , 527-548	3
381	Design, expression, and purification of a Flaviviridae polymerase using a high-throughput approach to facilitate crystal structure determination. 2004 , 13, 2685-92	13
380	Hepatitis C virus virology and new treatment targets. 2009 , 7, 329-50	9
379	Approaches for the development of antiviral compounds: the case of hepatitis C virus. 2009, 25-51	8
378	Antiviral Strategies. 2009 ,	2
377	Chapter 2. New insights into flavivirus nonstructural protein 5. 2009 , 74, 41-101	66
376	Nucleoside analog inhibitors of hepatitis C viral replication: recent advances, challenges and trends. 2009 , 1, 1429-52	24
375	Identification and biological evaluation of a series of 1H-benzo[de]isoquinoline-1,3(2H)-diones as hepatitis C virus NS5B polymerase inhibitors. 2009 , 52, 5217-27	38
374	Cellular and molecular biology of HCV infection and hepatitis. 2009 , 117, 49-65	98
373	Molecular Biology of Hepatitis Viruses. 807-834	

372	Allosteric inhibitors of hepatitis C virus NS5B polymerase thumb domain site II: structure-based design and synthesis of new templates. <i>Bioorganic and Medicinal Chemistry</i> , 2010 , 18, 2836-48	·4	19
371	Insight into ligand selectivity in HCV NS5B polymerase: molecular dynamics simulations, free energy decomposition and docking. 2010 , 16, 49-59		18
370	Development of novel antiviral therapies for hepatitis C virus. 2010 , 25, 246-66		22
369	Structures of EV71 RNA-dependent RNA polymerase in complex with substrate and analogue provide a drug target against the hand-foot-and-mouth disease pandemic in China. 2010 , 1, 491-500		58
368	Structure and functionality in flavivirus NS-proteins: perspectives for drug design. 2010 , 87, 125-48		227
367	Identification of hepatitis C virus genotype 2a replicon variants with reduced susceptibility to ribavirin. 2010 , 85, 520-4		9
366	Ligand-induced changes in hepatitis C virus NS5B polymerase structure. 2010 , 88, 197-206		28
365	Cell culture and in vivo analyses of cytopathic hepatitis C virus mutants. 2010 , 405, 361-9		17
364	A comparative analysis of the substrate permissiveness of HCV and GBV-B NS3/4A proteases reveals genetic evidence for an interaction with NS4B protein during genome replication. 2010 , 406, 228-40		6
363	A cell-based reporter assay for inhibitor screening of hepatitis C virus RNA-dependent RNA polymerase. 2010 , 403, 52-62		34
362	Inhibitors of hepatitis C virus polymerase: synthesis and characterization of novel 2-oxy-6-fluoro-N-((S)-1-hydroxy-3-phenylpropan-2-yl)-benzamides. 2010 , 20, 2119-24		21
361	Review article: specifically targeted anti-viral therapy for hepatitis C - a new era in therapy. 2010 , 32, 14-28		93
360	An update on small molecule inhibitors of the HCV NS5B polymerase: effects on RNA synthesis in vitro and in cultured cells, and potential resistance in viral quasispecies. 2010 , 73		1
359	Viral response to specifically targeted antiviral therapy for hepatitis C and the implications for treatment success. 2010 , 24, 385-90		3
358	1a/1b subtype profiling of nonnucleoside polymerase inhibitors of hepatitis C virus. 2010 , 84, 2923-34		36
357	Regulation of de novo-initiated RNA synthesis in hepatitis C virus RNA-dependent RNA polymerase by intermolecular interactions. 2010 , 84, 5923-35		43
356	Chapter 11:2?-F-2?-C-Methyl Nucleosides and Nucleotides for the Treatment of Hepatitis C Virus: from Discovery to the Clinic. 2010 , 238-266		7
355	Mechanisms of activity and inhibition of the hepatitis C virus RNA-dependent RNA polymerase. 2010 , 285, 13685-93		19

(2011-2010)

354	Further insights into the roles of GTP and the C terminus of the hepatitis C virus polymerase in the initiation of RNA synthesis. 2010 , 285, 32906-32918	68
353	Evidence that the polymerase of respiratory syncytial virus initiates RNA replication in a nontemplated fashion. 2010 , 107, 10226-31	31
352	New insights into structure and replication of the hepatitis C virus and clinical implications. 2010 , 30, 333-47	61
351	Non-nucleoside inhibitors of hepatitis C virus polymerase: current progress and future challenges. 2010 , 2, 121-41	26
350	Combining 3-D quantitative structure-activity relationship with ligand based and structure based alignment procedures for in silico screening of new hepatitis C virus NS5B polymerase inhibitors. 2010 , 50, 662-76	52
349	2©eoxy-2©pirocyclopropylcytidine revisited: a new and selective inhibitor of the hepatitis C virus NS5B polymerase. 2010 , 53, 8150-60	48
348	New NS5B polymerase inhibitors for hepatitis C. 2010 , 19, 963-75	73
347	Production and characterization of active hepatitis C virus RNA-dependent RNA polymerase. 2010 , 71, 147-52	1
346	Inhibitors of the Hepatitis C Virus RNA-Dependent RNA Polymerase NS5B. 2010 , 2, 2169-95	73
345	The HCV NS5B nucleoside and non-nucleoside inhibitors. 2011 , 15, 611-26	41
344	Anti-HCV drugs in the pipeline. 2011 , 1, 607-16	49
343	Selection of hepatitis C virus resistant to ribavirin. 2011 , 8, 402	24
342	An objective assessment of conformational variability in complexes of hepatitis C virus polymerase with non-nucleoside inhibitors. 2011 , 414, 370-84	37
341	Current drug discovery strategies for treatment of hepatitis C virus infection. 2011 , 63, 883-92	7
340	Recent advances in hantavirus molecular biology and disease. 2011 , 74, 35-75	13
339	A cell-based assay for RNA synthesis by the HCV polymerase reveals new insights on mechanism of polymerase inhibitors and modulation by NS5A. <i>PLoS ONE</i> , 2011 , 6, e22575	35
338	New hepatitis C therapies in clinical development. 2011 , 16, 303-14	34
337	New HCV therapies on the horizon. 2011 , 17, 122-34	85

336	StralSV: assessment of sequence variability within similar 3D structures and application to polio RNA-dependent RNA polymerase. 2011 , 12, 226	11
335	I. Novel HCV NS5B polymerase inhibitors: discovery of indole 2-carboxylic acids with C3-heterocycles. 2011 , 21, 5336-41	41
334	Chronic hepatitis C. 2011 , 5, 117-32	22
333	Recent advances in drug discovery of benzothiadiazine and related analogs as HCV NS5B polymerase inhibitors. <i>Bioorganic and Medicinal Chemistry</i> , 2011 , 19, 4690-703	29
332	An overview of HCV molecular biology, replication and immune responses. 2011 , 8, 161	116
331	Investigation of the mode of binding of a novel series of N-benzyl-4-heteroaryl-1-(phenylsulfonyl)piperazine-2-carboxamides to the hepatitis C virus polymerase. 2011 , 21, 2212-5	5
330	RNA-dependent RNA polymerases from different hepatitis C virus genotypes reveal distinct biochemical properties and drug susceptibilities. 2011 , 1814, 1325-32	5
329	Nucleotide prodrugs for HCV therapy. 2011 , 22, 23-49	64
328	Hepatitis C virus and host cell lipids: an intimate connection. 2011 , 8, 258-69	128
327	Efficient in silico assay of inhibitors of hepatitis C Virus RNA-dependent RNA polymerase by structure-based virtual screening and in vitro evaluation. 2011 , 9, 290-8	5
326	The F1 motif of dengue virus polymerase NS5 is involved in promoter-dependent RNA synthesis. 2011 , 85, 5745-56	58
325	Mechanistic characterization of GS-9190 (Tegobuvir), a novel nonnucleoside inhibitor of hepatitis C virus NS5B polymerase. 2011 , 55, 4196-203	86
324	A comprehensive structure-function comparison of hepatitis C virus strain JFH1 and J6 polymerases reveals a key residue stimulating replication in cell culture across genotypes. 2011 , 85, 2565-81	53
323	Characterization of the elongation complex of dengue virus RNA polymerase: assembly, kinetics of nucleotide incorporation, and fidelity. 2011 , 286, 2067-77	38
322	Impact of HCV genetic differences on pathobiology of disease. 2011 , 9, 747-59	31
321	Hepatitis C virus nonstructural protein 5B is involved in virus morphogenesis. 2012 , 86, 5080-8	30
320	Assembly, purification, and pre-steady-state kinetic analysis of active RNA-dependent RNA polymerase elongation complex. 2012 , 287, 10674-10683	46
319	Hepatitis C virus NS5B and host cyclophilin A share a common binding site on NS5A. 2012 , 287, 44249-60	32

318	Escape from a dominant HLA-B*15-restricted CD8+ T cell response against hepatitis C virus requires compensatory mutations outside the epitope. 2012 , 86, 991-1000	17
317	Antiviral resistance and direct-acting antiviral agents for HCV. <i>Antiviral Therapy</i> , 2012 , 17, 1147-62 1.6	21
316	Direct-acting antiviral agents for the treatment of HCV. <i>Antiviral Therapy</i> , 2012 , 17, 1105-7 1.6	3
315	A novel class of highly potent irreversible hepatitis C virus NS5B polymerase inhibitors. 2012 , 55, 2089-101	23
314	Viral polymerases. 2012 , 726, 267-304	59
313	Nucleoside, nucleotide, and non-nucleoside inhibitors of hepatitis C virus NS5B RNA-dependent RNA-polymerase. 2012 , 55, 2481-531	219
312	Viral enzymes containing magnesium: Metal binding as a successful strategy in drug design. 2012 , 256, 3063-3086	44
311	TMC647055, a potent nonnucleoside hepatitis C virus NS5B polymerase inhibitor with cross-genotypic coverage. 2012 , 56, 4676-84	38
310	Robust full-length hepatitis C virus genotype 2a and 2b infectious cultures using mutations identified by a systematic approach applicable to patient strains. 2012 , 109, E1101-10	70
309	The C-terminal priming domain is strongly associated with the main body of bacteriophage ?6 RNA-dependent RNA polymerase. 2012 , 432, 184-93	8
308	Progress in the development of anti-hepatitis C virus nucleoside and nucleotide prodrugs. 2012 , 4, 625-50	22
307	In vitro selection and characterization of HCV replicons resistant to multiple non-nucleoside polymerase inhibitors. <i>Journal of Hepatology</i> , 2012 , 56, 41-8	15
306	The conserved lysine 151 of HCV NS5B modulates viral genome replication and infectious virus production. 2012 , 19, 862-6	2
305	Structural biology of dengue virus enzymes: towards rational design of therapeutics. 2012 , 96, 115-26	84
304	Structural biology of the hepatitis C virus proteins. 2012 , 9, e175-226	6
303	Discovery of new scaffolds for rational design of HCV NS5B polymerase inhibitors. 2012 , 58, 258-64	12
302	Structure-activity relationship (SAR) development and discovery of potent indole-based inhibitors of the hepatitis C virus (HCV) NS5B polymerase. 2012 , 55, 754-65	27
301	Chronic Hepatitis C Virus. 2012 ,	2

300	Evidence for a non-catalytic ion-binding site in multiple RNA-dependent RNA polymerases. <i>PLoS ONE</i> , 2012 , 7, e40581	9
299	Structure of hepatitis C virus polymerase in complex with primer-template RNA. 2012 , 86, 6503-11	105
298	Synthesis of new 4,5-dihydrofuranoindoles and their evaluation as HCV NS5B polymerase inhibitors. 2012 , 14, 556-9	21
297	Discovery of N-arylalkyl-3-hydroxy-4-oxo-3,4-dihydroquinazolin-2-carboxamide derivatives as HCV NS5B polymerase inhibitors. 2012 , 7, 850-60	5
296	Assays for RNA synthesis and replication by the hepatitis C virus. 2012 , 7, 233-245	1
295	New targets for antiviral therapy of chronic hepatitis C. <i>Liver International</i> , 2012 , 32 Suppl 1, 9-16 7.9	47
294	Discovery of substituted N-phenylbenzenesulphonamides as a novel class of non-nucleoside hepatitis C virus polymerase inhibitors. 2012 , 95, 182-91	8
293	Inhibition of hepatitis C virus NS5B polymerase by S-trityl-L-cysteine derivatives. 2012 , 49, 191-9	19
292	Hepatitis C RNA-dependent RNA polymerase inhibitors: a review of structure-activity and resistance relationships; different scaffolds and mutations. <i>Bioorganic and Medicinal Chemistry</i> , 3.4 2012 , 20, 3150-61	39
291	II. Novel HCV NS5B polymerase inhibitors: discovery of indole C2 acyl sulfonamides. 2012 , 22, 713-7	17
29 0	Novel therapies for hepatitis C - one pill fits all?. 2013 , 12, 595-610	156
289	Evaluation of coumarin and neoflavone derivatives as HCV NS5B polymerase inhibitors. 2013 , 81, 607-14	20
288	Detailed computational study of the active site of the hepatitis C viral RNA polymerase to aid novel drug design. 2013 , 53, 3031-43	21
287	Perspectives and challenges of interferon-free therapy for chronic hepatitis C. <i>Journal of Hepatology</i> , 2013 , 58, 583-92	78
286	Nucleoside/nucleotide analogue polymerase inhibitors in development. 2013, 17, 105-10	20
285	2-Heteroarylimino-5-arylidene-4-thiazolidinones as a new class of non-nucleoside inhibitors of HCV NS5B polymerase. 2013 , 69, 931-41	28
284	Resistance to HCV nucleoside analogue inhibitors of hepatitis C virus RNA-dependent RNA polymerase. 2013 , 3, 508-13	13
283	Understanding the hepatitis C virus life cycle paves the way for highly effective therapies. 2013 , 19, 837-49	425

282	Allosteric N-acetamide-indole-6-carboxylic acid thumb pocket 1 inhibitors of hepatitis C virus NS5B polymerase TAcylsulfonamides and acylsulfamides as carboxylic acid replacements. 2013 , 91, 66-81	2
281	Structure and Molecular Virology. 2013 , 219-245	
280	[The molecular biology of hepatitis C virus]. 2013 , 36, 280-93	5
279	HCV versus HIV drug discovery: D∭vu all over again?. 2013 , 23, 2281-7	5
278	New therapeutic strategies in HCV: polymerase inhibitors. <i>Liver International</i> , 2013 , 33 Suppl 1, 85-92 7.9	42
277	What are the promising new therapies in the field of chronic hepatitis C after the first-generation direct-acting antivirals?. 2013 , 15, 303	18
276	Hepatitis C virus proteins: from structure to function. 2013 , 369, 113-42	189
275	Hepatitis C virus RNA replication. 2013 , 369, 167-98	102
274	Hepatitis C virus-specific directly acting antiviral drugs. 2013 , 369, 289-320	24
273	Structure-based target druggability assessment. 2013 , 986, 141-64	14
272	Structural organization of viral RNA-dependent RNA polymerases. 2013, 78, 231-5	9
271	Antiviral Drug Discovery. 2013 , 439-515	
270	RNA synthetic mechanisms employed by diverse families of RNA viruses. 2013 , 4, 351-67	63
269	The molecular and structural basis of advanced antiviral therapy for hepatitis C virus infection. 2013 , 11, 482-96	290
268	Molecular simulations illuminate the role of regulatory components of the RNA polymerase from the hepatitis C virus in influencing protein structure and dynamics. 2013 , 52, 4541-52	14
267	25 years of interferon-based treatment of chronic hepatitis C: an epoch coming to an end. 2013 , 13, 535-42	112
266	Affinity labeling of hepatitis C virus replicase with a nucleotide analogue: identification of binding site. 2013 , 52, 432-44	7
265	Residues Arg283, Arg285, and Ile287 in the nucleotide binding pocket of bovine viral diarrhea virus NS5B RNA polymerase affect catalysis and fidelity. 2013 , 87, 199-207	18

264	Crystal Structure of the full-length Japanese encephalitis virus NS5 reveals a conserved methyltransferase-polymerase interface. 2013 , 9, e1003549		160
263	Productive homologous and non-homologous recombination of hepatitis C virus in cell culture. 2013 , 9, e1003228		36
262	NTP-mediated nucleotide excision activity of hepatitis C virus RNA-dependent RNA polymerase. 2013 , 110, E348-57		35
261	Systematic analysis of enhancer and critical cis-acting RNA elements in the protein-encoding region of the hepatitis C virus genome. 2013 , 87, 5678-96		27
260	JUMP-C: a randomized trial of mericitabine plus pegylated interferon alpha-2a/ribavirin for 24 weeks in treatment-nalle HCV genotype 1/4 patients. 2013 , 58, 514-23		45
259	Sensitivity of a ribavirin resistant mutant of hepatitis C virus to other antiviral drugs. <i>PLoS ONE</i> , 2013 , 8, e74027	3.7	4
258	Benefit-risk assessment of new and emerging treatments for hepatitis C: focus on simeprevir and sofosbuvir. 2014 , 6, 37-45		31
257	Structural and regulatory elements of HCV NS5B polymeraseEloop and C-terminal tailare required for activity of allosteric thumb site II inhibitors. <i>PLoS ONE</i> , 2014 , 9, e84808	3.7	21
256	Novel indole derivatives as hepatitis C virus NS5B polymerase inhibitors: Pharmacophore modeling and 3D QSAR studies. 2014 , 9,		0
255	Interference of HCV replication by cell penetrable human monoclonal scFv specific to NS5B polymerase. 2014 , 6, 1327-39		11
254	A closed-handed affair: positive-strand RNA virus polymerases. 2014 , 9, 769-784		1
253	The interface between methyltransferase and polymerase of NS5 is essential for flavivirus replication. 2014 , 8, e2891		33
252	Efficiency of incorporation and chain termination determines the inhibition potency of 2@modified nucleotide analogs against hepatitis C virus polymerase. 2014 , 58, 3636-45		56
251	Targets for antiviral therapy of hepatitis C. 2014 , 34, 9-21		32
250	Mechanism of inhibition for BMS-791325, a novel non-nucleoside inhibitor of hepatitis C virus NS5B polymerase. 2014 , 289, 33456-68		20
249	Inhibition of RNA binding to hepatitis C virus RNA-dependent RNA polymerase: a new mechanism for antiviral intervention. <i>Nucleic Acids Research</i> , 2014 , 42, 9399-409	20.1	34
248	Comparison of dengue virus and HCV: from impact on global health to their RNA-dependent RNA polymerases. 2014 , 9, 53-67		8
247	In vitro selection of the 3Quntranslated regions of the human liver mRNA that bind to the HCV nonstructural protein 5B. 2014 , 450-451, 13-23		4

(2014-2014)

246	Structure modeling and docking study of HCV NS5B-3a RNA polymerase for the identification of potent inhibitors. 2014 , 23, 618-627	4
245	Accounting for target flexibility and water molecules by docking to ensembles of target structures: the HCV NS5B palm site I inhibitors case study. 2014 , 54, 481-97	12
244	Discovery of SCH 900188: A Potent Hepatitis C Virus NS5B Polymerase Inhibitor Prodrug As a Development Candidate. 2014 , 5, 244-8	4
243	Polymerases of hepatitis C viruses and flaviviruses: structural and mechanistic insights and drug development. 2014 , 105, 8-16	46
242	Nucleic Acid Polymerases. 2014 ,	1
241	Hepatitis C virus genetic variability and the presence of NS5B resistance-associated mutations as natural polymorphisms in selected genotypes could affect the response to NS5B inhibitors. 2014 , 58, 2781-97	46
240	Dynamics of hepatitis C virus (HCV) RNA-dependent RNA polymerase NS5B in complex with RNA. 2014 , 289, 14399-411	17
239	Hepatitis C virus polymerase-polymerase contact interface: significance for virus replication and antiviral design. 2014 , 108, 14-24	8
238	Multiple e-pharmacophore modeling, 3D-QSAR, and high-throughput virtual screening of hepatitis C virus NS5B polymerase inhibitors. 2014 , 54, 539-52	44
237	Hepatitis C virus RNA replication and virus particle assembly require specific dimerization of the NS4A protein transmembrane domain. 2014 , 88, 628-42	20
236	Phylogeny and molecular evolution of the hepatitis C virus. 2014 , 21, 67-82	38
235	Nucleotide prodrugs of 2@deoxy-2@pirooxetane ribonucleosides as novel inhibitors of the HCV NS5B polymerase. 2014 , 57, 1836-44	34
234	Discovery and preclinical characterization of the cyclopropylindolobenzazepine BMS-791325, a potent allosteric inhibitor of the hepatitis C virus NS5B polymerase. 2014 , 57, 1855-79	70
233	Hepatitis C virus RNA replication and assembly: living on the fat of the land. 2014 , 16, 569-79	184
232	Structure of influenza A polymerase bound to the viral RNA promoter. 2014 , 516, 355-60	321
231	Initiation of RNA synthesis by the hepatitis C virus RNA-dependent RNA polymerase is affected by the structure of the RNA template. 2014 , 53, 7002-12	4
230	Mutations in the chikungunya virus non-structural proteins cause resistance to favipiravir (T-705), a broad-spectrum antiviral. 2014 , 69, 2770-84	149
229	Molecular and structural basis for the roles of hepatitis C virus polymerase NS5B amino acids 15, 223, and 321 in viral replication and drug resistance. 2014 , 58, 6861-9	9

228	2D and 3D quantitative structure-activity relationship study of hepatitis C virus NS5B polymerase inhibitors by comparative molecular field analysis and comparative molecular similarity indices analysis methods. 2014 , 54, 2902-14	43
227	Phosphorylation of hepatitis C virus RNA polymerases ser29 and ser42 by protein kinase C-related kinase 2 regulates viral RNA replication. 2014 , 88, 11240-52	17
226	RNAi to Treat Chronic Hepatitis C Infection. 2014 , 1-30	
225	Cross-genotypic examination of hepatitis C virus polymerase inhibitors reveals a novel mechanism of action for thumb binders. 2014 , 58, 7215-24	11
224	Common and unique features of viral RNA-dependent polymerases. 2014 , 71, 4403-20	153
223	Potency and resistance analysis of hepatitis C virus NS5B polymerase inhibitor BMS-791325 on all major genotypes. 2014 , 58, 7416-23	22
222	Inhibition of viral RNA polymerases by nucleoside and nucleotide analogs: therapeutic applications against positive-strand RNA viruses beyond hepatitis C virus. 2014 , 9, 1-7	39
221	Distinct conformations of a putative translocation element in poliovirus polymerase. 2014 , 426, 1407-19	40
220	The hepatitis C virus core protein can modulate RNA-dependent RNA synthesis by the 2a polymerase. 2014 , 189, 165-76	2
219	B-ring modified aurones as promising allosteric inhibitors of hepatitis C virus RNA-dependent RNA polymerase. 2014 , 80, 579-92	32
218	Molecular modeling and residue interaction network studies on the mechanism of binding and resistance of the HCV NS5B polymerase mutants to VX-222 and ANA598. 2014 , 104, 40-51	34
217	Amino acid sequence analysis in patients with chronic HCV genotype 1b infection during pegylated interferon-Pa and ribavirin therapy. <i>Antiviral Therapy</i> , 2014 , 19, 661-8	
216	Daclatasvir (Daklinza): The First-in-Class HCV NS5A Replication Complex Inhibitor. 2015, 43-60	
215	Sofosbuvir (Sovaldi): The First-in-Class HCV NS5B Nucleotide Polymerase Inhibitor. 2015 , 61-80	4
214	Synthesis of deleobuvir, a potent hepatitis C virus polymerase inhibitor, and its major metabolites labeled with carbon-13 and carbon-14. 2015 , 58, 250-60	1
213	HCV Drug Resistance Challenges in Japan: The Role of Pre-Existing Variants and Emerging Resistant Strains in Direct Acting Antiviral Therapy. 2015 , 7, 5328-42	26
212	Virologic Tools for HCV Drug Resistance Testing. 2015 , 7, 6346-59	37
211	Pharmacoinformatics approach for investigation of alternative potential hepatitis C virus nonstructural protein 5B inhibitors. 2015 , 9, 1825-41	22

210	Inhibitors of the Hepatitis C Virus Polymerase; Mode of Action and Resistance. 2015 , 7, 5206-24	81
209	A Structural Overview of RNA-Dependent RNA Polymerases from the Flaviviridae Family. 2015 , 16, 12943-57	61
208	Gene Therapy for Hepatitis C Virus Infection. 2015 , 191-226	
207	Viral replication. Structural basis for RNA replication by the hepatitis C virus polymerase. 2015 , 347, 771-5	222
206	Hepatitis C. 2015 , 385, 1124-35	365
205	Cryo-EM structure of influenza virus RNA polymerase complex at 4.3 Iresolution. 2015 , 57, 925-935	62
204	Hepatitis C virus RNA replication depends on specific cis- and trans-acting activities of viral nonstructural proteins. 2015 , 11, e1004817	22
203	Dual Allosteric Inhibitors Jointly Modulate Protein Structure and Dynamics in the Hepatitis C Virus Polymerase. 2015 , 54, 4131-41	8
202	The dengue virus NS5 protein as a target for drug discovery. 2015 , 119, 57-67	120
201	The juxtamembrane sequence of the Hepatitis C virus polymerase can affect RNA synthesis and inhibition by allosteric polymerase inhibitors. 2015 , 51, 1-11	1
200	Combination of pharmacophore hypothesis and molecular docking to identify novel inhibitors of HCV NS5B polymerase. 2015 , 19, 529-39	3
199	Allosteric inhibitors have distinct effects, but also common modes of action, in the HCV polymerase. 2015 , 108, 1785-1795	10
198	Phosphorylation at the N-terminal finger subdomain of a viral RNA-dependent RNA polymerase. 2015 , 466, 21-7	5
197	Fidelity Variants and RNA Quasispecies. 2016 , 392, 303-22	45
196	Recent advances on the synthesis of hepatitis C virus NS5B RNA-dependent RNA-polymerase inhibitors. 2015 , 102, 188-214	9
195	Functional insights from molecular modeling, docking, and dynamics study of a cypoviral RNA dependent RNA polymerase. 2015 , 61, 160-74	4
194	Cooperation between the Hepatitis C Virus p7 and NS5B Proteins Enhances Virion Infectivity. 2015 , 89, 11523-33	22
193	Emerging treatments for chronic hepatitis C. 2015 , 114, 204-15	32

192	New era for management of chronic hepatitis C virus using direct antiviral agents: A review. 2015 , 6, 301-10	28
191	Hydrophobic and charged residues in the C-terminal arm of hepatitis C virus RNA-dependent RNA polymerase regulate initiation and elongation. 2015 , 89, 2052-63	7
190	The interaction between the hepatitis C proteins NS4B and NS5A is involved in viral replication. 2015 , 475, 139-49	10
189	Structure-function relationships underlying the replication fidelity of viral RNA-dependent RNA polymerases. 2015 , 89, 275-86	73
188	Nonstructural protein 5A (NS5A) and human replication protein A increase the processivity of hepatitis C virus NS5B polymerase activity in vitro. 2015 , 89, 165-80	11
187	Perturbation in the conserved methyltransferase-polymerase interface of flavivirus NS5 differentially affects polymerase initiation and elongation. 2015 , 89, 249-61	30
186	Computational study on the drug resistance mechanism of HCV NS5B RNA-dependent RNA polymerase mutants V494I, V494A, M426A, and M423T to Filibuvir. 2015 , 113, 79-92	9
185	Optimizing triple therapy and IFN/RBV-free regimens for hepatitis C virus infection. 2015 , 9, 21-30	4
184	Hepatitis C virus infection treatment: An era of game changer direct acting antivirals and novel treatment strategies. 2016 , 42, 535-47	26
183	C-Terminal Auto-Regulatory Motif of Hepatitis C Virus NS5B Interacts with Human VAPB-MSP to Form a Dynamic Replication Complex. <i>PLoS ONE</i> , 2016 , 11, e0147278	9
182	Discovery of Novel Hepatitis C Virus NS5B Polymerase Inhibitors by Combining Random Forest, Multiple e-Pharmacophore Modeling and Docking. <i>PLoS ONE</i> , 2016 , 11, e0148181	35
181	Initiation of RNA Polymerization and Polymerase Encapsidation by a Small dsRNA Virus. 2016 , 12, e1005523	33
180	Genome-wide analysis for identification of adaptive diversification between hepatitis C virus subtypes 1a and 1b. 2016 , 62, 608-16	1
179	Biotransformation of Daclatasvir In Vitro and in Nonclinical Species: Formation of the Main Metabolite by Pyrrolidine Exidation and Rearrangement. 2016 , 44, 809-20	8
178	Discovery of 1-((2R,4aR,6R,7R,7aR)-2-lsopropoxy-2-oxidodihydro-4H,6H-spiro[furo[3,2-d][1,3,2]dioxaphosphinine-7,20xet (JNJ-54257099), a 3660cyclic Phosphate Ester Prodrug of 20Deoxy-20spirooxetane Uridine	.a- <u>ң</u>]g6-уl)р
177	Triphosphate Useful for HCV Inhibition. 2016, 59, 5790-8 Structure-based optimization and derivatization of 2-substituted quinolone-based non-nucleoside HCV NS5B inhibitors with submicromolar cellular replicon potency. 2016, 26, 2900-2906	10
176	Crystal structures of a group II intron maturase reveal a missing link in spliceosome evolution. 2016 , 23, 558-65	54
175	Direct-acting antiviral agents for hepatitis C: structural and mechanistic insights. 2016 , 13, 338-51	122

174	Fidelity of Nucleotide Incorporation by the RNA-Dependent RNA Polymerase from Poliovirus. <i>The Enzymes</i> , 2016 , 39, 293-323	18
173	A concerted two-prong approach to the allosteric regulation of bifunctional catalysis. 2016 , 7, 6674-6683	13
172	The history of hepatitis C virus (HCV): Basic research reveals unique features in phylogeny, evolution and the viral life cycle with new perspectives for epidemic control. <i>Journal of Hepatology</i> , 2016, 65, S2-S21	143
171	Mechanism of Action of Direct-Acting Antivirals: New Insights into the HCV Life Cycle. 2016 , 287-301	1
170	Hepatitis C Virus II. 2016 ,	1
169	Hepatitis C Virus I. 2016 ,	2
168	Computational study on the binding and unbinding mechanism of HCV NS5B with the inhibitor GS-461203 and substrate using conventional and steered molecular dynamics simulations. 2016 , 156, 72-80	9
167	Comparative Investigation of Normal Modes and Molecular Dynamics of Hepatitis C NS5B Protein. 2016 , 707, 012036	
166	Quasispecies: From Theory to Experimental Systems. 2016,	27
165	Hydrogen/Deuterium Exchange Kinetics Demonstrate Long Range Allosteric Effects of Thumb Site 2 Inhibitors of Hepatitis C Viral RNA-dependent RNA Polymerase. 2016 , 291, 10078-88	18
164	3D-QSAR and molecular docking studies on designing inhibitors of the hepatitis C virus NS5B polymerase. 2016 , 1117, 227-239	18
163	A Complex Network of Interactions between S282 and G283 of Hepatitis C Virus Nonstructural Protein 5B and the Template Strand Affects Susceptibility to Sofosbuvir and Ribavirin. 2016 , 60, 2018-27	11
162	New pseudodimeric aurones as palm pocket inhibitors of Hepatitis C virus RNA-dependent RNA polymerase. 2016 , 115, 217-29	13
161	Phosphocholine conjugation: an unexpected in vivo conjugation pathway associated with hepatitis c ns5b inhibitors featuring a bicyclo[1.1.1]pentane. 2016 , 44, 1332-1340	6
160	Discovery and preclinical evaluation of potent, orally bioavailable, metabolically stable cyclopropylindolobenzazepine acylsulfonamides as thumb site 1 inhibitors of the hepatitis c virus NS5B RNA-dependent, RNA polymerase. 2016 , 26, 936-940	7
159	Molecular modeling study on the drug resistance mechanism of NS5B polymerase to TMC647055. 2016 , 94, 147-58	4
158	Novel indoleflutimide heterocycles with activity against influenza PA endonuclease and hepatitis C virus. 2016 , 7, 447-456	17
157	A structural view of the RNA-dependent RNA polymerases from the Flavivirus genus. 2017 , 234, 34-43	35

156	Hepatitis C virus genotype 3A in a population of injecting drug users in Montenegro: Bayesian and evolutionary analysis. 2017 , 162, 1549-1561	1
155	The uncoupling of catalysis and translocation in the viral RNA-dependent RNA polymerase. 2017 , 14, 1314-1319	16
154	Novel nucleoside analogues targeting HCV replication through an NS5A-dependent inhibition mechanism. 2017 , 90, 352-367	5
153	Applications of computer-aided approaches in the development of hepatitis C antiviral agents. 2017 , 12, 407-425	35
152	Picornaviral polymerase structure, function, and fidelity modulation. 2017 , 234, 4-20	55
151	Discovery of a Hepatitis C Virus NS5B Replicase Palm Site Allosteric Inhibitor (BMS-929075) Advanced to Phase 1 Clinical Studies. 2017 , 60, 4369-4385	21
150	Bunyaviridae RdRps: structure, motifs, and RNA synthesis machinery. 2017 , 43, 753-778	32
149	The group II intron maturase: a reverse transcriptase and splicing factor go hand in hand. 2017 , 47, 30-39	16
148	Cystoviral RNA-directed RNA polymerases: Regulation of RNA synthesis on multiple time and length scales. 2017 , 234, 135-152	6
147	Flaviviridae viruses use a common molecular mechanism to escape nucleoside analogue inhibitors. 2017 , 492, 652-658	6
146	Structure and function of the Zika virus full-length NS5 protein. 2017 , 8, 14762	111
145	Why highly effective drugs are not enough: the need for an affordable solution to eliminating HCV. 2017 , 10, 583-594	14
144	NMR reveals the intrinsically disordered domain 2 of NS5A protein as an allosteric regulator of the hepatitis C virus RNA polymerase NS5B. 2017 , 292, 18024-18043	7
143	Development of a New Structural Class of Broadly Acting HCV Non-Nucleoside Inhibitors Leading to the Discovery of MK-8876. 2017 , 12, 1436-1448	10
142	Crystal Structure and Thermostability Characterization of Enterovirus D68 3D. 2017, 91,	6
141	Molecular simulations to delineate functional conformational transitions in the HCV polymerase. 2017 , 38, 1125-1137	2
140	Design and Development of HCV NS5B Polymerase Inhibitors. 2017 , 189-219	
139	Flavivirus Protease: An Antiviral Target. 2017 , 137-161	1

138	Molecular characterization of a novel cryptic virus infecting pigeonpea plants. PLoS ONE, 2017, 12, e018 \$8,29	6
137	5QJTR and NS5B-based genotyping of hepatitis C virus in patients from Damietta governorate, Egypt. 2018 , 10, 39-47	5
136	Crystal Structure of Classical Swine Fever Virus NS5B Reveals a Novel N-Terminal Domain. 2018, 92,	14
135	Real-world challenges for hepatitis C virus medications: a critical overview. 2018 , 44, 143-160	14
134	Molecular characterization of hepatitis C virus in end-stage renal disease patients under hemodialysis. 2018 , 90, 537-544	4
133	Bioactivation of cyclopropyl rings by P450: an observation encountered during the optimisation of a series of hepatitis C virus NS5B inhibitors. 2018 , 48, 1215-1226	7
132	The rearrangement of motif F in the flavivirus RNA-directed RNA polymerase. 2018, 108, 990-998	2
131	Using bioinformatics tools for the discovery of Dengue RNA-dependent RNA polymerase inhibitors. 2018 , 6, e5068	6
130	Virology and Pathogenesis of Hepatitis C. 2018 , 412-427.e8	
129	Resistance-Associated Substitutions/Variants Correlate to Therapeutic Outcomes of Novel Direct-Acting Antivirals in Different HCV Genotype Treated Individuals. 2018 ,	O
128	Hepatitis C virus: Morphogenesis, infection and therapy. <i>World Journal of Hepatology</i> , 2018 , 10, 186-212 _{3.4}	55
127	A unique intra-molecular fidelity-modulating mechanism identified in a viral RNA-dependent RNA polymerase. <i>Nucleic Acids Research</i> , 2018 , 46, 10840-10854	11
126	Structural and Functional Basis of the Fidelity of Nucleotide Selection by Flavivirus RNA-Dependent RNA Polymerases. 2018 , 10,	34
125	RNA Dependent RNA Polymerases: Insights from Structure, Function and Evolution. 2018, 10,	144
124	Structural Flexibility in HCV NS5B Polymerase and Molecular Modelling of Anti-HCV Drugs. 2018 , 12, 65-87	2
123	Viral RNA-Dependent RNA Polymerases: A Structural Overview. 2018 , 88, 39-71	23
122	RNA Synthesis and Capping by Non-segmented Negative Strand RNA Viral Polymerases: Lessons From a Prototypic Virus. 2019 , 10, 1490	34
121	A Structure-Function Diversity Survey of the RNA-Dependent RNA Polymerases From the Positive-Strand RNA Viruses. 2019 , 10, 1945	46

120	Anti-hepatitis-C virus activity and QSAR study of certain thiazolidinone and thiazolotriazine derivatives as potential NS5B polymerase inhibitors. 2019 , 184, 111747		13
119	Overview of HCV Life Cycle with a Special Focus on Current and Possible Future Antiviral Targets. 2019 , 11,		36
118	Evolution of HCV NS5B Non-nucleoside Inhibitors. 2019 , 171-191		4
117	HCV Molecular Virology and Animal Models. 2019 , 29-68		1
116	In Silico Target Druggability Assessment: From Structural to Systemic Approaches. 2019 , 1953, 63-88		4
115	Taming a beast: lessons from the domestication of hepatitis C virus. 2019 , 35, 27-34		6
114	The hepatitis C virus RNA-dependent RNA polymerase directs incoming nucleotides to its active site through magnesium-dependent dynamics within its F motif. 2019 , 294, 7573-7587		8
113	RNA-Dependent RNA Polymerases and Their Emerging Roles in Antiviral Therapy. 2019 , 1-42		7
112	Rhinovirus RNA Polymerase: Structure, Function, and Inhibitors. 2019 , 301-331		3
111	Design and evaluation of novel tetracyclic benzofurans as palm site allosteric inhibitors of HCV NS5B polymerase. 2019 , 29, 126104		O
110	Hepatitis C Virus NS5B RNA-Dependent RNA Polymerase Inhibitor. 2019 , 211-235		4
109	RNA-Dependent RNA Polymerase of Alphaviruses: A Potential Target for the Design of Drugs Against Alphaviruses. 2019 , 69-94		1
108	A nucleobase-binding pocket in a viral RNA-dependent RNA polymerase contributes to elongation complex stability. <i>Nucleic Acids Research</i> , 2020 , 48, 1392-1405	20.1	15
107	Mechanistic cross-talk between DNA/RNA polymerase enzyme kinetics and nucleotide substrate availability in cells: Implications for polymerase inhibitor discovery. 2020 , 295, 13432-13443		3
106	Prediction of Small Molecule Inhibitors Targeting the Severe Acute Respiratory Syndrome Coronavirus-2 RNA-dependent RNA Polymerase. 2020 , 5, 18356-18366		12
105	Multi-step parallel synthesis enabled optimization of benzofuran derivatives as pan-genotypic non-nucleoside inhibitors of HCV NS5B. 2020 , 30, 127004		2
104	Two RNA Tunnel Inhibitors Bind in Highly Conserved Sites in Dengue Virus NS5 Polymerase: Structural and Functional Studies. 2020 , 94,		5
103	The 2020 Nobel Prize in Physiology or Medicine. 2020 , 63, 13197-13204		1

102	Identification and characterization of novel RdRp and Nsp15 inhibitors for SARS-COV2 using computational approach. 2020 , 1-18		11
101	Discovery of novel Hepatitis C virus inhibitor targeting multiple allosteric sites of NS5B polymerase. 2020 , 84, 104371		9
100	Stringent control of the RNA-dependent RNA polymerase translocation revealed by multiple intermediate structures. 2020 , 11, 2605		14
99	Dissection of two drug-targeted regions of Hepatitis C virus subtype 4a infecting Egyptian patients. 2020 , 56, 564-581		2
98	The Tobacco Plant Genome. 2020 ,		1
97	Analysis of SARS-CoV-2 RNA-dependent RNA polymerase as a potential therapeutic drug target using a computational approach. 2020 , 18, 275		84
96	Hepatitis C Virus Infection in Pregnancy: An Update. 2020 , 43, 12-21		10
95	Structural insights into NS5B protein of novel equine hepaciviruses and pegiviruses complexed with polymerase inhibitors. 2020 , 278, 197867		3
94	Cryo-EM structure of the respiratory syncytial virus RNA polymerase. 2020 , 11, 368		28
93	Molecular Biology of Hepatitis Viruses. 2020 , 793-820		O
92	The genomes of Mourilyan virus and Wlizh is shrimp virus 1 of prawns comprise 4 RNA segments. 2021 , 292, 198225		3
91	TRIM26 is a critical host factor for HCV replication and contributes to host tropism. 2021 , 7,		7
90	Insight into the drug resistance mechanisms of GS-9669 caused by mutations of HCV NS5B polymerase via molecular simulation. 2021 , 19, 2761-2774		1
89	Crystal structure of a tick-borne flavivirus RNA-dependent RNA polymerase suggests a host adaptation hotspot in RNA viruses. <i>Nucleic Acids Research</i> , 2021 , 49, 1567-1580	20.1	2
88	HCV Virology. 2021 , 1-44		
87	Structure Unveils Relationships between RNA Virus Polymerases. 2021 , 13,		4
86	To Explore the Potential Targets and Current Structure-based Design Strategies Utilizing Co-crystallized Ligand to Combat HCV. 2021 , 22, 590-604		1
85	A crystal structure of alphavirus nonstructural protein 4 (nsP4) reveals an intrinsically dynamic RNA-dependent RNA polymerase.		1

84	A comparative analysis of parechovirus protein structures with other picornaviruses. 2021 , 11, 210008	0
83	Strategies to Inhibit Hepatitis B Virus at the Transcript Level. 2021 , 13,	1
82	An induced-fit de novo initiation mechanism suggested by a pestivirus RNA-dependent RNA polymerase. <i>Nucleic Acids Research</i> , 2021 , 49, 8811-8821	1
81	Proline to Threonine Mutation at Position 162 of NS5B of Classical Swine Fever Virus Vaccine C Strain Promoted Genome Replication and Infectious Virus Production by Facilitating Initiation of RNA Synthesis. 2021 , 13,	2
80	HCVpred: A web server for predicting the bioactivity of hepatitis C virus NS5B inhibitors. 2020 , 41, 1820-1834	6
79	Antiviral Targets in HCV. 2012 , 203-225	1
78	Antiviral Agents for Hepatitis Viruses. 2002 , 235-277	1
77	Overview of Direct-Acting Antiviral Drugs and Drug Resistance of Hepatitis C Virus. 2019 , 1911, 3-32	52
76	Mechanisms of Hepatitis C Virus Drug Resistance. 2009 , 531-545	1
75	Nicotiana attenuata Genome Reveals Genes in the Molecular Machinery Behind Remarkable Adaptive Phenotypic Plasticity. 2020 , 211-229	2
74	Recent advances in prevention and treatment of hepatitis C virus infections. <i>Progress in Drug Research Fortschritte Der Arzneimittelforschung Progres Des Recherches Pharmaceutiques</i> , 2001 , Spec No, 79-110	5
73	Recent advances in prevention and treatment of hepatitis C virus infections. <i>Progress in Drug Research Fortschritte Der Arzneimittelforschung Progres Des Recherches Pharmaceutiques</i> , 2000 , 55, 1-32	20
72	Structure-function relationships among RNA-dependent RNA polymerases. 2008, 320, 137-56	166
71	Structure, Dynamics, and Fidelity of RNA-Dependent RNA Polymerases. 2014 , 309-333	6
70	The HCV Replicase Complex and Viral RNA Synthesis. 2016 , 149-196	1
69	Direct-Acting Antiviral Agents for the Treatment of Hepatitis C Virus Infection. 2017, 553-627	O
68	Replication of Hepatitis C Virus. 2012 , 97-110	1
67	The Journey to the Discovery of Boceprevir: an NS3-NS4 HCV protease inhibitor for the treatment of chronic hepatitis C. 2010 , 49, 1-36	21

66	RNA-dependent RNA polymerase complex of Brome mosaic virus: analysis of the molecular structure with monoclonal antibodies. 2002 , 83, 2879-2890		4
65	Identification of amino acids within norovirus polymerase involved in RNA binding and viral replication. 2017 , 98, 1311-1315		4
64	A dynamic regulatory interface on SARS-CoV-2 RNA polymerase.		4
63	Hepatitis C Virus Polymerase as a Target for Antiviral Drug Intervention: Non-Nucleoside Inhibitors. 137	7-151	6
62	Nucleoside Analog Inhibitors of Hepatitis C Viral Replication. 153-166		2
61	Poliovirus RNA-Dependent RNA Polymerase (3Dpol): Structure, Function, and Mechanism. 255-267		6
60	De novo polymerase activity and oligomerization of hepatitis C virus RNA-dependent RNA-polymerases from genotypes 1 to 5. <i>PLoS ONE</i> , 2011 , 6, e18515	3.7	21
59	Novel nucleotide and amino acid covariation between the 5@TR and the NS2/NS3 proteins of hepatitis C virus: bioinformatic and functional analyses. <i>PLoS ONE</i> , 2011 , 6, e25530	3.7	2
58	Cell penetrable humanized-VH/V(H)H that inhibit RNA dependent RNA polymerase (NS5B) of HCV. <i>PLoS ONE</i> , 2012 , 7, e49254	3.7	42
57	Structural Analysis of Monomeric RNA-Dependent Polymerases: Evolutionary and Therapeutic Implications. <i>PLoS ONE</i> , 2015 , 10, e0139001	3.7	61
56	The Hepatitis C Virus NS5A Stimulates NS5B During In Vitro RNA Synthesis in a Template Specific Manner. <i>The Open Biochemistry Journal</i> , 2009 , 3, 39-48	0.9	31
55	[Current approaches for developing new anti-HCV agents and analyses of HCV replication using anti-HCV agents]. <i>Uirusu</i> , 2005 , 55, 105-10	0.1	4
54	Genetic diversity of the hepatitis C virus: impact and issues in the antiviral therapy. <i>World Journal of Gastroenterology</i> , 2007 , 13, 2416-26	5.6	72
53	Scotomas in molecular virology and epidemiology of hepatitis C virus. <i>World Journal of Gastroenterology</i> , 2013 , 19, 7910-21	5.6	9
52	New treatments for chronic hepatitis C: an overview for paediatricians. <i>World Journal of Gastroenterology</i> , 2014 , 20, 15965-74	5.6	13
51	Hepatitis C virus comes for dinner: How the hepatitis C virus interferes with autophagy. <i>World Journal of Gastroenterology</i> , 2015 , 21, 8492-507	5.6	20
50	Genotyping & diagnostic methods for hepatitis C virus: A need of low-resource countries. <i>Indian Journal of Medical Research</i> , 2018 , 147, 445-455	2.9	13
49	Is the 25-year hepatitis C marathon coming to an end to declare victory?. World Journal of Hepatology, 2017 , 9, 921-929	3.4	5

48	Understanding the RNA-Specificity of HCV RdRp: Implications for Anti-HCV Drug Discovery. <i>Bulletin of the Korean Chemical Society</i> , 2006 , 27, 59-64	1.2	3
47	Allosteric and dynamic control of RNA-dependent RNA polymerase function and fidelity. <i>The Enzymes</i> , 2021 , 49, 149-193	2.3	
46	Inhibition of viral RNA-dependent RNA polymerases with clinically relevant nucleotide analogs. <i>The Enzymes</i> , 2021 , 49, 315-354	2.3	2
45	Structural basis of viral RNA-dependent RNA polymerase nucleotide addition cycle in picornaviruses. <i>The Enzymes</i> , 2021 , 49, 215-233	2.3	1
44	HCV RdRp, sofosbuvir and beyond. <i>The Enzymes</i> , 2021 , 49, 63-82	2.3	1
43	Virus population dynamics, fitness variations and the control of viral disease: an update. <i>Progress in Drug Research Fortschritte Der Arzneimittelforschung Progres Des Recherches Pharmaceutiques</i> , 2001 , 57, 77-115		29
42	Hepatitis C Virus (HCV).		
41	Effects of genotypic variations on hepatitis C virus nonstructural protein 5B structure and activity. 2003 , 109-121		1
40	Thiobarbituric Acid Derivatives for Anti-HCV Agents Targeting NS5B RNA Polymerase. <i>Bulletin of the Korean Chemical Society</i> , 2007 , 28, 1917-1918	1.2	
39	INFECTIOUS HEPATITIS. 2009, 527-547		
39	INFECTIOUS HEPATITIS. 2009 , 527-547 Hepatitis C Virus.		
38	Hepatitis C Virus.		
38	Hepatitis C Virus. Protease and Polymerase Inhibitors for the Treatment of Hepatitis C Virus Infection. 2010, 2976-2989		
38 37 36	Hepatitis C Virus. Protease and Polymerase Inhibitors for the Treatment of Hepatitis C Virus Infection. 2010, 2976-2989 Mutations and the Development of Anti-viral Resistance. 2012, 227-249	5.2	0
38 37 36 35	Hepatitis C Virus. Protease and Polymerase Inhibitors for the Treatment of Hepatitis C Virus Infection. 2010, 2976-2989 Mutations and the Development of Anti-viral Resistance. 2012, 227-249 New Horizons: IL28, Direct-Acting Antiviral Therapy for HCV. 196-213 Update on the Development of Anti-Viral Agents Against Hepatitis C. Journal of Clinical and	5.2	0
38 37 36 35 34	Hepatitis C Virus. Protease and Polymerase Inhibitors for the Treatment of Hepatitis C Virus Infection. 2010, 2976-2989 Mutations and the Development of Anti-viral Resistance. 2012, 227-249 New Horizons: IL28, Direct-Acting Antiviral Therapy for HCV. 196-213 Update on the Development of Anti-Viral Agents Against Hepatitis C. Journal of Clinical and Translational Hepatology, 2013, 1, 9-21	5.2	0

Treatment of Hepatitis C. 1-8 30 Thiolutin Derivatives as inhibitor of RNA-Dependent RNA Polymerase (RdRP) of Hepatitis C Virus: An In-silico Approach. 001-001

28	Applications of Artificial Intelligence and Machine Learning in Viral Biology. 2019 , 1-39		1
27	Comparative Analysis of NS5 Protein for Tick Borne Encephalitis Virus Strains in three Virus Subtypes. <i>Acta Biomedica Scientifica</i> , 2019 , 3, 36-47	0.3	
26	Using Guided Motion Planning to Study Binding Site Accessibility. 2020,		0
25	Hepatitis C virus (HCV) : Development of anti-HCV agents and anti-HCV therapy. <i>Okayama Igakkai Zasshi</i> , 2020 , 132, 131-143	Ο	
24	Chronic hepatitis C: Portrait of a silent epidemic and the etiologic agent. 2008, 95-120		
23	RNA-directed RNA polymerase. 2007 , 468-491		
22	Molecular biology of liver disorders:the hepatitis C virus and molecular targets for drug development. <i>World Journal of Gastroenterology</i> , 2000 , 6, 465-469	5.6	4
21	HCV genetics and genotypes dictate future antiviral strategies. <i>Journal of Molecular Biochemistry</i> , 2017 , 6, 33-40	0.2	
20	Screening of Severe Acute Respiratory Syndrome Coronavirus 2 RNA-Dependent RNA Polymerase Inhibitors Using Computational Approach. <i>Journal of Computational Biology</i> , 2021 ,	1.7	4
19	Curing Hepatitis C with Direct-Acting Antiviral Therapy. <i>Methods and Principles in Medicinal Chemistry</i> , 2022 , 13-57	0.4	
18	Crystal structures of alphavirus nonstructural protein 4 (nsP4) reveal an intrinsically dynamic RNA-dependent RNA polymerase fold <i>Nucleic Acids Research</i> , 2022 ,	20.1	2
17	Within and Beyond the Nucleotide Addition Cycle of Viral RNA-dependent RNA Polymerases <i>Frontiers in Molecular Biosciences</i> , 2021 , 8, 822218	5.6	1
16	Molecular docking, ADMET analysis, and bioactivity studies of phytochemicals from Phyllanthus niruri as potential inhibitors of hepatitis C virus NSB5 polymerase. <i>Journal of the Indian Chemical Society</i> , 2022 , 99, 100321		1
15	Road to elimination of HCV: Clinical challenges in HCV management Liver International, 2021,	7.9	4
14	Structural studies of hepatitis C virus non-structural protein-5b of genotype 4a.		
13	Recent advancement in small molecules as HCV inhibitors <i>Bioorganic and Medicinal Chemistry</i> , 2022 , 60, 116699	3.4	

12	IL-26 inhibits hepatitis C virus replication in hepatocytes Journal of Hepatology, 2021,	13.4	1
11	Recapitulating Trafficking of Nucleosides Into the Active Site of Polymerases of RNA Viruses: The Challenge and the Prize <i>Frontiers in Medical Technology</i> , 2021 , 3, 705875	1.9	
10	Identifying Different Mutation Sites Leading to Resistance to the Direct-Acting Antiviral (DAA) Sofosbuvir in Hepatitis C Virus Patients from Egypt <i>Microorganisms</i> , 2022 , 10,	4.9	0
9	Comparisons of the Hbv and HIV Polymerase, and Antiviral Resistance Mutations. <i>Antiviral Therapy</i> , 2004 , 9, 149-160	1.6	83
8	Naturally occurring substitutions conferring resistance to hepatitis C virus polymerase inhibitors in treatment-naive patients infected with genotypes 18. <i>Antiviral Therapy</i> , 2009 , 14, 723-730	1.6	11
7	Screening of drug candidates against Endothelin-1 to treat hypertension using computational based approaches: Molecular docking and dynamics simulation. 2022 , 17, e0269739		O
6	How a 10-epi-Cubebol Synthase Avoids Premature Reaction Quenching to Form a Tricyclic Product at High Purity. 2022 , 12, 12123-12131		1
5	Global phylogenetic analysis of the RNA-dependent RNA polymerase with OrViT (OrthornaVirae Tree). 2,		O
4	Identification of new inhibitors of NS5 from dengue virus using saturation transfer difference (STD-NMR) and molecular docking studies. 2022 , 13, 355-369		0
3	Novel 6-Aminoquinazolinone Derivatives as Potential Cross GT1-4 HCV NS5B Inhibitors. 2022 , 14, 2767		Ο
2	Discovery of ZFD-10 of a pyridazino[4,5-b]indol-4(5H)-one derivative as an anti-ZIKV agent and a ZIKV NS5 RdRp inhibitor. 2023 , 105607		0
1	Unusual substructure conformations observed in crystal structures of a dicistrovirus RNA-dependent RNA polymerase suggest contribution of the N-terminal extension in proper folding. 2023 ,		О