Konstantin Galkin

List of Publications by Year
in descending order

74	364	840776 11	996975 15
papers	citations	h-index	g-index

75	75	75	291
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Solid phase growth and properties of Mg2Si films on Si(111). Thin Solid Films, 2007, 515, 8230-8236.	1.8	30
2	Enhancement of the Si p-n diode NIR photoresponse by embedding Î²-FeSi2 nanocrystallites. Scientific Reports, 2015, 5, 14795.	3.3	24
3	A study of the temperature dependence of adsorption and silicidation kinetics at the Mg/Si(111) interface. Thin Solid Films, 2007, 515, 8192-8196.	1.8	19
4	Growth, optical and electrical properties of Ca2Si film grown on Si(111) and Mg2Si/Si (111) substrates. Physics Procedia, 2011, 11, 95-98.	1.2	17
5	Reversible luminescence thermochromism and phase transition in crystals of thiophenylacetylacetonatoboron difluoride. Journal of Luminescence, 2008, 128, 1799-1802.	3.1	15
6	Multilayer Si(111)/Mg2Si clusters/Si heterostructures: Formation, optical and thermoelectric properties. E-Journal of Surface Science and Nanotechnology, 2005, 3, 12-20.	0.4	14
7	OPTICAL AND ELECTRONIC PROPERTIES OF M2Si (M = Mg, Ca, Sr) GROWN BY REACTIVE DEPOSITION TECHNIQUE. International Journal of Modern Physics B, 2010, 24, 3693-3699.	2.0	14
8	Silicon overgrowth atop low-dimensional Mg2Si on Si(111): structure, optical and thermoelectrical properties. Physics Procedia, 2011, 11, 55-58.	1.2	14
9	Formation, optical and electrical properties of a new semiconductor phase of calcium silicide on Si(111). Physics Procedia, 2012, 23, 41-44.	1.2	14
10	Vibrational spectra of zirconium fluoride complexes with different structures of anionic sublattice. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2015, 118, 114-124.	0.6	13
11	A room-temperature-operated Si LED with Î²-FeSi2 nanocrystals in the active layer: Î¼W emission power at 1.5â€‰Î¼m. Journal of Applied Physics, 2017, 121, .	2.5	13
12	A low temperature growth of Ca silicides on Si(100) and Si(111) substrates: Formation, structure, optical properties and energy band structure parameters. Journal of Alloys and Compounds, 2020, 813, 152101.	5.5	13
13	Silicon-silicide quasi-zero dimensional heterostructures for silicon based photonics, opto- and thermoelectronics. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 1670-1676.	0.8	11
14	On the way to enhance the optical absorption of a-Si in NIR by embedding Mg2Si thin film. Applied Physics Letters, 2016, 109, .	3.3	11
15	Technological possibilities of Si:H thin film deposition with embedded cubic Mg₂Si nanoparticles. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 1712-1716.	0.8	10
16	Comparison of the Structural, Optical and Thermoelectrical Properties of Ca Silicide Films with Variable Composition on Si Substrates. Defect and Diffusion Forum, 0, 386, 3-8.	0.4	10
17	Study of ultrathin iron silicide films grown by solid phase epitaxy on the Si(001) surface. Physics of the Solid State, 2010, 52, 397-403.	0.6	9
18	Optical properties of multilayer materials based on silicon and nanosized magnesium silicide crystallites. Journal of Applied Spectroscopy, 2006, 73, 227-233.	0.7	8

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19	Formation and optical properties of semiconducting thick Ca silicide films and Si/Ca_xSi/Si heterostructures on Si(111) substrate. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 1819-1823.	0.8	8
20	Formation, Structure and Optical Properties of Nanocrystalline BaSi₂ Films on Si(111) Substrate. Solid State Phenomena, 2015, 245, 42-48.	0.3	8
21	Pulsed modification of germanium films on silicon, sapphire, and quartz substrates: Structure and optical properties. Semiconductors, 2015, 49, 729-735.	0.5	6
22	Structural and optical properties of magnetron sputtered and pulsed beam annealed Ge/Si layers. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 1824-1827.	0.8	5
23	Structure and Optical Properties of Ca Silicide Films and Si/Ca₃Si₄/Si(111) Heterostructures. Solid State Phenomena, 2014, 213, 71-79.	0.3	5
24	Formation of Mg silicides on amorphous Si. Origin and role of high pressure in the film growth. Materials Chemistry and Physics, 2014, 148, 1078-1082.	4.0	5
25	Characterization of the silicon/Î²-FeSi2nanocrystallites heterostructures for the NIR photodetection at low temperature. Japanese Journal of Applied Physics, 2015, 54, 07JB02.	1.5	5
26	Non-doped and doped Mg stannide films on Si(111) substrates: Formation, optical, and electrical properties. Japanese Journal of Applied Physics, 2015, 54, 07JC06.	1.5	5
27	Influence of Cr+ ion implantation and pulsed ion-beam annealing on the formation and optical properties of Si/CrSi2/Si(111) heterostructures. Technical Physics, 2010, 55, 1036-1044.	0.7	4
28	Electrical and optical properties of thick Mg 2 Si films on Si(111). , 2003, , .		3
29	The model of the magnesium silicide phase (2/3âˆš3Ã—2/3âˆš3)-R30Â°on Si(111). Physics Procedia, 2011, 11, 47-50.	0.2	3
30	Growth, structure, optical and electrical properties of Si/2D Mg₂Si/Si(111) double heterostructures and Schottky diodes on their base. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 1720-1723.	0.8	3
31	SWIR-NIR Highly Absorbent Si_{1-x}Sn_x Alloy Film on Si(100) Substrate: Crystal Structure, Optical Properties and Thermal Stability. Defect and Diffusion Forum, 0, 386, 86-94.	0.4	3
32	Structure, optical properties and resistance to laser radiation of thin barium disilicide films grown on silicon. Journal of Physics: Conference Series, 2019, 1236, 012003.	0.4	3
33	An Influence of the Si(111)3-4^o Vicinal Surface on the Solid Phase Epitaxy of Î±-FeSi₂ Nanorods and their Crystal Parameters. Key Engineering Materials, 2019, 806, 30-35.	0.4	3
34	Calcium monosilicates as components of composite materials. Theoretical Foundations of Chemical Engineering, 2010, 44, 461-466.	0.7	2
35	Synthesis of Mg2Si precipitates in Mg-implanted silicon by pulsed ion-beam treatment. Physics Procedia, 2012, 23, 45-48.	1.2	2
36	Pulsed nanosecond annealing of magnesium-implanted silicon. Technical Physics, 2013, 58, 94-99.	0.7	2

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37	Comparative Analysis of the Effect of Immersion of Porous Silicon in Aqueous Solutions of Li and Fe Salts on the Stability, Peak Position and Intensity of its Photoluminescence. Defect and Diffusion Forum, 0, 386, 75-79.	0.4	2
38	Comparison of Crystal and Phonon Structures for Polycrystalline BaSi₂ Films Grown by SPE Method on Si(111) Substrate. Defect and Diffusion Forum, 2018, 386, 48-54.	0.4	2
39	Multilayer Heterostructures with Embedded CrSi₂ and Î²-FeSi₂ Nanocrystals on Si(111) Substrate: From the Formation to Photoelectric Properties. Solid State Phenomena, 0, 312, 45-53.	0.3	2
40	Formation and properties of pâ€“iâ€“n diodes based on hydrogenated amorphous silicon with embedded CrSi2, Mg2Si and Ca2Si nanocrystallites for energy conversion applications. , 0, , .		2
41	Transport Properties of CaSi₂ and Ca₂Si Thin Films. Solid State Phenomena, 0, 312, 3-8.	0.3	2
42	<title>Solid phase growth and properties of Mg<formula><inf><roman>2</roman></inf></formula>Si epitaxial films on Si(111)</title>. , 2005, , .		1
43	<title>Optical and structural properties of monocrystalline silicon wafers modified by compression plasma flow</title>. , 2005, , .		1
44	Optical properties of silicon-silicide nanoheterostructures grown by consecutive plasma-epitaxy synthesis. Journal of Applied Spectroscopy, 2009, 76, 840-846.	0.7	1
45	Ultra high vacuum growth of CrSi2 and <mml:math altimg="si1.gif" display="inline" overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:ce="h. Physics Procedia, 2011, 11,	1.2	1
46	Formation of nanocrystalline CrSi2 layers in Si by ion implantation and pulsed annealing. Physics Procedia, 2011, 11, 43-46.	1.2	1
47	Approach to a creation of silicon-silicide smart materials for silicon-based thermoelectronics and photonics. , 2012, , .		1
48	The study of Si(5 5 12) cleaning in the ultra-high vacuum conditions. Physics Procedia, 2012, 23, 29-32.	1.2	1
49	Influence of the Si(111)-2Ã—2-Fe surface reconstruction on formation, morphology and optical properties of manganese silicide. Physics Procedia, 2012, 23, 37-40.	1.2	1
50	How plasma preprocessing affects the luminescence properties of porous silicon. Journal of Optical Technology (A Translation of Opticheskii Zhurnal), 2014, 81, 431.	0.4	1
51	Extended near-IR Spectral Sensitivity and Electroluminescence Properties of Silicon Diode Structure with GaSb/Si Composite Layer. Solid State Phenomena, 0, 247, 61-65.	0.3	1
52	Stress-induced indirect to direct band gap transition in Î²-FeSi2 nanocrystals embedded in Si. AIP Conference Proceedings, 2017, , .	0.4	1
53	Thermoelectric Properties of Nanostructured Material Based on Si and GaSb. Defect and Diffusion Forum, 0, 386, 102-109.	0.4	1
54	MORPHOLOGY, OPTICAL PROPERTIES AND BAND STRUCTURE PARAMETERS OF MONOCRYSTALLINE SILICON MODIFIED BY COMPRESSION PLASMA FLOW. , 2007, , .		1

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55	Calculation of Desorption Parameters for Mg/Si(111) System. E-Journal of Surface Science and Nanotechnology, 2009, 7, 816-820.	0.4	1
56	HIGH DENSITY NANOSIZE Mg₂Si CLUSTERS IN SILICON MATRIX. , 2005, , .		0
57	<title>Growth and properties of silicon heterostructures with buried nanosize Mg<formula><inf><roman>2</roman></inf></formula>Si clusters</title>. , 2005, 5851, 427.		0
58	INFLUENCE OF EVAPORATION CONDITIONS ON Mg/Si(111) INTERFACE FORMATION. , 2007, , .		0
59	Optical and electron spectroscopy study of initial stages of room-temperature Mg film growth on Si (111). Semiconductors, 2008, 42, 475-480.	0.5	0
60	Mott criterion application to analysis of electrical conductivity in Na-Î²-aluminates doped by yttrium. Physics of the Solid State, 2009, 51, 1622-1625.	0.6	0
61	AES and EELS study of desorption of magnesium silicide films on Si(111). Physics Procedia, 2011, 11, 51-54.	1.2	0
62	Influence of Si(111) âˆš3Ã—âˆš3 - R30 Â° -Sb surface phase on the formation and conductance of low-dimensional magnesium silicide layer on Si(111) substrate. Physics Procedia, 2011, 11, 91-94.	1.2	0
63	INFLUENCE OF EMBEDDED LOW-DIMENSIONAL Mg₂Si ON THE CONDUCTIVITY OF Si/Mg₂Si/Si(111) HETEROSYSTEMS. , 2011, , .		0
64	An influence of Mg adsorption on the Si(5 5 12) substrate conductivity and surface morphology. Physics Procedia, 2012, 23, 33-36.	1.2	0
65	Pulsed laser/ion beam treatment of Ge/Si and Ge/Al<inf>2</inf>O<inf>3</inf> thin film structures. , 2013, , .		0
66	Influence of Preliminary Plasma Processing on Luminescent Properties of Porous Silicon. Solid State Phenomena, 0, 213, 90-95.	0.3	0
67	Fibrous Noble Opals: Electron and Atomic-Force Microscopy and Spectrometry Data. Solid State Phenomena, 0, 213, 109-113.	0.3	0
68	Thermal Properties of Si Mechanically Alloyed with FeSi₂ and CrSi₂. Applied Mechanics and Materials, 0, 799-800, 207-211.	0.2	0
69	Formation of Bulk and Nanocrystallite Layers of GaSb on Silicon. Solid State Phenomena, 0, 245, 72-79.	0.3	0
70	Formation and Optical Properties of Thin Mg₂Ge Films on Si(001) Substrate. Solid State Phenomena, 0, 247, 66-72.	0.3	0
71	The Structure and Magnetic Properties of Bronze, Stainless still and Alloy Layers Formed by Direct Laser Welding on Nonmagnetic Substrates. Solid State Phenomena, 2016, 247, 158-167.	0.3	0
72	Formation and Optical Properties of BaSi2 Films on Si (111) â€“ a Promising Nanomaterial for Solar Cells. KnE Materials Science, 2016, 1, 46.	0.1	0

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73	Relationship between the Photoluminescence Spectra and IR Spectroscopy of Mesoporous Silicon Samples during Long-Term Storage: The Effect of Immersion in an Aqueous LiBr Solutions. Solid State Phenomena, 0, 312, 38-44.	0.3	0
74	Relationship between the Photoluminescence Spectra and IR Spectroscopy of Mesoporous Silicon Samples during Long-Term Storage: The Effect of Immersion in an Aqueous Fe(NO₃)₃ Solutions. Solid State Phenomena, 0, 312, 54-61.	0.3	0